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# CALIFORNIA IOU CODE COMPLIANCE IMPROVEMENT PROGRAM

CALIFORNIA PUBLIC UTILITIES  
COMMISSION PROCESS EVALUATION  
REPORT

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## LEGAL NOTICE

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## LIMITATIONS

The evaluators acknowledge limitations to the research in this report, including that the scope of work included only the analysis of the Compliance Improvement program directly related to the efforts of the involved California IOUs and thus, necessarily omits details of the operations of critical Compliance Improvement program partners, such as California's RENs. The research did not use AI in any form in the gathering and analysis of data, though may have used AI very sparingly to optimize grammar in very limited instances. It was not used to create or summarize qualitative data.

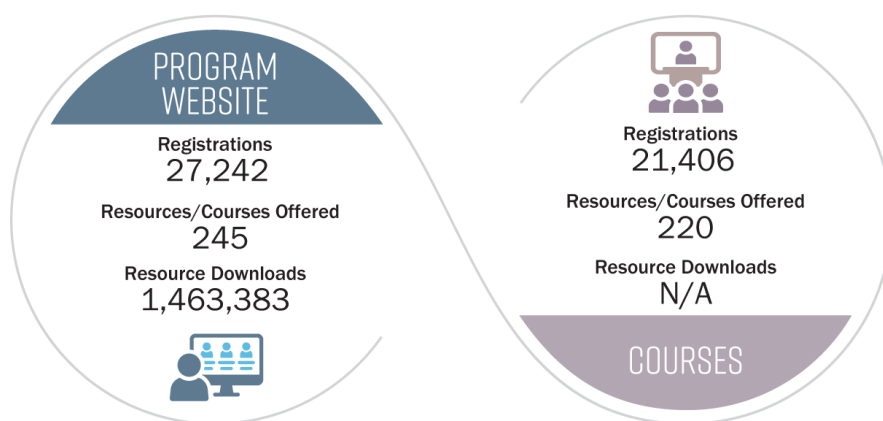
# I. EXECUTIVE SUMMARY

Compliance improvement (CI) programs, managed by California’s Investor-Owned Utilities (IOUs) individually though administered collaboratively (referred to hereafter as “the CI program”), help raise awareness of Title 20 (T20) appliance standards and Title 24 (T24) building codes among market actors in California. The program offers training courses (in-person and virtual), technical resources (e.g., checklists, fact sheets), as well as an organized system of stakeholder outreach and engagement. Program resources are primarily accessed via EnergyCodeAce.com, the program’s dedicated website for participants.

According to Pacific Gas and Electric (PG&E), the program’s lead coordinator, in its 2024–2027 Business Plan, the program mitigates “resistance to future advocacy and ensures that the potential savings from Codes and Standards (C&S) advocacy efforts are realized and persist over time. The CI program provides industry professionals and consumers with the specific knowledge, skills, and job aides they need to effectively perform their energy efficiency role, whether it be manufacturing, testing, registering, or purchasing compliant appliances or designing, constructing, or inspecting compliant buildings.”<sup>1</sup> These professionals primarily include: architects, builders, building officials, inspectors, contactors, authorities having jurisdiction (AHJs), energy consultants, design professionals, engineers, and plans examiners.





The program website has 12 tools that help users understand code requirements, print collateral, search eligible products, complete forms, and other functions, while offering a large number and variety of courses for code compliance. A performance summary for the website and courses for 2019 to 2023 is shown in Figure 1, demonstrating that professionals enrolled in courses and registered on the program website more than 20,000 times each, while downloading almost 1.5 million resources in that period. Courses include a number on topics across residential, nonresidential, and accessory dwelling unit (ADU) code, for specific professionals such as energy modelers and heating, ventilation, and air conditioning (HVAC) professionals, as well as general courses about code updates. The majority of students registering for courses were located in PG&E territory, followed by SoCal Edison (SCE), San Diego Gas and Electric (SDG&E), and unknown locations, as shown in Table 1.

Figure 1: 2019-2023 CI Program Performance Summary

















<sup>1</sup> PG&E 2024–2027 EE Business Plan, Table 4-14  
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Table 1: 2019-2023 Student Location by Investor-Owned Utility (IOU) Territory

	Registrations	Registration %
 Pacific Gas and Electric Company	20,131	55%
 SOUTHERN CALIFORNIA EDISON <small>An EDISON INTERNATIONAL<sup>®</sup> Company</small>	12,224	33%
 SDGE <sup>™</sup>	3,166	9%
 Program website (Variable Location)	1,095	3%
<b>Total</b>	<b>36,707</b>	<b>100%</b>

In addition, website registrants reported a variety of professions. While there were 27,242 registrants, only 15,572 recorded a profession upon registering, and many recorded multiple professions. Notably, almost half of those who recorded a profession were design professionals. The distribution of these responses may be seen in Table 2.

Table 2: 2019-2023 Professions of Website Registrants<sup>a,b</sup>

Profession	Registrants	Percent of Total	Profession	Registrants	Percent of Total
 Design professional	7,022	45%	 Contractor (General)	1,025	7%
 Mechanical engineer	2,695	17%	 Plans examiner	632	4%
 Trade professional	2,059	13%	 HERS Rater	292	2%
 Energy consultant	1,900	12%	 Acceptance Tester	116	1%
 Architect	1,416	9%	 Developer	111	1%
 Building official/inspector/other	1,354	9%	 Distributor	67	<1%
 Builder	1,254	8%	 Retailer	47	<1%
			<b>Total<sup>a</sup></b>	<b>15,572</b>	<b>100%</b>

Question S2: “In what role did you engage the program?”

<sup>a</sup>Table does not sum to totals, as many registrants indicated multiple professional backgrounds.

<sup>b</sup> Design professionals may include interior and lighting designers, while building officials include plan examiners, inspectors, and managers.

The programs are individually managed by the California IOUs: PG&E, SCE, and SDG&E,<sup>2</sup> and administered collaboratively across the state (the “program”) and locally at the jurisdiction level by all Regional Energy Networks (RENs) in California<sup>3</sup>. While input from RENs was gathered for this research in the interest of illuminating intersections

<sup>2</sup> Southern California Gas (SoCalGas) provided funding until 2021.

<sup>3</sup> Program IDs: PGE21053, SCE-13-SW-008C, SDGE3251

with the CI program, REN programs were not included in the current evaluation. Lastly, the IOU-administered program is implemented by Binary Evolution and Energy Solutions, with the support of other third-party organizations.

The CI program is part of the C&S portfolio segment. The overarching C&S segment budget for 2023 was \$62.7 million. The collective spend for the CI programs in 2023 was \$10,031,920 and \$6,318,997 in 2024, while the CI programs' budget for the 2024-2027 cycle is \$42,521,299. According to data provided by the program administrators and published in the California Energy Data and Reporting System (CEDARS),<sup>4</sup> the C&S portfolio segment generates the most savings for the California energy efficiency portfolio and drives the portfolio's cost-effectiveness. However, the CI program does not claim energy savings, carbon savings, nor TSB, and therefore lacks a direct measurement of success for its investment. Table 3 lists the program budget for C&S.

Table 3: C&S Portfolio Programs and Budgets Program Year (PY) 2023

Program	Description	2023 Spend (\$ millions)
State Code Advocacy	<i>Advocates in the California building code rulemakings</i>	9.4
State Standards Advocacy	<i>Advocates and participates in the California Energy Commission (CEC) appliance rulemakings</i>	2.9
Federal Standards Advocacy	<i>Advances federal appliance and equipment efficiency standards, and national model building energy codes (US Department of Energy Buildings Technology Office).</i>	5.3
Compliance Improvement	<i>Mitigates resistance to future advocacy and ensures that the potential savings from C&amp;S's advocacy efforts are realized and persist over time. (i.e., Outreach and Training)</i>	10.0
Reach Codes	<i>Help cities and counties leverage their authority to require increased Energy Efficiency and performance beyond the state's minimum requirements.</i>	5.5
Code Readiness <sup>a</sup>	<i>Data collection and other technical support activities that augment advocacy or Compliance Improvement.</i>	18.6
Planning and Coordination	<i>Supports close coordination between C&amp;S and New Construction, Emerging Tech, and Market Transformation administrators.</i>	10.9
Decarbonization Support <sup>a</sup>	<i>Apply C&amp;S processes to other state goals (Proposed)</i>	TBD
<b>Sector Budget</b>		<b>62.7</b>

<sup>a</sup>PG&E local programs. Similar activities are undertaken by SCE and SDG&E in their Planning and Coordination programs

The CI program provides resources for professionals to better understand and implement current code requirements on new construction or retrofit projects, while the C&S Advocacy program activities include the development of code enhancement proposals and conducting related research, and participating in public rulemaking processes and other

<sup>4</sup> <https://cedars.cpuc.ca.gov/>  
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related proceedings on the state and national level. The work done in the advocacy programs lays the foundation for the applied outreach, support, professional development, and training done in the CI program.

The total scale and scope of noncompliance in California, however, is unknown. While 104,626 new residential units were permitted in California in 2025<sup>5</sup>, the number of unpermitted dwellings and total number of retrofit projects (whether permitted or not) is unclear. As noted by the CEC in 2025, “(c)urrently, the state lacks comprehensive data on Energy Code compliance rates, regional variations in compliance, and the root causes of noncompliance.”<sup>6</sup> In 2025, the CEC estimated on the cost of noncompliance for Title 24 at \$2.8 billion per year for the new Title 24 2022 measures alone<sup>7</sup>

## 1.1 RESEARCH OBJECTIVES AND APPROACH

The California Public Utilities Commission (CPUC) hired Opinion Dynamics and its subcontractor, Market Logics (together, the evaluation team), to conduct a process evaluation of the program. The overall goal of the evaluation was to better understand the value of the programs and to identify areas for improvement. The research objectives were the following:

- Assess the program’s purpose, design, and performance
- Understand how participants interact with the program
- Gather suggestions for improving efficiency and effectiveness

To achieve these objectives, the evaluation team employed a combination of secondary data review and primary data collection activities, including:

- Review and update of the programs’ Program Theory and Logic Models (PTLM)<sup>8</sup>
- Review of program documentation
- In-depth interviews with stakeholders (program administrators, implementation vendors, and course trainers)
- Online surveys and in-depth interviews to gather compliance supply chain actor feedback

Although the evaluation focused on the operations of the program administered by the California IOUs, RENs also administer their own programs and are implemented at the local level. So, as noted earlier, the evaluation team also assessed areas of overlap between the IOUs and RENs in program operations and processes, as necessary. In addition, this evaluation did not attempt to measure *compliance* with T20 and T24 regulations but to examine the *operations* of the program itself.

## 1.2 CONCLUSIONS AND RECOMMENDATIONS

Below, we summarize the conclusions and recommendations from this evaluation organized by research objective. While the program overall fills an important gap in the compliance process, is regarded as an important resource for those who engage it, and 92% of survey respondents report being satisfied with the program, the primary challenge that remains is to meaningfully account for program activities in their contribution to the energy efficiency portfolio’s goals of

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<sup>5</sup> United States Census Bureau, Building Permits Survey

<sup>6</sup> California Energy Commission, California Energy Code Compliance Gap Analysis, publication CEC-400-2025-011.

<sup>7</sup> <https://efiling.energy.ca.gov/GetDocument.aspx?tn=267632&DocumentContentId=10> (CEC, page 16)

<sup>8</sup> PTLMs describe the logic behind how program activities lead to intended outcomes; they help explain what a program intends to do, what market barriers it is addressing, and how it intends to do it. PTLM reviews and updates are done to help assure that program activities are logical, that outcomes are measurable, and that they reliably lead to desired outcomes.

savings generation and decarbonization. In addition, the lack of clarity surrounding program outcomes exists within a compliance environment that is unclear, as current data is unable to describe the size and scope of non-compliance across the state.

Chapter 5 includes a more detailed review of our conclusions, key findings, and recommendations from the evaluation.



## 1.2.1 RESEARCH OBJECTIVE I: ASSESS THE PROGRAM'S PURPOSE, DESIGN, AND PERFORMANCE

**Conclusion 1: The program's courses and online resources successfully increase both awareness and knowledge of California energy codes and should increase their reach to the marketplace as much as possible throughout the state as resources allow and target to the segments in most need of the information.**

▪ **Recommendation 1: Conduct non-participant research.**

Program administrators should consider undertaking nonparticipant research to better understand which segments, both within and across professions, are most likely to be unaware and lack knowledge of code and code changes, and design outreach strategies to better reach those segments.

Table 4. Impact of CI Program on Respondents' Awareness and Knowledge of Codes and Standards

Method of CI Program Engagement	% Aware		% Knowledgeable	
	Before	After	Before	After
 Using Online Resources (n=477)	80	94	82	95
 Attending Courses (n=309)	83	98	85	98

likely to be unaware and lack knowledge of code and code changes, and design outreach strategies to better reach those segments.

**Conclusion 2: Program administrators and program trainers agree: building officials, inspectors, and AHJs remain hard-to-reach with the programs.**

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*“Building departments definitely have the least amount of spare time to grapple with all this...so, they are...the bottleneck of getting better compliance.”*

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- **Recommendation 2: Tailor participation options for these hard-to-reach groups.** Program administrators and implementers should consider a tailored participation pathway for building officials, inspectors, and AHJs that includes specialized program materials to address barriers that inhibit engagement with the programs, such as short checklists, mobile-accessible materials, and shortened training sessions, as well as tailored outreach strategies that include messaging about the availability of this custom pathway and the benefits of engaging the programs this way. Though some RENs actively work to address this in their operations, the bottleneck this barrier presents, statewide, is persistent.

**Conclusion 3: The programs lacked robust mechanisms for tracking program outcomes beyond participation metrics.**

- **Recommendation 3: Use the key performance indicators (KPIs) from the updated PTLM to measure and report program outcomes.** The two CI program PTLMs reviewed for this research should be combined into a single document, and updated to reflect best practices, such as including program barriers and target markets, identifying links and providing a logical description of each link. To make those KPIs described in this evaluation measurable, focus data gathering efforts on location and profession-specific indicators of program success on

outcomes of research such as needs assessments, skill and knowledge assessments, program resource use, compliance success, and net promoter scores. These key performance indicators are shown in Table 5, while the full list of suggested KPIs may be seen in Table 11<sup>9</sup>.

Table 5. Key Proposed Compliance Program PTLM KPIs and Rationale

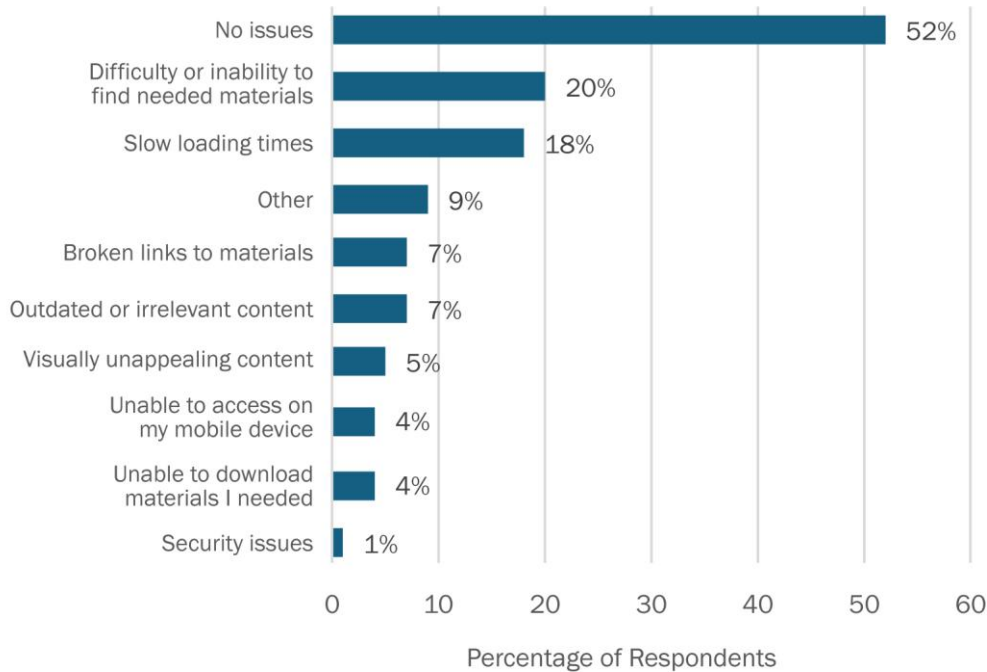
Recommended KPIs	Rationale
Usability goals based on needs assessment for training and tools for each profession and establishment of priority goals	Establish needs of target markets in order to properly orient program changes in a direction most likely to lead to increased participation
Skills/knowledge assessments of code process navigation, by level of resource use, tool use, course completion	Better understand where program activities directly lead to more successful compliance, and inform any interventions
Use of program resources, tools, and training by profession and location	Understand program participation by profession and region; to inform training materials, awareness needs, and resource needs
Compliance success, project resubmittal, and/or inspection success rates by program participation	Understand how successful the program is in improving critical compliance metrics
Net promoter score	Understand how successful the program is in accomplishing its goal of becoming a trusted resource in the industry

## 1.2.2 RESEARCH OBJECTIVE 2: UNDERSTAND HOW PARTICIPANTS INTERACT WITH THE PROGRAM

<sup>9</sup> Some KPIs described in Table 11 are also part of [Resolution E-5351](#), which describes metrics and indicators related to Energy Efficiency Portfolios.

**Conclusion 4: Users are generally satisfied with resources on the program website, but there are issues that introduce barriers for users. Because interruptions often occur during time-sensitive tasks, delays in finding answers to questions or concerns are a significant barrier for users.**

Figure 2. Percentage of Respondents Experiencing Each Issue (n=477)  
(Survey question 13: "What issues, if any, did you experience with the EnergyCodeAce website?")



Because interruptions often occur during time-sensitive tasks, delays in finding answers to questions or concerns are a significant barrier for users.

**Recommendation 4: Treat the website as a product.**

Program administrators should consider prioritizing usability assessments for each tool and the website as a whole to better understand user journeys through the website, common barriers to task completion, and overall user needs in order to inform a redesign of the program website prioritizing error reduction, time and resource

savings, the cross-functionality of tools and resources, and other highly valued program benefits. Suggested improvements, based on current data, include the expansion of search capabilities and limiting of results (via archiving out-of-date material, while supporting documentation multiple code cycles), enabling digital signatures, increasing the number of software options available for document completion and export, as well as the elimination of broken links, the use of artificial intelligence (AI)-assisted chat, and an available AI chatbot to quickly address user barriers.

**Conclusion 5: Course attendees are highly satisfied with courses, but desire a different blend of course formats, and shorter courses.**

Table 6. Respondent Course Format Preferences and Courses Taken  
(Survey questions 20 and 21)

Course Format	Format Preference	Format Taken	Difference
Live, online	65%	70%	-5%
Live, in person	34%	48%	-14%
Prerecorded webinar	45%	42%	3%
Self-paced online	51%	39%	12%

**Recommendation 5: Ensure diversified program formats.**

Curriculum designers and trainers should make as many course offerings available as possible for live online and self-paced training modalities, and work to produce shortened versions of courses (live and virtual) as much as is reasonably possible to accommodate time-constrained professionals, while limiting live in-person offerings to those deemed most necessary to hold in that format.

**1.2.3 RESEARCH OBJECTIVE 3: GATHER SUGGESTIONS FOR IMPROVING EFFICIENCY AND EFFECTIVENESS**

**Conclusion 6: The perception of frequent code changes creates complexity and frustration among market actors.**

- **Recommendation 6: Ease market actors into code changes.** Program actors can ease the perception of frequent code changes with updated tools to support market actors, including:
  - Program administrators can implement timelines for website vendors to update and maintain website tools and content to current code standards, in order to minimize the time outdated materials remain on the program website as much as reasonably possible.
  - Program content creators should provide succinct update summaries, visual guides, and webinars, as needed, to explain new code cycles and reduce confusion, emphasizing concision, visual appeal, and simplicity. To the extent possible, this content should be curated for different professions or locations within the compliance process.
  - Program trainers should proactively assess gaps in code-related knowledge in pre-/post-training surveys. This information can be used to focus upcoming training sessions on identified knowledge gaps and to inform the design of program collateral.

## 2. INTRODUCTION

The California State Title 24 (T24) Building Standards Code contains administrative regulations of the California Building Standards Commission. Residential and commercial buildings must meet requirements for electrical (Part 3), mechanical (Part 4), plumbing (Part 5), and energy efficiency (Part 6). These requirements may be updated once every three years.

Monitoring and enforcement of T24 is assigned at the local jurisdictional level. California has 58 counties and 483 municipalities. Each jurisdiction has its own building department responsible for enforcing T24, which involves reviewing building plans, issuing permits, and inspecting buildings to ensure compliance with the regulations. Maintaining an adequate level of knowledge of building regulations to effectively implement T24 requirements entails continuous learning by code officials and members of the building compliance supply chain, including architects, designers, energy modelers, builders, and building officials (i.e., plan examiners and inspectors).

Additionally, California's Title 20 (T20) Appliance Efficiency Regulations, in conjunction with Federal standards, set minimum efficiency requirements for household and commercial goods, such as lighting, appliances, and a wide variety of consumer electronics. It also provides these standards for space and water heating equipment, such as air conditioners, furnaces, and boilers.

Manufacturers of these products must comply with T20 regulations to be sold in California. However, all parties involved in the installation of this equipment are responsible for verifying the compliance status of any products they sell or install, including distributors, retailers, contractors, and designers, and are subject to fines. Parties can verify the compliance status of any products via the Modernized Appliance Efficiency Database System (MAEdBS).<sup>10</sup>

To support compliance statewide, three of California's investor-owned utilities (IOUs) each offer a code compliance improvement program, though they are administered collaboratively (referred to hereafter as "the program"). According to Pacific Gas & Electric (PG&E), the program's lead coordinator, the CI program, *"mitigates resistance to future advocacy and ensures that the potential savings from Codes and Standards (C&S) efforts are realized and persist over time. PG&E provides industry professionals and consumers with the specific knowledge, skills, and job aides they need to effectively perform their energy efficiency role, whether it be manufacturing, testing, registering, or purchasing compliant appliances or designing, constructing, or inspecting compliant buildings."*<sup>11</sup>

The program's offerings include training events (in-person and virtual), technical resources (e.g., checklists, fact sheets), and outreach to code officials, builders, designers, and other compliance supply chain professionals. Training topics encompass overviews of T20 and T24, as well as detailed information for each code, including lighting, heating, ventilation, and air conditioning (HVAC), pumps, and the building envelope, among others.

This process evaluation of the program provides the California Public Utilities Commission (CPUC) with data to fully understand the contribution of the program to California's statewide energy efficiency portfolio and assess the value they provide to the compliance supply chain to ensure that "the potential savings from C&S advocacy efforts are realized and persist over time."<sup>12</sup> The evaluation is limited to the operation of the IOU-administered program, focusing on 2019–2023. The program coordinates with Regional Energy Networks (RENs) at the local level, and although this evaluation focuses on the IOU-administered program, it identifies areas where the IOUs and RENs collaborate to provide regionally specific information or services as necessary.

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<sup>10</sup> <https://www.energy.ca.gov/programs-and-topics/programs/appliance-efficiency-program-outreach-and-education/modernized>

<sup>11</sup> PG&E 2024–2027 EE Business Plan, Table 4-14

<sup>12</sup> PG&E EE Business Plans 2024–2027

## 2.1 PROGRAM DESCRIPTION

The CI program is administered by PG&E, Southern California Edison (SCE), and San Diego Gas and Electric (SDG&E)<sup>13</sup>, while PG&E serves as the lead program administrator. The program is implemented by Binary Evolution and Energy Solutions, with the support of other third-party organizations. The program aims to streamline compliance with California's building energy code (Title 24, Part 6), CalGreen (Title 24, Part 11), and appliance standards (Title 20) for all market actors in the compliance supply chain.<sup>14</sup> Compliance across the supply chain helps California meet its energy efficiency and carbon reduction goals.<sup>15</sup> The program influences behavior change and aims to increase familiarity, awareness, and knowledge of energy code compliance by providing outreach, training courses, tools, and resources.

EnergyCodeAce.com (Figure 3) is the public facing hub for resources related to the program, and is thus integral to its functioning.<sup>16</sup> On EnergyCodeAce.com, users can register for online and in-person training, complete online self-study courses, use tools (such as the Virtual Compliance Assistant) to automate their work tasks, access code and standards language through Reference Ace<sup>17</sup>, share resources that help identify code triggers and compliance requirements, and connect with a code expert.

Figure 3. EnergyCodeAce.com Home Page



Your one-stop shop for no-cost tools, training, and resources to help you comply with California's [Title 24, Part 6 building energy code](#) and [Title 20 appliance standards](#). We're powered by the California Statewide Codes & Standards Program and vetted by the California Energy Commission.



In addition to EnergyCodeAce.com, program resources are available on the Energy Code Ace YouTube channel, such as

<sup>13</sup> Southern California Gas (SoCalGas) contributed funding until 2021.

<sup>14</sup> Southern California Edison. 2023. *Review of Implementation Plan Codes and Standards Compliance Improvement*.

<sup>15</sup> Ibid.

<sup>16</sup> <https://energycodeace.com/>

<sup>17</sup> The Reference Ace tool helps users navigate the Title 24, Part 6 Energy Code and Title 20 Standards documents.

<https://energycodeace.com/content/tools-ace-reference-ace>

modeling demonstrations, recorded discussions on code questions, and tutorials for how to fill out compliance forms. The program also offers a variety of training courses, including live in-person, live online, self-paced online, and pre-recorded webinars, covering residential and nonresidential compliance and building models, solar, T20, nonresidential multi-family, and residential accessory dwelling units.

The program interacts with market actors both in-person and virtually at industry events. These include the California Building Officials' Education Week, the Pacific Coast Builders' Conference, the Western Pools and Spa Show, the California Association of Building Energy Consultants' annual conference, and California Energy Commission webinars. The program also works with approximately 100 customers per month to answer questions and requests for assistance.

## 2.2 EVALUATION OBJECTIVES

Table 7 lists the research objectives and questions the process evaluation sought to address.

Table 7. Research Objectives and Questions Associated with the Evaluation

Research Objective	Research Questions
Assess the Compliance Improvement program's purpose, design, and performance	<ul style="list-style-type: none"> <li>▪ <b>Program Design:</b> What is the program's theory of change, and is it sufficient to meet the program's stated objectives? Does it need to be modified to better align with these objectives? What are the program activities and outputs, and what are the limitations to program effectiveness?</li> <li>▪ <b>Program Alignment:</b> How does this program contribute to decarbonization, reliability, and affordability?</li> <li>▪ <b>Strategy:</b> What does the program offer to support compliance improvement for Title 20, and for Title 24 parts 6 (energy code) and 11 (CALGreen)?</li> </ul>
Understand how market actors and participants interact or collaborate with the Compliance Improvement program	<ul style="list-style-type: none"> <li>▪ <b>Targets and Gaps:</b> If outreach is targeted, where is it targeted, and who is it intended for? Which groups are included, and which groups are not being sufficiently served by the program?</li> <li>▪ <b>Scale:</b> Are participation levels sufficient to affect the local or statewide compliance supply chain? What types of building professionals are interacting with the program, and how does the volume of that participation relate to the overall population of similar building industry professionals?</li> <li>▪ <b>Value in the Marketplace:</b> What role do training, tools, and resources play in the building value chain? Which elements – if any - are valued by market actors? Why are they valued? In addition to building industry professionals, this includes other programs such as Workforce, Education, and Training programs (WE&amp;T), the RENs, and other organizations.</li> </ul>
Gather suggestions for improving the Compliance Improvement program efficiency and effectiveness in achieving its stated outcomes and goals	<ul style="list-style-type: none"> <li>▪ <b>Outcomes:</b> To what degree, if any, have market actor awareness, knowledge, and skills been increased through the program? Are these outcomes sufficient to justify the program's resource level? For example, is the cost per participant comparable with other IOU energy efficiency outreach and training programs?</li> <li>▪ <b>Program Costs and Benefits:</b> What are the expenditure levels, and how do these align with the outcomes?</li> </ul>

### 3. EVALUATION METHODOLOGY

For the process evaluation, Opinion Dynamics and its subcontractor, Market Logics (the evaluation team), leveraged results from multiple research activities, including a comprehensive secondary materials and data review, a program theory logic model (PTLM) review and assessment of key performance indicators (KPIs), interviews with IOU program staff and other relevant market actors, and an online survey with program participants.

#### 3.1 DOCUMENT REVIEW AND IOU STAFF INTERVIEWS

The evaluation team requested and reviewed program documentation and interviewed program staff from each of the electric IOUs.<sup>18</sup> This included reviewing implementation plans, outreach and marketing materials, process models, PTLMs, and materials supporting process activities. This task was critical for the evaluation team’s understanding of the program theory and overarching goals. The evaluation team used information learned during the document review to develop the program staff interview guide.

The evaluation team conducted three interviews with program staff, as shown in Table 8. The evaluation team used the information gathered through these interviews to gain a deeper understanding of the program’s implementation structure, beyond what could be gleaned from available program documentation. Program staff interviews were completed in July 2025. The staff interview guide is available in Appendix A.

Table 8. Interviewed IOU Program Staff

IOU	Number of Interviewees
Pacific Gas & Electric (PG&E)	2
San Diego Gas & Electric (SDG&E)	1
Southern California Edison (SCE)	2

#### 3.2 PROGRAM THEORY LOGIC MODEL REVIEW

A PTLM is a systematic and visual way to represent the relationships among the resources available to operate a program, the activities planned, and the changes or results the program intends to achieve.<sup>19</sup> Specifically, a PTLM:

- Depicts a program’s theory of change
- Shows a categorization of program activities, outputs, and outcomes
- Ties program activities to outcomes and impacts
- Focuses on outcomes of program activities, not its program processes

A theory-based program has a clear definition of the problem it intends to solve, including a defined target market, specific objectives, identified market barriers, and strategies consistent with the program’s objectives. It is essential to clearly articulate the assumptions underlying the problem a program aims to solve, so that program activities can be designed to address them with actionable strategies. There are typically five areas a PTLM should clearly address, as shown in Table 9.

<sup>18</sup> SoCalGas contributed funding until 2021.

<sup>19</sup> Logic Model Development Guide. W.K. Kellogg Foundation, 2004.

Table 9. PTLM Components and Best Practice Considerations

PTLM Component	Purpose for PTLM	Best Practice Considerations
Barriers	Problem(s) to be addressed by the program	Ensure program activities are designed to adequately overcome identified barriers
Audience	Who the program is targeting for services	Clearly defined based on targeted segment and sector
Activities	What services or elements will the program be offering or developing	These can be categorized based on the type of intervention (such as financial assistance, technical assistance, information and education, infrastructure deployment)
Outputs	Program deliverables: the amount of product or service the program will provide	This is usually quantitative (such as the number of people who attend a training or the number of people registered to use a website)
Outcomes	Desired impacts or what happens because of the outputs	These are typically categorized based on expectations for the timeline to achieve each outcome (such as short-term, medium-term, and long-term); the timeline for each category is dependent upon the program (for example, short-term can be within the first 1–2 years of program implementation, based on expectations for when short-term outcomes can be reasonably achieved)

To create the model, the evaluation team reviewed materials related to program design and implementation, reviewed two PTLMs provided by the IOUs, and gathered insights from the interviews with IOU program staff, noted above. Once a draft PTLM was completed, the team met with IOU program staff and the CPUC to discuss the draft model and gather feedback. Based on this feedback, the evaluation team revised the model. In addition, this updated version of the PTLM includes a table that describes the linkages illustrated in the PTLM as well as a set of KPIs associated with the various elements of the PTLM, to facilitate concrete measurement and assessment of program operations.

## 3.3 QUALITATIVE STAKEHOLDER INTERVIEWS

Based on the findings of the document review, the evaluation team conducted two types of stakeholder interviews. The first focused on gathering detailed information from key market actors, such as REN staff, about how their organizations interface with the program to provide compliance improvement support. It also aimed to better understand customer-facing program operations by engaging implementation vendors and program trainers to gain insight into program operations, success, and areas for potential improvement. Secondly, the evaluation team interviewed key participants, using a battery of questions specifically designed to address how participants, such as building officials, architects, designers, and contractors, use program resources.

### 3.3.1 MARKET ACTOR INTERVIEWS

Based on the review of program documents and data, the evaluation team conducted 12 in-depth interviews with 23 market actors. The evaluation team used the information gathered through these interviews to gain a deeper understanding of stakeholder involvement in various program processes. We conducted interviews with the following market actor groups:

- **REN Program Staff:** The CI programs are coordinated, interacting with those of RENs at the local level as needed. We conducted interviews with staff at five of the seven California RENs. These interviews helped us understand how the REN program activities interact with and collaborate on the IOU program.
- **Implementation Partners:** To help deepen our understanding of how the program interfaces with participants and market actors, we interviewed appropriate staff from three implementation partners before beginning interviews with program trainers and key participants.

- **Program Trainers:** We interviewed five program trainers. Using program data, we identified the most active trainers and targeted them, focusing on those with the highest overall course volume.
- **Code Compliance Advocacy Organization:** We interviewed staff at this organization to better understand inspection and enforcement of code compliance.

Table 10 lists the interviewed market actor groups and the organizations that participated in the interviews. The market actor interview guide is available in Appendix A. Interviews with Regional Energy Network (REN) and implementation staff lasted approximately 60 minutes, while program trainer interviews averaged about 45 minutes. Interviews were semi-structured to allow interviewers to probe certain topics.

Table 10. Interviewed Market Actors

Market Actor Group	Number of Interviewees
<b>RENS</b>	
Tri-County REN	3
San Diego REN	2
Bay Area REN (BayREN)	2
Inland Regional Energy Network (I-REN)	2
Central California Rural REN (CCR-REN)	3
<b>Implementation Partners</b>	
Energy Solutions <sup>a</sup>	1
Noresco	1
<b>Others</b>	
Program Trainers	5
California Energy Alliance	4
<b>Total</b>	<b>23</b>

<sup>a</sup> Energy Solutions representative attended the meeting with IOUs, and did not complete a standalone interview

### 3.3.2 KEY PARTICIPANT INTERVIEWS

The evaluation team interviewed 13 key program participants, including building officials, architects, designers, energy consultants, contractors, and a Lighting Controls Acceptance Tester to gain a comprehensive understanding of how participants use program resources and identify ways the program may better serve specific groups. Participants who completed the evaluation’s quantitative online survey (described below) were asked to participate in interviews to offer more in-depth commentary regarding their participation and to add further details to their quantitative survey responses. The participant interviews helped ensure that items and issues not covered in sufficient depth in the surveys were reflected in the data-gathering process, thereby capturing the personal experiences of participants.

The evaluation team offered participants who completed an interview a \$50 electronic gift card for their time. The team kept the participant interviews under 45 minutes. The interviews were semi-structured, allowing interviewers to probe specific topics as deemed necessary during the interview. Table 11 lists the number of targeted and completed interviews across key participant groups.

Table 11. Interviewed Participants

Key Participant Group	Sample Frame (Based on Survey Responses)	Targeted Completes	Actual Completes	Average Years of Experience
Building Officials / Plans Examiners	29	2	3	10
Architects / Design Professionals	52	2	4	23
Energy Consultants	30	2	2	12.5
Contractors	18	2	3	20
Lighting Controls Acceptance Tester	0	0	1	12
<b>Total</b>	<b>129</b>	<b>8</b>	<b>13</b>	<b>17</b>

### 3.4 QUANTITATIVE PARTICIPANT SURVEY

The evaluation team conducted an online survey with program participants to gain a deeper understanding of their attitudes towards the program, how they utilize program resources, and the impact of the program on their day-to-day work. The evaluation team also explored, from the participants' perspective, what the program does well, what it does not do well, and the gaps between program offerings and participants' wants and needs.

The evaluation team drew the sample frame from both participants in the training sessions (n = 5,215) and those who registered for EnergyCodeAce.com (n = 27,242) during 2022 and 2023. Notably, all training participants also registered for the website.

Participants included architects, designers, contractors, building officials, mechanical engineers, and others. The evaluation team fielded the survey online using Qualtrics and recruited respondents by sending email invitations. To encourage survey participation, the evaluation team offered \$10 electronic gift cards to each respondent who qualified for and completed the survey. Table 12 lists the number of targeted and completed surveys by participant strata.

Table 12. Participant Survey Disposition Report<sup>20</sup>

	Population	Sample Frame	Targeted Completes	Actual Completes	Response Rate
Training Participants	5,215	5,215	300	75	
Website Registrants	27,242	27,057	300	243	
<i>Participants of Both Program Components</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	234	
<b>Total</b>	<b>32,457</b>	<b>32,272</b>	<b>600</b>	<b>552</b>	<b>2.9%</b>

<sup>20</sup> The IOUs mistakenly provided limited participation data for training participants to inform this study and therefore the data collection methods are based on limited participation and may not be representative. Population and sample frame figures here for trainings represent those current at the time which sampling decisions were made. Updated participation figures may be found in Section 4.2.3.

## 4. DETAILED FINDINGS

This section presents findings from the PTLM review and design, stakeholder and participant interviews, and participant survey research.

### 4.1 PTLM REVIEW AND KPI ASSESSMENT

To gather data for this task, the evaluation team reviewed two existing PTLMs for the CI program, one from San Diego Gas & Electric (SDG&E) (#1) and one from Pacific Gas & Electric (PG&E) and Southern California Edison (SCE) (#2), other program documentation provided by the investor-owned utilities (IOUs), and included insights from survey and interview data as well. The existing PTLMs are included in Appendix F.

While both PTLMs generally follow the appropriate structure accepted as best practice in PTLM design (see Appendix G), neither of the existing PTLM describe the market, behavioral, and other relevant barriers the program is meant to address, nor do they include the intended target markets of the program. In addition, while PTLM #1 includes linkage descriptions and proposed KPIs, PTLM #2 does not. The updated PTLM includes these linkage descriptions and proposes KPIs to measure program effects.

The following sections describe the updated PTLM, its key differences from existing PTLMs, and an updated PTLM linkage table and associated KPIs. Elements of the updated PTLM (see Figure 4) are referred to in the section below with a letter in parentheses following the item's description (e.g., Resources (C)).

#### 4.1.1 PTLM REVIEW

Beyond the addition of program barriers and target markets, in the “Activities” the evaluation team split out the “Resources” activity present in PTLM #2 to include both resource production (C) and translation (D) in the updated PTLM to reflect the significant effort administrators and stakeholders are putting into addressing market gaps through the translation of program materials into additional languages beyond English. In addition, the evaluation team added Technical Assistance (F) to program activities to document the multiple modes (phone, email, live chats) through which program website users can get questions answered and needs addressed by experts. Lastly, T20 and Title 24 (T24) implementation and infrastructure maintenance included in PTLM #1 was not included in the updated PTLM, but subsumed into the “Tool Creation and Maintenance” activity (B), while the identification of building department best practices and compliance improvement barriers and solutions in this same PTLM did not appear to have any current activities associated with it and was also omitted from the updated model.

In general, both PTLMs follow PTLM design best practice in their linking activities to their associated outputs, though the updated PTLM does differ from both existing PTLMs. For instance, the updated PTLM subsumes the outputs of the “training support” activities into the training output, and also subsumes the T20 and T24 support activities present in PTLM #1 into the online tools and resources output. In addition, the updated PTLM includes outputs linked to program activities that were added, such as translated resources (K) and T20 and T24 support (M).

Short-term outcomes present in PTLM #1 do not appear to follow logically from their derivative outputs. For example, increased manufacturer and distributor compliance would not necessarily result from outreach and knowledge campaigns. In addition, increased knowledge of compliance by other market actors described in this model would not result from the development of training materials itself, but would require awareness campaigns directed toward these market actors prior to knowledge building. Short-term outcomes in PTLM #2 generally flow logically from the proposed outputs, though in some cases do not (e.g., “Market actors understand their unique role in the compliance process and use Energy Code Ace tools and resources to perform their job”), in addition to not being accompanied by a linkage

description. The updated program theory logic model (PTLM) short-term outcomes are somewhat similar to PTLM #2, though they differ in some respects. Some short-term outcomes from PTLM #2 are designated as medium-term outcomes in the updated model, such as the increase in market actor compliance-related work efficiency (Y) and the use of program materials to educate colleagues (W). In addition, the updated PTLM includes a reference to an increase in non-English-speaking users of program resources (R).

For mid-term outcomes, as was the case for short-term outcomes, the updated PTLM echoes much of what is found in PTLM #2, but removes some of these outcomes that do not appear to be a result of logical progress, such as “Data is used to gauge effectiveness of Codes and Standards (C&S) and guide future C&S work.” If this is to be included in future iterations of the program PTLM, it should ultimately be linked back to a program barrier. Also, in PTLM #2, the short- to intermediate-term outcome “number of buildings properly designed, permitted, constructed, and inspected increases” is not currently tracked and does not logically lead to any other intermediate outcomes. This element is also included in PTLM #1, originating from market actor knowledge gains. However, in the updated PTLM, the evaluation team included this element as well, but tracking the logic that leads to it directly through increased skill in navigating the complexity of code (X), increased effectiveness of market actor work due to engagement with program experts (T), and an increased amount of Certified Energy Analysts (CEAs) and Associate CEAs (ACEAs) (Z)—all of which would drive increased consistency and effectivity of market actors’ collective work (Y).

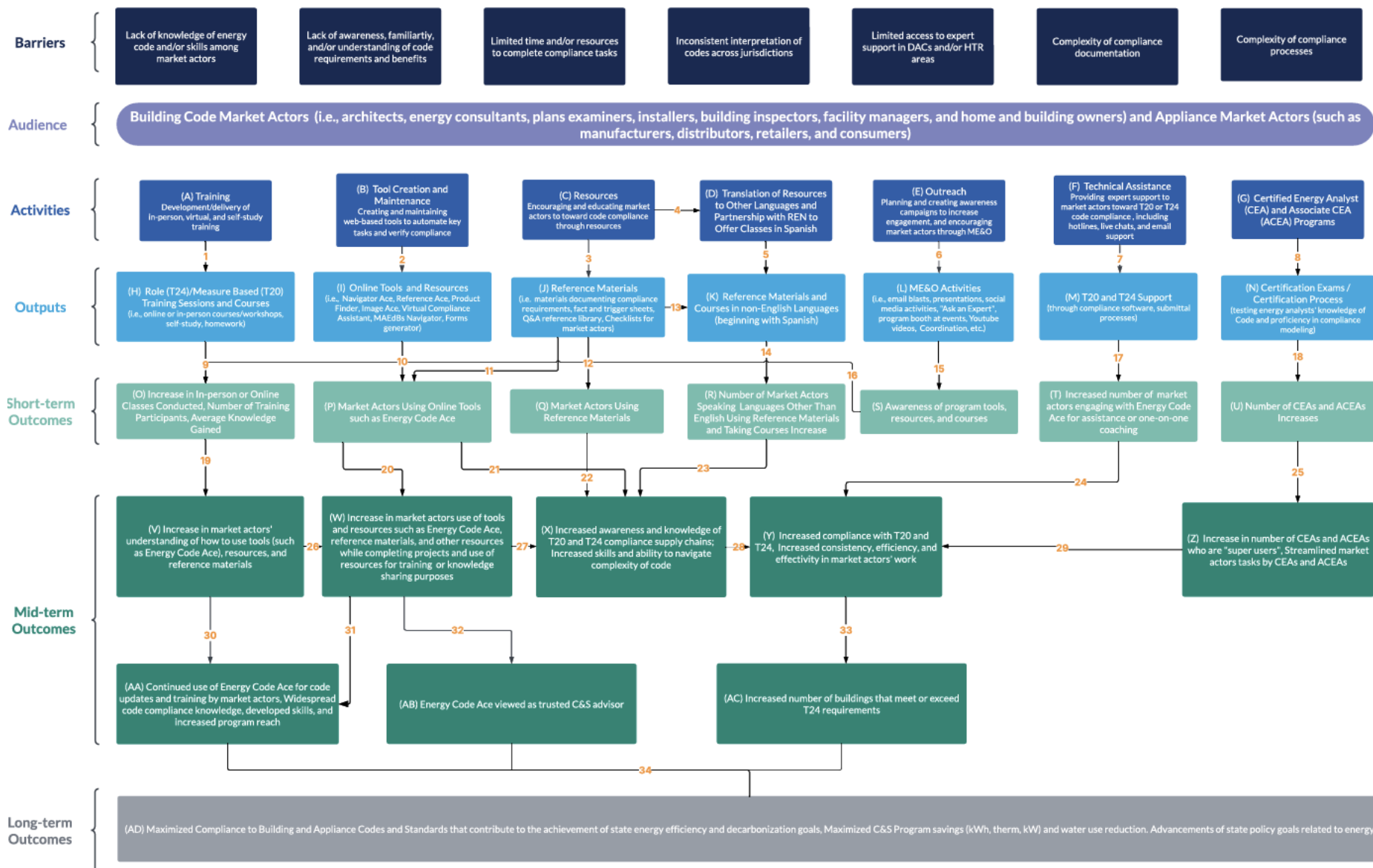
Additionally, there are some mid-term outcomes from this section of the IOU-provided PTLMs that the evaluation team did not see reflected in data gathered from the document review and interview process and that do not appear to flow logically from short-term outcomes; thus, they are not included in the updated PTLM. Increases in appliances that meet code (or decreases in those that do not) are mentioned in both PTLMs as intermediate outcomes, but the current evaluation data do not support them and require additional preliminary steps in the logic model to help realize them.

Lastly, long-term outcomes in the updated PTLM reflect those of both PTLMs #1 (described as both intermediate and long-term) and #2. These outcomes include maximized compliance with current standards, contributions to California’s energy and carbon savings goals, and maximized C&S Program savings. These outcomes logically follow from the mid-term outcomes described in the updated PTLM: continued use of Energy Code Ace (AA), Energy Code Ace being viewed as a trusted C&S advisor (AB), and an increased number of buildings that meet or exceed T24 requirements. To help the program realize these end goals, the evaluation team designed a set of KPIs (see Table 13) that will guide program administrators in tracking program progress and identifying pain points.

## 4.1.2 UPDATED PTLM

Figure 4 is the updated PTLM, developed by the evaluation team to more accurately reflect the current logic and activities associated with the program. In developing this updated PTLM, the evaluation team used findings from secondary, interview, and survey research to document the barriers the program is designed to overcome and traced the program’s logic through to the long-term outcomes. In doing so, we have added elements to strengthen the logic and, in other cases, removed elements that did not flow from previous steps in this logic. Activities and outcomes deemed central to the program’s success should be represented in future iterations of the program PTLM in a way that is measurable and logically flow from the barrier through to the long-term outcome. A best-practice guide for developing PTLMs is included in Appendix G.

Figure 4. Compliance Improvement Program Updated PTLM



### 4.1.3 UPDATED KPIS FOR TRACKING COMPLIANCE IMPROVEMENT PERFORMANCE

Table 13 summarizes the KPIs that should be used to track program performance and implementation based on the updated PTLM. Gathering data to support the tracking of these KPIs will help program staff assess the value of program elements, as well as the overall value the program adds to the compliance supply chain. More specifically, these KPIs serve to solidify linkages between program design elements which themselves maintain and legitimate the program’s logical flow. In many cases this data gathering is necessary at the level of location and profession.

The Evaluation Team utilized color coding within Table 13 to distinguish which KPIs are currently tracked, should be tracked, or may require additional data collection activities through an evaluation.

The KPIs are color-coded using the following logic:

- Standard text indicates KPIs that are planned to be tracked by IOU/implementation staff and require no changes;
- **Bolded text** denotes KPIs that are already planned to be tracked by IOU or implementation staff but may require more specific reporting requirements (such as unit of measure);
- *Italic text* represents KPIs that are not currently planned to be tracked but should be collected by IOU/implementation staff; and
- Underlined text represents KPIs that involve additional data collection activities, such as feedback forms, surveys, and interviews, but are not currently integrated into tracked data. These activities can be collected by an evaluator or IOU/implementation staff.

Table 13. Proposed Compliance Program PTLM Linkage Theories and Associated KPIs

Link	Linkage Theory	Recommended KPIs
1	Activity A leads to Output H, as trainings and training materials developed are used in role-based (T24) or measure-based (T20) in-person or online training courses, as well as self-study or home assignments.	<i>Number of unique training courses</i> <u>Training needs assessment for each profession and establishment of priority goals</u> <u>Percentage of goals based on attained</u>
2	Activity B leads to Output I, as web-based tool creation results in various tools, such as Navigator Ace, Reference Ace, Product Finder, Image Ace, Virtual Compliance Assistant, Modernized Appliance Efficiency Database System (MAEdBS), and Forms generator, which can automate key tasks and verify compliance.	<u>Tools needs assessment, and establishment of priority goals</u> <u>Tool reliability measure</u> <u>Percent of goals attained, based on assessment</u>
3	Activity C leads to Output J, as the Compliance program also produces resources in the form of documents or reference materials that document compliance requirements, fact or trigger sheets and checklists for market actors, and a Question and Answer reference library.	<u>Reference material needs assessment, establishment of priority goals (including percent of resources that are up-to-date)</u> <u>Percent of goals attained based on assessment</u>
4	Activity C also leads to Activity D as resources are translated into other languages, such as Spanish, enabling partners, such as Regional Energy Networks (RENS), to offer classes in Spanish.	<b>Translation needs assessment</b>

Link	Linkage Theory	Recommended KPIs
5	Activity D leads to Output K, as translation of resources and partnerships with RENs to offer classes in Spanish and other languages result in the availability of resources and classes in those languages.	<p><b>Number of courses available in languages other than English</b></p> <p><u>Proportion of applicable market actors with access to in-language courses</u></p> <p><u>Completion rate for all courses</u></p>
6	Activity E leads to Output L, as designing and creating awareness campaigns to increase engagement of market actors with the program requires various Marketing, Education & Outreach (ME&O) activities such as email blasts, presentations, social media activities, “Ask an Expert,” program booths at events, and YouTube videos.	<p><b>Number of emails, number and profession of recipients</b></p> <p><b>Number and type of presentations at professional gatherings</b></p> <p>Number and type of social media posts</p>
7	Activity F leads to Output M, as technical assistance activities are carried out through technical support for T20 and T24 via compliance software and support during the project submittal processes. The program also has a hotline that market actors can call for technical support.	<p><b>Number of chats on the website, and nature of inquiry</b></p> <p><b>Number of emails received, response time, and nature of inquiry</b></p> <p><b>Number of phone calls fielded, and nature of inquiry</b></p> <p><u>Issue resolution rate and customer satisfaction, post interaction</u></p>
8	Activity G leads to Output N, as the program facilitates CEA and via ACEAs exams and processes that test energy analysts’ knowledge of code and their proficiency in compliance modeling.	<p><b>Number of students participating in CEA certification</b></p> <p><b>Number of students participating in ACEA certification</b></p> <p><u>Average time to certification</u></p>
9	Output H leads to Short-term Outcome O, as market actors engaging in in-person or online training leads to an increased number of classes conducted, number of students, and knowledge gained.	<p>Change in code-relevant knowledge, <u>and change in code-relevant skills</u></p> <p><b>Number of courses added</b></p> <p><b>Number of learners added per course, by profession and location</b></p>
10	Output I leads to Short-term Outcome P, as the availability of online tools and resources leads to market actors using the tools and resources, such as Reference Ace, Product Finder, and the Virtual Compliance Assistant, for compliance.	<p><u>Tool Utilization Rate (% of registered users active per period, per tool), by profession and location</u></p> <p><u>Task completion rate within tools (%)</u></p> <p><u>Average sessions per active user, per period</u></p> <p><i>Active users per period</i></p>
11	Output J also leads to Short-term Outcome P, as the availability of online reference materials leads to market actors using these materials, such as Trigger Sheets and the Question and Answer Reference Library for compliance.	<p><u>Percent of users accessing reference materials and tools in the same session (Cross-use rate)</u></p>
12	Output J leads to Short-term Outcome Q, as the availability of reference materials results in the use of tools, resources, and reference materials.	<p><u>Reference materials access rate (% of users viewing/downloads), by profession and location</u></p> <p><u>Average time-on-page (minutes) for key resources</u></p>

Link	Linkage Theory	Recommended KPIs
13	Output J also leads to Output K, since once reference materials have been created, they can be translated to other languages, such as Spanish	Number of unique resources translated <u>Proportion of market actors with access to in-language collateral</u>
14	Output K leads to Short-term Outcome R, as the uptake of Spanish (or other) speaking among market actors using reference materials and taking courses in Spanish increases the number of Spanish-speaking market actors using reference materials.	<u>In-language material utilization (views/downloads)</u> Number of learners enrolled in courses <u>Learner satisfaction</u> <u>Course completion rate</u>
15	Output L leads to Short-Term Outcome S, as ME&O activities will result in engagement from market actors	<u>Open rate, click through rate, percent bounced/bad emails</u> <u>Attendance by profession at conference presentations</u> <u>Social media engagement rate</u> <b>Event booth interactions, including leads/contacts captured and types of inquiries</b>
16	Short-term Outcome S leads to Short-term Outcomes O, P, and Q, as the various awareness-raising methods drive market actors to courses, resources, and tools on the program website.	<u>Program tool user, resource user, and course attendee mode of awareness</u>
17	Output M leads to Short-term Outcome T, as the availability of technical support on either T20 or T24 leads to increased numbers of users seeking support.	<b>Active support users per period</b> <u>Support-to-solution rate (% cases resolved)</u> <u>Average time-to-resolution</u> <u>Repeat contact rate (% users needing &gt;1 touch)</u>
18	Output N leads to Short-term Outcome U, as energy analysts passing exams and completing the CEA certification processes leads to an increase of CEAs who may be able to serve in Energy Efficiency (EE) or incentive programs and guide others.	<u>Total number of CEAs and ACEAs increases</u> <u>Proportion of CEAs and ACEAs as proportion of total CEAs and ACEAs increases</u>
19	Short-term Outcome O leads to Mid-term Outcome V, as more market actors take online courses, they will have a better understanding of how to use the program's online tools and resources.	<u>Help-seeking reduction (% decrease in support tickets among learners)</u> <u>Number of learners using Energy Code Ace (% change), by profession and location</u>
20	Short-term Outcome P leads to Mid-term Outcome W, as market actors' initial use of tools, resources, and reference materials leads to consistent use during project completion, training, or knowledge sharing activities.	<u>Repeat usage rate</u> <i>New users per period</i>

Link	Linkage Theory	Recommended KPIs
21	Short-term Outcome P leads to Mid-term Outcome X, as the initial use of tools increases awareness of T20 and T24 compliance supply chains, as well as skills and the ability to navigate the complexity of code.	<u>Knowledge assessments of supply chains (survey), by level of tool use</u> <u>Skills/knowledge assessments of code process navigation, by level of tool use</u> <u>Knowledge sharing rate, by level of tool use</u> <u>Rate of use in private training scenarios, by level of tool use</u>
22	Short-term Outcome Q leads to Mid-term Outcome X, as the initial use of reference materials increases awareness of T20 and T24 compliance supply chains, as well as skills and the ability to navigate the complexity of code.	<u>Knowledge assessments of supply chains (survey), by level of reference material use</u> <u>Skills/knowledge assessments of code process navigation, by level of reference material use</u> <u>Knowledge sharing rate, by level of reference material use</u> <u>Rate of use in private training scenarios, by level of reference material use</u>
23	Short-term Outcome R leads to Mid-term Outcome X, as the initial use of translated resources increases awareness of T20 and T24 compliance supply chains, as well as the skills and ability to navigate the complexity of code for those who speak and read languages other than English.	<u>Knowledge assessments of supply chains (survey), by level of reference material use among non-English speakers</u> <u>Skills/knowledge assessments of code process navigation, by level of reference material use among non-English speakers</u> <u>Equitable access gap (difference vs English-speaking users)</u> <u>Knowledge sharing rate, by level of reference material use among non-English speakers</u> <u>Rate of use in private training scenarios, by level of reference material use among non-English speakers</u>
24	Short-term Outcome T leads to Mid-term Outcome Y, as users have barriers to tool and resource use removed during support sessions, resulting in increased compliance, along with users consistently, efficiently, and effectively navigating code-relevant work tasks.	<u>Error rate in submissions, by support history</u>
25	Short-term Outcome U leads to Mid-term Outcome Z, as the number of Certified Energy Analysts (CEAs) and Associate Certified Energy Analysts (ACEAs) increases, this results in the increase in the number of “super users” who are able to navigate code compliance quickly and effectively and may result in the streamlining of compliance-relevant tasks.	<u>Share of CEAs and ACEAs designated as “super users”</u> <u>Average turnaround/completion time for compliance tasks (super users vs baseline) such as modeling</u>
26	Mid-term Outcome V leads to Mid-term Outcome W, as market actors’ fluency with tools and resource use leads them to increase their use of the tools and resources.	<u>Tool usage rate by learner status, profession, and location</u> <u>Average number of tools used per user</u>

Link	Linkage Theory	Recommended KPIs
27	Mid-term Outcome W leads to Mid-term Outcome X, as increased use of tools leads to increased awareness of T20 and T24 compliance supply chains, as well as skills and ability to navigate the complexity of code by initial users, and new users they introduce.	<p><b>Word of mouth awareness rate from existing to new users</b></p> <p><u>Knowledge assessments (survey), by learner status</u></p> <p><u>Skills/knowledge assessments of code process navigation, by learner status</u></p>
28	Mid-term Outcome X leads to Mid-term Outcome Y, as knowledge of T20 and T24, and skills and the ability to navigate code increase, leading to more consistent, efficient, and effective code compliance and compliance-relevant work.	<p><u>Compliance success</u></p> <p><u>Project resubmittal rate</u></p>
29	Mid-term Outcome Z leads to Mid-term Outcome Y, as the increase in “super users” with increased code competency leads to an increase in compliant documentation.	<u>Proportion of compliant forms and plans submitted by CEA and ACEA certified professionals compared to those submitted by non-certified professionals</u>
30	Mid-term Outcome V leads to Mid-term Outcome AA, as actors’ increased understanding of how to use tools in Energy Code Ace leads them to rely more on the program to stay informed of code updates and to use it for training.	<p><u>Tool access rate by learner status, profession, and location</u></p> <p><i>Rate of continued tool use and access by period</i></p> <p><b>Email opt-in rates</b></p> <p>Number of registered users for EnergyCodeAce.com</p>
31	Mid-term Outcome W leads to Mid-term Outcome AA as increased use of tools during project completion leads to longer-term use by initial users, and users they introduce.	<p><u>Tool access rate by referral source</u></p> <p><i>Rate of continued tool use and access by period</i></p> <p><b>Email opt-in rates</b></p> <p>Number of registered users for EnergyCodeAce.com</p>
32	Mid-term Outcome W leads to Mid-term Outcome AB, as increased use of tools leads to increased trust in Energy Code Ace as a resource	<p><u>Net Promoter Score</u></p> <p><u>Net Trust Score</u></p>
33	Mid-term Outcome Y leads to Mid-term Outcome AC, as increased compliance via increased use of Energy Code Ace results in an increase in the proportion of code-compliant buildings	<u>Inspection pass/failure rate by user status</u>
34	Mid-term Outcomes AA, AB, and AC lead to Long-term Outcome AE, as increased compliance attained through existing use of Energy Code Ace and continued use and trust of the website by market actors, helps the program make a positive contribution to California’s decarbonization and efficiency goals.	<p><u>Estimated annual energy savings attributable to program</u></p> <p><u>Avoided emissions (tCO2e) attributable to program</u></p> <p><u>Avoided water use attributable to program</u></p> <p><u>Cost per compliant building (\$/building)</u></p>

## 4.2 DOCUMENT REVIEW AND QUALITATIVE STAKEHOLDER INTERVIEWS

The evaluation team conducted 12 interviews with several stakeholders, including program staff, implementation vendors, regional partners (RENs), and the California Energy Alliance. This section will include topic-specific findings from these interviews, supplemented by insights gleaned from the document review conducted by the evaluation team at the outset of the research, and provide an overview of program coordination and processes.

## 4.2.1 PROGRAM PURPOSE

According to program documentation provided by the investor-owned utilities (IOUs), the program’s objective is twofold:

1. Increase compliance with California’s energy codes
2. Reduce market barriers by providing professionals with the knowledge and tools needed to understand the codes and comply with them.

During interviews, program administrators and RENs agreed that the program’s objectives, laid out in administrators’ business plans for the program, of “carbon reduction objectives” equated to building electrification, and “streamline the process for market actors” was interpreted as addressing barriers to understanding and enforcement of the building code. Southern California Edison (SCE) added to the definition of streamlining to include “...the focus on removal of barriers for compliance and really understanding how the complexity and rapid pace of change within the code becomes an impediment for industry....”

The Regional Energy Networks (RENs) view the CI program, administered by the IOUs, as foundational to compliance. “The statewide... program is like a base, a foundation... ensuring there are some basic resources.”

Program consultants emphasized that the program’s core objective is to make code compliance faster and easier for all market actors — architects, designers, plan examiners, inspectors, contractors, and others — by providing accessible tools, training, and reference materials, in as many formats as possible: “Providing resources of all sorts to the market actors involved ... helping improve compliance in any way they are able,” according to one implementer. Another summarized it this way:

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*“Our objective is to make compliance faster and easier for all the different market actors...so that the tasks in the compliance process are faster and easier.”*

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## 4.2.2 PROGRAM COORDINATION

Figure 5 maps the organizations and entities involved in implementing the program. The program focuses on reaching key market actors in the appliance and building sectors to drive greater compliance improvement. Regional partners and industry stakeholders, including local government agencies, RENs, and trade associations, work with the IOUs to provide outreach and training, including Spanish-language classes and resources. Dashed lines indicate supporting entities and relationships: for example, Southern California Gas provides funding but does not participate in implementation due to Decision language from the California Public Utilities Commission (CPUC), and SCE facilitates working groups through California Building Energy Modeling (CalBEM),<sup>21</sup> a statewide group of energy modeling professionals focused on streamlining the use of energy models in compliance processes, providing education on modeling tools and approaches, and improving these tools and increasing their accuracy.

Figure 5. Compliance Improvement Program Organizational Chart

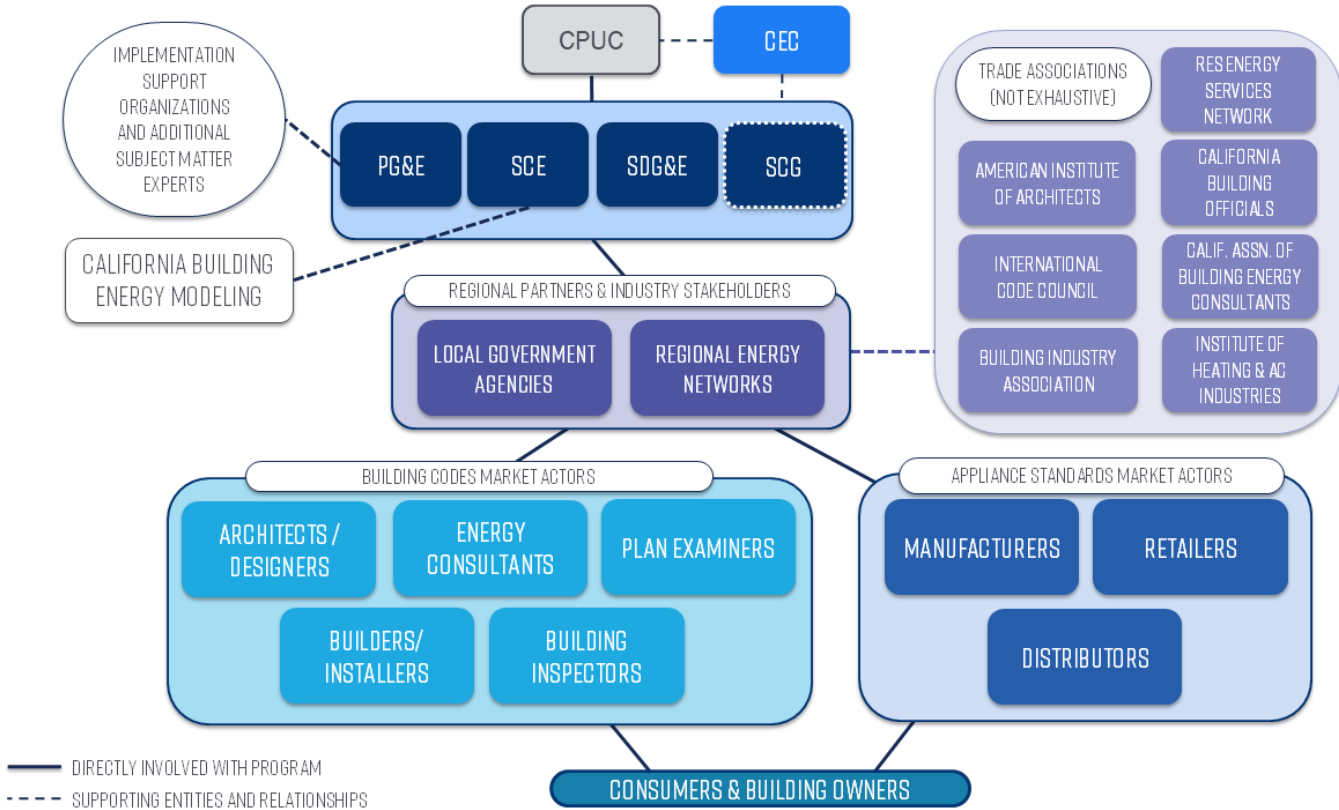


Figure Note: The IOUs also have direct relationships with all market actors shown and do not rely on local government agencies or RENs as intermediaries to reach those actors or trade associations. The IOUs also maintain direct relationships with multiple divisions within the CEC.

## PROGRAM ADMINISTRATORS AND IMPLEMENTATION SUPPORT

The CI program is coordinated across IOUs locally. Three of the four IOUs participate in joint planning rather than through centralized leadership. The IOUs maintain that the program is collaborative at the statewide level, but acknowledge regional differences in building type, activity levels, and jurisdictional capacity. Each IOU contributes in different ways. San Diego Gas & Electric (SDG&E) put it this way, “Pacific Gas & Electric (PG&E) has some vendors, SDG&E has some vendors, [SCE] has some vendors. ...think of a pizza or a pie. We all take a piece of the pie and do a lot of different work.”

- SDG&E contributes print materials for some course materials, handouts, brochures, and other printed needs.
- SCE contributes marketing materials for conferences and seminars. These include branded pens, notebooks, and other marketing items.
- PG&E oversees the Energy Code Ace brand and website through eight vendors (See Appendix G for the full listing), including Energy Solutions for technical expertise and Binary Evolution for building and managing the website.

Offerings across utilities include,

- Training events (in-person and virtual)
- Technical resources (e.g., checklists, fact sheets)
- Outreach to code officials, builders, designers, and other compliance supply chain professionals

The IOUs and RENs describe the program as fully collaborative, even though different responsibilities are assigned to each utility. Each IOU implements the program in a way that accommodates regional differences.

PG&E controls the program budget for the website, which constitutes much of the overall CI program budget; however, according to interviews, both SCE and SDG&E were satisfied that they could achieve their individual program goals, such as outreach and technical support, with their current program budget.

The IOUs review resources and tools with the California Energy Commission (CEC) to ensure compliance improvement messaging is consistent across IOUs and RENO. SDG&E and SCE cited the need to simplify messaging to reach a broader audience and build awareness of the codes and code changes, but this is becoming more challenging as the code becomes more complex.

In interviews, each utility emphasized that the program was fully collaborative, despite different responsibilities for program implementation being assigned to each utility.<sup>22</sup> According to SDG&E, the program evolved into a regional, yet fully collaborative, initiative when the broader statewide codes and standards program segment transitioned to third-party implementation.

The CI program collaborates with California's Workforce, Education, and Training (WE&T) programs to develop and deliver courses. Typically, WE&T program staff will contact CI program staff with requests from training audiences for specific topics and collaborate with the CI program to determine content and delivery. There are also monthly calls with the IOUs and RENO to discuss all CI program activities, provide updates, and avoid overlapping program efforts. According to the program administrators, materials produced by IOUs and RENO are reviewed by the CEC to ensure messaging and collateral are consistent with CEC guidance.

Additionally, staff administering the statewide Reach Codes Program collaborate with the CI program, as they work with various groups within the same jurisdictions. The Reach Codes Program collaborates with sustainability staff, which then presents its findings to the city council. The CI program works more closely with the enforcement divisions of building officials; nonetheless, messaging must remain consistent for effective codes and standards advocacy across the programs.

Finally, even though they implement joint decisions, each IOU maintains contracts with its own vendors for supplies, training, and other professional services. Specifically, PG&E holds contracts with the following vendors:

- Energy Solutions, which provides technical expertise and supports outreach activities and develops tools and resources for the Energy Code Ace website.
- NORESKO, which provides technical expertise and develops tools and resources for the Energy Code Ace website.
- Binary Evolution, which provides website maintenance and enhancements.

Individually, IOUs hold contracts with program-vetted firms that provide subject matter expertise, design training curricula and materials, and conduct training. These firms are:

- EnergySoft
- Gable Energy Associates
- Selby Energy
- Anchors Aweigh Energy
- Build Smart
- McLain ID
- Anchors Aweigh Energy

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<sup>22</sup> Examples: PG&E coordinates the overall program, SDG&E provides common printed materials, SCE provides common marketing materials  
Opinion Dynamics

- Morton Green Building

## REGIONAL PARTNERS AND INDUSTRY STAKEHOLDERS

The primary role of the RENs and local government agencies with the CI program broadly is to help market actors comply with local applications of statewide codes and standards mandates. RENs act as a resource for market actors at the local level.

In interviews, the RENs generally agreed that coordination and collaboration were effective across stakeholders. Beyond monthly coordination calls, each REN actively coordinates with the appropriate IOU through Joint Cooperation Memos (JCM) to avoid duplicative program efforts. One REN explained it this way, “We coordinate with IOU partners to make sure resources complement, not overlap... RENs are designed to fill the gaps.” Another added, “We’ve relied heavily on statewide resources, but add a local layer—our relationships make the material resonate.” However, because of their “high touch” model for connecting with market actors at the local level, the RENs emphasized that more resources would create more consistent outreach. “It seems like we can never have enough resources to be on the ground talking to people.”

## TRADE ASSOCIATIONS

For targeting and market engagement, the IOUs reach out directly to trade organizations to access the full compliance supply chain through conferences, speaking engagements, lunch-and-learn sessions, and customized training. Key trade associations with which the CI program collaborates include the Building Industry Association (BIA), the California Association of Building Energy Consultants (CABEC), professional organizations, and Mechanical, Electrical, and Plumbing (MEP) firms, as well as local building departments.

## MARKET ACTORS

Building codes and appliance standards market actors are the primary program audience for training and resources. However, these stakeholders generally have little contact with program staff and implementers, save for requests for assistance with the website and tools. Market actors, such as architects, contractors, building inspectors, plan examiners, and others, serve as the channel through which the program delivers code-compliant instruction.

### 4.2.3 PROGRAM PERFORMANCE

The evaluation team asked interviewees about products and services offered by the program, how they performed, and how these products and services addressed perceived barriers and challenges in the market. According to these interviewees, the barriers are the complexity of the building code and the lack of available training on how to navigate and interpret the code. The overall goal of the CI program is to raise awareness (of the existence of codes and any changes) and provide education (on what it takes to implement the code and how to navigate the forms and paperwork to document compliance). The interviewed IOUs offered these assessments of the program:

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*“There’s maybe five major categories of activities and services offered...there is outreach, there’s training, there’s tools, resources, and technical support. And PG&E provides funding for all of those things.”*

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*“It’s a comprehensive education process, educating the designers and educating the installers and the contractors, even educating original equipment manufacturers [OEMs]... The distributors and manufacturers, and then educating the ... code enforcement side of the machine.”*

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## ENERGY CODE ACE WEBSITE

The Energy Code Ace website is the public facing portion of the program, housing tools, resources, and course enrollment opportunities. The website has grown over time due to the expansion of code, as the program tries to expand its reach throughout the compliance supply chain. The CI program has a total of 245 resources for the 2019 and 2022 code cycles.<sup>23</sup> These ranged from checklists and blog posts to interactive forms and a virtual reality app. See the current list of tools provided through the Energy Code Ace website in Table 14.

Table 14. Overview of Resources Available on EnergyCodeAce.com

Tool	Purpose
Fact sheets	Brief overviews of specific code topics or updates.
Reference guides	Deeper explanatory documents that walk users through compliance rules.
Checklists	Printable aids that outline when certain code requirements apply.
Trigger sheets	Printable aids that outline when certain code requirements apply.
Training videos	Recorded instruction segments on compliance and code topics.
Case studies	Real-world examples of code application and implementation.
Reference Ace	A tool that helps users navigate the Title 24 (T24), Part 6 energy code and Title 20 (T20) Standards documents.
Virtual Compliance Assistant	Helps users complete forms and verify compliance. It creates Certificates of Compliance and Certificates of Installation for nonresidential, hotel/motel, high-rise multifamily, and low-rise multifamily projects.
Forms Ace	Aids users in figuring out which T24, Part 6 forms apply to their project.
Product Finder	Assists in finding T24, Part 6 compliant products.
Noteblocks	Allows users to share notes and applicable energy codes with their teammates.
Image Tool	Image library with diagrams and illustrations that visually explain the requirements of California’s energy code (T24, Part 6) and appliance efficiency regulations (T20).

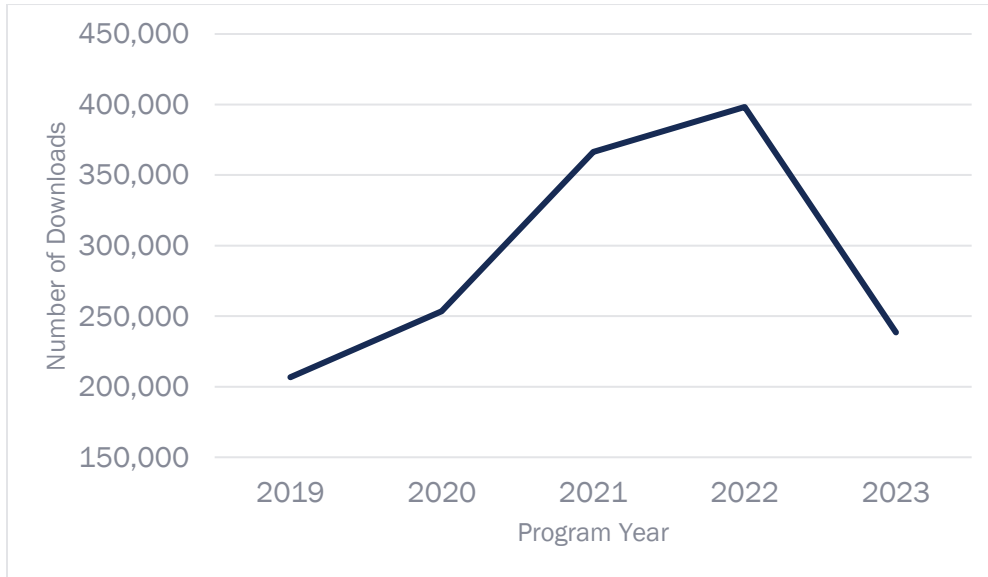
One investor-owned utility (IOU) consultant indicated, “Reference Ace and Virtual Compliance Assistant have the most impact...they automate tasks and make compliance faster and easier.”

The number of downloads from the Energy Code Ace website steadily increased from 2019, reaching a peak in 2022. Then, in 2023, the volume of downloads dropped to 2019 and 2020 levels. This may be because the 2022 T24 changes were significant, and market actors were seeking information on the changes. Total annual downloads are presented in Figure 6.

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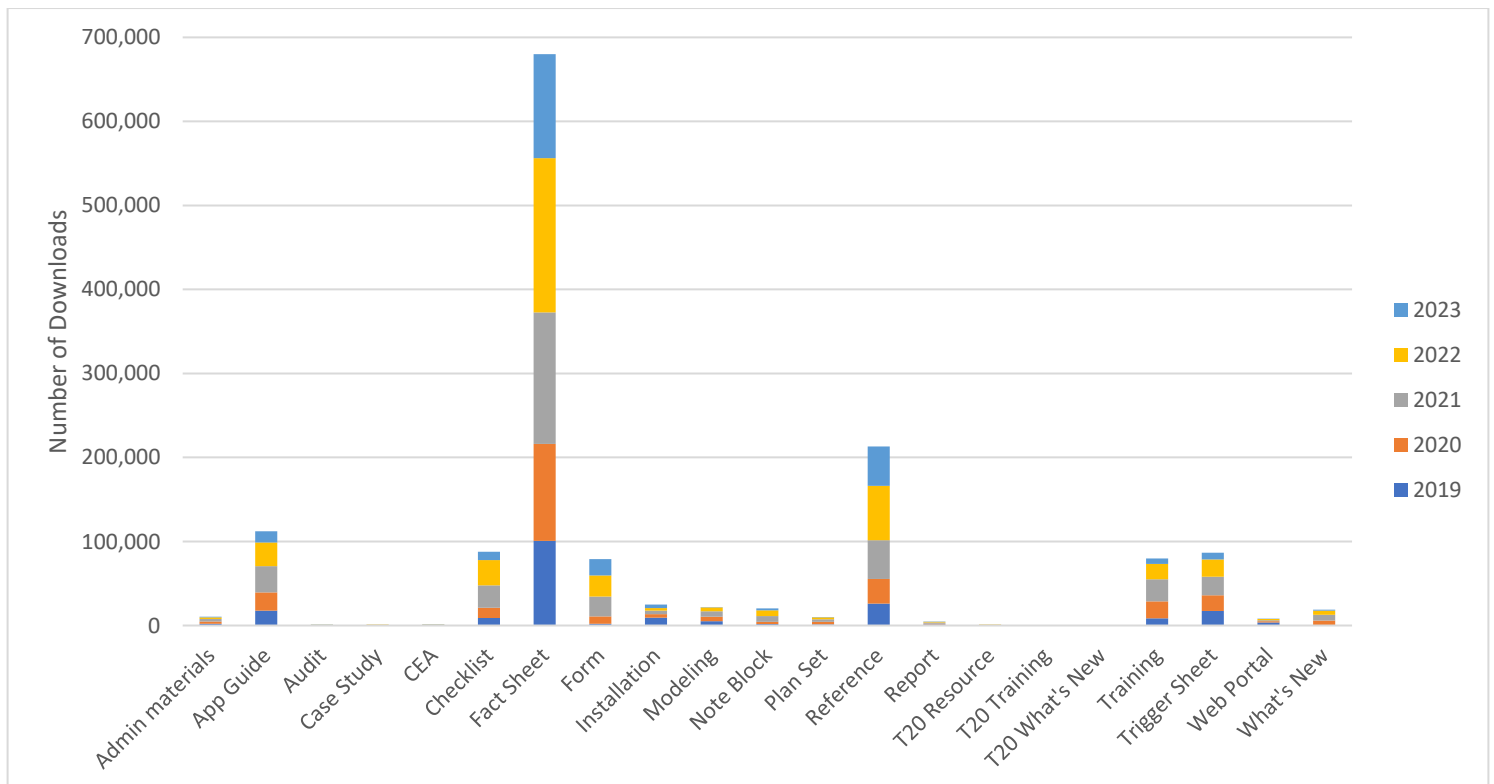
<sup>23</sup> California’s building code cycle is a three-year (triennial) process where new editions of the state’s Title 24 code are adopted, primarily based on model codes from the International Code Council (ICC), incorporating state-specific amendments for safety, energy, and accessibility, with updates usually effective January 1 of the cycle year (e.g., 2025 codes effective January 1, 2026). Between these major cycles, intervening cycles occur roughly every 18 months for more limited updates and supplements, ensuring codes remain current with new laws and technology.

Figure 6: Annual Energy Code Ace Website Downloads



Fact sheets and reference guides were the most downloaded resources from the Energy Code Ace website throughout the evaluation period (2019–2023). The most downloaded resource, which covered the 2021 California T20 changes to computers and related hardware, was downloaded 16,243 times. The second most downloaded resource was the “What’s Changed in 2022 – Single-family Residential Buildings” fact sheet, which was downloaded 9,696 times. Figure 7 shows the number of downloads by year for each website resource.

Figure 7. Annual Number of Downloaded Resources by Type



Most stakeholders praised training and tools; however, several noted overlaps, navigation challenges, and uneven utilization. Referring to the navigation of resources and tools on the site, a vendor that provides content acknowledged, “Sometimes it’s a little too voluminous...hard to navigate because it is so comprehensive.” Regarding the forms, another content provider stated, “They’re very clunky and a little bit awkward to use. We avoid using them whenever possible.” A related comment from another provider was, “We just have so much content to update every three-year cycle...sometimes we run out of time before another update is due.”

The interviewed regional energy networks (RENs) reported using localized checklists, templates, and plain-language summaries derived from Energy Code Ace materials to deploy outreach at the local level. For many resources, such as checklists and Reference Code Ace, the RENs reported providing links from their websites to the Energy Code Ace website. As one REN put it, “We don’t recreate the wheel at all. We use many of the [statewide] resources as possible but make them accessible to our communities.”

## TRAINING COURSES

Cross-promotion and joint training between IOUs and RENs are common. One REN said, “We refer people to Energy Code Ace all the time... and we’ve done jointly scheduled trainings.” Another added, “We coordinate with our [IOU] contact so that he can inform us what classes are currently scheduled... we coordinate to cross-promote [the training].”

The RENs also develop customized training tailored to local needs. For example, Bay Area Regional Energy Network (BayREN) and Central California Rural Regional Energy Network (CCR-REN) offer shorter, 60- to 90-minute sessions customized to their jurisdictions. “If [the audience] only has an hour, they can come to one of our trainings.” One of these stakeholders indicated they can struggle with attendance for multi-day trainings because it is hard for trainees to take time off from their day-to-day operations.

Interviewed program trainers commented that online training delivery is more cost-effective for instructors and convenient for students. They also stressed that in-person and live online training were more effective than self-study training. As one instructor noted, “The live sessions are better because you can get interaction, Q&A, and immediate feedback. Self-study... you don’t know if [the audience] really understood.”

The program enrolled 21,406 students during the evaluation period (2019–2023).<sup>24</sup> According to the Energy Code Ace website, many courses offer Continuing Education Units (CEUs) that are recognized by professional organizations, including:

- American Institute of Architects (AIA)
- California Association of Building Energy Consultants (CABEC)
- International Code Council (ICC)
- Zero Net Carbon Design (ZNCD)

The CI program offered courses through four modalities, as listed in Table 15. In all, 290 unique courses were offered. About half of these (49%) focused on residential buildings. Several course topics were split into multiple course titles. For example, we count the “2022 Title 24-Single Family Plans Examiner” course as a single topic. This was a two-day course that was listed under “Part 1 through 12” for delivery.

Courses are now offered in several modalities to reach the widest possible number of students. Live in-person training is favored by students and instructors for depth of learning and networking, but live online training attracts the most students due to the convenience of attending from work or home.

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<sup>24</sup> This student count represents the total number of registrations, not the number of unique students.

Table 15. Course Delivery Modalities

Modality	Description
Live in-person	This is a traditional physical classroom setting
Live Online Sessions	Real-time virtual classes led by instructors.
Self-Paced Modules	On-demand courses that can be taken at your convenience.
Recorded Webinars	Previously recorded sessions were available for viewing at any time.

The number of registrations for courses jumped from an average of 4,857 for the years 2019 through 2021 to an average of 11,068 for 2022 and 2023. This number nearly doubled in 2022 from prior years and remained higher in 2023. During this period, the IOUs added online and virtual courses to mitigate the effects of COVID. The added convenience was one reason more professionals were able to participate. The total number of registrations by year is shown in Table 16. Of the registrations from 2019-2023, 34,619 (94%) were for online courses (either live or self-paced), and 2088 (6%) were for in-person courses.

Table 16. Annual Number of Registrations

Year	2019	2020	2021	2022	2023	Total
Students	3,726	4,657	6,187	11,517	10,620	<b>36,707</b>

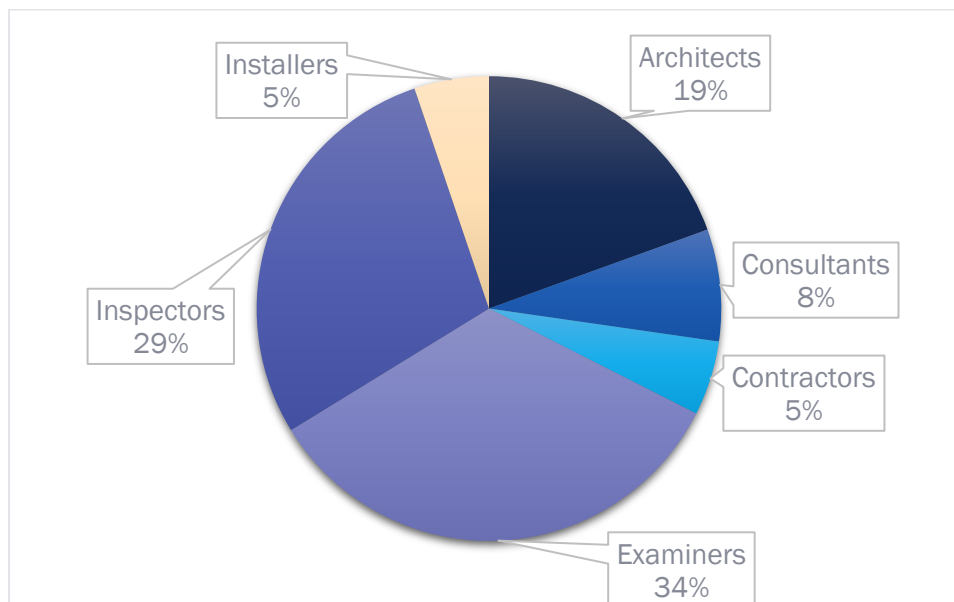
A majority of students (57%) were in Pacific Gas & Electric's (PG&E) service area, while on-demand courses via the Energy Code Ace web portal accounted for about 3% of student participation. Table 17 provides an overview of course registrations by IOU.

Table 17. Course Registrations by IOU Service Area

Location	Registrations	Registration %
PG&E	20,131	57%
SCE	12,224	34%
SDG&E	3,257	9%
Program website (Variable Location)	1,095	3%
<b>Total</b>	<b>36,707</b>	<b>100%</b>

Nearly a third of all courses (31%) offered were focused on 2022 residential T24, while 2022 nonresidential T24 accounted for 18%. Additionally, just over a quarter (27%) of these courses targeted specific roles in the building compliance supply chain. The courses offered to specific groups are shown in Figure 8.

Figure 8. Percentage of Courses Targeting Specific Market Actors



## TARGET AUDIENCE AND MARKET ENGAGEMENT

According to the IOUs, the CI program targets each market actor in the compliance supply chain, but it has a “lighter touch” for some market actors than others. For example, SCE indicated in interviews that it enters into formal agreements with key trade associations in its area, which it considers major players in code compliance. Examples include the Building Industry Association (BIA) and CABEC. However, San Diego Gas & Electric (SDG&E) can more easily cover its service territory because it is geographically small. As part of outreach, SDG&E CI program staff physically visit trade associations, professional organizations, and MEP firms in addition to building departments.

The IOUs’ conference and speaking engagements, lunch-and-learn sessions, and customized training focus on audience-tailored topics. These could be design implications for architects, documentation and modeling issues for energy consultants, or plan review and enforcement alignment for building officials. As part of this effort, the IOUs “...push people to sign up on the [Energy Code Ace] website because if they do, they get added to our various email lists [for further engagement].”

The CI program also dedicates a portion of the program website to specific market actors, referred to as “collections.” These are organized resources that provide information for specific market actors such as architects and designers, plan examiners, heating, air conditioning and ventilation (HVAC) installers, or building inspectors. Interviewed program trainers consistently highlighted that the key strength of the Energy Code Ace website is tailoring resources to specific professions. One trainer explained: “We really target document preparers, CEAs [Certified Energy Analysts], and designers because they’re the ones actually filling out Title 24 forms.”

Nearly all interviewees emphasized that local building departments are the linchpin of code compliance, yet have the least time, staffing, and tools to engage deeply. One trainer indicated:

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*“The inspectors don’t come to the classes as much because the format isn’t built for their workflow.”*

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Another trainer explained, “Building departments definitely have the least amount of spare time to grapple with all this. ... so, they are... I think the bottleneck of getting better compliance.” Another trainer reflected, “[The program is] hitting

the design professionals, but contractors and inspectors? Not enough. That’s where the real compliance gaps remain.” One interviewee emphasized a mismatch between the training format and program resources, “Inspectors need quick checklists. They don’t want to sit through a two-hour webinar. That’s why participation from Authority Having Jurisdictions [AHJs] is always limited.”<sup>25</sup>

Outreach and content are directed toward all market actors, but more focus is placed on certain roles, such as architects/designers and energy consultants. Building officials (plan examiners, inspectors) are considered “hard-to-reach.” One REN stated, “Many of our jurisdictions don’t have formal building departments and outsource to third parties—making outreach more complex.”

The CI program conducts outreach to offer training for building officials, but this outreach is not as widely used as for other groups. One REN added, “Not everyone wants a 2-hour class. We need smaller modules, five or ten minutes, so people can get exactly what they need.” Another added, “You can’t just post it on a website; you have to meet people where they’re at.”

## LESSONS LEARNED

Based on interview data gathered from the IOUs and other stakeholders, program administrators have learned several lessons:

- **Simplicity is key:** SDG&E stated their main lesson learned as, “Simplify. Use bigger fonts, shorter blurbs, and visual hooks. Nobody wants to read about the energy code.” SCE echoed this by developing summary cards and QR-linked handouts to reduce printing costs and direct users to current digital content. However, as some IOUs stated in interviews, simplifying messaging to reach a broader audience is becoming more challenging as code becomes more complex.
- **Brand consistently while continuously improving content:** PG&E noted that brand building has been very important. According to PG&E, the industry initially viewed the program with suspicion. After 10 years, the program earned the 2023–2024 Industry Achievement Award issued by the California Building Officials Association. However, PG&E’s primary lesson learned is that learning is not static, so the program must constantly scan the market, review code changes in advance, and provide feedback to the Codes and Standards (C&S) Advocacy team to stay ahead of market actor barriers.
- **Track program performance:** SDG&E has started creating an event report to track what they did, how many people they interacted with, and what type of people they interacted with. This is helping them to focus their outreach efforts and drive enrollments for the courses. SCE is testing translation of certain fact sheets into Spanish and other languages to broaden its reach, and like the other IOUs, understands the importance of creating program materials for non-native English speakers. Tracking activities and outcomes helps future decision-making.

### 4.2.4 BUDGETING COORDINATION

The CI program is part of the C&S portfolio segment. The overarching C&S segment budget for 2023 was \$62.7 million. The CI program budget for this period was \$10 million. According to data provided by the program administrators and published in the California Energy Data and Reporting System (CEDARS),<sup>26</sup> the C&S portfolio segment generates the most savings for the California energy efficiency portfolio and drives the portfolio’s cost-effectiveness. However, the CI program does not claim energy savings and therefore lacks a direct measurement of success for its investment. Table 18 lists the 2023 budget for C&S.

<sup>25</sup> An Authority Having Jurisdiction, or AHJ, is essentially any organization or office that’s responsible for enforcing standards and codes.

<sup>26</sup> <https://cedars.cpuc.ca.gov/>

Table 18. C&S Portfolio Programs and Budgets Program Year (PY) 2023

Program	Description	2023 Spend (\$ millions)
State Code Advocacy	Advocates in the California building code rulemakings	9.4
State Std. Advocacy	Advocates and participates in the California Energy Commission (CEC) appliance rulemakings	2.9
Federal Std. Advocacy	Advances federal appliance and equipment efficiency standards, and national model building energy codes (US Department of Energy Buildings Technology Office).	5.3
Compliance Improvement	Mitigates resistance to future advocacy and ensures that the potential savings from C&S's advocacy efforts are realized and persist over time. (i.e., Outreach and Training)	10.0
Reach Codes	Help cities and counties leverage their authority to require increased Energy Efficiency and performance beyond the state's minimum requirements.	5.5
Code Readiness*	Data collection and other technical support activities that augment advocacy or Compliance Improvement.	18.6
Planning and Coordination	Supports close coordination between C&S and New Construction, Emerging Tech, and Market Transformation administrators.	10.9
Decarbonization Support <sup>a</sup>	Apply C&S processes to other state goals (Proposed)	TBD
<b>Sector Budget</b>		<b>62.7</b>

<sup>a</sup> Code Readiness and Decarbonation Support are PG&E-only activities.

PG&E, overseeing the budget for the website and other duties, controls the much of the CI program budget, but both SCE and SDG&E were satisfied that they could achieve their individual program goals with their current program budgets. The 2023 and 2024 CI program PY budgets from CEDARS are provided in Table 19.

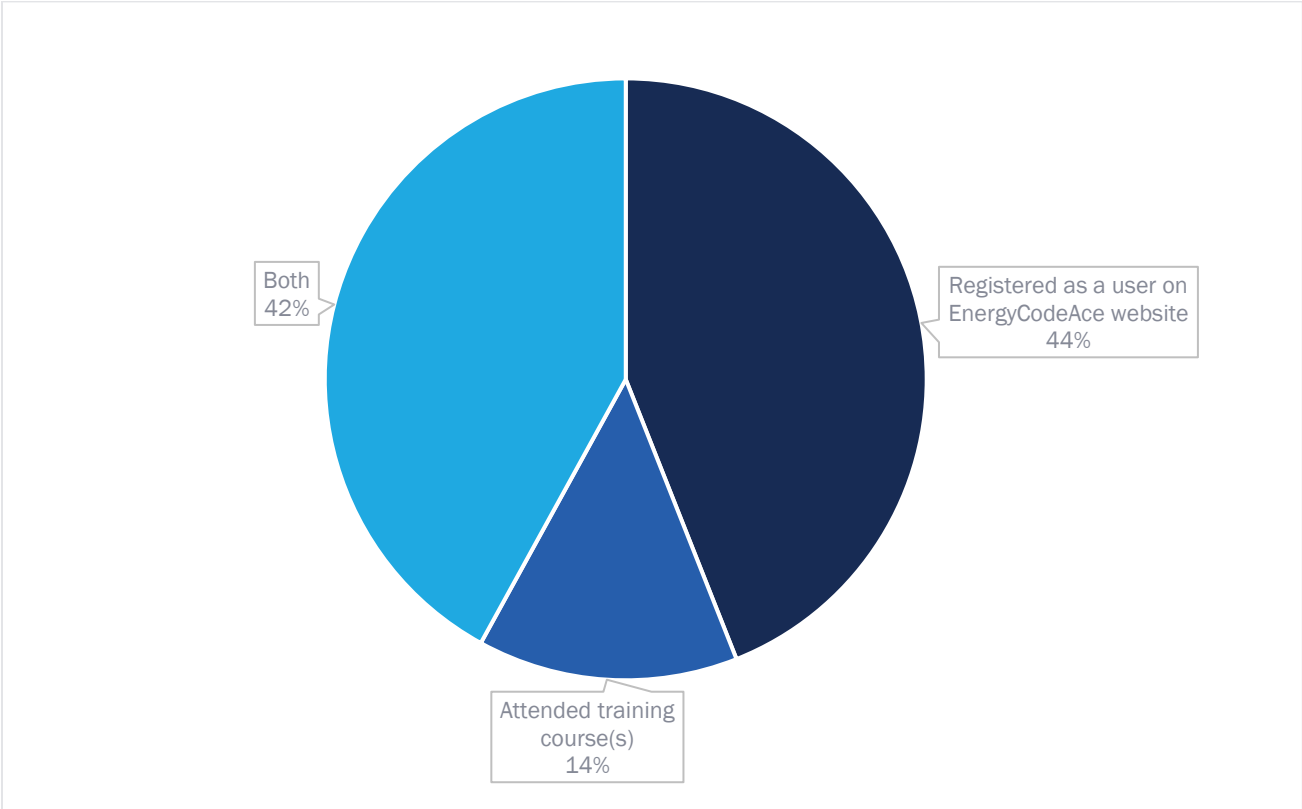
Table 19. Individual IOU CI Spend for PY 2023 and 2024

Program Administrator	2023	2024
PG&E	\$5.9M	\$4.5M
SCE	\$3.1M	\$1.4M
SDG&E	\$0.9M	\$0.4M
<b>Total</b>	<b>\$10.0M</b>	<b>\$6.3M</b>

## 4.3 PARTICIPANT SURVEY AND QUALITATIVE INTERVIEWS

The Evaluation Team conducted online surveys with program participants, including training session attendees and website registrants. Figure 9 demonstrates how respondents engaged with the program website and courses.

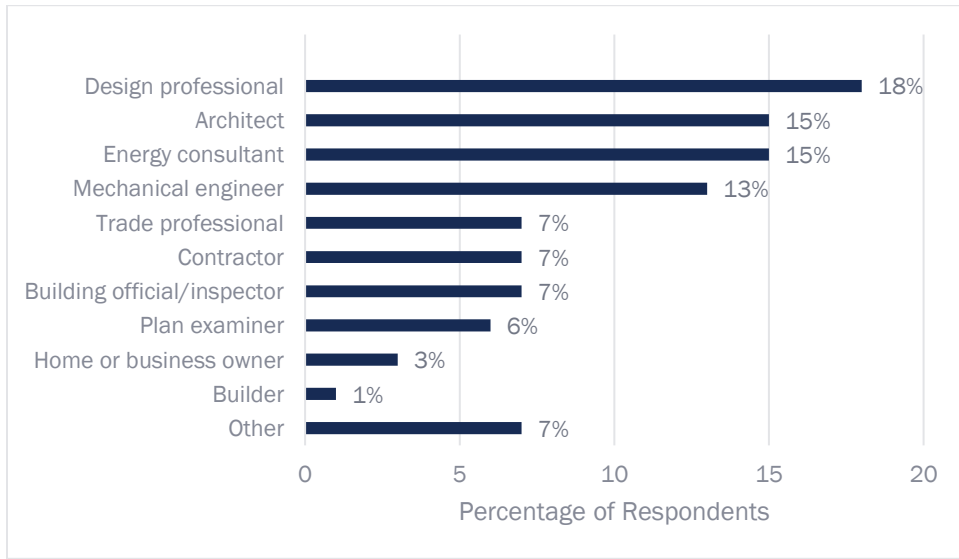
Figure 9. Respondent Engagement with CI program (n=552)



Question S1: “How have you encountered California’s Compliance Improvement program?”

Respondents came from a variety of roles. As seen in Figure 10, the largest group of respondents (18%) were design professionals, and the smallest group (1%) were builders. Fifteen percent of participants were architects and were more likely than other professions to attend training courses as their primary method of engaging with the program. Seven percent (41 people) of respondents did not fall into one of the predefined professional categories (indicated in Figure 10 as “other”). Within the other category, six respondents work as electrical engineers, four specialize in lighting, and four in HVAC.

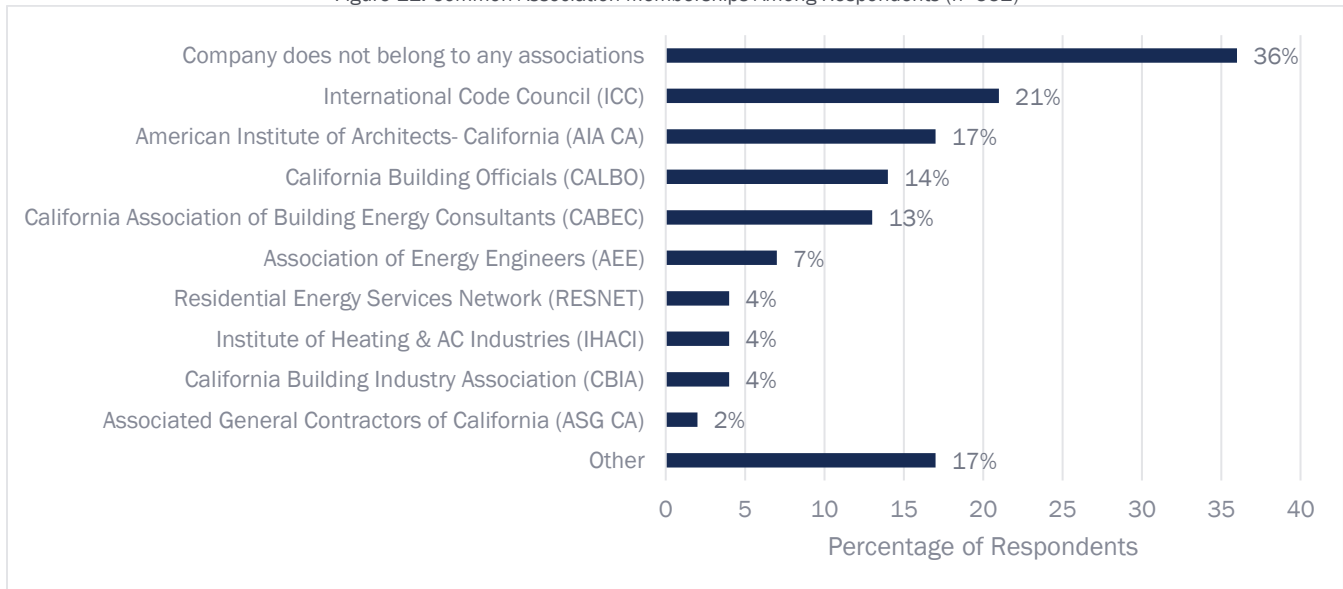
Figure 10. Respondents' Role (n=552)



Question S2: "In what role did you engage the program?"

In addition, 84% of the survey respondents have been in their industry for at least six years, while 16% have been in the energy compliance industry for less than six years. Lastly, to better understand respondents' professional affiliations and, thus, the potential of this pathway for the program to engage them, the evaluation team asked whether they or their company belonged to any trade associations. Figure 11 highlights associations that respondents or their company belong to, and indicates that more than a third did not have any professional affiliations.

Figure 11. Common Association Memberships Among Respondents (n=552)



Question 38: "Which of the following associations do you or your company belong to?"

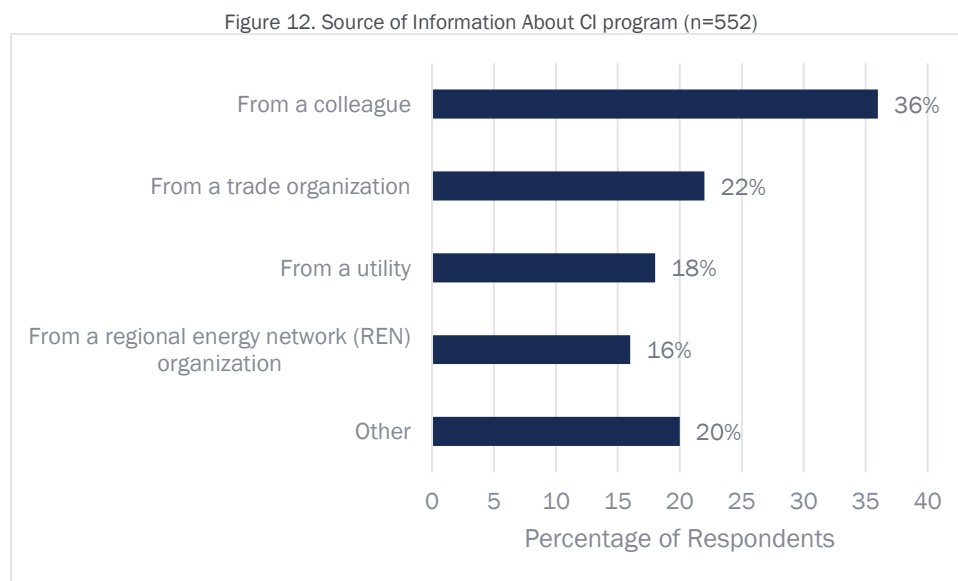
The evaluation team also interviewed selected survey respondents to gather more nuanced information regarding their use of the program website and program trainings. Findings from these interviews indicated three distinct groups of website users, based on their frequency of tool utilization, which was assigned by summing the respondents' scores on questions 6, 7, 24, and 27 in the survey: high-frequency (greater than 30), moderate (20-30), and low-frequency (less than 20) users. The groups were unanimous in their support of the website and training as valuable, high-quality resources, and the degree to which they utilized them depended largely on needs dictated by their profession:

- **High-frequency users** were most often plan examiners, but included one energy consultant; this group sees the website as crucial for accomplishing their work and uses the website almost daily
- **Moderate users** were most frequently design professionals and contractors; this group generally uses the website to accomplish emergent, detail-focused tasks a few times a month
- **Low-frequency users** were varied in their professions, and use the website sporadically and often only when required to do so

Findings from the participant surveys are discussed below, supplemented by relevant participant interview findings, as appropriate. The evaluation team categorized the participant interview findings using the frequency assessment to contextualize statements from the interviews.

### 4.3.1 PROGRAM AWARENESS

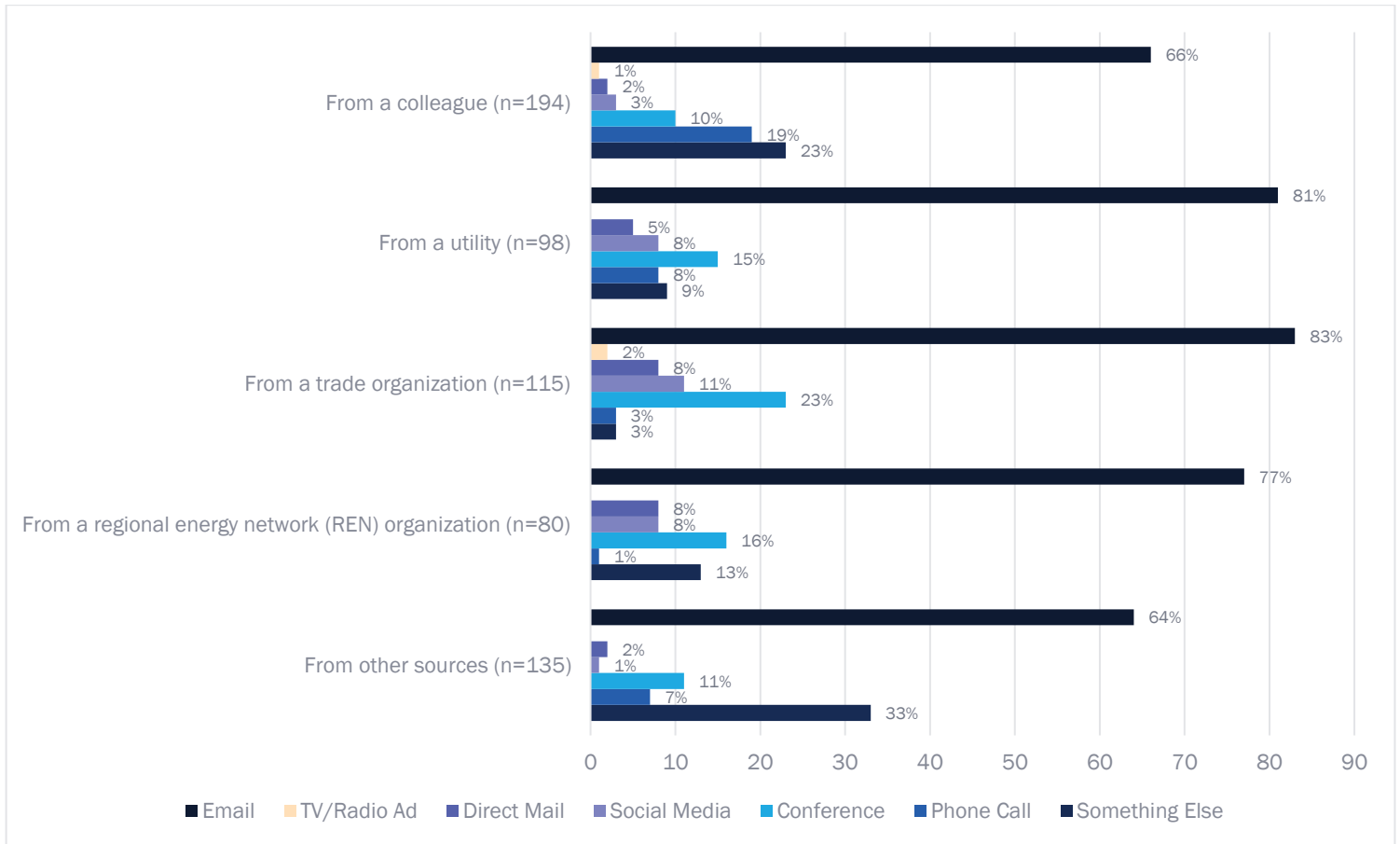
Survey respondents learned about the program through various sources, as shown in Figure 12. The internet was a popular “Other” response, with 25% of respondents finding out about the program through an online search. City governments and local building departments also played a significant role in spreading awareness of the program, with 12% of respondents who selected “Other” citing them.



Question 1: “From whom did you hear about the Compliance Improvement program?”

Figure 13 demonstrates that email was by far the most common way respondents heard about the program from these sources. For other outreach methods, respondents received information about the CI program in various ways, depending on the source.

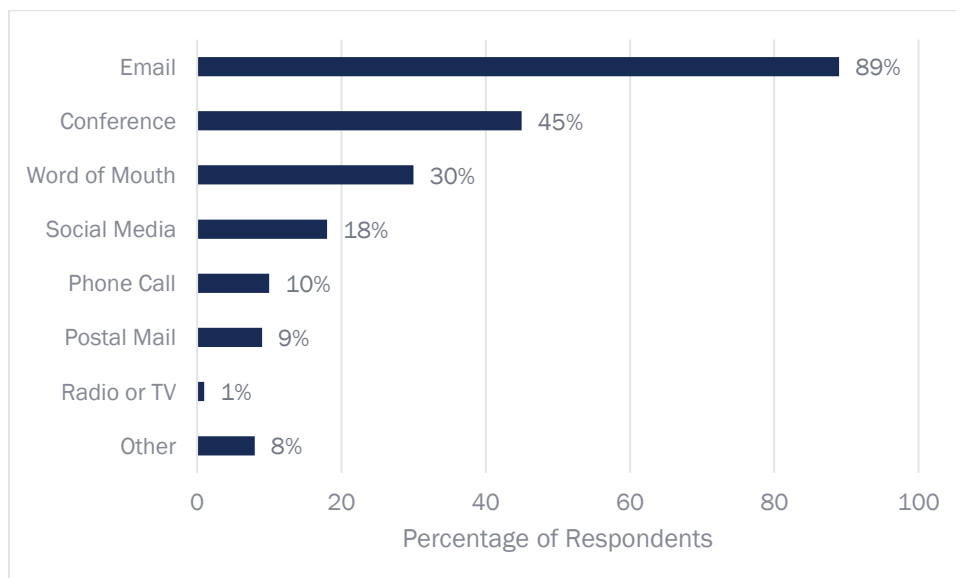
Figure 13. Common Outreach Methods by Source



Question 2: "How did you receive the information [Q1 response] on the Compliance Improvement Program?"

Respondents were also asked what they thought the most effective ways to reach professionals about energy compliance resources are. Their responses are below in Figure 14.

Figure 14. Most Effective Ways to Reach Energy Professionals (n=552)



Question 3: "What would you say are the most effective ways to reach professionals in your role about resources for energy codes?"

## 4.3.2 PROGRAM OUTCOMES

According to the survey, respondents' awareness of code changes increased after using the online resources and attending courses. There was also an increase in knowledge about codes applicable to respondents' work after they engaged with the CI program, as shown in Table 20. Respondents reported increases in awareness and knowledge across the two engagement modes, ranging from 13% to 15%. These findings corroborate results from the 2022 and 2023 pre- and post-surveys conducted by an implementation partner as part of the online trainings. The findings of the implementation partner show that in 2022, the median increase in knowledge among online training participants was 40% from their baseline pre-survey score, whereas in 2023, the median increase was 44%.

Table 20. Impact of CI Program on Respondents' Awareness and Knowledge of Codes and Standards (2022-2023)

Method of CI Program Engagement	% Aware Before	% Aware After	% Knowledgeable Before	% Knowledgeable After
Using Online Resources (n=477)	80	94	82	95
Attending Courses (n=309)	83	98	85	98

Questions S1, 16-19

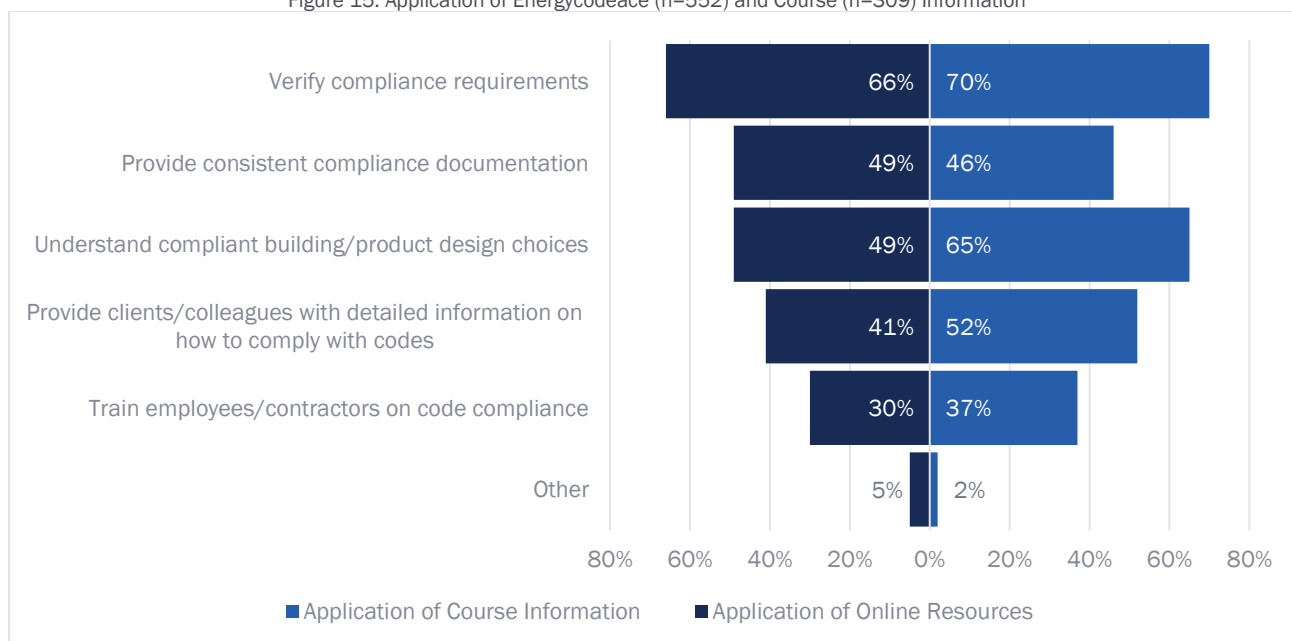
## 4.3.3 VALUE IN THE MARKETPLACE

Respondents were asked to provide feedback about the online tools and various training and course modalities available through the CI program. Specifically, they were asked to indicate how these resources were valuable to them in their day-to-day work and how they could be improved.

### APPLICATION OF CI PROGRAM CONTENT

The CI program provides users with various tools to help them answer questions about Title 20 (T20) and Title 24 (T24) codes. Information from the program was most often used to verify compliance requirements and least often for training. Generally, the two modalities were used similarly by respondents, but course attendees were more likely to report that they used this information for understanding compliant design choices and providing compliance information to others, as seen in Figure 15.

Figure 15. Application of EnergyCodeAce (n=552) and Course (n=309) Information



Question 9: “How have you applied the information from the EnergyCodeAce website to your work?” and question 27: “How have you applied the information you learned in the course(s) to your work?”

The tools on the website were also used to complete forms, submit permit applications, and claim rebates, as well as to track code updates and enhance understanding of the California energy code, without consulting the code itself. One lighting contractor commented: “It’s easier to go on the website and just answer all the questions, and it generates the certification document that I need for the permit application.” One plan examiner highlighted its value for enforcement consistency and completeness: “For those of us in the industry, it’s invaluable.” Further, to another plan examiner, the tools are central to streamlining the review process and getting the T24 energy code implemented:

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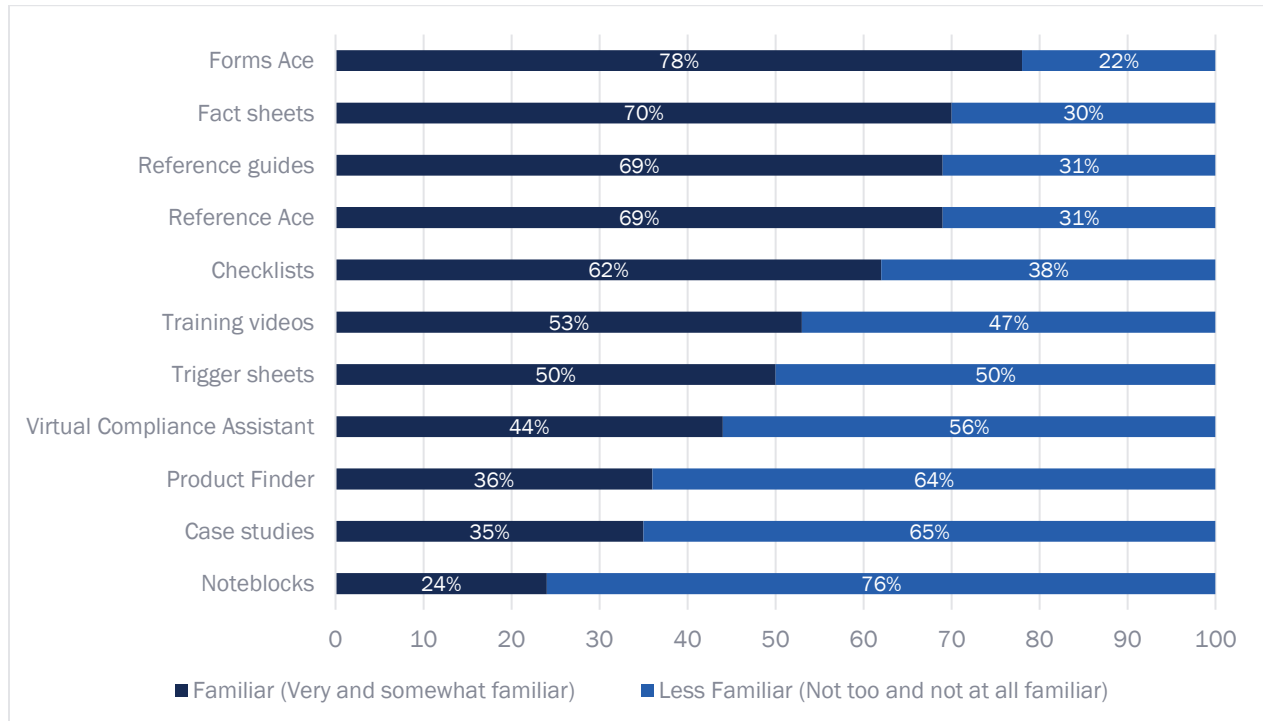
*“If Energy Code Ace didn’t exist, I don’t think anyone would pay enough attention to energy [within the code].”*

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## RESOURCE FAMILIARITY, VALUE, AND SUGGESTED IMPROVEMENTS

Overall, the training and resources provided by Energy Code Ace are familiar to and valued by professionals in the compliance value chain. Figure 16 shows that respondents were most familiar with Forms Ace, and least familiar with Noteblocks, as well as showing that half or fewer respondents are familiar with trigger sheets, the Virtual Compliance Assistant, product finder, case studies, and Noteblocks.

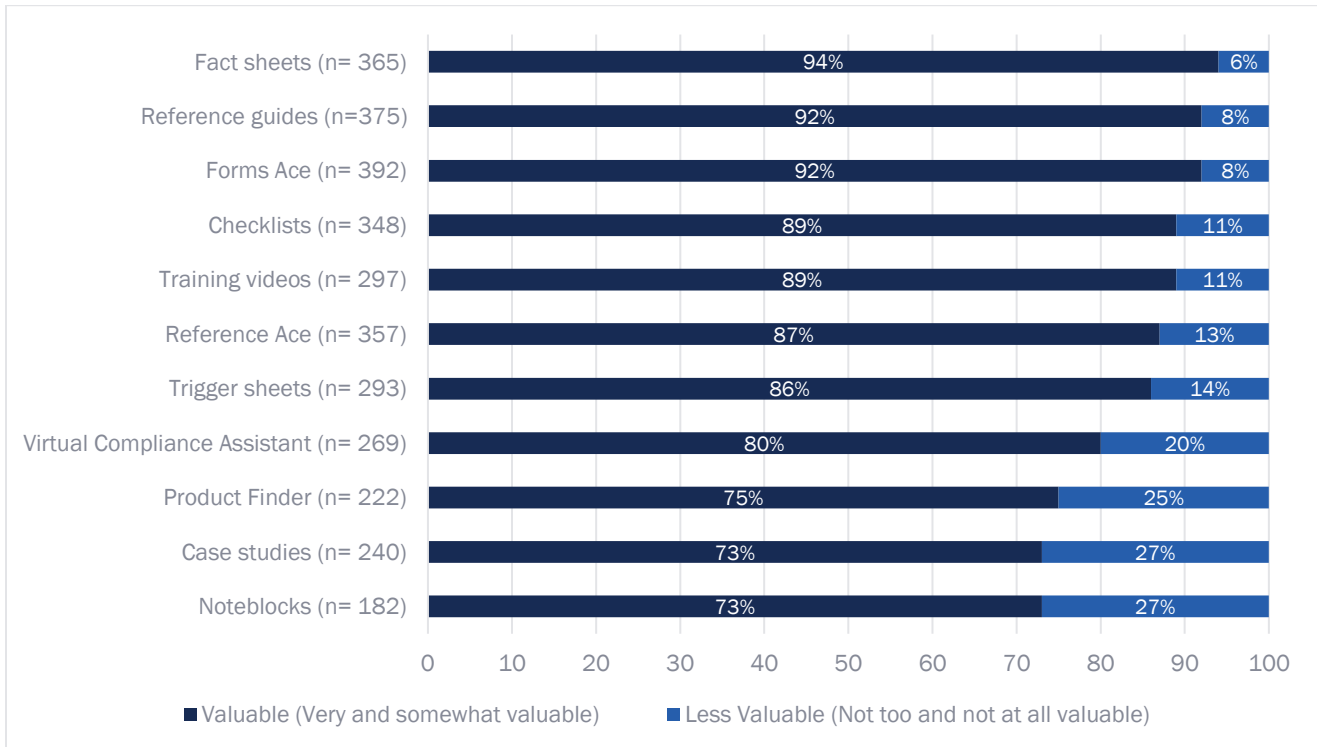
Figure 16. Familiarity with Energy Code Ace Resources (n=477)



Question 5: "How familiar are you with the following Compliance Improvement Program resources provided through the EnergyCodeAce website?"

Respondents were also asked to assess the value of the CI program’s online resources. Figure 17 demonstrates that respondents found all resources valuable, with fact sheets, reference guides, and forms being the most valuable. Noteblocks and case studies were the least valuable compared to other resources, but were still rated as valuable by 73% of respondents.

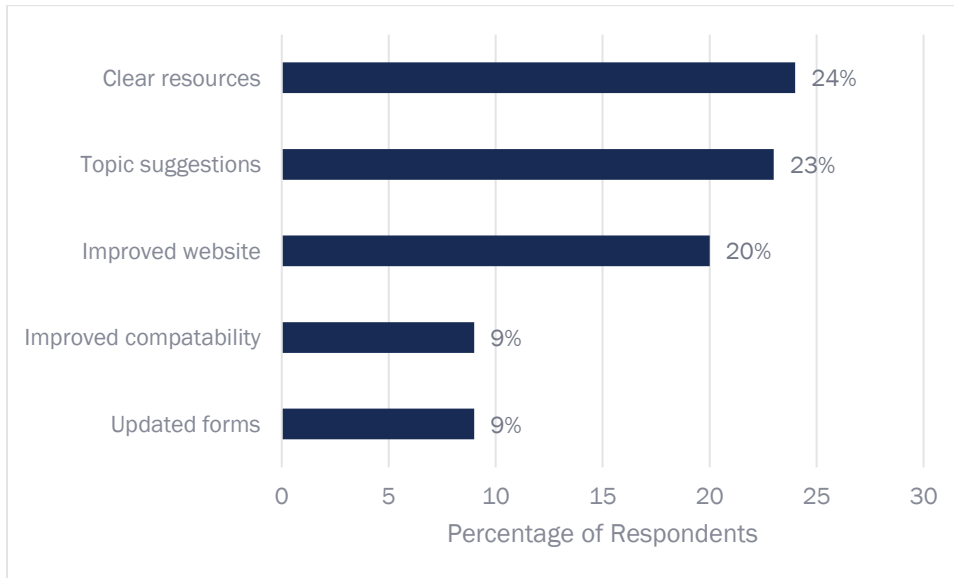
Figure 17. Value of Online Resources



Question 6: “How valuable have the following Compliance Improvement Program resources provided through the EnergyCodeAce website been to you?”

As shown above, respondents found the resources available on Energy Code Ace website highly valuable. Nevertheless, when asked if there were any resources they needed that were not available, roughly one-quarter of respondents took the opportunity to highlight resources on topics of interest to them, as well as general concerns about the program website. Figure 18 highlights the most common responses. Common requests from one quarter of respondents included the need for clearer explanations of each requirement and the necessary forms for projects. About one-quarter of respondents also suggested additional training topics, such as retrofit guidance, single-family heating, ventilation and air conditioning (HVAC), solar photovoltaics, and Title 24 (T24) acceptance test requirements, while 20% reported that the website was hard to navigate, glitchy, and had broken links. About 10% mentioned the forms available on the website were not always up to date, which proved challenging for them to complete their work. Website compatibility was also an issue for 9% of users who stated that the format in which the forms are saved is not compatible with the software they use for their work.

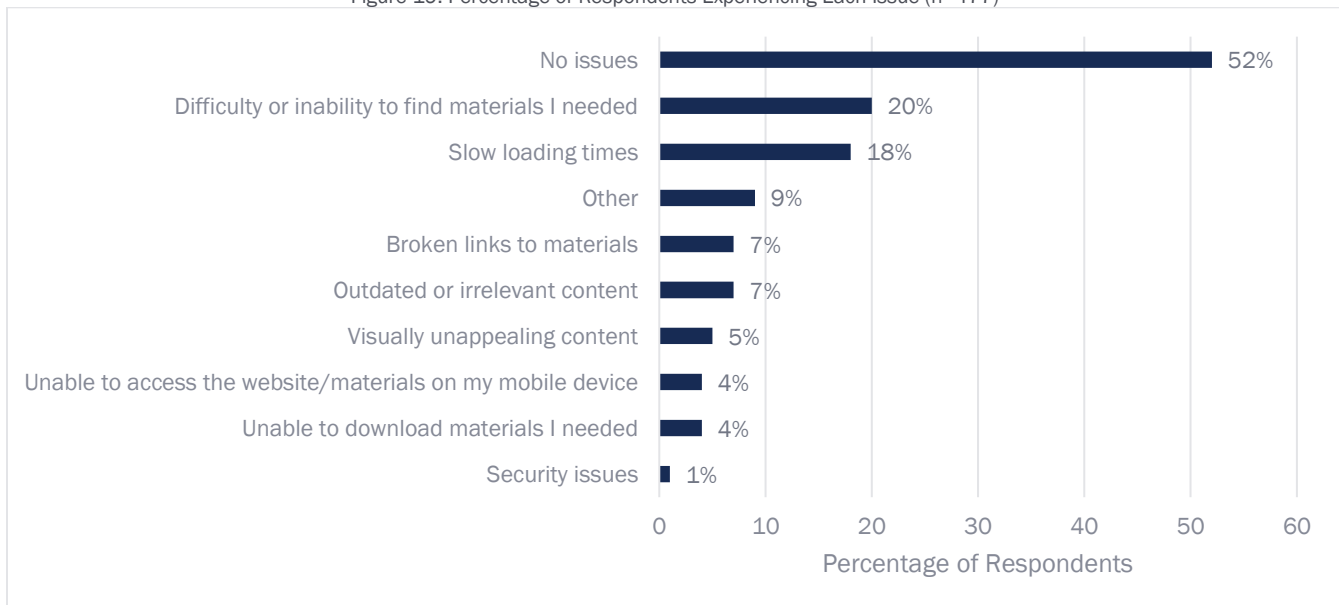
Figure 18: Additional Web Resources Requested by Respondents (n=106)



Question 12: “Were there any online resources not available on topics you needed, or tools that could have helped you but were not available?”

While roughly half of those who used the website experienced no issues with the site, the other half did. Figure 19 demonstrates that one in five of these respondents reported difficulty or an inability to find the materials they needed, and another fifth experienced slow loading times. Other difficulties included the general clunkiness of the website, navigating the forms, determining which ones were needed for specific projects, and completing them. A small portion of respondents believed the website had outdated or irrelevant, visually unappealing content, and broken links to materials. Respondents were unable to download the necessary materials, had difficulty accessing the materials/resources on mobile devices, and encountered security issues.

Figure 19: Percentage of Respondents Experiencing Each Issue (n=477)



Question 13: “What issues, if any, did you experience with the EnergyCodeAce website?”

Table 21 highlights the features of each resource that respondents found valuable, along with suggestions for further improvement. In general, respondents appreciated how resources streamline compliance by providing clear and concise summaries of energy code requirements. They highlighted their functionality across professions and the intuitive layout with tables, bullet points, and visuals. However, respondents provided ample advice on further resource improvements, notably improved document search capabilities, faster access to updated materials, and better integration of resources

and platforms. One lighting contractor, a low-frequency user, had two suggestions for improvement: 1) The system collects address and contact fields but does not populate them into the final PDF, requiring manual edits, and 2) when she invites a responsible contractor to review and sign, they often cannot easily find the project. “You can invite collaborators... and I have found that process to be very confusing for the people invited... When they follow the link... they don’t know. They can’t find it. It doesn’t just appear on the screen for them.” While using Energy Code Ace is convenient, it could become even more valuable with some updates to its functionality. See Appendix D for detailed results regarding suggested resource improvements.

Table 21. Energy Code Ace Resources: Value and Suggestions for Improvement

Resource	Perceived Value	Suggestions for Improvement	Industry-Specific Notes
Fact Sheets	94% found them valuable, praising them for clarity, practicality, quick access, and ease of sharing across professions. (n=325)	Improve usability (search/navigation), expand content for nonresidential projects, refine clarity/format, and increase awareness and training. (n=83)	Strong demand for nonresidential content; widely used by architects and contractors.
Reference Guides	92% found them valuable; valued for searchable, organized access to Title 24. (n=312)	Enhance usability/navigation, simplify content, add visuals/examples, expand targeted content, improve integration and awareness. (n=85)	Requests for content on multifamily, nonresidential, net-zero, and all-electric buildings.
Forms Ace	Widely regarded as essential; saves time, reduces errors, and streamlines compliance documentation. (n=336)	Simplify navigation, clearer explanations and examples, streamline workflow, integrate with other tools, and add AI/chat support. (n=126)	Critical for designers, contractors, and clients, especially for Title 24 compliance forms.
Reference Ace	65% cited usefulness for clarifying requirements, supporting decision-making, and training. (n=281)	Enhance navigation/search, simplify language, incorporate visuals/examples, keep content current, and improve integration and visibility. (n=115)	Used for design, compliance, and plan check; supports coordination among designers and contractors.
Checklists	88% described them as highly practical for Quality Assurance/Quality Control (QA/QC) and compliance steps. (n=272)	Improve usability/access (mobile-friendly, PDFs), keep content current, provide clearer guidance, and add interactive formats and training. (n=106)	Supports QA/QC across design, construction, and inspection phases.
Trigger Sheets	78% valued them for identifying when requirements apply, as it saves time and reduces errors. (n=229)	Add more scenarios, keep content current, provide clearer explanations/examples, simplify the format, improve visibility, and enhance training. (n=83)	Especially useful for alterations, retrofits, and envelope work.

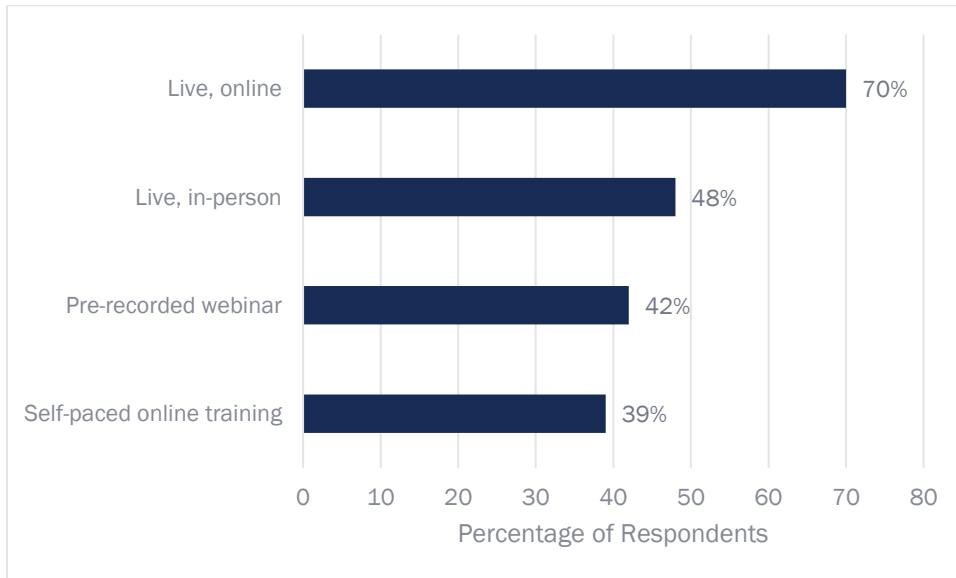
Resource	Perceived Value	Suggestions for Improvement	Industry-Specific Notes
Training Videos	Highly valued for flexibility and clarity, 71% said they improve understanding of complex topics. (n=248)	More on-demand videos, shorter modules, expand targeted topics, improve visibility, and add learning features (quizzes, transcripts). (n=117)	Important for onboarding and code updates; requested content for architects, small contractors, and building officials.
Virtual Compliance Assistant	Valued for streamlining compliance and reducing errors, 58% cited guided workflows. (n=185)	Improve usability/navigation, fix bugs/reliability issues, increase awareness/training, add detailed guidance, expand functionality (artificial intelligence (AI)-style help). (n=111)	Essential for nonresidential projects; compared to a 'TurboTax-like' experience.
Product Finder	Saves time and simplifies product compliance research; awareness varies. (n=147)	Improve search/filtering, expand the product database, keep information current, increase visibility, and enhance integration with other tools. (n=123)	Supports product selection for Title 20/24 compliance, which is useful for design and rebate eligibility.
Case Studies	62% emphasized real-world application; it helps visualize compliance pathways. (n=161)	Add more variety/relevance, simplify the presentation, improve searchability, and provide deeper details (including costs and lessons learned). (n=126)	Requests for diverse building types, retrofit scenarios, and climate zones.
Noteblocks	Valued for saving time and improving plan quality; awareness is low. (n=113)	Increase visibility/education, improve usability (editing/search), enable integration/export (AutoCAD/Revit), prioritize workflow fit. (n=100)	Integration with design tools (AutoCAD/Revit) is a key industry-specific need.

Question 7: "What about these resources were most valuable to you" and question 8: "How can these resources be improved to further increase their value to you?"

## COURSE ATTENDANCE AND SUGGESTIONS FOR ADDITIONAL COURSES

As shown in Figure 20, all forms of training were popular among respondents, but live online and in-person training were the most popular. Out of the 309 respondents who participated in the training, 57% accessed it in at least two ways.

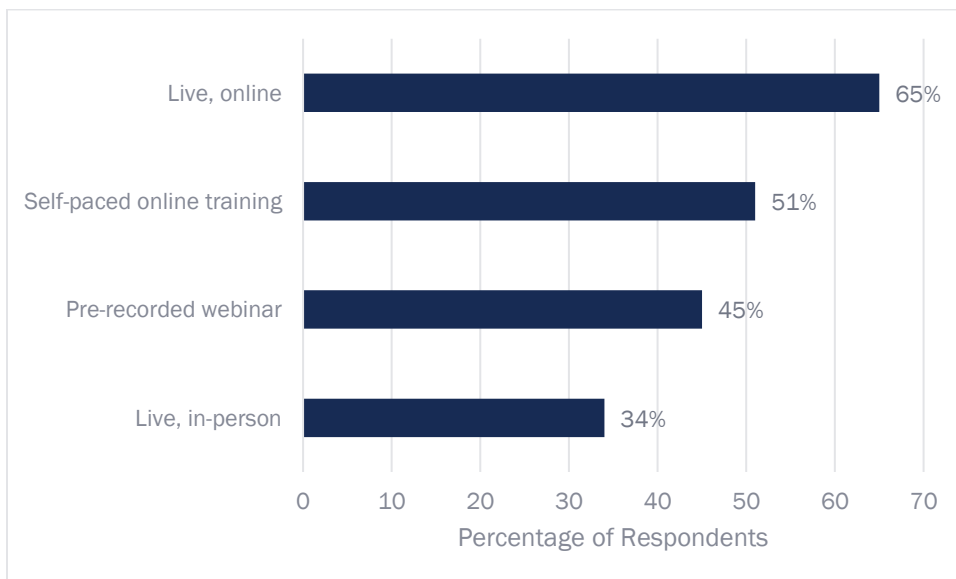
Figure 20. Compliance Improvement (CI Program Course Method Attended in the Past Year (n=309)



Question 20: “How have you participated in California code compliance training courses in the past?”

When respondents were asked about their preferred method of future code compliance training courses, 65% stated they preferred live online training, and 51% preferred self-paced online training (Figure 21). These formats offer the most flexibility, as they are either online or pre-recorded. It is interesting to note that the formats respondents say they want available in the future differ from those they used in the past. For example, Figure 20 shows that 48% of respondents participated in live, in-person training in the past, while only 34% mentioned they prefer this method in the future. The preferred course method differs by role, though no format preferred by a majority of respondents in each role. Building officials/inspectors, contractors, and trade professionals were more likely to prefer live, in-person training, while architects, mechanical engineers, and plan examiners preferred to take live online training in the future. Builders, design professionals, and home/business owners prefer self-paced online training, and energy consultants stated that, in the future, they would like to attend pre-recorded webinars.

Figure 21. Future Preferred CI Program Course Method (n=309)



Question 21: “What is your preference for participating in California code compliance training courses in the future?”

Out of nine CI program course themes, three were the most popular. Over 50% of respondents who attended training courses attended those on Title 24 (T24), Part 6, Residential, Non-residential & Multifamily, as well as Non-Residential essentials and standards.<sup>27</sup> T24, Part 6, Non-residential & Multifamily, and Non-Residential Essentials and Standards are also the most popular courses respondents are interested in attending in the future. When asked if they had suggestions for courses they would like to see available through the program, 30% of respondents suggested a variety of additional courses, tallied in Table 22.

Table 22. Suggested CI Program Courses

Suggested Course	Percent of Respondents (n=164)	Suggested Course Details
Code compliance	15%	<ul style="list-style-type: none"> <li>▪ How to comply with standards</li> <li>▪ The rationale and background behind the codes</li> <li>▪ Interpreting certificates of compliance</li> <li>▪ Examples of typical projects</li> <li>▪ Resources available and how to use them</li> <li>▪ Application across jurisdiction</li> </ul>
Code changes	15%	<ul style="list-style-type: none"> <li>▪ Special interest in code updates</li> </ul>
Non-Residential compliance	12%	<ul style="list-style-type: none"> <li>▪ Permitting</li> <li>▪ Specific requirements for each trade</li> </ul>
Mechanical codes	10%	<ul style="list-style-type: none"> <li>▪ Especially for heating, ventilation, and air conditioning (HVAC) systems</li> <li>▪ Acceptance requirements</li> <li>▪ Courses for mechanical engineers</li> <li>▪ HVAC technology and how it relates to compliance</li> </ul>
Other topics	9%	<ul style="list-style-type: none"> <li>▪ Data centers</li> <li>▪ Carbon issues</li> <li>▪ Healthcare code compliance</li> <li>▪ American Disabilities Act compliance</li> <li>▪ Revit design</li> <li>▪ Modeling of non-standard systems</li> <li>▪ Use of AI</li> </ul>
Energy storage	7%	<ul style="list-style-type: none"> <li>▪ Solar and battery storage</li> </ul>
Title 24	7%	<ul style="list-style-type: none"> <li>▪ Application for commercial spaces and demand response</li> <li>▪ Acceptance testing requirements</li> </ul>
Modeling	5%	<ul style="list-style-type: none"> <li>▪ For residential and nonresidential use</li> </ul>
Residential compliance	5%	<ul style="list-style-type: none"> <li>▪ Permitting</li> </ul>
Implementation	5%	<ul style="list-style-type: none"> <li>▪ Walking through real scenarios and common code challenges</li> </ul>
Retrofit compliance	5%	<ul style="list-style-type: none"> <li>▪ How T24 applies to retrofit projects</li> </ul>
General requirements	4%	<ul style="list-style-type: none"> <li>▪ Whom to contact with issues</li> <li>▪ Available resources for follow-up review</li> </ul>
Multi-family compliance	3%	<ul style="list-style-type: none"> <li>▪ Code standards for large buildings</li> <li>▪ How to fill out nonresidential certificates of compliance and mechanical forms</li> </ul>
Environmental compliance	3%	<ul style="list-style-type: none"> <li>▪ Net zero compliance and passive strategies</li> <li>▪ Net zero carbon courses</li> <li>▪ Climate zone-specific requirements</li> </ul>
Lighting/lighting controls	2%	<ul style="list-style-type: none"> <li>▪ LED commercial and residential codes</li> <li>▪ Solar integration with lighting and control systems</li> </ul>
Envelope	2%	<ul style="list-style-type: none"> <li>▪ Insulation and exterior rigid insulation</li> <li>▪ Building envelope commissioning</li> </ul>
Title 20 (T20)	2%	

<sup>27</sup> Full course list and target market by profession are found in Appendix E.

Suggested Course	Percent of Respondents (n=164)	Suggested Course Details
Software	1%	<ul style="list-style-type: none"> <li>Plans examiner software</li> <li>Energy software</li> </ul>
Wildland-Urban Interface building code	1%	<ul style="list-style-type: none"> <li>Code requirements</li> </ul>

Question 33: "What additional training courses would be useful to further increase your level of knowledge about codes applicable to your work?"

## OVERALL PROGRAM IMPROVEMENT

Despite the issues some users had with the program website, discussed above, most respondents were very or somewhat satisfied with their ability to resolve them. One interviewee, a moderate-use HVAC contractor, noted that when they run into problems, "(I)t would be nice if there was a chat feature, but other than that, I think it's [the website] excellent." Notably, a third of those with issues were still not satisfied with their ability to get them resolved. Those who were unsatisfied often had trouble downloading materials. Other unresolved issues included very slow website loading times, difficulty determining whom to contact to discuss problems, and long response times from the help desk.

Respondents offered recommendations on how the CI program could simplify code compliance. Respondents' suggestions fell into the following categories: training and process improvements, optimizing website/resource design, reducing system flaws, code simplification, and providing up-to-date information. Eighteen percent of respondents stated that the resources were sufficient and did not have further suggestions. Table 23 provides a detailed breakdown of the suggestions, along with the percentage of respondents who made such requests.

Table 23. Suggested Program Improvements

Suggested Program Improvements	Percent of Respondents (n= 194)	Key Considerations
Training improvements	39%	<ul style="list-style-type: none"> <li>Training availability &amp; flexible formats</li> <li>Targeted content incorporating real-life examples</li> <li>Resources &amp; tools</li> <li>Improved outreach &amp; communication</li> <li>Instructor knowledge</li> </ul>
Compliance process improvement	24%	<ul style="list-style-type: none"> <li>Simplification &amp; usability</li> <li>Process efficiency &amp; coordination</li> <li>Technology &amp; introduction of AI</li> <li>Guidance &amp; communication</li> <li>Training, education &amp; workforce development</li> <li>Program growth &amp; awareness</li> </ul>
Optimize website and resource design	22%	<ul style="list-style-type: none"> <li>Code clarity &amp; organization</li> <li>Documentation simplification &amp; compatibility</li> <li>Software &amp; user interface</li> <li>Enhanced website navigation &amp; search capabilities</li> <li>Integration of California energy code portals</li> <li>Provision of templates &amp; live guidance</li> <li>Program awareness &amp; outreach</li> </ul>
Reduce system flaws	9%	<ul style="list-style-type: none"> <li>Improved oversight &amp; enforcement to improve quality assurance</li> <li>Training &amp; professional accountability</li> <li>Balance code flexibility with enforcement</li> <li>Cost &amp; practicality concerns</li> <li>Improve industry awareness on the importance of energy codes</li> </ul>

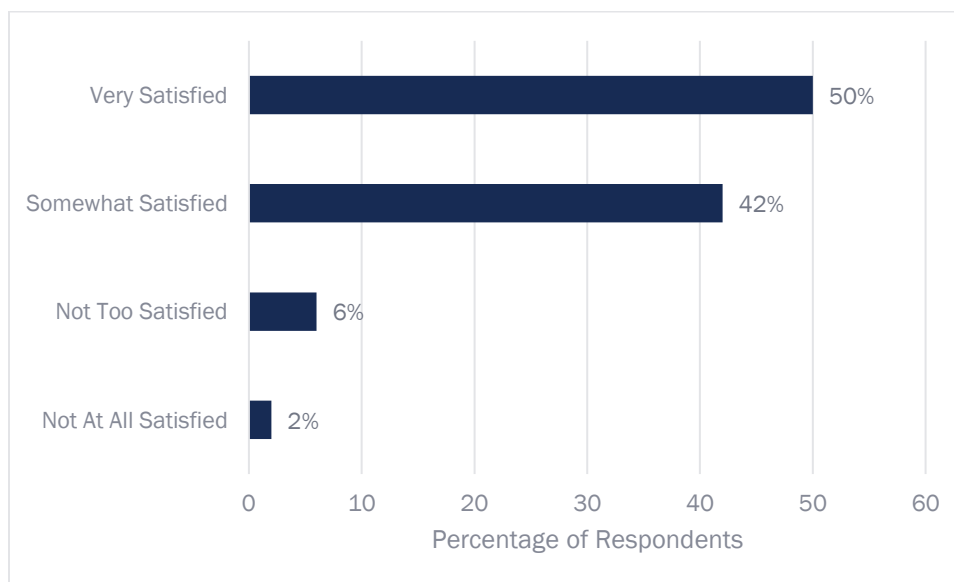
Suggested Program Improvements	Percent of Respondents (n= 194)	Key Considerations
Code simplification	8%	<ul style="list-style-type: none"> <li>Reduce frequency of changes</li> <li>Simplify the code, reduce complex language &amp; procedures</li> </ul>
Provide up-to-date resources	8%	<ul style="list-style-type: none"> <li>Importance of ongoing code updates &amp; communication</li> <li>Material organization &amp; accessibility</li> </ul>

Question 34: "What could the California Compliance Improvement Program do to make compliance with codes easier for you and your company?"

## 4.3.4 PROGRAM SATISFACTION

Half of the respondents stated they were very satisfied with the CI program (Figure 22). Ninety-two percent of respondents were either very or somewhat satisfied, while a very small percentage (8%) were either not too satisfied or not at all satisfied with the program. Satisfaction did not vary by the method participants used to engage with the program.

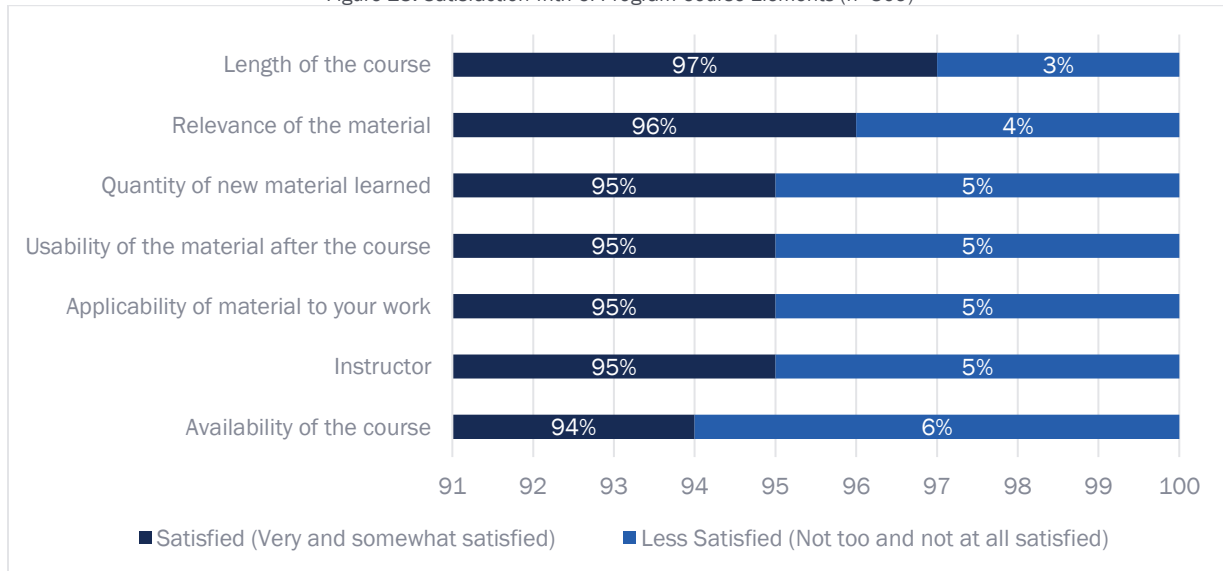
Figure 22. Respondent Satisfaction with CI Program (n=552)



Question 35: "Overall, how satisfied are you with the Compliance Improvement Program?"

Across all professions, 96% of respondents were either very or somewhat satisfied with the training courses and each aspect of the courses. The percentage of respondents who were very or somewhat satisfied ranged from 94% (satisfaction with course availability) to 97% (satisfaction with course length). Figure 23 shows respondents' satisfaction with each course element.

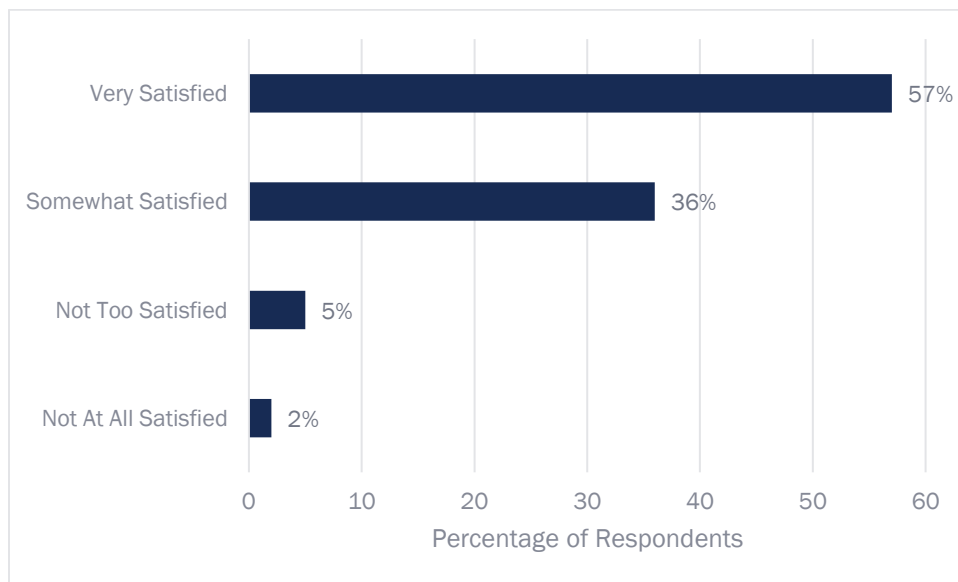
Figure 23. Satisfaction with CI Program Course Elements (n=309)



Question 24: "Please rate your satisfaction with the following aspects of the training course(s) you took. "

Respondents were similarly satisfied with the online resources provided, with 93% of respondents reporting that they were very or somewhat satisfied with the program’s online resources, as demonstrated in Figure 24. Suggested improvements to these resources are detailed in Appendix D.

Figure 24. Satisfaction with CI Program Online Resources (n=477)



Question 11: "Overall, how satisfied are you with the Compliance Improvement Program resources provided through the EnergyCodeAce website?"



## 5. CONCLUSIONS AND RECOMMENDATIONS

Below, we describe the conclusions and recommendations from this evaluation.

### Research Objective 1: Assess the program’s purpose, design, and performance

**Conclusion 1: The program’s courses and online resources successfully increase both awareness and knowledge of California energy codes.** Survey respondents reported a high level of overall satisfaction (92% “very” or “somewhat” satisfied) with the program. Further, survey data, shown in Table 24, revealed that the proportion of market actors aware and knowledgeable of codes and code changes increased from roughly 8 in ten participants to 9 in ten whether they used online resources or attended courses. While the majority of participants were already aware and knowledgeable (8 in ten), the online resources and courses helped increase this rate to almost 100%, which is optimal given that all market actors need to be aware and knowledgeable to ensure full compliance.

Table 24. Impact of CI Program on Respondents’ Awareness and Knowledge of Codes and Standards

Method of CI Program Engagement	% Aware		% Knowledgeable	
	Before	After	Before	After
 Using Online Resources (n=477)	80	94	82	95
 Attending Courses (n=309)	83	98	85	98

Survey questions S1, Q16-19

- **Recommendation 1: Conduct participant research.** Program administrators should consider undertaking nonparticipant research to better understand which segments, both within and across professions, are most likely to be unaware and lack knowledge of code and code changes, and design outreach strategies to better reach those segments.

**Conclusion 2: Program administrators and program trainers agree: building officials, inspectors, and AHJs remain hard-to-reach with the programs.** According to nearly all of the program stakeholders we interviewed, these groups are central to the success of code compliance efforts and finding solutions to integrate them into the compliance improvement process more meaningfully is a significant priority for stakeholders. Building officials, inspectors, and AHJs are typically time-constrained, making it challenging to find time to engage them. This can make traditional engagement methods, such as phone calls, conferences, and multi-day training courses less effective. In addition, some jurisdictions lack building departments, which can make communication more challenging. As one trainer noted:

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*“Building departments definitely have the least amount of spare time to grapple with all this...so, they are...the bottleneck of getting better compliance.”*

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- **Recommendation 2: Tailor participation options for these hard-to-reach groups.** Program administrators and implementers should consider a tailored participation pathway for building officials, inspectors, and AHJs that includes specialized program materials to address barriers that inhibit engagement with the programs, such as short checklists, mobile-accessible materials, and shortened training sessions, as well as tailored outreach strategies that include messaging about the availability of this custom pathway and the benefits of engaging the programs this way.

**Conclusion 3: The programs lacked robust mechanisms for tracking program outcomes beyond participation metrics.**

The two PTLMs provided by the IOUs could be improved in several areas, given that (1) there are missing empirical links between program design elements (primarily including activities, outputs, and outcomes), (2) the target market and behavioral barriers the programs are addressing are not identified, and (3) some relationships between activities through to mid-term outcomes do not flow logically.

- Recommendation 3: Use the key performance indicators (KPIs) from the updated PTLM to measure and report program outcomes.** The PTLMs should be combined into a single document, and updated to reflect best practices, such as including program barriers and target markets, identifying links and providing a logical description of each link. To make those linkages concrete, program administrators should increase data collection to align with the key performance indicators (KPIs) described in this evaluation, primarily including increased efforts to gather data location and profession-specific indicators of program success such as needs assessments, skill and knowledge assessments, program resource use, compliance success, and net promoter scores. These key performance indicators are shown in Table 4, while the full list of suggested KPIs may be seen in Table 11.

Table 25. Key Proposed Compliance Program PTLM, KPIs and Rationale

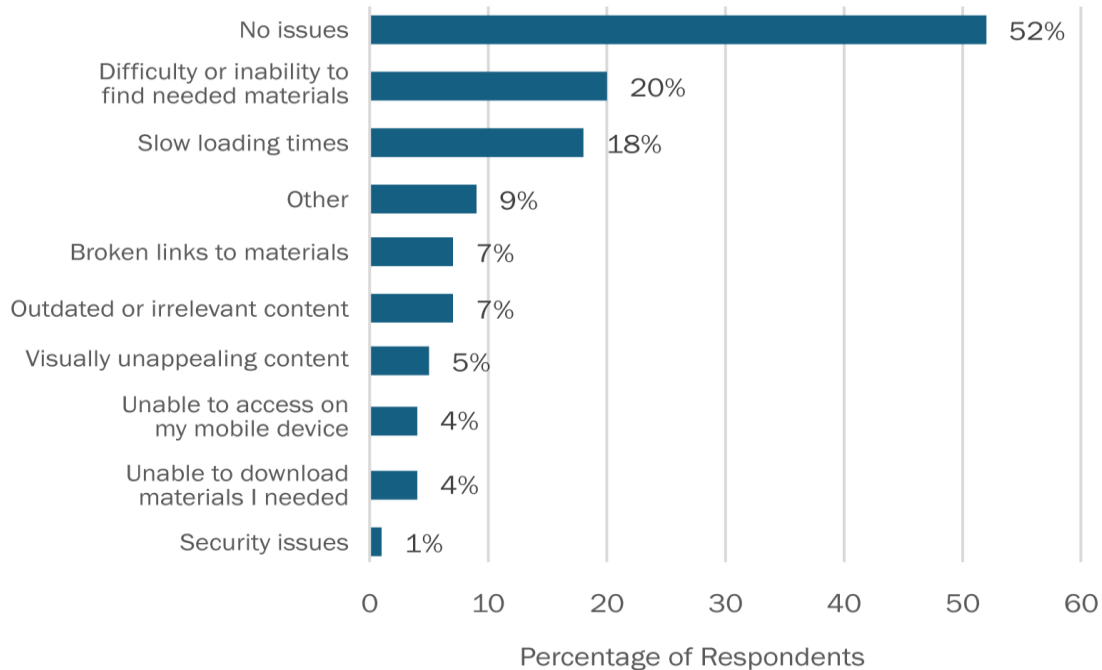
Recommended KPIs	Rationale
Usability goals based on needs assessment for training and tools for each profession, and establishment of priority goals	Establish needs of target markets in order to properly orient program changes in a direction most likely to lead to increased participation
Skills/knowledge assessments of code process navigation, by level of resource use, tool use, course completion	Better understand where program activities directly lead to more successful compliance, and inform any interventions
Use of program resources, tools, and training by profession and location	Understand program participation by profession and region; to inform training materials, awareness needs, and resource needs
Compliance success, project resubmittal, and/or inspection success rates by program participation	Understand how successful the program is in improving critical compliance metrics
Net promoter score	Understand how successful the program is in accomplishing its goal of becoming a trusted resource in the industry

**Research Objective 2: Understand how participants interact with the program**

**Conclusion 4: Users are generally satisfied with resources on the program website, but there are several issues that introduce barriers for users. Because interruptions often occur during time-sensitive tasks, delays in finding answers to questions or concerns are a significant barrier for users.** Respondents report a high level of satisfaction with the online resources, with 93% reporting that they are “very” or “somewhat” satisfied with them. However, data indicates that respondents need a more streamlined and optimized interface: as shown in Table 25, respondents frequently report

challenges locating the documents or resources they need, which slows time-sensitive workflows, while navigation complexity, including a lack of access via the mobile interface, broken links to resources, unappealing website design, inability to download necessary materials due to security issues, and outdated, irrelevant, and/or visually unappealing content pose navigation problems for users. These barriers reduce efficiency and the quality of the overall user experience.

Figure 25. Percentage of Respondents Experiencing Each Issue (n=477)



Question 13: "What issues, if any, did you experience with the EnergyCodeAce website?"

In addition, when asked for tool-specific suggestions for improvement, respondents report a need for streamlined, integrated workflows within and across tools. Lastly, a third of those who reported having issues with tools were not satisfied with the ability to resolve them, which drives users away from the program website and undermines its intended role as a trusted resource for industry professionals.

**Recommendation 4: Treat the website as a product.** Program administrators should consider prioritizing usability assessments for each tool and the website as a whole to better understand user journeys through the website, common barriers to task completion, and overall user needs in order to inform a redesign of the program website prioritizing error reduction, time and resource savings, the cross-functionality of tools and resources, and other highly valued program benefits. Suggested improvements, based on current data, include the expansion of search capabilities and limiting of results (via archiving out-of-date material, while supporting documentation multiple code cycles), enabling digital signatures, increasing the number of software options available for document completion and export, as well as the elimination of broken links, and the use of artificial intelligence (AI)-assisted chat and an AI chatbot to quickly address user barriers.

**Conclusion 5: Course attendees are highly satisfied with courses, but desire a different blend of course formats, and shorter courses.** Almost all (96%) respondents were either "Very Satisfied" or "Somewhat Satisfied" with the trainings. The majority of respondents, allowed to give multiple responses, prefer live online trainings (65%) and self-paced formats (51%), while forty five percent preferred recorded webinars, and 34% preferred in-person sessions. This indicates a preference for virtual learning that is easier to fit into busy professional schedules. This preference differs

somewhat from the formats respondents had actually taken courses in. Seventy percent attended live online trainings, 42% attended pre-recorded webinars, 39% attended self-paced trainings, and 48% attended live in-person.

Course Format	Format Preference	Format Taken	Difference
Live, online	65%	70%	-5%
Live, in person	34%	48%	-14%
Prerecorded webinar	45%	42%	3%
Self-paced online	51%	39%	12%

Question 20: “How have you participated in California code compliance training courses in the past?” and Question 21: “What is your preference for participating in California code compliance training courses in the future?”

Importantly, this preference for live online courses is also reflected in the courses offered to all participants during the evaluation period (80%). In addition, respondents emphasized the need for these courses to be available in shorter versions. Offering users a variety of engagement opportunities, both in terms of course medium (online, live, on-demand, etc.) and the length/depth of the material, allows for greater flexibility in integrating courses into their schedules. This is supported by survey data indicating that 57% of those who attended training did so via more than one medium.

- **Recommendation 5: Ensure diversified program formats.** Curriculum designers and trainers should make as many course offerings available as possible for live online and self-paced training modalities, and work to produce shortened versions of courses (live and virtual) as much as is reasonably possible, to accommodate time-constrained professionals, while limiting live in-person offerings to those deemed most necessary to hold in that format.

### Research Objective 3: Gather suggestions for improving efficiency and effectiveness

#### **Conclusion 6: The perception of frequent code changes<sup>28</sup> creates complexity and frustration among market actors.**

Respondents described T24 as “difficult to follow” and called for simplification and clearer communication of updates. Relatedly, some program administrators noted that while simplifying program messaging is essential to broaden reach and increase awareness of codes and code changes, doing so has become increasingly difficult as the codes themselves grow more complex. Relatedly, some users are concerned that program materials can become outdated because, as one implementer noted, content updates sometimes get behind schedule due to the sheer volume of updates needed. In addition, Fact Sheets regarding 2022 updates were the most downloaded resources from the program website during the evaluation period, reinforcing users’ rating of this resource as the most valuable and their stated desire for simplified, visually appealing resources to help them make sense of complex T24 regulations.

- **Recommendation 6: Ease market actors into code changes.**
  - Program administrators should consider implementing timelines for website vendors to update and maintain website tools and content to current code standards, in order to minimize the time outdated materials remain on the program website as much as reasonably possible.
  - Program content creators should provide succinct update summaries, visual guides, and webinars, as needed, to explain new code cycles and reduce confusion, emphasizing concision, visual appeal, and simplicity. To the

<sup>28</sup> Energy Code is updated every 3 years as required by the Warrant-Alquist Act.  
Opinion Dynamics

extent possible, this content should be curated for different professions or locations within the compliance process.

- Program trainers should proactively assess gaps in code-related knowledge in pre-/post-training surveys. This information can be used to focus upcoming training sessions on identified knowledge gaps and to inform the design of program collateral.

## APPENDIX A. DATA COLLECTION INSTRUMENTS

The Codes Compliance Market Actor Interview Guide, Codes Compliance IOU Interview Guide, Codes Compliance Participant Interview Guide, and Codes Compliance Participant Survey are appended in this a appendix.

# CPUC GROUP B CODES & STANDARDS: COMPLIANCE IMPROVEMENT MARKET ACTOR INTERVIEW GUIDE

DATE: AUGUST 2025

## PROGRAM DESCRIPTION

Compliance Improvement is dedicated to ensuring strong adherence to both current and newly implemented building energy efficiency standards (Title 24, Part 6, also known as the Energy Code) and appliance regulations (Title 20). Its primary goal is to support California in achieving its energy efficiency and carbon reduction objectives and streamline the process for market actors in the compliance supply chain (e.g., distributors, manufacturers, designers, energy consultants, retailers, inspectors, and building owners among others) to comply with California’s building energy code (Title 24, part 6) and appliance standards (Title 20). Key initiatives as stated by the programs include:

- Providing training, tools, and resources.
- Conducting outreach.
- Supporting performance certifications; and
- Supporting decarbonization.

## STUDY OVERVIEW

Because of the program’s reach, based on our review of program documents and data, we will conduct up to 12 in-depth interviews with key program market actors. Table 1 details the expected sample frame for the market actor telephone interviews. Table 2 includes key characteristics about the instrument.

Table 1. Market Actor Interview Sample Frame

Strata	Population	Targeted Completes
REN Program Staff	7	5
Program Vendors	7	2
Program Trainers <sup>a</sup>	12	5

<sup>a</sup> Trainers presented in-person courses across 43 cities over the 2019-2023 period.

Table 2. Study Overview

Descriptor	This Instrument
Instrument Type	Semi-structured, with open-ended questions and probes
Estimated Time to Complete	45–60 minutes
Population Description	Market actors associated with California’s Compliance Improvement program directly or indirectly
Population Size	<ul style="list-style-type: none"> <li>▪ RENs = 7</li> <li>▪ Vendors = 7 (8 with Energy Solutions; Opinion Dynamics already completed an interview with Energy Solutions through the PG&amp;E IOU program staff interview)</li> <li>▪ Trainers = 12 (3 associated with 75% of all trainings)</li> </ul>

Descriptor	This Instrument
Completion Goal(s)	<ul style="list-style-type: none"> <li>REN program staff who coordinate or interact with Compliance Improvement program (n=5, 60 minutes)</li> <li>Vendors /stakeholders associated with Compliance Improvement program services (n=2, 60 minutes)</li> <li>Program course trainers delivering IOU-funded training across regions (n=5, 45 minutes, targeting most active trainers)</li> </ul>
Contact List Source and Date	N/A
Type of Sampling	Census
Incentive Types and Amounts	\$50 - Training participants only as identified from survey
Outreach Methods	Email/telephone recruiting and online scheduling

## RESEARCH OBJECTIVES

Table 3 maps the research objectives and questions to specific questions in the instrument. The objectives for the Market Actor interviews are stated in **BOLD**. The objectives for the overall evaluation objectives corresponding to this interview guide are listed in *italic*.

Table 3. Research Objectives

Research Objective/Statement	Associated Instrument Section/Questions
<p><b>Capture perceptions of the Compliance Improvement program’s purpose, design, and performance</b></p> <p><i>Program Design: What is the program’s theory of change, and is it sufficient to meet the program’s stated objectives? Does it need to be modified to better align with these objectives? What are the program activities and outputs, and is there a limit to program effectiveness?</i></p> <p><i>Program Alignment: How does this program contribute to decarbonization, reliability, and affordability?</i></p>	Perception of Program (4-11)
<p><b>Understand how market actors interact or collaborate with the Compliance Improvement program</b></p> <p><i>Targets and Gaps: If outreach is targeted, where is it targeted, and who is it intended for? Which groups are included, and which groups are not being sufficiently served by the program?</i></p> <p><i>Scale: Are participation levels sufficient to affect the local or statewide compliance supply chain? What types of building professionals are interacting with the program, and how does the volume of that participation relate to the overall population of similar building industry professionals?</i></p> <p><i>Value in the Marketplace: What role do training, tools, and resources play in the building value chain? Which elements – if any - are valued by market actors? Why are they valued? In addition to building industry professionals, this includes other programs such as WE&amp;T, the RENs, and other organizations.</i></p>	Program Interaction: Support or Hindrance (12-17)
<p><b>Gather suggestions for improving Compliance Improvement program efficiency and effectiveness in achieving its stated goals</b></p> <p><i>Outcomes: To what degree, if any, has market actor awareness, knowledge, and skills been increased through the program? Are these outcomes sufficient to justify the program’s resource level? For example, is the cost per participant comparable with other IOU energy efficiency outreach and training programs?</i></p> <p><i>Program Costs and Benefits: What are the expenditure levels, and how do these align with the outcomes?</i></p>	Efficiency and Effectiveness (18-26)

# INSTRUMENT

## INTRODUCTION

*REQUEST PERMISSION TO START RECORDING.*

*Thank you for speaking with us today. We are evaluating the Compliance Improvement program implemented by the California IOUs (PG&E, SCE, SDG&E) to understand its performance, value in the market, and opportunities for improvement.*

*Your organization either interacts with or supports the Compliance Improvement program through your work in compliance improvement activities, training, or technical support.*

*We are interested in your perceptions of the Compliance Improvement program –what it does well, what could improve, and how it impacts your work. Your feedback will be confidential and reported in aggregate. We estimate this interview may take between 45-60 minutes. Is it okay to proceed?*

*We will start with a general description of your background and role and then talk about your perceptions of the Compliance Improvement program. Then we will discuss how it supports or hinders your work, what currently is working and what isn't, and conclude with any recommendations you may have based on your experience with the program.*

## BACKGROUND AND ROLE

*Let's start with your BACKGROUND AND ROLE in compliance improvement.*

1. Can you describe your role and your organization's activities related to building/appliance code compliance?
2. Please describe the compliance improvement activities (program operations) you/your organization administers in California.
  - a. How long have you been involved with compliance improvement activities?
  - b. What is your geographic or market focus?
3. How do you interact with the statewide Compliance Improvement program administered by the IOU PAs?
  - a. Which specific IOU-specific compliance improvement initiatives have you worked with?

## PERCEPTION OF PROGRAM

*Now I'd like to learn more about your PERCEPTIONS of the IOU Compliance Improvement program.*

4. What do you see as the main objectives of the statewide Compliance Improvement program?  
*[PROBE: increasing code compliance, improving market knowledge/skills, supporting decarbonization, reliability, affordability]*
  - a. How does this compliment/overlap/differ with the main objectives of your organization's compliance improvement activities?
5. How would you describe the statewide Compliance Improvement program's reputation in the market?
6. What do you think the Compliance Improvement program does especially well?
7. Are there areas where you think the program falls short of the objective(s) you mentioned?

8. What is your opinion of the quality of statewide Compliance Improvement resources? *[Probe: strength of technical content, resources, or training]*
  - a. What is done well? What could be improved?
9. How accessible are statewide Compliance Improvement program resources?
  - a. Who are the intended audiences these resources are targeted towards?
  - b. How does the program do at reaching the intended audience? Why is that?
  - c. How aware are compliance supply chain professionals (e.g., distributors, manufacturers, designers, energy consultants, retailers, inspectors, and building owners among others) of statewide Compliance Improvement resources? Are specific groups more or less aware than others?
  - d. How could access/awareness of statewide Compliance Improvement resources be improved?
10. In your opinion, what role do training, tools, and resources play in the building value chain? *[Probe specifically about statewide Compliance Improvement resources]*
  - a. Which elements are most/least valued by market actors? Why do you say that?
11. [REN Only] In your opinion, are participation levels sufficient to affect the local (or statewide) building code compliance supply chain?
  - a. What types of building professionals interact with the program most often? *[Probe: How does the volume of participation relate to the overall population of these building industry professionals?]*

## PROGRAM INTERACTION

Let's move to talking about your *INTERACTIONS* with the program and then we'll discuss its efficiency and effectiveness.

12. How does the statewide Compliance Improvement program support your day-to-day work? *[Probe: Has it your work harder or less efficient? If so, how?]*
13. How do statewide Compliance Improvement program activities complement, overlap, or conflict with your organization's program offerings?
14. Are there examples where statewide Compliance Improvement program resources, tools, or training have directly benefited your work or customers?
15. Are there examples where statewide Compliance Improvement program activities duplicated or competed with your offerings?
16. How effective is statewide Compliance Improvement program communication and coordination with you or your organization?
17. How does your organization collaborate or coordinate with the IOUs regarding compliance improvement?
  - a. How clear are roles and responsibilities?
  - b. How willing are IOUs to collaborate about compliance improvement activities?
  - c. How timely is the flow of information from the IOUs?
  - d. How responsive are the IOUs to feedback?

## EFFICIENCY AND EFFECTIVENESS

Now let's turn to *EFFICIENCY* and *EFFECTIVENESS* of the Compliance Improvement program.

18. How could the statewide Compliance Improvement program be more efficient?  
*[Probe: streamlined processes, better targeting, reduced duplication]*
19. How could the statewide Compliance Improvement program be more effective at achieving its stated goals?  
*[Probe: higher compliance rates, greater reach, stronger skills development]*
20. Are there opportunities to better align statewide Compliance Improvement program activities with your work or other market actors' efforts?
21. Are there untapped audiences, markets, or delivery methods the statewide Compliance Improvement program should focus on?
22. What changes to program content, tools, or training would have the biggest impact? Why is that?

## LESSONS LEARNED

*Before we finish-up I would like to get your opinion on LESSONS LEARNED working with the statewide Compliance Improvement program.*

23. Based on your experience, what would a highly effective statewide Compliance Improvement program look like in California?
24. What role should the IOUs play in that vision? What about your organization?
25. Are there any key lessons learned from previous program years?
26. How should the CPUC measure success for the statewide Compliance Improvement program beyond participation numbers?

## CLOSING

*I have just a couple of questions before we CLOSE.*

27. Is there anything else you think is important for us to know about the statewide Compliance Improvement program?
28. If you have questions or would like to add anything you can contact me directly. Do you mind if we reach out to you again if we have any additional questions or clarification regarding this evaluation of the Compliance Improvement program?

*Thank you for sharing your time and insights. Your perspective will help us identify practical steps to optimize the Compliance Improvement program's value, efficiency, and market impact.*

# IOU Interview Guide: Compliance Improvement

## 1. Study Overview

Descriptor	This Instrument
Instrument Type	In-depth Interview Guide
Estimated Time to Complete	45-60 minutes
Population Description	Program Administrator Staff from PG&E, SDG&E, and SCE
Contact List Size	3 IOUs (min1 staff each from PG&E, SCE, SDG&E)

### Program Description

From PG&E<sup>1</sup>: The Statewide Compliance Improvement Program is administered by PG&E (Program ID PGE21053), SCE (Program ID SCE-13-SW-008C), SCE (Program ID SCG3726), and SDG&E (SDGE3251) in collaboration with the California Energy Commission (CEC).

The program is dedicated to ensuring **strong adherence** to both current and newly implemented building energy efficiency standards (Title 24, Part 6, also known as the Energy Code) and appliance regulations (Title 20). Its primary **goal is to support California in achieving its energy efficiency and carbon reduction objectives and streamline the process for market actors in the compliance supply chain** (e.g., distributors, manufacturers, designers, energy consultants, retailers, inspectors, and building owners among others) to comply with California’s building energy code (Title 24, part 6) and appliance standards (Title 20). **Key initiatives** as stated by the program include:

- Providing training, tools, and resources.
- Conducting outreach.
- Supporting performance certifications; and
- Supporting decarbonization.

Research Objective: Understand the program’s scope, activities, and coordination/collaboration approach.

Research Topic Overview*	Question #
Program Design	1, 2, 3, 4, 6, 21, 24, 25
CPUC Goal Alignment	8, 9,
Program Costs and Benefits	8,9, Doc/Data review
Strategy	11, 12, 17, 19, 20, 22, 23, 26, 30, 31
Targets and Gaps	13, 14, 15,28, surveys
Scale	16, Data review
Outcomes	5, 7, 27, 29, Doc/data review, surveys
Value in the Marketplace	29, Surveys, interviews

\*From CI 2025 workplan

<sup>1</sup> Source: “PG&E Codes and Standards Compliance Improvement Subprogram Implementation Plan”. PG&E. Accessed June 2, 2025. [https://cedars.cpuc.ca.gov/documents/download/3120/mainchange\\_summary%7Cmain%7Credline\)/](https://cedars.cpuc.ca.gov/documents/download/3120/mainchange_summary%7Cmain%7Credline/)

## 2. Introduction

*Thank you for taking the time to speak with us today. I'm Jon Vencil (independent consultant) and I'm with Karla Soriano (Opinion Dynamics). We are conducting this evaluation of the C&S Compliance Improvement subprogram on behalf of the CPUC.*

*We estimate this interview may take between 45-60 minutes. Our questions primarily are about your specific Compliance Improvement program activities. We can discuss the larger statewide program as it overlaps with your program.*

***We'll start with a general description of the program and then talk about services and activities. From there we'll move to marketing and collaboration, and close with lessons learned.***

## 3. Program Description and Purpose

*Read passage (paraphrased from implementation plans):*

*"The primary goal of the program is to support California in achieving its energy efficiency and carbon reduction objectives and streamline the process for market actors in the compliance supply chain to comply with California's building energy code (Title 24, part 6) and appliance standards (Title 20)."*

Q1 Does this description accurately describe the goals of your CI program?

Q2 Are there any elements to modify or add?

***With that in mind, we'd like to know more about the activities and services offered***

## 4. Activities and Services Offered

Q3 What specific program services or activities does your CI program offer?

*PROMPT:*

- *Training [please describe the type of training, how you deliver training and what you are training on?]*
- *tool creation [please describe the types of tools you create]*
- *outreach [please describe the type of outreach]*
- *new technology [please describe the technologies]*

a) Do you focus on any one of these in particular?

Q4 For each of the program activities we just discussed, what barriers or challenges do these activities aim to address or overcome? *(Interviewer: be sure activities are linked specifically to barriers/challenges)*

Q5 For each of these program activities, what specific outputs (i.e., specific products or services) and outcomes (i.e., changes or benefits) do you wish to achieve through these activities?

*PROMPT:*

- *short, mid, long-term outcomes*
- *energy savings*
- *outcomes such as reduction of GHG emissions, cost savings for end use customers, making the grid reliable/stable*

Q6 Can you describe any key tools or platforms that your CI program offers or has developed along with which goals or barriers these address?

PROMPT:

- *online reference guides*
- *dynamic checklists (NoteBlocs)*
- *marketing materials*
- *Reference Ace*
- *Product Finder*
- *Fact Sheets*

Q7 What outcomes are you documenting or noticing from the program?

PROMPT: *For example, has it increased*

- *awareness*
- *knowledge*
- *skills of market actors*

Q8 How is the program budget allocated within the C&S portfolio?

Q9 From your perspective, do the CI expenditures align with these outcomes?

- Are any changes planned for this programs budget?
  - If so, where and why?

Q10 From your perspective, how do the program activities,

- 1) support decarbonizing California,
- 2) make customers' energy bills more affordable, if at all? and
- 3) contribute to grid reliability?

Q11 Do you have any recommendations for enhancing offerings at local, regional, or statewide levels?

***Now let's talk about who these services are for***

## **5. Target Audience and Market Engagement**

Q12 How do you promote and recruit for participation in CI activities?

Q13 Who does your program primarily target? How is this targeting done?

PROMPT:

- *architects (large-scale commercial and mixed-use developments)*
- *building officials (plan examiners, inspectors)*
- *contractors/installers*
- *designers (homes and low-rise structures – nonres and multi)*
- *manufacturers*
- *Certified Energy Analysts (CEA)*
- *Acceptance Test Technicians (ATTs)*

Q14 Do you think that any of these groups could be served better by the program? If so, how?

Q15 Are there any group(s) that the program should be more focused on? If so, which ones and why?

Q16 Would you say that your program size and scope is sufficient to affect the regional compliance supply chain?

- Q17 Do you tailor content or delivery strategies to different groups within the building compliance supply chain?
- If yes, How do you know what to offer?
- Q18 Are there any specific engagement strategies for,
- disadvantaged or underserved communities?
  - multi-lingual needs?
  - in-field technical support?
- Q19 Is stakeholder trust, accessibility, or satisfaction considered in your outreach efforts?
- Q20 Do you have any recommendations for improving market engagement or outreach at local, regional, or statewide levels?

***Next, we would like to discuss...Coordination and Collaboration***

## **6. Coordination and Collaboration**

- Q21 Is there a designated lead for CI coordination across IOUs, or is decision-making fully collaborative?
- Q22 What role do you play in the statewide coordination of the CI subprogram versus its local implementation responsibilities?
- Q23 How do you coordinate with other IOUs, RENs and CCAs to set the program's yearly plans/activities?  
*PROMPT:*
- *reduce redundancy?*
  - *ensure complementary offerings?*
- Q24 Are there formal mechanisms in place to manage this coordination? (i.e., active Joint Cooperation Memos or other documents?)
- Q25 How does this program integrate with other elements of IOU portfolio programs (e.g., WE&T, Equity, Market Support, Reach Codes, or Code Readiness)?
- Q26 Do you have any recommendations for improving coordination or collaboration at the local, regional, or statewide levels?

***Now let's switch to lessons learned...***

## **7. Lessons Learned and Continuous Improvement**

- Q27 Do you track any aspect of program performance (e.g., number of downloads, cost per output, participant feedback)?
- If yes, what do you track, how do you track it, and what do you do with your data?
- Q28 Have you identified any key lessons learned from previous program years?
- Q29 From your perspective are there any specific tools, formats, or partnerships that are/were particularly effective or ineffective?
- Q30 Are you planning any changes for the CI program?
- If yes, what are these changes, and why is each being made?

Q31 Do you have any recommendations for improving the design, delivery, operation, or evaluation of the CI program overall (local, regional, or statewide)?

## 8. Closing

*Thank you for taking the time to speak with us today.*

*Evaluation next steps: We also will be talking to stakeholders, students, and website users to learn their perspectives on elements of the program.*

Q32 Is there anything we have not discussed that you would,

- like to point out - or -
- anything in particular you would like us to investigate as part of this study?

Q33 Do you mind if we reach out to you if we have any additional questions or clarification regarding the program or data and documents we received?

## **Definitions (source: CEC)**

A **Certified Energy Analyst (CEA)** is a professional who demonstrates expertise in the California Energy Standards (Title 24) and is a member of the California Association of Building Energy Consultants (CABEC). CEAs assist building professionals in meeting and exceeding state energy efficiency requirements, providing a statement of their professional skills and knowledge to building departments, contractors, architects, and homeowners.

**Acceptance Test Technicians (ATTs)** are certified professionals who perform acceptance tests to ensure that lighting controls and mechanical systems in nonresidential buildings comply with the California Energy Code. They are trained and certified by an Acceptance Test Technician Certification Provider (ATTCP). These tests verify that systems are installed and operating as intended, meeting specific performance standards.

**Table 1: Tracking Table for PTLM data collection**

<b>Information for PTLM</b>					
<b>Activities</b>					
<b>PA</b>	<b>Training</b>	<b>Tool Creation</b>	<b>Outreach</b>	<b>New Technology</b>	<b>Other</b>
PG&E					
SCE					
SDG&E					
<b>Barriers/Challenges Addressed by Activity</b>					
PG&E					
SCE					
SDG&E					
<b>Outputs from Activity</b>					
PG&E					
SCE					
SDG&E					
<b>Short Term Outcomes/Impacts</b>					
PG&E					
SCE					
SDG&E					
<b>Midterm Outcomes/Impacts</b>					
PG&E					
SCE					
SDG&E					
<b>Long Term Outcomes/Impacts</b>					
PG&E					
SCE					
SDG&E					

# CPUC GROUP B CODES & STANDARDS: COMPLIANCE IMPROVEMENT PARTICIPANT INTERVIEW GUIDE

DATE: OCTOBER 2025

## PROGRAM DESCRIPTION

Compliance Improvement is dedicated to ensuring strong adherence to both current and newly implemented building energy efficiency standards and appliance regulations. Its primary goal is to support California in achieving its energy efficiency and carbon reduction objectives and streamline the process for market actors in the compliance supply chain (e.g., distributors, manufacturers, designers, energy consultants, retailers, inspectors, and building owners among others) to comply with California’s building energy code (Title 24, part 6) and appliance standards (Title 20). Key initiatives as stated by the programs include:

- Providing training, tools, and resources.
- Conducting outreach.
- Supporting performance certifications; and
- Supporting decarbonization.

## STUDY OVERVIEW

Because of the program’s reach, based on our review of program documents and data, we will conduct up to 8 in-depth interviews with program training participants. Table 1 details the expected sample frame for the market actor telephone interviews. Table 2 includes key characteristics about the instrument.

Table 1. Participant Interview Sample Frame

Strata	Population	Targeted Completes
Architects/Designers	5,364	2
Building Officials	2,267	2
Contractors	4,313	2
Energy Consultants	9,456	2

TBD = based on number of survey responses

Table 2. Study Overview

Descriptor	This Instrument
Instrument Type	Semi-structured, with open-ended questions and probes
Estimated Time to Complete	30-45 minutes
Population Description	Attendees of California’s Compliance Improvement Program training – all modalities
Population Size (estimates from IOU data)	<ul style="list-style-type: none"><li>▪ Architects/Designers (n= 5,364)</li><li>▪ Building Officials (n= 2,267)</li><li>▪ Contractors (n= 4,313) includes building and manufacturing contractors</li><li>▪ Energy Consultants (n= 9,456)</li></ul>

Descriptor	This Instrument
Completion Goal(s)	<ul style="list-style-type: none"> <li>▪ Architects/Designers (n=2)</li> <li>▪ Building Officials (n=2)</li> <li>▪ Contractors (n=2)</li> <li>▪ Energy Consultants (n=2)</li> </ul>
Contact List Source and Date	N/A
Type of Sampling	Selective Sampling – based on professions and responses
Incentive Types and Amounts	\$50 - Training participants only as identified from survey
Outreach Methods	Email recruiting and online scheduling

## RESEARCH OBJECTIVES

Table 3 maps the research objectives and questions to specific questions in the instrument. The objectives for the participant interviews are stated in **BOLD**. The objectives for the overall evaluation corresponding to this interview guide are listed in *italic*. Note: This interview guide is focused on the second objective so questions are focused in that area.

Table 3. Research Objectives

Research Objective/Statement	Associated Instrument Section/Questions
<p><b>Capture awareness and perception of the Compliance Improvement program’s purpose and offerings</b></p> <p><i>Program Design: What is the program’s theory of change, and is it sufficient to meet the program’s stated objectives? Does it need to be modified to better align with these objectives? What are the program activities and outputs, and is there a limit to program effectiveness?</i></p> <p><i>Program Alignment: How does this program contribute to decarbonization, reliability, and affordability?</i></p>	(NA)
<p><b>Understand how participants interact with the Compliance Improvement program</b></p> <p><i>Targets and Gaps: If outreach is targeted, where is it targeted, and who is it intended for? Which groups are included, and which groups are not being sufficiently served by the program?</i></p> <p><i>Scale: Are participation levels sufficient to affect the local or statewide compliance supply chain? What types of building professionals are interacting with the program, and how does the volume of that participation relate to the overall population of similar building industry professionals?</i></p> <p><i>Value in the Marketplace: What role do training, tools, and resources play in the building value chain? Which elements – if any - are valued by market actors? Why are they valued? In addition to building industry professionals, this includes other programs such as WE&amp;T, the RENs, and other organizations.</i></p>	Program Feedback, Application to Work (Q1 - Q19)
<p><b>Gather suggestions for improving Compliance Improvement program efficiency and effectiveness in achieving its stated goals</b></p> <p><i>Outcomes: To what degree, if any, has market actor awareness, knowledge, and skills been increased through the program? Are these outcomes sufficient to justify the program’s resource level? For example, is the cost per participant comparable with other IOU energy efficiency outreach and training programs?</i></p> <p><i>Program Costs and Benefits: What are the expenditure levels, and how do these align with the outcomes?</i></p>	Overall Impression (Q20 - Q24)

# INSTRUMENT: PARTICIPANT INTERVIEW GUIDE

## INTRODUCTION

*REQUEST PERMISSION TO START RECORDING.*

*Thank you for speaking with us today. We're evaluating the Compliance Improvement Program, and we are following up on the survey you completed.*

*We'd like to understand your experience with the program in a bit more detail—does it help you in your work? From your perspective, what works well and what could be improved? Your feedback will help inform future program direction. This will take about 30-45 minutes, and your responses will be kept confidential and combined with other responses for reporting. Is it okay to proceed?*

*We will start with a general description of your background and role and then talk about how you used the program and your perceptions of it. We'll conclude with any recommendations you may have based on your experience with the program.*

## SCREENING/FIRMOGRAPHICS: BACKGROUND AND ROLE

*Let's start with your BACKGROUND AND ROLE in compliance improvement. [Pre-fill from survey and verify]*

1. What is your primary profession or role in the compliance supply chain?

1.1.  Architect / Designer

1.2.  Engineer

1.3.  Contractor / Installer

1.4.  Building Official / Inspector

1.5.  Other

*[Probe: Could you briefly describe your current responsibilities?]*

2. How many years have you been working in this position?

2.1.  < 3 years

2.2.  3–10 years

2.3.  11–20 years

2.4.  20+ years

*[Probe: How has your role or responsibilities changed over time, if at all?]*

## PROGRAM FEEDBACK: RESOURCES AND TOOLS

*[For website users only]*

*Let's discuss RESOURCES and TOOLS you used or downloaded from the EnergyCodeAce website.*

3. You mentioned using *[Prefill from survey: Fact sheets / Reference guides / Note Blocks / other]*. Can you give a specific example of when you used one of these resources and how it was useful?

*[Probe: How did it help you? Did it save time, improve accuracy, or help with client/colleague interactions?]*

4. Which resources did you find less useful? [RESTATE RESOURCES RESPONDENT HAS USED]

*[Probe: How could they be improved? What limited their value (content depth, relevance, accessibility, usability)?]*

5. How do EnergyCodeAce resources compare with other sources of information you use?  
*[Probe: What other resources have you used? From which sources?]*

## PROGRAM FEEDBACK: TRAINING COURSES

*[For training participants only]*

Let's move on to discuss TRAINING and DELIVERY for the course(s) you attended.

6. Which training(s) have you attended? *[Pre-fill from survey and verify]; If more than one course. Probe on answers.*
- 6.1. Which courses were most valuable to your day-to-day work?
- 6.2. Which courses were the least valuable?
- 6.3. How did you feel about the length and timing of the trainings? Any suggestions for improvement there?
7. How did you attend? *(Prefill as able)* Which is your preference for future training?
- 7.1.  In-person
- 7.2.  Live webinar
- 7.3.  On-demand recording  
*[Probe: Did this format work well for you? Why or why not?]*
8. How did you first hear about the training you attended? *[Probe: email, colleague, event, website, referral]*
9. What motivated you to attend the training?
10. Do you run into other compliance professionals who are less aware of code updates/nuances?
11. Overall, what was your most valuable takeaway from the training you attended?
12. Can you share an example of a time when the training you received directly influenced your work?  
*[Probe: A decision made, a compliance step clarified, or a project outcome changed?]*
13. **[For low ratings only]** On the survey you gave *(course length, course availability, relevance of material)*, a low satisfaction rating. Why is that?
- 13.1. What was missing or unclear in the training?
- 13.2. What would an improved version look like?

## APPLICATION TO WORK

Now let's turn to APPLICATION and OUTCOMES.

14. Beyond what we have already discussed **[See Q3 and Q13]**, how have you applied what you learned from the resources, tools, or training to your work?  
*[Probe: Providing compliance documentation? Training employees? Advising clients?]*
- 14.1. What impact has this had on your effectiveness, efficiency, or confidence in your role?  
*[Probe: project changes, improved compliance, efficiency gains]*
15. How frequently do you apply what you have learned from resources, tools, or training?
- 15.1.  Frequently
- 15.2.  Occasionally
- 15.3.  Not yet, but plan to

16. How important are these resources, tools, training in your ability to do your day-to-day work?
17. **[IF NO APPLICATION]** What has prevented you from applying what you learned?
18. Have you shared program resources with colleagues or clients?
  - 18.1. **[IF YES]** What was their feedback?
  - 18.2. **[IF NO]** What made you decide not to?
19. What guidance or tools you need are not available? When a resource is unavailable, what do you do instead?  
*[Probe: What organizations/resources do you typically turn to?]*

## OVERALL IMPRESSION

*Before we finish-up I would like to get your OVERALL IMPRESSIONS working with the Compliance Improvement program.*

20. How does this compare to other professional development or compliance training and resources?
21. How likely are you to recommend the training or website to a colleague?  
*[Probe: What factors influenced your answer?]*
22. Is there any other advice you would like to give to make the program more effective for professionals like you?  
*[Probe: Are there other topics or formats you'd like to see offered in the future?]*

## CLOSING

*I have just a couple of questions before we CLOSE.*

23. Is there anything else you think is important for us to know about the statewide Compliance Improvement program?
24. If you have questions or would like to add anything you can contact me directly. Do you mind if we reach out to you again if we have any additional questions or clarification regarding this evaluation of the Compliance Improvement program?

*Thank you for your time and insights. Your perspective will help us identify practical steps to optimize the Compliance Improvement Program's value, efficiency, and market impact.*

*For your participation we would like to offer you a \$50 e-gift card. What is the preferred email address you'd like us to send it to?*

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# CPUC GROUP B COMPLIANCE IMPROVEMENT PROCESS EVALUATION

AUGUST 2025

## PARTICIPANT SURVEY

### STUDY OVERVIEW

Table 1 includes key characteristics about the instrument.

Table 1. Study Overview

Descriptor	This Instrument
Instrument Type	Web survey
Estimated Time to Complete	10 minutes
Population Description	2022-2023 registrants and trainees
Sampling Strata Definitions	N/A
Population Size	27,132 web registrants, 6,612 training attendees
Contact List Size	27,057 web registrants, 5,216 training attendees
Completion Goal(s)	300 web registrants, 300 training attendees
Contact List Source and Date	2022-2023 participants provided by PAs
Type of Sampling	Random sampling of web registrants and training attendees
Incentive Types and Amounts	N/A
Outreach Methods	Email with two follow-ups

### RESEARCH OBJECTIVES

Table 2 maps the research objectives and questions to specific questions in the instrument. This survey aims to better understand participant attitudes (both registrants on [energycodeace.com](http://energycodeace.com),<sup>1</sup> as well as training attendees) towards the program, how they use the program resources, and how it influences their work. We will also explore, from the participants' perspective, what the program does well, what it does poorly, and what gaps exist (if any) between program offerings and participants' wants and needs.

Table 2. Research Objectives

Research Objective/Statement	Associated Instrument Section(s)
Understand, to what degree market actor awareness, knowledge, and skills have changed due to the program	<ul style="list-style-type: none"><li>• Program and Resource Awareness</li><li>• Program Feedback: Resources and Tools</li><li>• Program Feedback: Training Courses</li></ul>
Assess which program elements (training, tools, resources) are valued by market actors and why	<ul style="list-style-type: none"><li>• Program Feedback: Resources and Tools</li><li>• Program Feedback: Training Courses</li></ul>

<sup>1</sup> This is the program website, which provides a variety of tools, resources, and information on codes and standards.  
Opinion Dynamics

Gauge market actor satisfaction with the program

- Program Feedback: Resources and Tools
- Program Feedback: Training Courses

## PROGRAMMING INFORMATION

The variables listed in Table 3 are from the sample, database, or other external data source.

Table 3. Variables from Sample or Database

Sample Variable Name	Variable Description and Values
odcid	Unique ODC identifier
first_name	Participant first name
last_name	Participant last name
Email	Participant email
Email_flag	Flag for whether or not participant has an email (1=Yes 0=No)
Onlinetraining_flag	Flag for whether the participant participated in the online CIP training (1=Yes 0=No)
Livetraining_flag	Flag for whether participant participated in live CIP training (1=Yes 0=No)
Registrant_flag	Flag for whether or not the participant registered on EnergyCodeAce.com

Programming note style conventions in this document:

[PROGRAMMING] Programming instructions are in bracketed CAPS.

[Interviewer notes] Onscreen interviewer instructions are in italics.

<Piped value> Database inputs are inside <greater and less than symbols>

## INTERVIEWER INFORMATION

### PROGRAM DESCRIPTION

According to PG&E, the Compliance Improvement Program, “mitigates resistance to future advocacy and ensures that the potential savings from Codes and Standards (C&S) advocacy efforts are realized and persist over time. PG&E provides industry professionals and consumers with the specific knowledge, skills, and job aides they need to effectively perform their EE role, whether it be manufacturing, testing, registering, or purchasing compliant appliances or designing, constructing, or inspecting compliant buildings.”<sup>2</sup>

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<sup>2</sup> PG&E 2024-2027 EE Business Plan, Table 4-14  
Opinion Dynamics

## OUTREACH MATERIALS

### EMAIL INVITE

Subject line: Your Feedback is Needed on California's Compliance Improvement Program.

Hello <NAME>,

The California Public Utilities Commission (CPUC) seeks to understand your perspective on the online resources provided through EnergyCodeAce.com and the courses and training available as part of California's Compliance Improvement Program. Opinion Dynamics, an independent company, is conducting this research on the CPUC's behalf.

By completing this 10-minute survey, you can provide important information to help the CPUC understand what the program is doing well, where it could improve, and what additional information would be helpful for professionals like you.

Click here to start the survey. <<LINK>>

Your answers will remain confidential and will be reported in aggregate with other answers or otherwise anonymized. We will not share your or your company's name with the CPUC or in any reporting.

If you have any questions about this research study or technical difficulties with the survey, please contact Taylor Williams at [Taylor.Williams@opiniondynamics.com](mailto:Taylor.Williams@opiniondynamics.com).

### FIRST FOLLOW-UP EMAIL

Subject line: Help California Enhance the Compliance Improvement Program!

Hello <NAME>,

The California Public Utilities Commission (CPUC) seeks to understand your opinions of EnergyCodeAce.com, its training, and course offerings. By completing this 10-minute survey, you can provide important information to help the CPUC understand what the program is doing well, where it could improve, and what additional information would be helpful for you.

Opinion Dynamics, an independent company, is conducting this research on the CPUC's behalf.

Click here to start the survey. <<LINK>>

Your answers will remain confidential and will be reported in aggregate with other answers or otherwise anonymized. We will not share your or your company's name with the CPUC or in any reporting.

If you have any questions about this research study or technical difficulties with the survey, please contact Taylor Williams at [Taylor.Williams@opiniondynamics.com](mailto:Taylor.Williams@opiniondynamics.com).

### SECOND FOLLOW-UP EMAIL

Subject line: Provide Feedback about California's Compliance Improvement Program.

Hello <NAME>,

Opinion Dynamics

We only need a few more responses to reach our goal. We would still like to hear from you!

The California Public Utilities Commission (CPUC) is reaching out to you as an EnergyCodeAce.com registrant and/or training attendee because it seeks your feedback on these resources. Opinion Dynamics, an independent company, is conducting this research on the CPUC's behalf.

By completing this 10-minute survey, you can provide important information to help the CPUC understand your thoughts on the program and how it can better serve professionals like you.

Click here to start the survey. <<LINK>>

Your answers will remain confidential and will be reported in aggregate with other answers or otherwise anonymized. We will not share your or your company's name with the CPUC or in any reporting.

If you have any questions about this research study or technical difficulties with the survey, please contact Taylor Williams at [Taylor.Williams@opiniondynamics.com](mailto:Taylor.Williams@opiniondynamics.com).

## INSTRUMENT

### INTRODUCTION/LANDING PAGE

On behalf of the California Public Utilities Commission (CPUC), thank you for taking this survey. The CPUC has hired Opinion Dynamics, an independent third-party research firm, to conduct this study. Your responses will be kept strictly confidential. If you exit the survey before completing it, you can pick up where you left off by clicking the link from your email.

### SCREENING

California's Compliance Improvement Program aims to provide industry professionals with the specific knowledge, skills, and job aids needed to effectively comply with California's Title 24, Part 6 building energy code and Title 20 appliance standards. The [EnergyCodeAce](#) website provides no-cost tools, training, and resources for professionals like you.

- S1. How have you encountered California's Compliance Improvement Program?
1. Registering as a user on the EnergyCodeAce website
  2. Attending a training course
  3. Both
  4. Unsure [TERMINATE]
- S2. In what role did you engage the program?
1. Architect
  2. Builder
  3. Building official/inspector
  4. Contractor
  5. Energy consultant
  6. Design professional
  7. Home or business owner
  8. Mechanical engineer
  9. Plans examiner
  10. Trade professional: Please specify: [OPEN END]
  11. Other: please specify: [OPEN END]

## PROGRAM AND RESOURCE AWARENESS

- Q1. From whom did you hear about the Compliance Improvement Program? *Please select all that apply.* [MULTIPLE RESPONSE; RANDOMIZE 1-4; LOCK 5]
1. From a regional energy network (REN) organization
  2. From a trade organization
  3. From a utility
  4. From a colleague
  5. Other: please specify: [OPEN END]

[FOR EACH OF THE SOURCES SELECTED IN Q1, ASK Q2]

- Q2. How did you receive the information [Q1 response] on the Compliance Improvement Program? [MULTIPLE RESPONSE]
1. Email
  2. Phone call
  3. Conference
  4. Social media
  5. Direct mail
  6. TV/radio advertisement
  7. Something else

- Q3. What would you say are the most effective ways to reach professionals in your role about resources for energy codes? Select up to three responses.
1. Email
  2. Phone call
  3. Conference or speaking engagement
  4. Social media
  5. Postal mail (postcard, flyer, letter, etc.)
  6. Radio or TV
  7. Word of mouth
  8. Other: please specify: [OPEN END]

- Q4. From whom would you say these communications about resources would be most effective? Select up to two. [RANDOMIZE 1-4; LOCK 5]
1. From a regional energy network (REN) organization
  2. From a trade organization
  3. From a utility
  4. From a colleague
  5. Other: please specify: [OPEN END]

## PROGRAM FEEDBACK: RESOURCES AND TOOLS

BLOCK: [ASK IF S1=1 OR 3]

- Q5. How familiar are you with the following Compliance Improvement Program resources provided through the EnergyCodeAce website? [SINGLE RESPONSE SCALE]

Item	1. Very Familiar	2. Somewhat Familiar	3. Not too Familiar	4. Not at all Familiar
a. Fact sheets				
b. Reference guides				
c. Checklists				
d. Trigger sheets				

e. Training videos				
f. Case studies				
g. Reference Ace				
h. Virtual Compliance Assistant				
i. Forms Ace				
j. Product Finder				
k. Noteblocks				

[ASK Q6 IF Q5 = 1, 2 OR 3]

Q6. How valuable have the following Compliance Improvement Program resources provided through the EnergyCodeAce website been to you? [SINGLE RESPONSE SCALE]

Item	1. Very Valuable	2. Somewhat Valuable	3. Not too Valuable	4. Not at all Valuable	5. I have not used this resource
a. Fact sheets					
b. Reference guides					
c. Checklists					
d. Trigger sheets					
e. Training videos					
f. Case studies					
g. Reference Ace					
h. Virtual Compliance Assistant					
i. Forms Ace					
j. Product Finder					
k. Noteblocks					

[ASK IF ANY Q6= 1 OR 2]

Q7. What about these resources were most valuable to you? [PIPE IN EACH RESPONSE FROM 6 = 1 OR 2, WITH INDIVIDUAL OPEN END FIELDS]

[ASK IF ANY Q6=2, 3, OR 4]

Q8. How can these resources be improved to further increase their value to you? [OPEN END]

Q9. How have you applied the information from the EnergyCodeAce website to your work? *Please select all that apply.* [MULTIPLE RESPONSE; RANDOMIZE 1-7]

1. Providing clients and colleagues with detailed information on how to comply with codes
2. Understanding compliant building/product design choices
3. Verifying compliance requirements
4. Providing consistent compliance documentation
5. Training employees/contractors on code compliance
6. Other, please specify: [OPEN END]

[CARRY FORWARD RESPONSES FROM 9] [DISPLAY IF MORE THAN ONE RESPONSE SELECTED IN Q9]

Q10. Which of these applications would you say is most important for your work?

1. Providing clients and colleagues with detailed information on how to comply with codes
2. Understanding compliant building/product design choices
3. Verifying compliance requirements
4. Providing consistent compliance documentation

5. Training employees/contractors on code compliance
6. Other, please specify: [OPEN END]

Q11. Overall, how satisfied are you with the Compliance Improvement Program resources provided through the EnergyCodeAce website? [SINGLE RESPONSE SCALE]

1. Very satisfied
2. Somewhat satisfied
3. Not too satisfied
4. Not at all satisfied

Q12. Were there any online resources not available on topics you needed, or tools that could have helped you but were not available?

1. Yes, please explain: [OPEN ENDED]
2. No, the resources and tools I needed were available

Q13. What issues, if any, did you experience with the EnergyCodeAce website? [MULTIPLE RESPONSE 1-9; RANDOMIZE 1-8, LOCK 9, 10]

1. Difficulty or inability to find the materials I needed
2. Unable to download materials I needed
3. Unable to access the website/materials on my mobile device
4. Slow loading times
5. Visually unappealing content
6. Outdated or irrelevant content
7. Broken links to materials
8. Security issues
9. Other, please specify: [OPEN END]
10. I did not experience any issues with the EnergyCodeAce website

[ASK IF Q13≠10]

Q14. How satisfied were you with your ability to get these issues resolved?

1. Very satisfied
2. Somewhat satisfied
3. Not too satisfied
4. Not at all satisfied

[ASK IF Q13≠10]

Q15. Please explain why you were [PIPE IN RESPONSE FROM Q14] with your ability to get issues resolved. [OPEN ENDED]

Q16. How aware were you of code changes applicable to your work **before** you began to use the online resources available through the EnergyCodeAce website?

1. Very aware
2. Somewhat aware
3. Not too aware
4. Not at all aware

Q17. How aware were you of code changes applicable to your work **after** you began to use the online resources available through the EnergyCodeAce website?

1. Very aware
2. Somewhat aware
3. Not too aware
4. Not at all aware

Q18. How knowledgeable were you about codes applicable to your work **before** you began to use the online resources available through the EnergyCodeAce website?

1. Very knowledgeable
2. Somewhat knowledgeable
3. Not too knowledgeable
4. Not at all knowledgeable

Q19. How knowledgeable were you about implementing these codes to your work **after** you began using the online resources available through the EnergyCodeAce website?

1. Very knowledgeable
2. Somewhat knowledgeable
3. Not too knowledgeable
4. Not at all knowledgeable

## PROGRAM FEEDBACK: TRAINING COURSES

BLOCK: [ASK IF S1=2 OR 3]

Q20. How have you participated in California code compliance training courses in the past? *Please select all that apply.* [MULTIPLE RESPONSE; RANDOMIZE 1-4]

1. Live, in person
2. Live, online
3. Self-paced online training
4. Pre-recorded webinar

Q21. What is your preference for participating in California code compliance training courses in the future? *Please select all that apply.* [MULTIPLE RESPONSE; RANDOMIZE 1-5]

1. Live, in person
2. Live, online
3. Self-paced online training
4. Pre-recorded webinar
5. Other: please specify: [OPEN END]

Q22. Which of the following courses have you attended? *Please select all that apply.* [MULTIPLE RESPONSE; RANDOMIZE 1-9]

1. Residential
2. Residential Models
3. General
4. Non-residential and Multifamily
5. Non-residential
6. Non-residential Models
7. Residential Accessory Dwelling Unit
8. Solar
9. Title 20
10. Other: please specify [OPEN END]

Q23. Which of the following courses are you interested in attending in the future? *Please select all that apply.* [MULTIPLE RESPONSE; RANDOMIZE 1-9]

1. Residential
2. Residential Models
3. General
4. Non-residential and Multifamily
5. Non-residential
6. Non-residential Models
7. Residential Accessory Dwelling Unit
8. Solar

- 9. Title 20
- 10. Other: please specify [OPEN END]

Q24. Please rate your satisfaction with the following aspects of the training course(s) you took.

Item	1. Very Satisfied	2. Somewhat Satisfied	3. Not too Satisfied	4. Not at all Satisfied
1. Instructor				
2. Applicability of material to your work				
3. Usability of the material after the course				
4. Relevance of the material				
5. Quantity of new material learned				
6. Length of the course				
7. Availability of the course				

Q25. Overall, how satisfied are you with the California code compliance training courses you have taken? [SINGLE RESPONSE SCALE]

- 1. Very satisfied
- 2. Somewhat satisfied
- 3. Not too satisfied
- 4. Not at all satisfied

[ASK IF Q25= 3 OR 4]

Q26. What would have improved your level of satisfaction with the course(s)? [OPEN END]

Q27. How have you applied the information you learned in the course(s) to your work? *Please select all that apply.* [MULTIPLE RESPONSE; RANDOMIZE 1-5]

- 1. Providing clients and colleagues with detailed information on how to comply with codes
- 2. Understanding compliant building/product design choices
- 3. Verifying compliance requirements
- 4. Providing consistent compliance documentation
- 5. Training employees/contractors on code compliance
- 6. Other, please specify: [OPEN END]

[CARRY FORWARD RESPONSES FROM Q27] [DISPLAY IF MORE THAN ONE OPTION SELECTED IN Q27]

Q28. Which of these applications would you say is the most important for your work?

- 1. Providing clients and colleagues with detailed information on how to comply with codes
- 2. Understanding compliant building/product design choices
- 3. Verifying compliance requirements
- 4. Providing consistent compliance documentation
- 5. Training employees/contractors on code compliance
- 6. Other, please specify: [OPEN END]

Q29. How aware were you of code changes applicable to your work **before** you took courses through the program?

- 1. Very aware
- 2. Somewhat aware
- 3. Not too aware
- 4. Not at all aware

Q30. How aware were you of code changes applicable to your work **after** you took courses through the program?

- 1. Very aware

2. Somewhat aware
3. Not too aware
4. Not at all aware

- Q31. How would you assess your level of knowledge about codes applicable to your work **before** the course(s)?
1. Very knowledgeable
  2. Somewhat knowledgeable
  3. Not too knowledgeable
  4. Not at all knowledgeable
- Q32. How would you assess your level of knowledge about codes applicable to your work **after** the course(s)?
1. Very knowledgeable
  2. Somewhat knowledgeable
  3. Not too knowledgeable
  4. Not at all knowledgeable
- Q33. What additional training courses would be useful to further increase your level of knowledge about codes applicable to your work? [OPEN END]
- Q34. What could the California Compliance Improvement Program do to make compliance with codes easier for you and your company? [OPEN END]

[ASK ALL]

- Q35. Overall, how satisfied are you with the Compliance Improvement Program? [SINGLE RESPONSE SCALE]
1. Very satisfied
  2. Somewhat satisfied
  3. Not too satisfied
  4. Not at all satisfied

## FIRMOGRAPHICS [ASK ALL]

- Q36. Which of the following best describes your company? [SINGLE RESPONSE; RANDOMIZE 1-4]
1. Building/Construction Firm
  2. Architecture/Design Firm
  3. Developer/Real Estate Development Firm
  4. Engineering Firm
  5. Other: please specify [OPEN END]
- Q37. How long have you been in your role in the industry?
1. Less than 1 year
  2. 1 to 5 years
  3. 6 to 10 years
  4. More than 10 years
- Q38. Which of the following associations do you or your company belong to? Please *select all that apply*. [MULTIPLE RESPONSE; RANDOMIZE 1-9]
1. California Building Industry Association (CBIA)
  2. California Association of Building Energy Consultants (CABEC)
  3. California Building Officials (CALBO)
  4. Association of Energy Engineers (AEE)
  5. Associated General Contractors of California (ASG CA)
  6. American Institute of Architects- California (AIA CA)
  7. Institute of Heating & AC Industries (IHACI)
  8. International Code Council (ICC)

9. Residential Energy Services Network (RESNET)
10. Other, please specify: [OPEN END]
11. My company does not belong to any associations

## CLOSING

- Q39. Would you be willing to participate in a follow-up interview to more fully explore your thoughts about California's Compliance Improvement Program? Interviewees will be provided with a \$50 gift card for completing the interview.
1. Yes
  2. No

[IF Q39=1]

- Q40. Thank you! We appreciate your willingness to participate in an interview. Please enter the best email to reach you, and we will contact you if you are selected.
1. Enter email here: [OPEN END]

Thank you for taking the time to complete our survey. We really appreciate your feedback.

Please click the link below to submit your responses.

REDIRECT TO URL: <https://energycodeace.com/>

## APPENDIX B. SURVEY CROSS-TABULATED RESULTS AND VERBATIM RESPONSES

Cross-tabulated results and verbatim responses appended to this appendix.

# Compendium of Open-Ended Questions from Code Compliance Improvement Program Process Evaluation

## Tabulation of Q7a S1

What about fact sheets was most valuable to you?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
	101	75	32	208
The facts	0	0	1	1
,	1	0	0	1
----	1	0	0	1
.	0	0	3	3
2022 California Energy Code for residential and non-residential ADU ENERGY	1	0	0	1
Able to reference them for our green building program which references code.	0	0	1	1
Accessible summaries	1	0	0	1
Ace Resources	0	0	1	1
Actual questions and answers	1	0	0	1
All energy and energy compliance facts sheets are very valuable.	0	0	1	1
All information on one page with links	0	0	1	1
All of them	0	0	1	1
All the correct information is there, and it covers a wide variety of building types	0	0	1	1
All the information in one place	0	0	1	1
Answered questions I had	1	0	0	1
Avoid plan check comments.	0	0	1	1
Brief pertinent facts that directly apply.	0	0	1	1
Bringing design team members up to speed so I don't have to put together my own training resources.	1	0	0	1
CARE, FERA and ESA programs	1	0	0	1
CODE COMPLIANCE REFERENCES	1	0	0	1
Clarification of requirements	0	0	1	1
Clarifies code requirements for different occupancies and measures, and identifies required forms	1	0	0	1
Clarity	1	0	1	2
Clarity and simplicity	0	0	1	1
Clarity and summary information in a ready, easy-to-digest format.	0	0	1	1
Clarity of the information	0	0	1	1
Clear descriptions and	1	0	0	1

breakdowns of specific topics.				
Code Reference	1	0	0	1
Code reference information.	0	0	1	1
Code regulations	1	0	0	1
Code sections and requirements	0	0	1	1
Code sections that can easily be looked up and reviewed from references provided in the fact sheets.	0	0	1	1
Code updates	1	0	0	1
Community appliance data	1	0	0	1
Comprehensive summary	1	0	0	1
Concise	1	0	1	2
Concise format with easy to find information	1	0	0	1
Concise info on requirements and solutions	1	0	0	1
Concise information and details	0	0	1	1
Concise information with reference to code sections	0	0	1	1
Concise summary	0	0	1	1
Condensed information	1	0	0	1
Content	0	0	1	1
Current code change info	1	0	0	1
Current provisions for compliance. Various scenarios and examples.	0	0	1	1
Detailed reference	1	0	0	1
Direct information, no fluff	0	0	1	1
Distillation of complex code reqs	0	0	1	1
Don't recall	0	0	1	1
ECA+NR+Whats+Changed+Fac t+Sheet+WEB_4125 (Thank you Gable!)	0	0	1	1
Ease in explaining to homeowners and contractors energy compliance.	1	0	0	1
Easily digestable	0	0	1	1
Easy quick checklist to reference	0	0	1	1
Easy to consume and process when working on a project	1	0	0	1
Easy to consume information	1	0	0	1
Easy to find and concise information	0	0	1	1
Easy to find information	0	0	1	1
Easy to find the code requirements and changes	0	0	1	1
Easy to locate information regarding our current project	1	0	0	1
Easy to read and concise	1	0	0	1
Easy to read and understand; summarizes the important factors for each type of measure	0	0	1	1
Easy to read. Quick and useful reference.	0	0	1	1
Easy to reference and find important information regarding	1	0	0	1

code requirements which can sometimes be confusing depending on the project.				
Easy to see T-24 requirements	1	0	0	1
Easy to understand	1	0	1	2
Easy to understand info in one place.	0	0	1	1
Easy to use	0	0	1	1
Easy to use, comprehensive	0	0	1	1
Expert knowledge you can't find anywhere else	1	0	0	1
Explanation of codes.	0	0	1	1
Explanation of the code	0	0	1	1
Fact Sheet: Nonresidential and Multifamily Lighting	1	0	0	1
Fact Sheet: Nonresidential Daylighting and Daylighting Controls				
Fact Sheet: Nonresidential and High-rise Multifamily Solar and Battery Systems				
Fact sheets on envelope requirements	0	0	1	1
Facts, and code sections	0	0	1	1
Fast resources	1	0	0	1
Finding the information I am looking for available in printed form	0	0	1	1
Focus on energy usage.	0	0	1	1
GE GENERATORS.	0	0	1	1
General information for guidance with energy form requirements.	0	0	1	1
Good info on there	1	0	0	1
Good reminders to re read all the time.	0	0	1	1
Good resource of distilled information to pass to architects	0	0	1	1
Good source of information	1	0	0	1
Good starting point	1	0	0	1
Good summary	0	0	1	1
Good summary of information relevant to specific regulations.	0	0	1	1
Great for quick information	0	0	1	1
Great source of information in one place.	1	0	0	1
Great summaries of major topics that we need to know about as a building department and an easy understandable reference for contractors and homeowners	1	0	0	1
Great summary of information	1	0	0	1
HERS and Commissioning	0	0	1	1
Having a reliable reference point	0	0	1	1
Having easy and quick to find references is valuable to have.	1	0	0	1
Helped with lighting compliance process	1	0	0	1
Helpful for answering quick	1	0	0	1

questions				
Helpful in what is needed to achieve compliance. Often sent them to architects.	1	0	0	1
Helping to explain Title 24 to homeowners.	1	0	0	1
Helps to remember the data needed when doing analysis.	1	0	0	1
High level summary for each building segment, able to share with other agencies easily	0	0	1	1
How to comply with title 24	1	0	0	1
I Use all of the fact sheets for residential on a daily basis. But the hands down best one is the new 2025 Plan examiner's checklist dynamic form. Its a must for anyone in this industry	0	0	1	1
I can email them to architects, designers and builders to clarify updates to code or to help them understand what I've explained to them.	1	0	0	1
I can look a form and find answers to questions.	1	0	0	1
I can read the codes in a practical and simple way, and it is easy to understand the codes.	0	0	1	1
I don't remember in specifics.	1	0	0	1
I have not seen it yet.	0	0	1	1
I haven't used the fact sheets much, but knowing the resource is available if needed is useful in itself.	1	0	0	1
I think they were mostly of average information and super valuable	0	0	1	1
Identifying the code sections to reference and be able to look up directly and the overview of requirements themselves.	0	0	1	1
Indoor and outdoor lighting control requirements	1	0	0	1
Information condensed to easily see what is needed for compliance and where to get more indepth information.	0	0	1	1
Information contained.	0	0	1	1
Information in a bite sizable format	1	0	0	1
Information is direct without having to look thru a ton of information.	1	0	0	1
Information related to code	0	0	1	1
Information summarized in an easy to find place	0	0	1	1
Insuring that our products can	1	0	0	1

assist in compliance.				
It distills the code into a short, graphic, easy to read and understand bite	0	0	1	1
It helps me read through condensed set of information without having to comb through pages of articles of Code	1	0	0	1
It helps with facts	1	0	0	1
It helps with questions for another person.	0	0	1	1
It is a way to simplify / summarize key information into one simple format	0	0	1	1
It is nice to have everything accessible on one sheet to reference.	0	0	1	1
It provides good summary of the requirements with code sections so I can look them up if needed.	0	0	1	1
It provides key information in a condensed form.	0	0	1	1
Keeps me up to daye	0	0	1	1
Latest information	0	0	1	1
Learning about code changes	0	0	1	1
Learning how the program works.	1	0	0	1
Lighting/ Occupancy Sensors	0	0	1	1
Limited use, There is so much information it can become overwhelming. Difficult to direct or help guide applicants (in the building world).	1	0	0	1
Long term planning	1	0	0	1
Mechanical HVAC modeling	1	0	0	1
N/A	0	0	1	1
Na	0	0	1	1
New code changes	1	0	0	1
No comment	0	0	1	1
Non Residential Lighting	1	0	0	1
Nonresidential and Multifamily Lighting	1	0	0	1
Obtaining data	0	0	1	1
One answer, facts.	1	0	0	1
Overall summaries of Code Cycle Benefits. Bulletin on ADU Energy compliance	1	0	0	1
Pretty much everything to do with either lighting, or mechanical (heating/cooling) were extremely helpful.	0	0	1	1
Print for reference	1	0	0	1
Prod info	0	0	1	1
Products and procedures that meet the current energy code requirements	1	0	0	1
Proof of actual information.	1	0	0	1
Provided a quick overview of the	1	0	0	1

topic				
Provided insightful information	0	0	1	1
Provides important information.	1	0	0	1
Questions answered and standards confirmed.	1	0	0	1
Quick	0	0	1	1
Quick References and code locations.	1	0	0	1
Quick access to consolidated information.	0	0	1	1
Quick and got at essential issues	0	0	1	1
Quick facts	0	0	1	1
Quick information in an easy to digest format.	0	0	1	1
Quick overview	0	0	1	1
Quick overview, links to materials	0	0	1	1
Quick reference	1	0	0	1
Quick reference to Energy Code Requirements; summarized in easy to understand format; references to code sections included.	0	0	1	1
Quick reference to a topic and easy to send to clients and AHJ's	0	0	1	1
Quick reference to use as a resource	0	0	1	1
Quick simple and to the point for finding relative information	0	0	1	1
Quick summary, don't have to spend a ton of time looking for major info	0	0	1	1
Quick to look up, hard to find the specific sheet for a specific project	0	0	1	1
Quickly find relevant information	1	0	0	1
Quickly understanding specific code application code requirements.	1	0	0	1
Ready resource to give to clients.	1	0	0	1
Reference tool	1	0	0	1
References the title 24 code.	1	0	0	1
Relevant information that provides clarity of CODE Requirements.	0	0	1	1
Reliable Information.	1	0	0	1
Reliable information	1	0	0	1
Reliable up to date facts.	0	0	1	1
Residential Energy	1	0	0	1
Residential and non-residential addition/alteration requirements	1	0	0	1
Residential compliance	0	0	1	1
Residential compliance. Don't remember specifics	0	0	1	1
Residential energy compliance	0	0	1	1
Residential, Multifamily and commercial.	0	0	1	1
Revisions to codes and standards	0	0	1	1
Rules change so much its a value	0	0	1	1

to find the correct answer to your question				
SFR residential compliance, Mandatory Measures	1	0	0	1
Seeing all the current code standards on one page is super helpful when creating a Title 24 Short cut	0	0	1	1
Simple information for high level stakeholders	1	0	0	1
Simple summaries to reference	0	0	1	1
Simplicity	0	0	1	1
Something simple that can be presented to the public	0	0	1	1
Sometimes I can find an answer to a question about the code more quickly in a Fact Sheet than I can by digging through the code.	0	0	1	1
Straightforward and easy to navigate	1	0	0	1
Summarize key code requirements, provide visual examples and clarifies path for prescriptive vs performance	1	0	0	1
Summarizes the info i'm looking for in one concise document	0	0	1	1
Summary and highlights of different parts of the Energy Code. The visual aids, when provided are also very helpful.	0	0	1	1
Organizing the information into bullet lists or tables is pretty useful.				
Summary info	0	0	1	1
Summary of requirements	1	0	0	1
Summary of sometimes confusing code requirements	0	0	1	1
Summary of typical compliance	1	0	0	1
The ADU was is great.	1	0	0	1
The Quick and easy	1	0	0	1
The compact descriptions of code requirements makes them invaluable for quick reference rather than digging into the full code book.	0	0	1	1
The conciseness and language easier to understand than code verbiage.	0	0	1	1
The content summarizes code and/or changes in a way that saves me substantial time, and I know I can rely on its accuracy.	1	0	0	1
The data is readily available.	0	0	1	1
The fact sheet summaries the important information	0	0	1	1
The fact sheets help me learn about and understand changes	1	0	0	1

and additions to the California Energy Code				
The fact sheets were most valuable because they clearly summarized lighting and controls requirements in Title 24. They make it easier for us to verify compliance and explain code requirements to clients during retrofit and rebate projects without digging through the entire code	0	0	1	1
The fact sheets were most valuable because they presented key information in a clear, concise, and visually organized format. They helped me quickly understand the main takeaways without having to sift through lengthy documents. The use of charts, bullet points, and summaries made it easy to reference and share with others.	0	0	1	1
The fact sheets were most valuable because they provided concise, practical guidance that I could easily reference during design development. They translated complex energy standards into actionable strategies for architectural design.	0	0	1	1
The format	0	0	1	1
The general and specific lighting information	0	0	1	1
The information	1	0	0	1
The information is listed in a format which is easy to follow.	0	0	1	1
The information provided.	1	0	0	1
The means of communication of information.	0	0	1	1
The most valuable aspect of the Energy Code Ace fact sheets was how clearly they summarized complex California Energy Code (Title 24, Part 6) requirements. They condensed technical information into easy to understand language, diagrams, and tables, which made it much faster to find answers about compliance options and documentation requirements. I especially appreciated that each fact sheet focused on a specific topic such as lighting controls, HVAC efficiency, or envelope requirements, so I could quickly	0	0	1	1

reference the one relevant to my project. Overall, the fact sheets helped bridge the gap between the code language and practical application in design and construction.				
The quickness of finding out about information	1	0	0	1
The true reality of the information provided.	1	0	0	1
Their availability	0	0	1	1
These are good conceptual overviews to familiarize myself with the intent of different Title 24 sections, and to find plain-language descriptions that can be shared with clients or colleagues.	1	0	0	1
The trigger sheets are very helpful for decision-making during building design and renovation.				
They are a clean, summarized list of key points about topics which I know have been checked by an energy code professional. They provide links and make learning the topics a lot simpler and quicker. I can dive into the code book with a clearer understanding of what I'm actually looking for.	0	0	1	1
They are a quick and easy way to reference major code changes, especially when first transitioning between cycles.	0	0	1	1
They are a quick guide to the Energy Code that can assist me in finding more information as needed.	0	0	1	1
They are an organized and condensed resource which gives me confidence that I have found all the relevant information.	0	0	1	1
They are concise and very informative. It helps digest the language of the code.	0	0	1	1
They are quick reference guides for the current or new code. Very helpful for new hires	0	0	1	1
They can be a quicker way to find specific things in the code.	0	0	1	1
They distill Title 24 code into clear concise language and helps with interpretation.	0	0	1	1
They get to the point	1	0	0	1
They give quick summaries that I can share with others.	0	0	1	1
They help when communicating with the public through questions	1	0	0	1

they ask. Also very helpful for internal information and training				
They helped me to process information that was not wholly clear from other resources.	1	0	0	1
They provide concise summaries of complex code requirements.	1	0	0	1
The quick references to prescriptive limits, mandatory measures, and compliance exceptions save time compared to reading the full code text. They are most valuable for confirming details during design and coordination without needing to open Title 24 or the Energy Code directly.				
They provided a quick easy to understand resource to send people	0	0	1	1
They show the facts so that one can move onto the next task	0	0	1	1
They summarize the code changes in an understandable way and help communicate it to decision makers and code implementers	1	0	0	1
They're a quick reference to see what's changed or new	1	0	0	1
Title 20 sheets are very clear and different versions exist for manufacturers, wholesalers, distributors.	1	0	0	1
Title 24 2022 information.	1	0	0	1
Title 24.	1	0	0	1
To clarify things on the code book.	1	0	0	1
To give an overall view of the direction of compliance in general.	1	0	0	1
To the point	1	0	0	1
Triggers for various projects.	0	0	1	1
Trying to figure out what I need to look into more.	0	0	1	1
Understanding new code updates; communications materials for stakeholders	0	0	1	1
Understanding new requirements	1	0	0	1
Understanding specifically what code changes or requirements exist for each equipment.	1	0	0	1
Unsure	1	0	0	1
Up to date energy compliance requirements	0	0	1	1
Updates in 2025 code cycle	0	0	1	1
Useability	1	0	0	1
Used for product selection	1	0	0	1
Used them to check I have everything covered in my	0	0	1	1

proposals				
Useful information	0	0	1	1
Useful information summarized	1	0	0	1
Useful information used in plans examination.	0	0	1	1
Various requirements	0	0	1	1
Verification of code memory or details on the situation	0	0	1	1
Verification of proposed systems	1	0	0	1
Very quick resource	0	0	1	1
Very valuable	0	0	1	1
WHAT'S NEW FOR RESIDENTIAL, MUTIFAMILY RESIDENTIAL IN 2015 AND OTHERS.	0	0	1	1
Well organized and often specific to a climate zone	0	0	1	1
What's New in 2022 (2025, etc) for Non-Residential (for Multifamily, for Single Family...); Solar PV rules by occupancy; detail about mechanical requirements	0	0	1	1
What's new	0	0	1	1
What's new in 2022/2025 Single Family	1	0	0	1
YES, ACCEPTABLE	0	0	1	1
Yes they were valuable	0	0	1	1
a lot of downloadable material	1	0	0	1
access	1	0	0	1
all	0	0	1	1
all of it	0	0	1	1
an overview of the process - though I'm not super familiar with them	0	0	1	1
being able to provide customers with easy to understand information	0	0	1	1
being able to quickly look up info and find references to code sections that have more detailed requirements	1	0	0	1
bullet point summaries of changes to the code	0	0	1	1
can compare with field installation	0	0	1	1
clear description of code requirements.	0	0	1	1
clear direction regarding code compliance changes and requirements	0	0	1	1
comprehensive summaries for code changes	0	0	1	1
concise	0	0	2	2
concise distillation of energy code with plain language and examples of where applicable	0	0	1	1
concise for quick reference	0	0	1	1

concise info specific to a single topic	0	0	1	1
cuts through to salient points	1	0	0	1
dont recall	1	0	0	1
easily accessible	1	0	0	1
easy to reference	0	0	1	1
everything	1	0	0	1
fact sheets allow to use information on the project decisions	0	0	1	1
fact sheets are very informative	0	0	1	1
facts	1	0	0	1
facts that may be in "grey" areas	0	0	1	1
gOOD RESOURCE	0	0	1	1
gave me answers	1	0	0	1
gives you information	0	0	1	1
having quick facts easily accessible	0	0	1	1
helps locate information faster	1	0	0	1
helps with facts	1	0	0	1
information you need to know	0	0	1	1
lay out all the facts clearly	1	0	0	1
learning information	0	0	1	1
like a code interpretation in a human language, not law language which no one knows what to do.	0	0	1	1
looking up new code changes	0	0	1	1
mechanical and lighting fact sheets	0	0	1	1
n/a	0	0	1	1
na	1	0	0	1
needing to see what changed in new T24 version	1	0	0	1
nice summary of code changes	0	0	1	1
non residential envelopes	0	0	1	1
none	0	0	1	1
not sure	2	0	0	2
provide information that is useful, relevant	0	0	1	1
quick access to commonly needed information.	1	0	0	1
quick and informative	1	0	0	1
quick glance with all the info	0	0	1	1
quick information on a specific subject	0	0	1	1
quick reference on a subject	0	0	1	1
quick references to quickly recall specifics	0	0	1	1
short and sweetl "Single family buildings whats new in 2025	1	0	0	1
simple, to the point and easy to read	1	0	0	1
straight-to-the-point facts, important updates	0	0	1	1
summarized the requirements into easy to read tables and visuals	1	0	0	1
summary	0	0	1	1
super accessible	1	0	0	1

t-24	0	0	1	1
the information	0	0	2	2
they are helpful. compact and to the point.	0	0	1	1
they help provide quick facts and information	0	0	1	1
understanding electric requirements for water heater replacement for my project.	0	0	1	1
use all the time	0	0	1	1
valuable	1	0	0	1
what has changed (re code), residential sheets	0	0	1	1
<b>Total</b>	<b>243</b>	<b>75</b>	<b>234</b>	<b>552</b>

### Tabulation of Q7b S1

What about reference guides was most valuable to you?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
	88	75	43	206
----	1	0	0	1
.	2	0	3	5
2019 building standards	1	0	0	1
2022 Title 24, Part 6 Reference Ace	1	0	0	1
2022 and 2025 T24 references	1	0	0	1
A good go-to reference	0	0	1	1
A place for reference general topic oversight	1	0	0	1
A quick overview	1	0	0	1
A reference guide allows you do a more detail look at a key code section or item.	0	0	1	1
ALL FACT SHEETS	0	0	1	1
Ability to be pointed in the correct direction.	1	0	0	1
Ability to get information	0	0	1	1
Able to look up information.	1	0	0	1
Able to quickly reference information.	0	0	1	1
Able to reference them for our green building program which references code. The ability to dig deep into topics for understanding.	1	0	0	1
Accessing the code quickly and being able to search.	0	0	1	1
Added knowledge	0	0	1	1
All	0	0	1	1
All of them	0	0	1	1
All the information in one place	0	0	1	1
Allows for easy lookup for finding additional information.	0	0	1	1

Allows me to get quick access to code summaries without digging through the Energy code	0	0	1	1
Allows to locate energy code reference articles.	0	0	1	1
Applications	1	0	0	1
As a reference through our plan review process	0	0	1	1
Assisted me knowledge	1	0	0	1
At a glance, must-know information.	0	0	1	1
Avoid plan check comments.	0	0	1	1
Being able to find the information I need immediately.	1	0	0	1
Being able to find the right resources	1	0	0	1
Being able to research details in comprehensive resource with an UpCodes degree of depth.	0	0	1	1
Breakdown of regulations, requirements and user friendly and understandable is top priority to add value.	0	0	1	1
Building Energy Efficiency Guides	1	0	0	1
Building Energy Efficiency Standards	0	0	1	1
CA statewide codes and standards compliance enhancement and process evaluation	1	0	0	1
CODE COMPLIANCE REFERENCES	1	0	0	1
California Energy Code	1	0	0	1
Clarity and simplicity	0	0	1	1
Clear & concise	0	0	1	1
Clear and concise information	0	0	1	1
Clear description of code requirements.	0	0	1	1
Code	1	0	0	1
Code changes. Updates to Home Builders in my category for Ventilation and Balanced air. Electrical and HVAC	0	0	1	1
Code references	0	0	1	1
Code references are useful when authoring a comment letter after reviewing Energy Code requirements.	0	0	1	1
Code sections	0	0	1	1
Compiled data and code resources	0	0	1	1
Complete access to all code references in a readable and searchable format. The ability to link to specific code sections is great.	1	0	0	1
Comprehensive information allowing for deeper research for	1	0	0	1

project specific questions				
Concise info	0	0	1	1
Concise, know where to look for information that pertains to my design.	0	0	1	1
Condensed information	1	0	0	1
Content	0	0	1	1
Deeper understanding in the details	1	0	0	1
Detailed information on code requirements	0	0	1	1
Detailed information when needed	1	0	0	1
Don't remember	0	0	1	1
Ease of access to information pertaining to my project	1	0	0	1
Ease of access to reqs	0	0	1	1
Easier sourcing of pertinent data	1	0	0	1
Easier to navigate the code than using the CEC website.	1	0	0	1
Easy access and easy to understand	0	0	1	1
Easy to find information	0	0	1	1
Easy to find information needed.	1	0	0	1
Easy to follow	1	0	0	1
Easy to look up	1	0	0	1
Easy to read and understand	0	0	1	1
Easy to reference	0	0	1	1
Easy to understand	1	0	1	2
Easy to understand.	0	0	1	1
Easy to use, comprehensive	0	0	1	1
Easy tot find information	0	0	1	1
Easy use	0	0	1	1
Education	1	0	0	1
Energy Code, ASHRAE Standards	1	0	0	1
Energy Star	1	0	0	1
Expert knowledge you canâ€™t find anywhere else	1	0	0	1
Explains to me, what to look for on the plans	1	0	0	1
Fast access	1	0	0	1
Fast resources	0	0	1	1
Formatting and searching	0	0	1	1
GE	0	0	1	1
General guidance navigating energy code.	0	0	1	1
Getting to know how effective it should be.	1	0	0	1
Getting into the question with greater depth. Figuring out how code applies to a specific project can get complicated. Reference guides help figure it out.	0	0	1	1
Glossary	0	0	1	1
Good info on there	1	0	0	1
Good information	1	0	0	1

Good overviews for certain applications	0	0	1	1
Good resource but upcodes and Icc Digital Copies provide similar products that quicker to open and use.	1	0	0	1
Good source of information	1	0	0	1
Good source of resources	0	0	1	1
Got me the info I needed	0	0	1	1
Great for more detail reference info	0	0	1	1
Great resource with the exact information you typically need to populate T24 models on EnergyPro	1	0	0	1
Guide helps since im not too familiar with the energy code ace software	1	0	0	1
Guides for nonresidential compliance	0	0	1	1
Guides on code updates for 2025	0	0	1	1
HVAC equipment selection	1	0	0	1
Handy	1	0	0	1
Handy for finding information.	1	0	0	1
Having reliable resources	0	0	1	1
Help in finding the specific information I needed	1	0	0	1
Help me make sure I'm not missing something	0	0	1	1
Help me to follow a path of ideas into the codes, and it is easy to understand some key information.	0	0	1	1
Help when analyzing a complex project	0	0	1	1
Help with compliance and code requirements	0	0	1	1
Help with the ACE forms	1	0	0	1
Helpful in seeing the "grey" in the energy code.	0	0	1	1
Helpful to find the code requirements more in depth.	0	0	1	1
Helps navigate through multiple sections	0	0	1	1
How to comply with title 24	1	0	0	1
How to navigate	1	0	0	1
I am sure they are useful to those who actually follow code, as I speak around the state I have not had anyone mention these as being helpful. Instead I have heard many talk about not worrying about the code in practice and have seen and heard from many about drive-by follow	0	0	1	1
I am unable to cite a specific example	1	0	0	1
I assume this is referring to	1	0	0	1

reference ACE? ability to browse the code quickly and find sections I needed to refer to/how different sections interact				
I could track where the info comes from.	0	0	1	1
I do not believe I found any specific part to be greater than the others	1	0	0	1
I don't remember	0	0	1	1
I don't remember how I've used these in the past.	0	0	1	1
I don't remember in specifics.	1	0	0	1
I may have confused this with the reference ace, which is just an online accessible version of the codes.	1	0	0	1
I prefer working with reference guides and compliance manuals to speed up the process of determining code compliance.	1	0	0	1
Reading the code itself is tedious and having a knowledgeable resource to easily find the information I need by subject is crucial to the efficiency of my work.				
I used the guides in order to create title 24 compliance forms	1	0	0	1
I'm actually not sure what this is referring to, I originally thought reference guides was also referring to fact sheets.	1	0	0	1
INSULATION	0	0	1	1
Identifying the code sections to reference and be able to look up directly and the overview of requirements themselves.	0	0	1	1
If unsure about data or checklists.	0	0	1	1
If we encountered with any error. we can look at reference guide and solve the error. or sometimes to understand the concepts.	1	0	0	1
If you can find them.	1	0	0	1
In clarifying questions about specific issues without having to look for blogs or forums.				
In depth guide about upcoming changes to the code	0	0	1	1
In depth information	0	0	1	1
Information	0	0	2	2
Information related to codes	0	0	1	1
Informative and handy reference	1	0	0	1
Interpretations	0	0	1	1
Interpretations of the code.	0	0	1	1
It clarifies definitions of terms and provides complete code sections	0	0	1	1

for reference.				
It condenses how and whom executes different processes in one location. Since the type and markets that you could be involved with can vary over time it helps as guide and refresher if you havhaven't been involved with a specific compliance requirements in a year or two.	0	0	1	1
It helps explain/clarify the Title 24 requirements that we need to meet.	1	0	0	1
It helps me to have a resource that I can recall to, as opposed to having to memorize all or having to make one for myself	1	0	0	1
It is valuable in helping to find sections in code	0	0	1	1
It's a quick reminder of what I already know.	0	0	1	1
Itâ€™s a good source for finding valuable information	1	0	0	1
Knowing the source of information	0	0	1	1
LIGHTING	1	0	0	1
LOOKING UP CODES, GOOD BOOKMARKS, EASY TO NEVIGATE	1	0	0	1
Learning about insulation and hvac	0	0	1	1
Learning how to apply codes	1	0	0	1
Learning information	0	0	1	1
Lighting Occupancy Sensors	0	0	1	1
Like a master index	0	0	1	1
More detail than the code, if you're willing to dig.	0	0	1	1
N/A	0	0	1	1
NONE	0	0	1	1
Navigation of code	1	0	0	1
No comment	0	0	1	1
None in particular - just good reference tools overall	1	0	0	1
Not seen it yet.	0	0	1	1
Nothing is really valuable, the forms and compliance data are unnecessary.	1	0	0	1
Outlines some of the rules.	1	0	0	1
Provide easy to understand information	1	0	0	1
Provide quick access to information	1	0	0	1
Provide quick citation for the referred regulation	1	0	0	1
Provides and points to accurate source of information giving clarity to CODE requirements.	0	0	1	1

Provides compliance approaches and technologies for different scenarios	1	0	0	1
Quality information	1	0	0	1
Quality of information provided.	1	0	0	1
Quick ref guide	0	0	1	1
Quick reference	0	0	1	1
Quick reference notes	0	0	1	1
Quick reference options	0	0	1	1
Quick review of general requirements	0	0	1	1
Quick search	0	0	1	1
Reference Ace, could not of passed by multiple choice CEA exam without. but all of them for each energy feature is valuable. I just wish more builders, hvac installers, trade schools new about them	0	0	1	1
Reference tool	1	0	0	1
Research requirements	1	0	0	1
Residential and nonres guides	0	0	1	1
Residential energy compliance	0	0	1	1
Residential, Multifamily, Commercial.	0	0	1	1
Resource to direct applicants to, for help.	1	0	0	1
SAA	0	0	1	1
SAME	1	0	0	1
Same	0	0	2	2
Same as last response. Easy to find the needed info in one place.	0	0	1	1
Same thing, the guides are faster and clearer than digging through the actual code sections.	0	0	1	1
Same, all of the energy references are valuable.	1	0	0	1
Satisfied need for reference materials to support decisions.	1	0	0	1
Saves time not having to search thru code book	1	0	0	1
Similar products can be caopared.	0	0	1	1
Similar to fact sheets	0	0	1	1
Specific code reference	1	0	0	1
Specific short I fo	1	0	0	1
T20 REFERENCE	1	0	0	1
T24 Guides for residential	1	0	0	1
That they exist	1	0	0	1
The CA Energy Code reference guide is awesome. It makes it much easier to navigate the energy code, allowing users to see the chapters/sections on the left side and easily and quickly navigate to the section of code they want to read. I love it!	0	0	1	1
The ability to find my answers	1	0	0	1

quickly				
The ability to look up information when needed.	0	0	1	1
The ability to look up many sources quickly.	0	0	1	1
The ease of use.	0	0	1	1
The flow is easy to understand	0	0	1	1
The hyperlinks to code sections and definitions.	1	0	0	1
The information	1	0	1	2
The lighting	0	0	1	1
The most valuable part of the reference guides was the detailed explanations and real-world examples that clarified how to apply the California Energy Code requirements correctly. They provided step-by-step guidance, helpful visuals, and references to specific code sections, which made it easier to interpret the intent behind the regulations.	0	0	1	1
The reference guide gives me context to understand exactly what input is needed in the energy ace compliance form	1	0	0	1
The reference guides I found most valuable were the trigger sheets and compliance checklists provided through EnergyCodeAce.	0	0	1	1
The reference guides were most valuable because they provide detailed explanations and examples that go beyond the summaries in the fact sheets. They help us confirm technical details about Title 24 lighting, controls, and documentation requirements, which is critical for ensuring projects qualify for rebates and pass inspections	0	0	1	1
The reference guides were most valuable because they provided detailed, step-by-step instructions that I could easily follow. They served as a reliable resource when I needed quick clarification or deeper understanding of specific processes. Having everything in one place made it efficient to troubleshoot or train others.	0	0	1	1
The reference guides were most valuable because they provided in-depth explanations of energy modeling assumptions and design strategies. They helped me	0	0	1	1

understand the technical basis behind the performance targets and supported more confident decision-making during design.				
The step-by-step explanations of compliance pathways and forms.	1	0	0	1
The reference guides translate code language into clear actions				
Their availability	0	0	1	1
These provide more in-depth descriptions of requirements than the Fact Sheets, so they help when determining how to specifically comply with the measures in T24	1	0	0	1
They are an organized and condensed resource which gives me confidence that I have found all the relevant information.	0	0	1	1
They are great for finding answers while using applications. The more user friendly the better.	1	0	0	1
They are searchable and easy to use.	1	0	0	1
They give info that helps me summarize for others.	0	0	1	1
They help	1	0	0	1
They help explain the Energy Code in a way that's easier to understand.	1	0	0	1
They help quickly locate the code requirements and separate the Energy Code from the compliance manuals (what is required vs what is recommended).	0	0	1	1
They provide a navigable version of the energy code which helps cut down the time I spend looking for what I need to find.	0	0	1	1
They were helpful for answering questions I was sent	0	0	1	1
They're consolidated sheets for easier reference	1	0	0	1
Thorough information	0	0	1	1
Those that explained the upcoming changes to title 24, especially 2025 standards, by breaking down complex code updates into a checklist	1	0	0	1
Time saving	1	0	0	1
Title 24 article numbers	1	0	0	1
Title 24, Part 6	0	0	1	1
Title 24, Part 6 Reference Ace	0	0	1	1
Title 24.	1	0	0	1
To confirm information	0	0	1	1
Totally helps to achieve an end product.	1	0	0	1

Understanding code	0	0	1	1
Understanding the intent	1	0	0	1
Understanding where to look and what applicable sections of code are for specific equipment.	1	0	0	1
Unknown	1	0	0	1
Unsure	1	0	0	1
Up to date info	0	0	1	1
Useability	1	0	0	1
Useful info	0	0	1	1
Very Valuable	0	0	1	1
Visual diagrams are working best for me	0	0	1	1
Well, provide refernce to the material and code section.	0	0	1	1
Where to find data or code information.	1	0	0	1
YES	0	0	1	1
all	1	0	1	2
all i need	0	0	1	1
all information is valuable	0	0	1	1
all of it	0	0	1	1
being able to jump between referenced code sections	1	0	0	1
big picture	0	0	1	1
bullet point summaries of code changes	0	0	1	1
code interpretation, but too much word.	0	0	1	1
code outlines otherwise cumbersome to find	0	0	1	1
code references	1	0	0	1
commercial	0	0	1	1
compliance for customers	1	0	0	1
comprehensive data	0	0	1	1
concise accurate	0	0	1	1
concise and straightforwardness	0	0	1	1
condensed information	1	0	0	1
depth of info	1	0	0	1
detail information	1	0	0	1
do not recall	0	0	1	1
do you mean Reference Ace?	1	0	0	1
question not clear				
don't know	1	0	0	1
dont recall	1	0	0	1
easily accessible	1	0	0	1
easy to access	0	0	1	1
easy to find	0	0	1	1
easy to use for quick info look up	1	0	0	1
easy to use, simple	0	0	1	1
entire code available	1	0	0	1
facts in one compact place	0	0	1	1
finding an answer	0	0	1	1
general resource	0	0	1	1
having quick facts easily accessible	0	0	1	1
help in locating T24 regs	0	0	1	1
help to understand and process	1	0	0	1

helps in future design...	0	0	1	1
helps to make decisions	1	0	0	1
if I am searching for something not quite addressed in your other material	1	0	0	1
in depth	0	0	1	1
informative with accurate title description	1	0	0	1
interpretations, explanations as to the why	0	0	1	1
it was a good reference	1	0	0	1
links	0	0	1	1
links to materials	0	0	1	1
more explanatory, but still fast and authoritative	0	0	1	1
n/a	1	0	2	3
n/a	0	0	1	1
na	2	0	0	2
needing quick summary of T24 requirements for specific situations	1	0	0	1
nice summary	0	0	1	1
none	0	0	1	1
not sure	2	0	0	2
not sure i remember, but there were documents I downloaded to study the requirements so I could properly fill out the title 24 paperwork	1	0	0	1
organisation	0	0	1	1
overview - similar to last answer	0	0	1	1
product examples	1	0	0	1
provides a direct inspection and plan review tool to ensure compliance	1	0	0	1
provides general guidance to certain parts of the code, like lighting	0	0	1	1
reference guides are very helpful for the project approach	0	0	1	1
reference information	0	0	1	1
reference on other divisions	0	0	1	1
references	1	0	0	1
relevant applications	1	0	0	1
residential	1	0	0	1
residential compliace	0	0	1	1
same	2	0	0	2
same they give support information that enables clear application data	1	0	0	1
search function is more streamlined than google search (fewer mis-attributions)	1	0	0	1
single source for updated code and reference material	0	0	1	1
some references only	0	0	1	1
t-24	0	0	1	1

the hot links to other sections	0	0	1	1
the in depth reference	1	0	0	1
they are helpful. compact and to the point.	0	0	1	1
they help provide more input on the references	0	0	1	1
thorough	0	0	1	1
used for product selection	1	0	0	1
useful reference.	1	0	0	1
valuable information and links	1	0	0	1
verify related regulations and approvals	0	0	1	1
very clear guides	0	0	1	1
very few	0	0	1	1
very informative	0	0	1	1
website	1	0	0	1
where are the "reference guides" on the web page?	1	0	0	1
you can reference things quickly	1	0	0	1
<b>Total</b>	<b>243</b>	<b>75</b>	<b>234</b>	<b>552</b>

#### Tabulation of Q7c S1

What about checklists was most valuable to you?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
-	107	75	62	244
-----	0	0	1	1
.	1	0	0	1
.	2	0	3	5
A clear process	1	0	0	1
A good note on whats required	1	0	0	1
A quick and easy way to help ensure compliance with the Energy Code for simple installations.	0	0	1	1
A quick guide	0	0	1	1
A simple way to keep track of useful information	0	0	1	1
ALL FACT SHEETS	0	0	1	1
All of them	0	0	1	1
An organized list of requirements in an easy to digest manner	0	0	1	1
As a guide to help develop internal checklists	0	0	1	1
Avoid plan check comments.	0	0	1	1
Check list for Plan examiner	0	0	1	1
Check requirements	1	0	0	1
Checklist: Single Family Plans Examiner 2022	1	0	0	1
Checklists	0	0	1	1
Checklists are great to make sure I've not missed a code requirement that may or may not	1	0	0	1

be required or may be required for planned future work. Makes short work of "knowing" code requirements that change so rapidly it's tough to truly know.				
Checklists are helpful	1	0	0	1
Checklists help me go through each item, minimizing errors or mistakes as a process built-in	1	0	0	1
Checklists help me plan for, and confirm that I've completed, all the required aspects of compliance with T24	1	0	0	1
Checklists help to guide my review thought process and make sure I pick up the most critical corrections	0	0	1	1
Checklists help to identify items that are required	0	0	1	1
Checklists show me what plans examiners and building inspectors will be looking for	1	0	0	1
Checklists that focus on something new/changing. For example multifamily PV & storage for 2022 code.	0	0	1	1
Checks the work	0	0	1	1
Clarify deliverables and responsibilities at the earliest stages of a project.	1	0	0	1
Clarity and simplicity	0	0	1	1
Clear and concise; great to share with a client.	0	0	1	1
Clear description of code requirements.	0	0	1	1
Compliance	1	0	0	1
Compliance checklist for Federal and State energy and utilities requirements	1	0	0	1
Comprehensive and is a good way to learn the process of code compliance review if you are unsure of what to expect.	1	0	0	1
Compressed information	0	0	1	1
Compressed information and covering any scope gaps	1	0	0	1
Condensed information	1	0	0	1
Confirming that we have implemented all that we could on our projects	0	0	1	1
Confirming what has to be done. Like any check list?	1	0	0	1
Confirms all required info has been completed	1	0	0	1
Covered all the potential scenarios and checklists that might be needed	1	0	0	1

DSA Forms	1	0	0	1
Design	1	0	0	1
Detail summary of requirements.	0	0	1	1
Did I forget anything?	0	0	1	1
Don't recall	0	0	1	1
Easier step by step process	1	0	0	1
Easy	0	0	1	1
Easy to adopt for our program.	1	0	0	1
Easy to find the needed info in one place.	0	0	1	1
Easy to follow	1	0	1	2
Easy to follow directions	0	0	1	1
Easy to place on drawings	0	0	1	1
Easy to read	0	0	1	1
Easy to read guide for requirements	0	0	1	1
Easy to use	1	0	1	2
Easy to use and understand	1	0	0	1
Easy to use.	0	0	1	1
Easy way to double check that nothing was missed	0	0	1	1
Ensure I'm on the right track	1	0	0	1
Ensuring all requirements were followed	1	0	0	1
Expert knowledge you can't find anywhere else	1	0	0	1
Fast resources	0	0	1	1
Finding what is triggered	0	0	1	1
For Lighting compliance	1	0	0	1
GE	0	0	1	1
GOOD	0	0	1	1
Gave a quick rundown of the necessary aspects	1	0	0	1
Good backcheck	0	0	1	1
Good info on there	1	0	0	1
Good quick reference guides.	0	0	1	1
Good resource when plan reviewing for any items I may have missed.	0	0	1	1
Good summaries, for myself, colleagues, and applicants. Useful for educating others.	0	0	1	1
Good tools as a quality control reference and a project management resource.	0	0	1	1
Good way to makesure we account for everything that is needed	0	0	1	1
Great tool for plans examiners	0	0	1	1
HELPS WITH REVIEWING BUILDING APPLICATION SUBMITTALS	1	0	0	1
HVAC	0	0	1	1
Handy tools for field inspectors	1	0	0	1
Help speed up compliance reviews	0	0	1	1
Help to complete all required	0	0	1	1

steps.				
Helped formulate Title 24 requirements for our project.	1	0	0	1
Helped in Construction Documents	0	0	1	1
Helped me know what energy compliance info I needed to include on my plans.	1	0	0	1
Helped me stay on task	0	0	1	1
Helpful to advise and send to architects and builders.	1	0	0	1
Helpful with getting projects permitted.	1	0	0	1
Helping me make sure I don't miss anything	0	0	1	1
Helps for QA of documents to check compliance.	0	0	1	1
Helps me see all the topics involved	0	0	1	1
Helps me to not leave anything out.	1	0	0	1
Helps plan the design	1	0	0	1
Helps process flow when running through large project compliance	0	0	1	1
Helps to confirm all issues are addressed.	1	0	0	1
Helps to organize projects	1	0	0	1
Helps with QC/QA	0	0	1	1
Helps with compliance	1	0	0	1
Helps with internal qa qc	0	0	1	1
Hiw to comply with title 24	1	0	0	1
I don't know this one well	0	0	1	1
I don't remember in specifics.	1	0	0	1
I don't remember.	1	0	0	1
I have referenced them for plan review and creating similar documents.	0	0	1	1
I haven't used them that much but the one I used was useful for creating my own note blocks.	0	0	1	1
I intended to mark not as familiar with these checklists, but it sounds helpful to know exactly what is required.	1	0	0	1
I like that it is a quick reference to verify my project is complete.	0	0	1	1
I think the checklist sometimes are a bit too much. But it difficult at times to find the most up to date ones.	0	0	1	1
I used the energy checklists when designing my system for title 24 compliance	1	0	0	1
IDK	0	0	1	1
Identify what is missing in the forms	1	0	0	1
Identifying the code sections to	0	0	1	1

reference and be able to look up directly and the overview of requirements themselves.				
Important documentation	1	0	0	1
Intuitive, thorough	0	0	1	1
Invaluable for projects.	0	0	1	1
It helps with ongoing specific administration details, procedures and compliance processes.	0	0	1	1
Keeping a Socratic line of thinking to achieve goals.	1	0	0	1
Keeping on track	1	0	0	1
Keeping track of what is still pending is very useful.	1	0	0	1
Keeps project on track	0	0	1	1
Knowing what exactly would be required helped me provide those requirements.	1	0	0	1
Learning information	0	0	1	1
Less useful but a fantastic way to check i havent missed anything	1	0	0	1
Lighting	0	0	1	1
Lists out the requirements	0	0	1	1
Look.... I'm not going to answer each of these questions.	0	0	1	1
EnergyCodeAce is a fantastic resource. Our engineers use it all the time. Our energy analysts are constantly needing to use it. Even our HERS raters are often using the tools available. It makes our jobs so much easier and we as a team are grateful for it.				
Made sure I didn't miss anything important	1	0	0	1
Making sure everything is squared away	1	0	0	1
Mechanical	0	0	1	1
Minimal use	0	0	1	1
Multifamily & Nonresidential Plans Examiner	1	0	0	1
N/A	1	0	2	3
Navigating the forms	0	0	1	1
Nice for internal orgnaization QC process	0	0	1	1
No comment	0	0	1	1
No comment.	1	0	0	1
Non residential plans examiner	1	0	0	1
Not Familiar with Checklist	1	0	0	1
Not frequently used	0	0	1	1
Not having to develop this myself	0	0	1	1
Not seen it yet.	0	0	1	1
Not sure	1	0	1	2
Not used	0	0	1	1
Nothing	1	0	0	1
Only the necessary and required items are checked, all others gets	0	0	1	1

put aside.				
Plan Examiner and prescriptive Climate zone checklists	0	0	1	1
Plan review checks	1	0	0	1
Pre and post commissioning	1	0	0	1
Process development	1	0	0	1
Process is good, checklists are better	0	0	1	1
Provides a clear method and path to completing certain plans and inspections	0	0	1	1
Provides a comprehensive list of specific requirements for specific systems.	0	0	1	1
Provides clear reminders of what is necessary in completion of CODE requirements.	0	0	1	1
Quality Check	0	0	1	1
Quality of information provided.	1	0	0	1
Quick check for work performed	1	0	0	1
Quick guide	1	0	0	1
Quick reference for design and build phases quote	1	0	0	1
Reference on the methods used in the program	1	0	0	1
Requirements	0	0	1	1
Residential energy compliance	0	0	1	1
Residential, Multifamily, Commercial.	0	0	1	1
Residential, Nonresidential	0	0	1	1
Same	0	0	3	3
Secondary check to be sure you've covered all the bases	0	0	1	1
Shortcut	1	0	0	1
Similar to the reference guide, it helps to know the process	1	0	0	1
Simple for residential contractors who hate code	0	0	1	1
Simplicity	1	0	0	1
Step-by-step	0	0	1	1
The checklists are valuable as quality control tools for confirming that mandatory measures, documentation, and installation requirements are addressed before permit submittal or inspection.	1	0	0	1
The checklists gave me a practical way to ensure all documentation was complete before submittal, reducing back-and-forth with plan checkers.	0	0	1	1
The checklists make me think about all the things required for the project to comply.	1	0	0	1
The checklists were most valuable because they helped ensure that	0	0	1	1

no critical steps were missed during planning and execution. They provided a clear, structured way to track progress, stay organized, and maintain consistency across tasks. Having a visual confirmation of completed items also boosted accountability and efficiency.				
The checklists were most valuable for keeping our team organized and ensuring all energy efficiency measures were addressed at each design stage. They provided a clear framework for tracking progress and maintaining consistency across projects.	0	0	1	1
The completeness of the list	0	0	1	1
The fact that they provide role specific step by step guidance that is easy to follow.	1	0	0	1
The information	0	0	1	1
The most valuable aspect of the checklists was how they broke down the compliance process into clear, manageable steps. They made it easy to verify that all required documentation and measures were complete before submission.	0	0	1	1
The reminders	1	0	0	1
The steps	0	0	1	1
They are an organized and condensed resource which gives me confidence that I have found all the relevant information.	0	0	1	1
They are easy to read	0	0	1	1
They create a process to follow.	0	0	1	1
They make it simple to confirm that every code requirement has been met before we wrap up a job	0	0	1	1
They were a quick reference point for other people	0	0	1	1
They would sometimes remind me of something else to look at. It's also useful when they omit something (lets you know it's not really as critical as you thought).				
This helped make sure nothing was missed in design	1	0	0	1
Title 24.	1	0	0	1
To help keep my calculations in line	1	0	0	1
To make sure all the requirements are met.	1	0	0	1
To make sure everything is covered	0	0	1	1

Understanding existing requirements.	0	0	1	1
Understanding what technicians and plan checkers are looking for for code compliance.	1	0	0	1
Understanding what will be required for projects from AHJ perspective	1	0	0	1
Unsure	1	0	1	2
Usable, printable, easy high points.	0	0	1	1
Use as double-check before submission.	1	0	0	1
Useful guide to what is required	1	0	0	1
Useful in keeping track of compliance issues.	1	0	0	1
Useful reminders of what to check	0	0	1	1
Useful when I am doing final review of drawings and forms before we put plans out	1	0	0	1
Verifying complete energy compliance.	0	0	1	1
Very detailed	0	0	1	1
Very helpful for projects	0	0	1	1
Very thorough.	1	0	0	1
Very useful for processing permits	1	0	0	1
When I am in a design, it is hard to keep remember all the codes, checklist, it helps me if my design would be affected.	0	0	1	1
When I'm brand new to a type of work or topic, this gives me valuable foundational knowledge. I fell confident that my work is accurately following every part of the energy code when i use a checklist.	0	0	1	1
When construction items have efficiency triggers.	1	0	0	1
YES	0	0	1	1
Yes	0	0	1	1
all	0	0	2	2
all of it	0	0	1	1
as implied by the title	1	0	0	1
building inspector	0	0	1	1
bullet point summaries of code changes	0	0	1	1
checklists are always useful to make sure areas of compliance are completely covered	1	0	0	1
checklists help to be organized & completes tasks more effective	0	0	1	1
comprehensive	0	0	1	1
concise	0	0	1	1
concise and straightforwardness	0	0	1	1
confirming they my project meets all requirements	0	0	1	1

convenient	0	0	1	1
detailed info on compliance	1	0	0	1
did not use	1	0	0	1
didn't use much	1	0	0	1
ditto - I don't really use them. As an architect we employ a consultant to do the energy stuff thought its good for us to have an overview	0	0	1	1
don't know	1	0	0	1
don't remember	0	0	1	1
dont recall	1	0	0	1
easy to follow and comprehensive	0	0	1	1
easy to look up	1	0	0	1
easy to see what needs to be completed	0	0	1	1
easy to track all required items are provided	1	0	0	1
energy checklist help to complete propjets properly	1	0	0	1
ensuring I had all the correct forms for a certain project	1	0	0	1
fast review	0	0	1	1
finding mistakes.	1	0	0	1
general resource	0	0	1	1
good to give to customers and to review requirements	0	0	1	1
great overall resource to make sure nothing is missed	1	0	0	1
help make sure you are following all required items	0	0	1	1
help me remember what is required	0	0	1	1
help to understand and process	1	0	0	1
helpful to have a list rather than trying to find it in the codes	0	0	1	1
helping me remember items to keep in mind	0	0	1	1
helps keep you up to date on your project requirements...	0	0	1	1
info	1	0	0	1
it is good to have and keep side by side so we can not missed anything.	1	0	0	1
it was a great leaning experinces	1	0	0	1
its a checklist	1	0	0	1
less familiar with these	0	0	1	1
lighting	1	0	0	1
logical order to look at requirements in plan check	0	0	1	1
making sure we have all done	0	0	1	1
n/a	1	0	1	2
n/a	1	0	0	1
na	1	0	0	1
none	0	0	1	1
not sure	2	0	0	2
organizing info for building	0	0	1	1

modeling				
proper procedures	1	0	0	1
provide some items that may be missed	0	0	1	1
provided a complete list of tasks and items necessary for inspection	1	0	0	1
provides a direct resource that can be used as a tool during inspections and plan review.	1	0	0	1
quality control	1	0	0	1
quick	0	0	1	1
quick and easy to follow	1	0	0	1
reminding me all the required items for each particular project.	0	0	1	1
residential	1	0	0	1
review	0	0	1	1
same	2	0	0	2
same as fact sheets	0	0	1	1
see last answer	1	0	0	1
serve as reminders	1	0	0	1
serves as a reminder to double check our work.	1	0	0	1
simple to read	1	0	0	1
simplifies compliance documentation	0	0	1	1
some of them	1	0	0	1
that they exist	1	0	0	1
the checklist itself	0	0	1	1
the simplified requirements with links	1	0	0	1
they are helpful. compact and to the point.	0	0	1	1
to list pertinent and accurate information, etc.	1	0	0	1
to the point	0	0	1	1
use on the job	0	0	1	1
useful it at job site inspections	0	0	1	1
visual aids in compliance	0	0	1	1
we all need checklists	0	0	1	1
what we need	0	0	1	1
when assessing a project, establishing the scope	0	0	1	1
x	0	0	1	1
you can check items as you go and see where you are in the list and how much still needs to be done	1	0	0	1
Total	243	75	234	552

**Tabulation of Q7d S1**

What about trigger sheets was most valuable to you?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
	151	75	73	299
-	0	0	1	1
----	1	0	0	1
.	1	0	3	4
?	0	0	2	2
A very clear process	1	0	0	1
ALL FACT SHEETS	0	0	1	1
Ability to make sure I haven't forgotten anywhere preparing a Title 24.	1	0	0	1
Again, helping explaining to clients what they need to do, based on scope	1	0	0	1
All	0	0	1	1
All in one place.	0	0	1	1
All of them	0	0	1	1
An easy way to determine if I need to dig deeper on a particular item.	0	0	1	1
Avoid plan check comments.	0	0	1	1
Being able to quickly check required compliance saves lots of time compared to digging through code.	1	0	0	1
Clarity	0	0	1	1
Clarity and simplicity	0	0	1	1
Clear description of code requirements.	0	0	1	1
Clear outlines of what causes triggers. A lot of the requirements is buried in the code language and the trigger sheets are clearer.	0	0	1	1
Clear understanding	0	0	1	1
Compare your project criteria to energy code requirements	0	0	1	1
Compliance	0	0	1	1
Comprehensive scope of work	0	0	1	1
Concise	1	0	0	1
Concise way to wade through the energy code to see what is required.	0	0	1	1
Concise, easy to find information with details about different cases to help determine which one my design falls under.	0	0	1	1
Condensed pointed information	1	0	0	1
Critical in helping determine	0	0	1	1

compliance				
Demistifying	1	0	0	1
Design	1	0	0	1
Diagrams. The visual	0	0	1	1
Did use them often	1	0	0	1
Easy	0	0	1	1
Easy reference guide	0	0	1	1
Easy to confirm which T24 forms are required	1	0	0	1
Easy to find the needed info in one place.	0	0	1	1
Easy to follow	0	0	1	1
Easy to understand and visual	0	0	1	1
Easy to use	0	0	1	1
Easy to use & read.	1	0	0	1
Energy code ace resources trigger sheets identify when the Title 24 is triggered.	1	0	0	1
Ensuring all requirements were followed	1	0	0	1
Expert knowledge you can't find anywhere else	1	0	0	1
Fast resources	0	0	1	1
GE	0	0	1	1
Good info on there	1	0	0	1
Good reminders of all elements of a project need to be addressed.	0	0	1	1
Good resource for clients	1	0	0	1
Good way to connect the dots of an otherwise confusing and complicated code	0	0	1	1
Great for figuring out what code sections I need to reference for lots of situations.	0	0	1	1
Great informational resource for unusual projects to determine what requirements are relevant.	1	0	0	1
HERS	0	0	1	1
Have not used them in my role.	0	0	1	1
Help answer questions from architects and builders regarding what is required to meet code compliance.	1	0	0	1
Help with compliance	1	0	0	1
Helpful to know when certain things apply	1	0	0	1
Helpful to understand what to look for in plan review.	0	0	1	1
Helping to identify when something applies when we are processing a permit	1	0	0	1
Helps in case you miss something.	1	0	0	1
Helps me alert me as I think of ideas and options on projects	0	0	1	1
Helps quickly identify when a requirement kicks in.	0	0	1	1
Helps solve questionable issues	0	0	1	1

Helps to determine when things are applicable	0	0	1	1
Helps to recognize when and where Energy requirements kick in.	0	0	1	1
Helps understanding what triggers each requirement	0	0	1	1
Helps us know when decisions will trigger code	0	0	1	1
Highlevel stakeholders, also minimally used.	0	0	1	1
How to comply with title 24	1	0	0	1
I am not sure on this.	1	0	0	1
I didn't use them much. Mostly the helped with lighting controls and when they are triggered.	0	0	1	1
I don't know this one at all.	0	0	1	1
I field lots of questions from staff re: when code requirements are triggered. I just send them a link to the trigger sheets.	1	0	0	1
I have used the trigger sheets the most and shared them with installers many times	0	0	1	1
I haven't used this	0	0	1	1
I just find the whole suite of documents very helpful.	0	0	1	1
I think the trigger sheets are the most useful becuase it tells you when a code section triggers it.	0	0	1	1
I think there is a Cool roof one that I reference often in my work	0	0	1	1
I work with a lot of renovations on tight budgets, so this helps with schematic decision-making and scoping how much can be achieved in the project budget.	1	0	0	1
I've only really found 1 trigger sheet to be helpful - the AHU replacement guide - again for sharing with others to explain why we do/don't have to meet certain criteria.	0	0	1	1
Identified if I was missing info in my plans or if equipment was not compliant	1	0	0	1
Identifying applicable cases, and avoiding rabbit holes when not applicable to a project	0	0	1	1
Identifying the code sections to reference and be able to look up directly and the overview of requirements themselves.	0	0	1	1
Information	1	0	0	1
Information on when work triggers compliance and what to expect	0	0	1	1

Invaluable for energy modeling	0	0	1	1
KNOWING TRIGGERS HELPS WITH CHECKING PLAN SUBMITTALS FOR COMPLIANCE	1	0	0	1
Keeps me aware	0	0	1	1
Knowing what instances or cases trigger certain codes saves a lot of time of code research	1	0	0	1
Knowing when T-24 controls are required	1	0	0	1
Letting me know what the trigger path is.	0	0	1	1
Lighting control requirements	1	0	0	1
Lighting trigger sheets are very helpful	0	0	1	1
Limited use.	1	0	0	1
MEP	1	0	0	1
Made me aware of project scope to consider for compliance.	0	0	1	1
Makes it easy to spot when I'm triggering the need for a permit	1	0	0	1
Making sure I don't miss something	0	0	1	1
N/A	3	0	2	5
N/a	1	0	0	1
NA	0	0	3	3
Nice for helping pinpoint what we need to comply with and how to comply based on a project scope	0	0	1	1
Nice to know what to look out for	1	0	0	1
No comment	0	0	1	1
Non residential design review and commissioning	1	0	0	1
Nonresidential Interior Lighting Alterations & Nonresidential Exterior Lighting	1	0	0	1
Nonresidential Small Commercial HVAC Alterations 2022	1	0	0	1
Not much	0	0	1	1
Not really used	1	0	0	1
Not sure	0	0	2	2
Not used yet.	1	0	0	1
Nothing	1	0	0	1
Nothing more complicated than remodels and work on existing buildings. The amount of exceptions and differing requirements are mind boggling, so having a good resource to tell me what exactly triggers code requirements and what doesn't is priceless.	1	0	0	1
Nothing.	0	0	1	1
Points to talk about	0	0	1	1
Prescripted and mandated	0	0	1	1
Quality information	1	0	0	1

Quality of information provided.	1	0	0	1
Quick guide	0	0	1	1
Quick info for prelims	1	0	0	1
Quick overview	0	0	1	1
Remind you, you might left out	0	0	1	1
Reminders	1	0	0	1
Residential HVAC Alteration	0	0	1	1
Residential energy compliance	0	0	1	1
Residential, Multifamily, Commercial.	0	0	1	1
Reviewing my Code Notes and Reference Materials. Use it for Proposals to Scope a project as well	0	0	1	1
Roofing	1	0	0	1
Same	1	0	3	4
Same as checklist, allows me to assess what may be needed when having meetings with designers and clients	1	0	0	1
Same lighting and occ sensors	0	0	1	1
Saves time determining requirements	1	0	0	1
See last answer	0	0	1	1
Shortcut	1	0	0	1
Shows which codes are applicable to the type of installation/work we have done	0	0	1	1
Similar to checklists	0	0	1	1
Simplifies the code requirements for each project	0	0	1	1
Sometimes I can get my questions answered more quickly than by digging though the code.	0	0	1	1
The best of all, when any code(s) apply and why... I love those ones.	0	0	1	1
The general information	0	0	1	1
The most valuable part of the trigger sheets was how clearly they identified when specific Energy Code requirements apply. They helped me quickly determine which measures were triggered by certain project scopes, saving time and preventing unnecessary work.	0	0	1	1
The table format is easy to understand. I like all the trigger sheets as well as other publications are all in color.	0	0	1	1
The trigger sheets were especially valuable because they provided a clear, visual decision-making tool for determining when specific Title 24, Part 6 requirements applied.	0	0	1	1
The trigger sheets were most valuable because they helped	0	0	1	1

identify key decision points and actions based on specific conditions or events. They served as a quick reference to ensure timely responses and consistent execution, especially in complex or fast-moving projects. Their clarity and structure made it easier to align teams and avoid delays.	0	0	1	1
The trigger sheets were most valuable for reminding the team of critical energy-related decisions at the right stages of design. They helped ensure that important efficiency strategies were considered early enough to influence the overall project outcomes.	1	0	0	1
The ways that certain things are needed and not needed	0	0	1	1
These are great for providing insight into which type of form or compliance a project needs to adhere to	0	0	1	1
These are helpful in understanding and in helping clients understand when items are triggered. Especially mechanical and ventilation triggers.	0	0	1	1
These are the most valuable to me in the early stages of a project to evaluate and fine tune the design parameters	0	0	1	1
They are an organized and condensed resource which gives me confidence that I have found all the relevant information. Beyond that, trigger sheets are a particularly useful way to organize the information - they provide the clearest "path" through the Code for any particular project, and are lightning-fast.	0	0	1	1
They are useful in plan check.	0	0	1	1
They gave a basic guideline	0	0	1	1
They offer a map to how the Energy Code regulations can be triggered and how to avoid triggering them through alternative designs.	0	0	1	1
They provide a clear snapshot of when specific code requirements are activated for alterations, additions or equipment changes under title 24	1	0	0	1
They were helpful for answering	0	0	1	1

questions I was sent				
They're easy to use.	0	0	1	1
They're quick and easy to use. The simplicity of being able to use it as a fast reference and then go to the fact sheets is really helpful.	0	0	1	1
This is BY FAR the most useful document from the site in my opinion. It has been disappointing that trigger sheets have not been created since 2019 code. These documents are extremely useful and critical for existing building retrofit projects and measures, which are the vast majority of the measures used in CA Energy Efficiency Programs. PLEASE bring this back. I'd request that it be expanded to include triggers for common retrofit projects as well.	1	0	0	1
This is a design factor	0	0	1	1
This makes learning topics like what acceptance testing is required or what HERS test is required when I check a certain box in a model. The information is in a condensed format which is very helpful.	0	0	1	1
Time saving -- summarizes new requirements and applicability	1	0	0	1
Title 24.	1	0	0	1
To be able to run through the list and quickly see what i need	1	0	0	1
To see needed testing	1	0	0	1
Trigger sheets are great	1	0	0	1
Trigger sheets are valuable in that they direct users to project scenarios, but they become dated and not get updated for new Codes and changes.	0	0	1	1
Trigger sheets inform when it is required	0	0	1	1
TriggerSheet.NR-SmComm.HVAC.Alt.2022	0	0	1	1
Understanding code and actual reports	0	0	1	1
Unsure	0	0	1	1
Useful tool for letting DPOR's when requirements apply	1	0	0	1
Very detailed	0	0	1	1
Very easy for field to follow	0	0	1	1
Very informative as a quick reference	0	0	1	1
Very valuable	0	0	1	1
When to apply the code	0	0	1	1
Why Title 24 testing is required	1	0	0	1

for certain jobs.				
YES	0	0	1	1
Yes	1	0	0	1
Yes very valuable	0	0	1	1
all	0	0	1	1
all of it	0	0	1	1
all the info	1	0	0	1
alterations and additions	0	0	1	1
basic information in one easy place	0	0	1	1
being able to show customers why we request certain information	0	0	1	1
bullet point summaries of code changes	0	0	1	1
can't recall	0	0	1	1
cannot do every day job without it.	0	0	1	1
clear	0	0	1	1
compact	0	0	1	1
comprehensive	0	0	1	1
concise and easy to review	0	0	1	1
reference				
concise and straightforwardness	0	0	1	1
determining how any particular project will need done to comply with T24	0	0	1	1
do not recall	0	0	1	1
easy to look up	1	0	0	1
easy to read	2	0	0	2
easy to reference	0	0	1	1
figuring out what parts of T24 applied to specific retrofit projects	1	0	0	1
good at the beginning of a project to see what aspects of the project are likely to trigger what requirements so we can advise the client if they want to avoid a trigger or get an early start on compliance with that specific aspect of the design that will require compliance documentation				
good flow chart of what project scopes needs which code requirements	0	0	1	1
good to know what improvement trigger other requirements	0	0	1	1
great bullet points.	1	0	0	1
hey help clients understand why certain upgrades or documentation are required	1	0	0	1
it helps me understand what triggers certain requirements, when i just want to double-check that information without having to read through other parts of the Code	1	0	0	1

knowing where a req. is coming from	1	0	0	1
let's us know if other items are triggered	0	0	1	1
lets me now what information is necessary for compliance	1	0	0	1
made it easy to visualize the steps and requirements when formatted as a table rather than reading the text	1	0	0	1
n/a	0	0	3	3
na	2	0	0	2
na	0	0	1	1
none	0	0	1	1
not much	1	0	0	1
not seen.	0	0	1	1
not sure	2	0	0	2
provides a direct resource that can be used as a tool during inspections and plan review.	1	0	0	1
quick	0	0	1	1
quick and easy to follow	1	0	0	1
quick look up	0	0	1	1
references to code in easy format	1	0	0	1
residential	1	0	0	1
residential hvac	0	0	1	1
resource	0	0	1	1
same as before	0	0	1	1
same, especially lighting, lighting controls, and other electrical requirements for electrification of appliances	1	0	0	1
source for complex code questions	0	0	1	1
summary info for commonly found triggers	0	0	1	1
t-24	0	0	1	1
the HVAC retrofits trigger sheet - - helping understand those complex requirements/when what provisions are triggered	1	0	0	1
they are helpful. compact and to the point.	0	0	1	1
things to watch out for, make sure compliance is met...	0	0	1	1
to know which directions the analysis would be best analyzed	0	0	1	1
useful for field inspections	0	0	1	1
what is triggered on applicable designs	0	0	1	1
<b>Total</b>	<b>243</b>	<b>75</b>	<b>234</b>	<b>552</b>

**Tabulation of Q7e S1**

What about training videos was most valuable to you?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
	148	75	64	287
-	0	0	1	1
----	1	0	0	1
.	2	0	2	4
2022 Title 24, Part 6 Essentials On Demand Single-family Standards & Technology: Envelope	1	0	0	1
2025 Title 24, Part 6 Essentials Nonresidential Standards: What's New	1	0	0	1
A fresher	1	0	0	1
Absolutely necessary! The training videos are the reason I passed my CEA.	0	0	1	1
Advancing knowledge for my portfolio and company	0	0	1	1
All	0	0	1	1
Allows us to stay up to date on code changes.	0	0	1	1
Always good to see how things should be done.	1	0	0	1
At least you can see someone else struggling with the Title 24 nonsense	1	0	0	1
Availability	0	0	1	1
Available on demand	0	0	1	1
Better understand the details. I only need the basics, but they are helpful for a more detailed understanding.	0	0	1	1
Brian Selby is great...wish he did some more for recent stuff.	1	0	0	1
CEC Title 24	0	0	1	1
California Appliance efficiency	0	0	1	1
Can get more in depth knowledge	0	0	1	1
Code Changes	0	0	1	1
Code updates. Situational training.	0	0	1	1
Energy modelling help				
Compliance	0	0	1	1
Comprehensive review of subject. My experience was an online course and not a video.	0	0	1	1
Content	1	0	0	1
Continuing update and education, would like more training on NRCC forms	0	0	1	1

Convenient to watch.	0	0	1	1
Current and Future code	1	0	0	1
Didn't utilize	1	0	0	1
Don't recall / not frequently utilized	1	0	0	1
EXAMPLES SPECIFIC TO THE KINDS OF PROJECTS I WORK ON TO HELP REFERENCE COMPLIANCE ISSUES. MOSTLY RESIDENTIAL	0	0	1	1
Easy to follow	0	0	3	3
Easy to understand	1	0	1	2
Easy watch	1	0	0	1
Education	1	0	0	1
Educational	0	0	1	1
Energy and code changes	1	0	0	1
Enhances knowledge on codes; keeps us up to date	0	0	1	1
Everything. How to. What the rules are. Usually answers most of my questions.	0	0	1	1
Excellent resource	0	0	1	1
Expert knowledge you can't find anywhere else	1	0	0	1
Extra help if get stuck	0	0	1	1
Extremely helpful format, content and excellent presenters. Helps support an energy consultant in every day work situations. Provides clarity where needed.	0	0	1	1
Fantastic resource, i have watched most of the training videos and courses offered	1	0	0	1
Find them useful	0	0	1	1
GE	0	0	1	1
GOOD EXPLAINATION	0	0	1	1
General explanations of topics	0	0	1	1
Generally thorough in explanation.	0	0	1	1
Getting clarification on terms and processes	0	0	1	1
Gives concrete information and explanations	0	0	1	1
Good for learning new code additions, but also to refresh existing knowledge	0	0	1	1
Good format for learning further	0	0	1	1
Good to keep up wiht CEU	0	0	1	1
Good when needed to deal with an issue	0	0	1	1
Great resource for learning how to utilize energy modeling software for compliance.	0	0	1	1
Guided walkthroughs of the code, how to use compliance software	0	0	1	1
Have not had too much	0	0	1	1

experience with the training videos				
Have not watched the training videos.	0	0	1	1
Have only seen maybe one or two, bur they are great starting point.	1	0	0	1
Haven't watched	1	0	0	1
Havent used them much yet.	0	0	1	1
Haven't really used	1	0	0	1
Having a person explain a topic makes learning the code more engaging and easier to comprehend. The teachers are always so knowledgeable and give valuable insight.	0	0	1	1
Help me with browsing	1	0	0	1
Help to compare situations and provide instructions for the process.	0	0	1	1
Help understand topics	0	0	1	1
Helped me be more proficient in my work as an energy consultant and in the use of the compliance software.	1	0	0	1
Helpful in navigating the code ace for the first time.	1	0	0	1
Helpful on completing forms	1	0	0	1
Helps take advantage of all available tools	1	0	0	1
Helps to get better understanding of Energy Code requirements.	0	0	1	1
How to administer	0	0	1	1
How to use the Dynamic forms and Virtual Assistant	1	0	0	1
I can view them when and where I want	1	0	0	1
I didnt watch too many videos. But, how to videos, Example how to fill out the CF1R, HOW to read the CF1r, title 24 energy etc.	0	0	1	1
I do not have much experience watching videos due to time constraints.	0	0	1	1
I don't like them, only use when I don't have any choice... it takes patience to arrive the infomation I need.	0	0	1	1
I have not watched any but I think this is useful.	0	0	1	1
I haven't seen too many video's I will have to check them out	1	0	0	1
I watched them on-demand, and they resolved my issues in the moment. (They were very useful in the moment, but not a source of anecdotes.)	0	0	1	1

I've done many webinars which help me keep up to date with current code requirements.	0	0	1	1
I've mostly attended live trainings but the videos are useful as a catch up occasionally.	0	0	1	1
I've not spent much time with the videos.	0	0	1	1
Idk	0	0	1	1
If i am really stuck on appropriately filling out forms or designing for compliance, I check to see if there are applicable training videos.	1	0	0	1
Information on the codes and compliance	0	0	1	1
Information regarding single family residential alterations and additions.	0	0	1	1
Informative	1	0	1	2
Informative on what to do to get compliance on a project	0	0	1	1
Informative way to learn more about a topic.	0	0	1	1
It helps to have the videos available for guidance.	1	0	0	1
It helps train and the information is hekpful	1	0	0	1
It is good to have. we can watch them with the most convivence way.	1	0	0	1
Keeping current with new code requirements and what is needed to be compliant with the changes	0	0	1	1
Keeping me up to date	0	0	1	1
Learning information	0	0	1	1
Learning more!	0	0	1	1
Learning objectives	0	0	1	1
Learning recent code changes	0	0	1	1
Learning the very difficult to follow California Energy Code	0	0	1	1
Lighting	1	0	0	1
Make subjects easy to learn	0	0	1	1
Minority helpful	1	0	0	1
Modeling guides	1	0	0	1
More relatable explanations for more technical concepts or equipment considerations.	0	0	1	1
My guys did them	1	0	0	1
N/A	1	0	1	2
NA	0	0	2	2
Never use.	0	0	1	1
Never used	1	0	0	1
Never used.	1	0	0	1
Never watched them	1	0	0	1
New or recent changes	0	0	1	1
No comment	0	0	1	1

No comment.	1	0	0	1
Not monotonous	0	0	1	1
Not only do I use these for myself, but I also use these for other employees for understanding.	0	0	1	1
Not used	0	0	1	1
Not used much yet	1	0	0	1
Nothing in particular	0	0	1	1
Online courses and training videos have kept me up to date on the code	0	0	1	1
Only looked at two	0	0	1	1
QII INSULATION, HPWH, I think these were on the 3CREN website now that I think about it	0	0	1	1
Quality of video.	1	0	0	1
Real world applicability	1	0	0	1
Refresh and enhance my understanding of the energy Code.	1	0	0	1
Residential energy compliance	0	0	1	1
Residential, Multifamily, Commercial.	0	0	1	1
Rview of changes as adopted from Code/Admin Law changes	0	0	1	1
SEEING EXAMPLES AND HEARING DISCUSSION	1	0	0	1
Same	1	0	0	1
See hear apply	0	0	1	1
Seeing helps understanding	0	0	1	1
Seeing someone guide you through every step on the software is so helpful when it covers something that is new especially	0	0	1	1
Several including Solar&ESS, Mechanical, and Envelope	1	0	0	1
Sometimes it's easier to hear instructions than read them	0	0	1	1
The convenience to watch online	0	0	1	1
The ease of following along as the instruction progressed	1	0	0	1
The fact that I could watch the training over again	0	0	1	1
The fact they combine visual walkthroughs with real world scenarios tied to title 24 requirements	1	0	0	1
The greater number of sensory inputs one utilizes..... the greater the retention of what is taught is a basic AXIOM of education and learning. Videos are a great source to accomplish the above.	0	0	1	1
The interaction between the presenter and the participants.	0	0	1	1
The new role out of the bite size	0	0	1	1

videos, are a great asset to the industry especially for builders and installers who have limited time to take a 3 hour eca class. But for me the online live training that ECA has helped me navigate the energy code and learn new modeling. But I do want to say I often go back to Brian Selby's 'code and coffee's on you tube for modeling. The other recent one that I suggest everyone in this industry take is the 2 part Plan Examiner's course for 2025.

The on-demand and recorded classes are easier to fit in my schedule and I can stop anytime and reassume at a later time.

The ones I have attended hosted by Passive House California

The production value

The training videos are helpful specifically during a code transition and when I first began as an energy consultant to understand key elements of the energy code and apply them to my compliance consulting. Keeping videos accessible beyond the live streams is super helpful.

The training videos are the most valuable as it helps me enhance my knowledge and skills.

The training videos show how to implement the requirements step by step, which is great for both office and field crews

The training videos were most valuable because they presented complex energy concepts in a clear, visual way. Seeing real project examples helped me better understand how to apply the strategies in my own design work.

The training videos were most valuable because they provided visual and practical demonstrations that made complex concepts easier to understand. Being able to pause, rewind, and rewatch sections at my own pace helped reinforce learning. They were especially helpful for onboarding and for refreshing knowledge on specific tasks or tools.

The videos are very informative

0 0 1 1

0 0 1 1

0 0 1 1

0 0 1 1

1 0 0 1

0 0 1 1

0 0 1 1

0 0 1 1

0 0 1 1

and better than reading text				
The visual aspect of them.	0	0	1	1
The whole thing. Having an actual human-being break down what certain things mean was extremely helpful. There's a lot of nuance in the codes that can lead to ambiguity or uncertainty. Having someone explain it to you in a tutorial is what helped me understand T24 compliance even better. It tends to answer design questions that aren't covered in the reference material.	0	0	1	1
There are very valuable and important sources of information	0	0	1	1
They help explain some of the more complex issues regarding code compliance.	0	0	1	1
They helped me gain further understanding of part 6 and how people in the industry understand part 6	0	0	1	1
They helped me understand some of the topics	0	0	1	1
They provide training.	0	0	1	1
They're useful for onboarding new team members and reinforcing key compliance concepts without needing to read full manuals.	1	0	0	1
Title 24.	1	0	0	1
To learn about the energy code	0	0	1	1
Too long -	1	0	0	1
Topic selection	0	0	1	1
Training videos help me when they are very simple and show how to use the system.	1	0	0	1
Understanding changes between Title 24 code cycles.	0	0	1	1
Understanding new code requirements	0	0	1	1
Unsure	1	0	0	1
Upcoming changes, dialogue, ideas	0	0	1	1
Useful for further research.	1	0	0	1
Useful for getting up to speed on a particular topic. Not for answering specific questions.	0	0	1	1
Useful tools	1	0	0	1
Valuable way to learn	1	0	0	1
Verbal discussion and elaboration	0	0	1	1
Very comprehensive	0	0	1	1
Very effective	1	0	0	1
Very informative.	0	0	1	1
Very knowledgeable and worthwhile to keep up with. The	0	0	1	1

instructors are some of the best sources of information in the industry especially for new professionals in the field who want to get up to speed with what is going on and why				
Very valuable	0	0	1	1
Very valuable information.	0	0	1	1
Videos are easier to learn from than trying to decipher some of the written material.	1	0	0	1
Visual Reference	0	0	1	1
Visual and personal explanations	1	0	0	1
Visual learning	1	0	0	1
Walkthrough of NRCC- Ele -E dynamic forms	1	0	0	1
Watched some of them	1	0	0	1
While the videos I watched were of high quality I do not believe they have much impact in practice and in the field. It seems like Sac is disconnected from the field realities.	0	0	1	1
YES	0	0	1	1
Yes valuable	0	0	1	1
You Tube and Energy Star Training Videos	1	0	0	1
all	0	0	1	1
all of it	0	0	1	1
being able to be spoon fed the information	0	0	1	1
being able to see the steps	0	0	1	1
best way to learn	0	0	1	1
breadth of topics	0	0	1	1
code and coffee	0	0	1	1
detail, step-by-step procedure is very helpful	1	0	0	1
digestible	0	0	1	1
don't know	1	0	0	1
easily accessed	0	0	1	1
easy sloution	0	0	1	1
easy to follow	0	0	1	1
easy to look up	1	0	0	1
easy to send links to contractors	0	0	1	1
engaging training videos	0	0	1	1
examples	1	0	0	1
explanations, QA	0	0	1	1
general information	0	0	1	1
general information in context	0	0	1	1
great to see visual training.	1	0	0	1
have not used, them but assume they are helpful	1	0	0	1
i use them for training and CEU	0	0	1	1
if you are a visual learner this is always helpful to have.	0	0	1	1
info	1	0	0	1
information in the training videos	0	0	1	1

information is summarized well	0	0	1	1
informative	1	0	0	1
it explains subject in details & clarity	0	0	1	1
it is valuable because I can watch videos on my time schedule.	0	0	1	1
knowledge refresh	0	0	1	1
learning about code changes and how to apply	0	0	1	1
love the training videos, wish the recorded/on demand versions were still an option in addition to the live recordings, we found both to be SOOO Valuable!	0	0	1	1
more easily digested than written material	0	0	1	1
n/a	0	0	1	1
na	2	0	1	3
no cost brush up on code requirements	0	0	1	1
none	0	0	1	1
not much	1	0	0	1
not sure	2	0	0	2
nothing, not used	1	0	0	1
occasional pertinent information that provides a good overview of subjects	1	0	0	1
only if I am having trouble understanding the requirements requirements or forms. I mostly refer my newer employees to these.	1	0	0	1
provides an excellent training resource that can be reviewed and then discussed with the entire building department staff	1	0	0	1
residential	1	0	1	2
resource	0	0	1	1
same	1	0	1	2
solar and battery	0	0	1	1
sometimes it is difficult to attend scheduled training meetings, so videos are very valuable.	0	0	1	1
t-24	0	0	1	1
teaching how to fill in forms	1	0	0	1
the step by step instructions	1	0	0	1
they were a great help and learning experiences	1	0	0	1
to better understand the technology	1	0	0	1
training videos keep me updated re changes every 2 years.	1	0	0	1
training for staff and compliance planning	1	0	0	1
understand the topic better	0	0	1	1
useful to understand software and energy code	0	0	1	1

very helpful	1	0	0	1
very informative	0	0	1	1
very usefull	0	0	1	1
Total	243	75	234	552

### Tabulation of Q7f S1

What about case studies was most valuable to you?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
----	177	75	124	376
.	1	0	0	1
Able to see different ways certain measures were installed; serve as good examples	2	0	2	4
Actually, I don't think I've used these	0	0	1	1
All	1	0	0	1
Allows to learn from real life applications.	0	0	1	1
Allows you to look a real world example of a practice in place.	0	0	1	1
Always a great spot to see how code applies.	1	0	0	1
Applicable	0	0	1	1
Avoid plan check comments.	0	0	1	1
Better understanding my projects	0	0	1	1
COMPARISON WITH PROJECTS I REVIEW FOR COMPLIANCE	1	0	0	1
Case studies help with clarification by providing examples.	1	0	0	1
Case studies is one of the best ways I learn in life. For example is one of my favorite expressions.	0	0	1	1
Case studies provided in classes duplicate real world tasks	1	0	0	1
Case studies validate past and present practice in interpreting the Building CODE.	0	0	1	1
Case study for CA utilities and the progressive business model	1	0	0	1
Commercial and industrial client	1	0	0	1
Commercial, ADU	1	0	0	1
Content	1	0	0	1
Didn't dela with it too much so can't say	0	0	1	1
Easier to relate/visualize by using real life and comparable examples	1	0	0	1
Easy to follow to learn about Compliance	0	0	1	1
Education	1	0	0	1
Energypro examples	1	0	0	1

Excellent examples of building types pertinent to my line of work.	0	0	1	1
Expert knowledge you can't find anywhere else	1	0	0	1
Facts and actual data.	1	0	0	1
GOOD EXAMPLE	0	0	1	1
Gave examples of how it could be applied in the real world	1	0	0	1
Good example examples of best practices	0	0	1	1
Good information.	0	0	1	1
Good practice on applicable projects.	0	0	1	1
Good real world examples	1	0	0	1
Good reference about past cases	0	0	1	1
Good to see past examples.	0	0	1	1
Good trees	0	0	1	1
Great resource	0	0	1	1
Has some relevance to projects we're doing.	0	0	1	1
Have seen them.	1	0	0	1
Haven't used	1	0	0	1
Haven't used	1	0	0	1
Help me understand better	1	0	0	1
Helpful	0	0	1	1
Helpful reference	0	0	1	1
How to go beyond code	1	0	0	1
I NEED REFERENCES TO HELP WITH COMPLIANCE	0	0	1	1
I don't use these much.	1	0	0	1
I don't	1	0	0	1
I found the case studies most useful for benchmarking our work against proven approaches. They provided inspiration and evidence that high-performance design can be achieved without compromising aesthetics or functionality.	0	0	1	1
I have not watched any but I think this is useful.	0	0	1	1
I haven't used these	0	0	1	1
I just value the comprehensive set of resources guys.	0	0	1	1
I like to see actual real life examples.	0	0	1	1
Informative	0	0	1	1
It gives examples success in an application that you are discussing with a client and the confidence that there are multiple roadmaps to a successful project.	0	0	1	1
It helps me to understand the process of energy design, and follow in my own.	0	0	1	1
It is nice to see real world	0	0	1	1

examples of completed projects that successfully meet compliance.				
It proves title 24 accomplished nothing	1	0	0	1
It provides insight into why	1	0	0	1
It's always helpful to have real-life examples, not just theoretical ones.	0	0	1	1
Its a great template to turn to when struggling with a specific scenario	1	0	0	1
Just interesting.	0	0	1	1
Kailey Eng Co.	0	0	1	1
Knowledgebase	1	0	0	1
Learning from the stories of what has worked well elsewhere.	0	0	1	1
Looked at a couple but they did not match my particular needs	0	0	1	1
Minorly helpful examples	1	0	0	1
N/A	2	0	1	3
NA	0	0	1	1
Never used	1	0	0	1
No comment	0	0	1	1
Not applicable	0	0	1	1
Not familiar with case studies	0	0	1	1
Not found. Sounds interesting	0	0	1	1
Not gone through anything	1	0	0	1
Not much	0	0	1	1
Not sure	0	0	2	2
Not used	0	0	2	2
Not used much	1	0	0	1
Outlines some of the applications.	1	0	0	1
Overall example of applications.	0	0	1	1
Practical application	0	0	1	1
Practical ways to apply	1	0	0	1
Proof others have achieved	0	0	1	1
Provides basis for certain changes with compliance and the building / Energy Codes	0	0	1	1
Quality of information provided.	1	0	0	1
Real life examples are always helpful	0	0	1	1
Real life situations	0	0	1	1
Real world example	0	0	1	1
Real world examples	0	0	1	1
RealWorld relatable	0	0	1	1
Reference real world and common project properties, goals, and challenges	0	0	1	1
Reference to how they relate to a current situation	0	0	1	1
Residential Energy code updae case	0	0	1	1
Residential energy compliance	0	0	1	1
Residential, Multifamily, Commercial.	0	0	1	1
Same	1	0	0	1

Sample of situations that may be similar to real circumstances.	0	0	1	1
See real world examples to get good ideas/suggestions	1	0	0	1
Shows how complex real world examples were solved and gives valuable insight	1	0	0	1
Shows real world value.	0	0	1	1
Similar to projects am working on	0	0	1	1
Some valuable	0	0	1	1
The Compact Hot Water Distributiopn Case Study	1	0	0	1
The case studies that were offered in-person were very effective. Face-to-face interactions with the instructor is best.	0	0	1	1
The case studies were most valuable because they provided real-world examples that illustrated how strategies and tools were applied successfully. They helped me understand practical applications, challenges faced, and measurable outcomes, which made it easier to relate the content to my own work and make informed decisions.	0	0	1	1
The case studies were most valuable because they translated the abstract requirements of Title 24, Part 6 into real-world applications. To make them even more effective, I'd suggest Adding cost/benefit insights alongside compliance steps, to show the practical impact of meeting requirements.	0	0	1	1
The information facts in the case	0	0	1	1
The most valuable aspect of the case studies was how they showed real-world examples of energy code compliance and best practices. They helped demonstrate how different design strategies and technologies can meet or exceed the California Energy Code requirements.	0	0	1	1
These matter to me because the certain topics they study help improve modeling software, as well as the understanding of how specific systems work in different climate zones, etc.	0	0	1	1
They are examples, and they illustrate paths through the system which others have taken.	0	0	1	1
They are solution based	0	0	1	1

They outline many of the typical problems we face.	1	0	0	1
They were helpful at times	1	0	0	1
This is a good reference for seeing what other applications that have used this.	0	0	1	1
Title 24.	1	0	0	1
Truthfully, I need to look more into these to understand them - but they offer the ability to point to real world scenarios	0	0	1	1
US EPA	1	0	0	1
Understanding actual applications	1	0	0	1
Unsure	1	0	1	2
Useful for further information	1	0	0	1
Verified data that can be used to provide improvements	1	0	0	1
Very good practice.	0	0	1	1
Very good resource	1	0	0	1
Very good to know the case studies.	1	0	0	1
Visualizing applications	0	0	1	1
YES	0	0	1	1
all	0	0	1	1
applicable to work	0	0	1	1
application	0	0	1	1
common and sometimes unique situation which may apply to me	1	0	0	1
comparison on different scenarios	0	0	1	1
context	0	0	1	1
don't know	1	0	0	1
don't remember	0	0	1	1
easy to look up	1	0	0	1
examples that I can use to improve my work	0	0	1	1
for background information	0	0	1	1
for doing research, case studies are great examples	0	0	1	1
general information	0	0	1	1
hands-on experience	0	0	1	1
having facts back up decisions	0	0	1	1
implementation examples	0	0	1	1
info	1	0	0	1
informative	0	0	1	1
it is good. however case studies does not looks important to me unless you spend time to read them.	1	0	0	1
it was great	1	0	0	1
lighting	0	0	1	1
n/a	1	0	3	4
na	1	0	0	1
none	0	0	2	2
not so much	0	0	1	1
provides examples to follow or get information from...	0	0	1	1
real world applications	0	0	1	1

resource	0	0	1	1
same	1	0	0	1
sometimes they relate to my own use case	1	0	0	1
the new compliance case study that the CEC released this year. Was a big eye opener for a lot of people in this industry. It helped energy educators really think about how they are teaching the code. There has been a big shift since that was released.	0	0	1	1
training for staff	1	0	0	1
understanding the complexities and potential solutions	0	0	1	1
useful for future projects.	1	0	0	1
verifying underlying information	0	0	1	1
when case studies are applicable to my work, they highlight issues I might not have thought of	1	0	0	1
<b>Total</b>	<b>243</b>	<b>75</b>	<b>234</b>	<b>552</b>

**Tabulation of Q7g S1**

What about Reference Ace was most valuable to you?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
-	109	75	56	240
----	0	0	1	1
.	1	0	0	1
2	2	0	2	4
2022 Reference Ace	1	0	0	1
2022 Title 24, Part 6 (soon to be 2025)	0	0	1	1
2022 Title 24, Part 6 Reference Ace	1	0	0	1
2025 T24 Reference Ace Online	1	0	0	1
2025 none-residential and residential What's new	0	0	1	1
A Godsend. Everything.	0	0	1	1
A good reference resource for plan review.	0	0	1	1
ALL FACT SHEETS	0	0	1	1
Ability to find information.	0	0	1	1
Ability to find more information of the specific topic I'm looking for.	1	0	0	1
Ability to look up any section in the Energy Standards. I regularly dig in and check out a key passage. (It works far better than a PDF of the entire Part 6.)	0	0	1	1
Ability to navigate to different provisions of the code quickly and	1	0	0	1

reference interacting provisions in different parts of the code.				
Able to reference them for our green building program which references code.	1	0	0	1
Access to codes	0	0	1	1
Ace is fantastic resource for reference, facts sheets etc	1	0	0	1
Again a master index.	0	0	1	1
All	0	0	1	1
All of them	0	0	1	1
Allowing me to get the information I need to complete projects	0	0	1	1
Always valuable to have the reference	0	0	1	1
At least I can find the worthless sheets I need to fill out so someone has a job.	1	0	0	1
Availability- lookup	0	0	1	1
Available information	0	0	1	1
Avoid plan check comments.	0	0	1	1
Being able to find what I'm looking for easily	1	0	0	1
Being able to search the code	0	0	1	1
Building Energy Efficiency Standards	0	0	1	1
CODE COMPLIANCE REFERENCES	1	0	0	1
Clear process	1	0	0	1
Code	1	0	0	1
Code compliance items	0	0	1	1
Code sections.	1	0	0	1
Complete access and links to docs	0	0	1	1
Complete access to all code references in a readable and searchable format. The ability to link to specific code sections is great.	1	0	0	1
Compliance questions answered.	1	0	0	1
Comprehensive	0	0	1	1
Comprehensive resource guide allowing for full understanding of the codes	1	0	0	1
Confirming compliance before submission.	1	0	0	1
Critical in helping with compliance	0	0	1	1
Critical to my knowledge of the energy code	1	0	0	1
Didn't use it.	0	0	1	1
Ease of access to information, can go back at any time to view	1	0	0	1
Easier to digest energy code + helpful examples	0	0	1	1
Easily able to reference Title 24 Energy Code	1	0	0	1

Easily accessible	1	0	0	1
Easy Access	0	0	1	1
Easy links to forms and guides.	0	0	1	1
Easy to access to exact code language	0	0	1	1
Easy to find info.	1	0	0	1
Easy to find information needed quickly	0	0	1	1
Easy to find specific code references	0	0	1	1
Easy to find the forms we need for our installations	0	0	1	1
Easy to find the specific code sections and their requirements	1	0	0	1
Easy to look up code sections when you need to provide citations.	1	0	0	1
Easy to navigate	1	0	0	1
Easy to navigate confusing information..	0	0	1	1
Easy to use	0	0	2	2
Easy to use and understand.	0	0	1	1
Education	1	0	0	1
Email links	1	0	0	1
Energy Code	1	0	0	1
Everything. The searchable nature, the clickable links. It's amazing!!!	0	0	1	1
Expert knowledge you can't find anywhere else	1	0	0	1
Explanation of the codes	0	0	1	1
FIND DOCUMENTS FOR VARIOUS PROJECT COMPLIANCE QUICKLY	1	0	0	1
Fact sheets	1	0	0	1
Facts for code compliance	0	0	1	1
Failry easily helped me through the ACE process	1	0	0	1
Finding applicable code provisions.	0	0	1	1
Finding code reqs	0	0	1	1
Finding cross references and indirect connections between topics.	0	0	1	1
Finding out specific requirements to complete forms in ACE	1	0	0	1
Finding specific resources	1	0	0	1
Finding the right form.	1	0	0	1
Flexible search	1	0	0	1
Free and open access to the California Energy Code and associated documents (Reference Appendices, Compliance Manual, etc.)	1	0	0	1
GOOD BOOKMARKS, EASY TO NAVIGATE	1	0	0	1
Gave pertinent suggestions	1	0	0	1

Getting forms. But I would like to download NRC forms even though you need an ATT. It is great to give the client examples of what forms they need to have the subs complete.	1	0	0	1
Getting the most current information without having to research the codes.	1	0	0	1
Giving an explanation along with references to where the information came from aids in Code enforcement during a plan review.	0	0	1	1
Good Yard stick	1	0	0	1
Good info on there	1	0	0	1
Good references	0	0	1	1
Good referene	1	0	0	1
Good to use when doing Plan review	1	0	0	1
Good tool to look for energy code articles.	0	0	1	1
Great	0	0	1	1
Great info	1	0	0	1
Great information	0	0	1	1
Handy	1	0	0	1
Havent used	1	0	0	1
Having the code available to search.	0	0	1	1
Help to learn	1	0	0	1
Help to navigate what is otherwise a cumbersome Energy reference manual.	0	0	1	1
Help with check lists and products info	0	0	1	1
Help.	0	0	1	1
Helped find information.	1	0	0	1
Helped with filling out forms required for T24 calcs	1	0	0	1
Helpful information	1	0	0	1
Helps complete tasks	1	0	0	1
Helps find infpormation.	0	0	1	1
Helps navigating	0	0	1	1
Helps to clear up questions	0	0	1	1
Helps with understanding the code requirements	1	0	0	1
How simple they explain and present the requirements to achieve compliance.	1	0	0	1
How to comply with title 24	1	0	0	1
Hyperlinks to code sections	1	0	0	1
I am able to search specific sections of the code	0	0	1	1
I don't remember in specifics.	1	0	0	1
I forget.	0	0	1	1
I haven't used this much but saw that it could have potential to	0	0	1	1

identify the exact sections quickly.				
I haven't used this	0	0	1	1
I liked the fact that I could easily search for the specific references listed on the dynamic forms to learn more about that item.	1	0	0	1
I thought the Reference Guides and the Reference Ace were basically the same thing.	1	0	0	1
I use it to look up JA references,	0	0	1	1
I use the Reference Ace quite a bit to answer specific questions that I have about the code. It is helpful that it contains internal (embedded) links to other sections of the code. I never look at PDF versions of the code. I always use the Reference Ace.	0	0	1	1
I use the reference guide and compliance manuals to figure out code requirements and the reference ace is the second step to quickly pulling up actual code language for review.	1	0	0	1
I use this all the time to reference code	0	0	1	1
I use this all the time. It's by far the easiest way to look up code language if I don't already know it.	0	0	1	1
I use this every day! It makes navigating the energy code sections a breeze. The tables and links are all so helpful for quick searches and finding answers fast.	0	0	1	1
INFORMATION ON RESIDENTIAL PROJECTS	0	0	1	1
In depth reference guide to additional info	1	0	0	1
In depth searchable more direct information/references/sources	0	0	1	1
In general, reviewing the code impacts for specific end uses and technologies.	1	0	0	1
Information	0	0	1	1
Information is really well-organized and easy to read. I use the Title 20 (appliance efficiency) reference quite a bit.	0	0	1	1
Insanely useful, searching through the code, navigating via drop down menus, opening references in the side panel, etc	1	0	0	1
Interactive with hot links	0	0	1	1
Interpretations	0	0	1	1
It helps me find the information I need fairly quickly, but it's size can be overwhelming	1	0	0	1

It is a good resource for reviewing compliance requirements for my project.	0	0	1	1
It is an easily accessible and easy to navigate resource.	1	0	0	1
It is informative	0	0	1	1
It saves time. We can search specific code terms and instantly get the Title 24 sections we need, instead of scrolling through hundreds of pages	0	0	1	1
It's my all-time go-to to check the code language	0	0	1	1
Its interactive and only reports relevant data	1	0	0	1
Its value is mostly as support to other resources - I like using the PDF of the actual codes (and the PDF guide as well) most of the time, but Reference Ace is a good resource for other assets to link into and give me a quick bit of extra context.	0	0	1	1
Kailey Eng Co. Maintenance Aces.	0	0	1	1
Key word search	1	0	0	1
Know where to find the material Knowledgebase	0	0	1	1
Lighting Occ Sensors	1	0	0	1
Links to the specific code sections.	0	0	1	1
Makes it easy to look up code requirements and it's great to know it features the actual Standards and Compliance Manuals	1	0	0	1
N/A	1	0	1	2
NA	0	0	2	2
Nice to have when it's been a while and could use a reminder, especially Code is updated regularly	1	0	0	1
No comment	0	0	1	1
Not having to search through the internet for clarifications and code references	1	0	0	1
Not seen it yet.	0	0	1	1
Not very familiar with as I don't use it much	0	0	1	1
Nothing	0	0	1	1
One stop shop. Quick easy navigate. Links throughout.	0	0	1	1
Thorough. Pictures. Diagrams.				
Online versions of the code.	1	0	0	1
Extremely helpful.				
Only seldom used	1	0	0	1
Print	1	0	0	1

Quality of information provided.	1	0	0	1
Question responses	1	0	0	1
Quick access to code requirement forms, compliance manuals, and supporting documentation in one centralized location.	1	0	0	1
Quick access to information	0	0	1	1
Quick and easy	0	0	1	1
Quick and streamlined	1	0	0	1
Quick code reference	0	0	1	1
Quick reference	1	0	0	1
Quick research and fast results when getting into the code specifics	1	0	0	1
Quick searches of Title 24 cuts down on time.	1	0	0	1
Reference Ace is a great tool to help navigate the energy code quickly and easily. I use it almost exclusively and I'm looking forward for the 2025 energy code to be added. The left side panel has all of the chapters and sections easily identifiable and allows you to click right there to get to the desired section of code. And when the code text references another section, it is great that Reference Ace directly links that section for you to click and read. I love the Reference Ace.	0	0	1	1
Reference Ace is my most used feature at Energy Code Ace. Easy to use. Please bring back the print option.	0	0	1	1
Reference Ace was most valuable because it centralized all key resources in one easy-to-navigate platform. It saved time by allowing quick access to fact sheets, guides, checklists, and other tools without having to search multiple locations. The intuitive layout and search functionality made it especially efficient for both new and experienced users.	0	0	1	1
Reference Ace was most valuable because it served as a centralized, searchable library for the code.	0	0	1	1
Reference ace from 2022 Title 24, part 6 energy code and Title 20 standard documents.	1	0	0	1
Reference to different sources	0	0	1	1
Reference tool	1	0	0	1
References about title 24	1	0	0	1

Research code requirements	1	0	0	1
Residential energy compliance	0	0	1	1
Resource of information to obtain and get clarification, but can get overwhelming for the average user or end user trying to do a simple project, for example.	0	0	1	1
Resourceful	0	0	1	1
Same	1	0	0	1
Search	0	0	1	1
Search energy code for a topic.	0	0	1	1
Search function makes it more helpful than CEC compliance manual.	0	0	1	1
Searchability	0	0	1	1
Searchable database.	0	0	1	1
Searchable information valuable to plan checks	0	0	1	1
Searchable text	0	0	1	1
Showing what references I need to keep up to date on	1	0	0	1
Snapshot of new requirements	0	0	1	1
Sometimes easier to get an answer	0	0	1	1
Specific tools and code resources.	0	0	1	1
Take me to reference quickly	1	0	0	1
The Comprehensive nature of the list	0	0	1	1
The Reference ACE was most valuable because it consolidated all key resources in one place. Having quick access to fact sheets, guides, and checklists streamlined my workflow and made it easier to find the right information when needed.	0	0	1	1
The UpCodes style interface that is easy to navigate and to check on code ideas.	0	0	1	1
The ease of navigation and access to information is very useful.	1	0	0	1
The ease of use.	0	0	1	1
The most valuable part of Reference Ace was its ability to quickly link specific Energy Code requirements to the relevant sections of Title 24, Part 6. It made it much easier to navigate the code and find precise information without spending extra time searching through long documents. I especially appreciated the searchable format and built-in definitions, which helped clarify terms and requirements in context. Overall, Reference Ace was an efficient and reliable tool for understanding	0	0	1	1

and applying the California Energy Code accurately.				
The reference ace referenced sections	0	0	1	1
The usefulness of the forms and clear information.	0	0	1	1
They are a COMPASS in providing accurate sources of information.	0	0	1	1
They were helpful for answering questions I was sent	0	0	1	1
This is my most-used resource -- fully searchable and hyperlinked saves a huge amount of time.	1	0	0	1
This is what I use if there is any question of what product qualifies.	0	0	1	1
Title 24.	1	0	0	1
Title 6	0	0	1	1
Title-24, Part 6 Energy Code	0	0	1	1
Tracking down specific Energy Code requirements included in the reference appendices (as well as the Energy Code itself) can be daunting; Reference Ace help by quickly moving from one link to another.	0	0	1	1
Understaning code	0	0	1	1
Use it alot when working on commercial type rprojects	0	0	1	1
Use it everyday - faster and easier to use for understanding what applies	0	0	1	1
Used frequently to quickly navigate to and specifically reference code items	0	0	1	1
Useful as a quick reference to avoid combing through code	0	0	1	1
Useful info	0	0	1	1
User friendly	1	0	0	1
Using the hyperlinks for code understanding	1	0	0	1
Very good	0	0	1	1
Very helpful, easy to navigate	0	0	1	1
Very valuable	0	0	1	1
Web-based reference. Easy to access	0	0	1	1
Were to get answers	0	0	1	1
What isn't? The whole thing- Its much easier to look up code in reference ace then any CEC manual. I use it on a daily basis. Please do not keep that going. Plus people sitting for the CEA exam and mentees in the CABEC mentoring program rely on reference ace.	0	0	1	1

Would be lost without it.	1	0	0	1
YES	0	0	1	1
ability to pull up code sections	1	0	0	1
all	0	0	1	1
all information at one place	0	0	1	1
all information is valuable	0	0	1	1
all of it	0	0	1	1
all reference ace are valuable.	1	0	0	1
can read the code book in an organized way	0	0	1	1
cannot remember	1	0	0	1
code lookup	0	0	1	1
concise and straightforwardness	0	0	1	1
did not use	0	0	1	1
documents	0	0	1	1
dont know	1	0	0	1
dont recall	1	0	0	1
easy	0	0	1	1
easy access to solutions	0	0	1	1
easy to look up	1	0	0	1
easy to search code sections for relevant information	1	0	0	1
easy to use	1	0	0	1
easy tool to help find code	0	0	1	1
everything but the resources included in searches	0	0	1	1
excellent resource for looking up info and working through the code	1	0	0	1
figuring out how to fill out T24 forms	1	0	0	1
finding correct code sections to use in plan review	0	0	1	1
good all around resource	0	0	1	1
guidance with data entry.	1	0	0	1
help find information	0	0	1	1
help to understand process	1	0	0	1
i use it to reference the code and compliance manual often	1	0	0	1
illustrative information	0	0	1	1
info	1	0	0	1
it is often easier to find information than a regular google search	1	0	0	1
it is ok, I use when I can.	0	0	1	1
it's easier to look up code and IBR documents	0	0	1	1
its existence	0	0	1	1
just a good source for finding stuff in the code	1	0	0	1
looking for certain answers, reference Ace helps to find it	0	0	1	1
more of a one time read	0	0	1	1
n/a	1	0	2	3
na	2	0	0	2
none	0	0	1	1
not familiar	1	0	0	1

not sure	2	0	0	2
planning	1	0	0	1
pop up definitions	1	0	0	1
provide quick access to the Standards	0	0	1	1
quick and informative	1	0	0	1
quick lookup	0	0	1	1
quick reference	0	0	1	1
quick solution	0	0	1	1
quick to access	0	0	1	1
quickly searching the code	0	0	1	1
references	0	0	1	1
referencing types of installations and how they need to be designed.	0	0	1	1
resource	0	0	1	1
resource to learn more	1	0	0	1
searchable	0	0	1	1
see last answer	1	0	0	1
shows how compliance is derived	1	0	0	1
single source for code and supporting documentation	0	0	1	1
so awesome to have a searchable code. having all the material in one place is great, i.e. code, cbecc user manual, res. compliance manual, etc.	0	0	1	1
sometimes it is hard to find information by just reviewing the codes	0	0	1	1
specific code requirements and exceptions	0	0	1	1
speed up code lookups and assist in CEA exams	0	0	1	1
t-24	0	0	1	1
the in depth information	1	0	0	1
the references	0	0	1	1
they are helpful. compact and to the point.	0	0	1	1
they list all the standards and compliance manuals. Very handy to reference actual standards in entirety and exact verbiage	1	0	0	1
they were great	1	0	0	1
to understand terms better	1	0	0	1
usability	0	0	1	1
very informative	0	0	1	1
yes	1	0	0	1
yes good.	1	0	0	1
Total	243	75	234	552

**Tabulation of Q7h S1**

What about the Virtual Compliance Assistant was most valuable to you?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
-	153	75	110	338
----	0	0	1	1
.	1	0	0	1
?	1	0	2	3
A good alternative to private sources	0	0	2	2
ACE online forms	1	0	0	1
AI	1	0	0	1
AI interface to streamline research	0	0	1	1
All	0	0	1	1
All NRCC Forms	1	0	0	1
Also useful for people who struggle with researching the specifics tied to T24	1	0	0	1
Amazing automation for non expert users and provided at no cost	1	0	0	1
Asking what I was looking for and it guided me.	1	0	0	1
Availability- ease of navigation	0	0	1	1
Avoid plan check comments.	0	0	1	1
Being able to reference back to a subject quickly	1	0	0	1
Can be easy to use	0	0	1	1
Can't recall	1	0	0	1
Clear and reliable information	1	0	0	1
Code	1	0	0	1
Code compliance items	0	0	1	1
Commissioning	0	0	1	1
Cut through complexity	1	0	0	1
Determining forms required for project scope	0	0	1	1
Didn't use it that often	1	0	0	1
Don't recall	0	0	1	1
Don't use	1	0	0	1
Easy to ask questions	0	0	1	1
Easy to interact	0	0	1	1
Easy to navigate	0	0	1	1
Education	1	0	0	1
Efficiency in form completions.	0	0	1	1
Energy Code Ace	1	0	0	1
Everything! Love this tool. It allows me to run through different scenarios to see how a designer can bring their design	1	0	0	1

into compliance and therefore provide useful feedback.				
Everything.	0	0	1	1
Fast answers	0	0	1	1
For rare instance in my role when needing to ensure compliance	0	0	1	1
Forms	0	0	1	1
Freindlty user	1	0	0	1
God! Those forms!VCA help to make sense of all the forms required and keep projects on the compliance track.	0	0	1	1
Good check	1	0	0	1
Good method for assistance	0	0	1	1
Good starting point	0	0	1	1
Great helpful hints and cautions.	1	0	0	1
Hardly use	0	0	1	1
Have not used in my role.	0	0	1	1
Have not used it much, but know it is there if needed.	0	0	1	1
Have not used it.	1	0	0	1
Help in filling form	0	0	1	1
Help me a lot on my projects	1	0	0	1
Helpful in completing tasks	1	0	0	1
Helpful in filling out forms	0	0	1	1
Helpful tool	1	0	0	1
Helps in getting the task done	1	0	0	1
Helps me determine which forms are needed and which documents to review for compliance	1	0	0	1
Helps to answer complex questions where code is not clear	0	0	1	1
Helps to know if your project complies	0	0	1	1
How to navigate mechanical documentation for a permit	0	0	1	1
I don't rmemeber using this	0	0	1	1
I forget.	0	0	1	1
I have not used the virtual compliance tool, but I am interested in checking it out	1	0	0	1
I have not used this yet, but I am looking forward to this.	0	0	1	1
I have not utilized.	0	0	1	1
I have not watched any but I think this is useful.	0	0	1	1
I haven't used it enough to have much of an opinion.	0	0	1	1
I haven't used it many times, but it's a very useful guided walk-through for filling out the forms.	0	0	1	1
I haven't used this enough to list what is most valuable.	0	0	1	1
I only use Compliance Assistant for NRCI forms. Entering compliance numbers (from NRCC documents found in the	0	0	1	1

approved designs) can be difficult. The assistance provide when the new processed was rolled out in 2022 was valuable. Learning new processes can be hard.				
I only used this once and found it difficult for me to use....but I will keep trying.	0	0	1	1
I use this for sign and lighting energy compliance applications	1	0	0	1
I usually go to Forms Ace -- I don't use the VCA.	1	0	0	1
Identifying which compliance forms are relevant on a project	0	0	1	1
If memory serves, this is the webapp where I actually fill out the forms. So yeah, kinda critical to any prescriptive work.	0	0	1	1
Information	0	0	1	1
Informative	0	0	1	1
Interactive and displays only what is required based on your previous replies.	1	0	0	1
It can be confusing for industry professionals so the more guidance the better	1	0	0	1
It helps	1	0	0	1
It helps in avoiding making mistakes when complaining the forms	0	0	1	1
It is difficult to find all the requirements by just reviewing the codes.	0	0	1	1
It is easy to navigate.	0	0	1	1
It speeds up the process.	0	0	1	1
It takes the guesswork out of compliance paperwork and helps make sure our projects meet Title 24 and rebate documentation requirements	0	0	1	1
It's an easy to use way to help fill out forms and bring attention to requirements that may be overlooked.	0	0	1	1
It's only valuable because it's the only option for completing some forms like the NRCC-MCH-E or NRCI-MCH-E. I don't have a choice, but it definitely has problems.	0	0	1	1
Its a great resource for people who are confused about what forms they need	0	0	1	1
Its great for precscriptive compliance on some projects	0	0	1	1
I'm required to use to access contractor NRCI forms. Would	1	0	0	1

be better if contractors could do electronic signatures				
Knowing that there was virtual help gave me confidence that I would able to complete the form correctly.	1	0	0	1
Light Solar COMPANY, ABENEINSA EPC, ABENGOA MENECEMENT.	0	0	1	1
Made me feel confident I wasn't missing a step in documenting everything	0	0	1	1
Make sure I haven't missed something on the Title 24.	1	0	0	1
Makes completing forms easier	0	0	1	1
N/A	1	0	4	5
N/a	1	0	0	1
NA	0	0	1	1
Never Used this Section	1	0	0	1
Never used	0	0	1	1
Nice to be able to discuss real problems.	1	0	0	1
No comment	0	0	1	1
Not familiar	1	0	0	1
Not familiar with this	0	0	1	1
Not for me, but for others	1	0	0	1
Not sure I have used this	0	0	1	1
Not sure didn't use much	0	0	1	1
Not sure.	0	0	1	1
Not used too much but I am aware of it. Helps plans examiners, and homeowners figure out what forms and whatnot they need for their respective projects				
Not used yet.	1	0	0	1
Not very familiar with as I don't use it much	0	0	1	1
Nothing really	1	0	0	1
Ok this is one thing that needs work, since its mainly only used for NR. But the user can input anything in a virtual assistant form to get it to comply. Too many loopholes. and its quite hard to use. But this might be a CEC issue with how the code is written for NR.				
Online resource to complete compliance forms.	1	0	0	1
Preparation of compliance forms	1	0	0	1
Provides step by step instructions and guidance	1	0	0	1
Providing clarification along the way is very useful.	1	0	0	1
Quick way to find answers to which forms to use	0	0	1	1

Same	1	0	0	1
Same. Easy to access resource.	0	0	1	1
Save time	1	0	0	1
Simple	0	0	1	1
Step-by-step clear procedures for completing the forms	1	0	0	1
The Certificates of Compliance (NRCC) for nonresidential	1	0	0	1
The Virtual Compliance Assistant is the most valuable tool because it streamlines form completion and reduces errors. It walks users through inputs step by step, flags inconsistencies, and automatically fills applicable fields. This makes Title 24 documentation faster, more accurate, and less repetitive. By far the most time-efficient feature on EnergyCodeAce.	1	0	0	1
The Virtual Compliance Assistant was most valuable because it provided real-time, accurate guidance on compliance-related questions, reducing the need to search through lengthy documentation. Its interactive format made it easy to get quick answers, stay aligned with regulatory requirements, and ensure consistent decision-making across the team.	0	0	1	1
The ability to fill out (prescriptive) compliance forms online, thus allowing the use of load calculation software other than EnergyPro and CBECC. Also, help with filling out the form and explanation of form input.	1	0	0	1
The collaborative nature of the program	0	0	1	1
The compliance forms and it guides me how to have my project and design comply in an interactive way.	0	0	1	1
The most valuable part of the VCA is seeing the setup for either a report or response for a client.	0	0	1	1
Fix the question (verb does not match plurality of the subject or tense)	0	0	1	1
The most valuable part of the Virtual Compliance Assistant was how it simplified the compliance process and guided me step by step. It saved time, clarified requirements, and helped ensure accuracy in meeting Energy Code	0	0	1	1

standards.				
The turbo tax like approach and the helpful tips make it easy to complete nonres projects	1	0	0	1
This is the new way to check work	1	0	0	1
This is very important because certain forms cannot be generated accurately in the T24 software, so the VCA is a necessary component to my job.	0	0	1	1
This makes filling out Prescriptive forms a breeze!	0	0	1	1
This one I'm less familiar with. I like that I can start off with some basics and figure out the best compliance path forward pretty quickly. Usually means I'm needing to use the energy modeling and use performance but it's good to see if that's truly necessary all the time.	1	0	0	1
Title 24.	1	0	0	1
Unsure	1	0	1	2
Use chat gpt	0	0	1	1
VCA saves me a lot of time when completing forms. I love this tool. I use it a lot for LMCC forms. And I only recently realized that I can use it for LMCI forms. Very helpful.	0	0	1	1
Verifying that all cross checks and requirements were being met.	1	0	0	1
Very easy to use	0	0	1	1
Very informative. Thanks,	0	0	1	1
Very intuitive and easy to use.	1	0	0	1
Provides responses to questions in record time				
Very little interaction	0	0	1	1
Very useful the most useful tool Energy Code Ace has.	1	0	0	1
Very valuable	0	0	1	1
Virtual Compliance Assistant helps the guide us to the right directions	0	0	1	1
Visual presentation with simple graphics	0	0	1	1
Walk through forms step by step	0	0	1	1
Walking through the process and understanding which requirements are applicable	1	0	0	1
YES	0	0	1	1
YES, SINCE IT CAN BE USED TITLE 24 FORMS INSTEAD OF CHEERS OR ENERGYPRO.	0	0	1	1
Yes valuable	0	0	1	1
all of it	1	0	1	2
allowed to walk through examples	1	0	0	1

for testing a scenario.				
another way to verify information and actions	0	0	1	1
available	0	0	1	1
compliance	0	0	1	1
compliance id, esily start project and choose associated forms	1	0	0	1
did not try it	0	0	1	1
don't know	1	0	0	1
ease of use. California T 24 is annoying and this makes it very easy	1	0	0	1
easy	0	0	1	1
easy to look up	1	0	0	1
easy to navigate and find things when needed.	1	0	0	1
easy to use	0	0	1	1
ending with a completed form	1	0	0	1
energy	1	0	0	1
guidance with data entry.	1	0	0	1
have not used	0	0	1	1
haven't use it much.	0	0	1	1
help with compliance	1	0	0	1
help with figuring out compliance docs required	0	0	1	1
helps determine the required T24 forms quickly	1	0	0	1
helps to find a pathway into compliance	0	0	1	1
i dont remember that one	1	0	0	1
i use it to generate forms for prescriptive compliance	1	0	0	1
instant answers	0	0	1	1
it is good. but it can not as much as reliable as real human.	1	0	0	1
it's how we primarily do prescriptive reporting on nonresidential projects	0	0	1	1
its usability	1	0	0	1
lighting	1	0	0	1
measure compliance issues	1	0	0	1
must us it, no choice	0	0	1	1
n/a	1	0	2	3
na	1	0	0	1
none	0	0	1	1
not used to much but learning	0	0	1	1
not used yet	0	0	1	1
only possible way to finish all NRCC forms	0	0	1	1
provide information as i need it	1	0	0	1
quick and informative	1	0	0	1
resource	0	0	1	1
simplified compliance documentation	0	0	1	1
sometimes just clarifies what forms are needed	0	0	1	1
spoon feed me	0	0	1	1

step by step	0	0	1	1
t-24	0	0	1	1
the help with the forms	1	0	0	1
they are helpful. compact and to the point.	0	0	1	1
this helped make sure that I was compliant	1	0	0	1
umm cuz I can fill out the forms?	0	0	1	1
working through the project compliance forms	1	0	0	1
yes	1	0	0	1
<b>Total</b>	<b>243</b>	<b>75</b>	<b>234</b>	<b>552</b>

### Tabulation of Q7i S1

What about Forms Ace was most valuable to you?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
	63	75	54	192
-	0	0	1	1
----	1	0	0	1
.	2	0	2	4
2022 Energy Code Forms	0	0	1	1
2022 Forms Ace	1	0	0	1
2022 residential. nonresidential and low-rise multifamily energy code forms.	1	0	0	1
50% of my job dealing with it.	1	0	0	1
A good alternative to sources in the marketplace	1	0	0	1
A good place to find multiple forms	0	0	1	1
A great collection of forms for the energy code.	0	0	1	1
A great way to complete compliance forms	0	0	1	1
A tool that can be directly used for plan review	1	0	0	1
ABILITY TO SEND FORMS ON TO APPLICANTS TO PROVIDE CODE COMPLIANCE	1	0	0	1
AI	1	0	0	1
Ability to find specific information.	1	0	0	1
Ability to wade through the multitude of forms and find what was needed.	1	0	0	1
Able to print compliance for projects	0	0	1	1
Access	0	0	1	1
Ace Compliance sheets	1	0	0	1
All	0	0	1	1
All of them	0	0	1	1

All the residential 2022 cf-1rs, cf2rs cf3rs are great for reference	0	0	1	1
Also really helpful for people who are confused about which forms apply to their project	0	0	1	1
Are these the forms that had drop down options?	1	0	0	1
Assistance on figuring out which forms to use.	1	0	0	1
Automatically filling information to fill forms for compliance submission	1	0	0	1
Availability- ease of navigation	0	0	1	1
Avoid plan check comments.	0	0	1	1
Becomes 1-stop location for forms	0	0	1	1
Being able to have prefilled forms based an existing Energy Pro calculation is a great time saver. Also being able to walk through each form step helps cut down on errors.	1	0	0	1
Being able to look up the required forms needed to submit based on the scope of work	1	0	0	1
Being able to step through the forms digitally instead of filling out pdfs makes the process clearer and more concise.	1	0	0	1
CF 1R forms	0	0	1	1
CF1R Forms (Residential Certificates of Compliance)	1	0	0	1
CHECKING RQUIREMENTS	1	0	0	1
COMPLETING T24 FORMS, HOWEVER THE AMOUNT OF CLICKING AND DROPDOWN MENUS SHOUD BE STREAMLINE BY SUPPORTING KEYBOARD ONLY NAVIGATION USING TAB AND ARROWS.	1	0	0	1
Clear concise	0	0	1	1
Clear directions and ease of finding the forms we are looking for.	0	0	1	1
Code	1	0	0	1
Completing the NRCC Forms	0	0	1	1
Compliance Forms	1	0	0	1
Compliance forms	0	0	1	1
Compliance forms for contractor	0	0	1	1
Conveying code requirements to the design team, ensuring that they understand documentation requirements and who needs to provide them.	1	0	0	1
Create faux prijects to check smf or compliance	0	0	1	1

D R. CONSULTANTS & DESIGNERS COMPANY	0	0	1	1
Database for all forms	0	0	1	1
Different forms, each organized by different segment	0	0	1	1
Direct and relevant	1	0	0	1
Ditto	0	0	1	1
ENV and MCH for NRCC Reports	0	0	1	1
Ease of filling out prescriptive T24 forms	0	0	1	1
Easier to parse through compared to the CEC website.	0	0	1	1
Easily accessible.	1	0	0	1
Easy access	1	0	0	1
Easy access but could us more detail training on some of the forms	0	0	1	1
Easy to fill out forms online	1	0	0	1
Easy to fill out the required forms automatically.	0	0	1	1
Easy to fill out, pertinent information	0	0	1	1
Easy to fill out.	0	0	1	1
Easy to find	0	0	1	1
Easy to find information needed quickly	0	0	1	1
Easy to follow	1	0	0	1
Easy to navigate	0	0	1	1
Easy to use	0	0	1	1
Easy to use and make changes if needed.	1	0	0	1
Easy to use forms for Energy compliance.	1	0	0	1
Easy to use, help with not missing section	1	0	0	1
Easy way to complete the form required by each municipality	1	0	0	1
Everything	0	0	1	1
Everything always comes down to filling out and submitting the paperwork correctly - nice to have form specific assistance.	0	0	1	1
Everything for forms. Essential service.	0	0	1	1
Expert knowledge you can't find anywhere else	1	0	0	1
Fact sheets	0	0	1	1
Fill out compliance forms and print to PDF digitally	0	0	1	1
Filling out forms without having to go through EnergyPro	1	0	0	1
Find the correct form or if a form exists.	0	0	1	1
Find the forms I need	1	0	0	1
Finding the forms that are applicable to projects and as a	0	0	1	1

resource for applicants.				
For Multifamily and NonRes	1	0	0	1
For the customers	1	0	0	1
Forms	0	0	1	1
Forms Ace help to locate the correct forms	0	0	1	1
Forms Ace is limited and can get convoluted in the design process and may not be applicable to every type of project.	0	0	1	1
Forms Ace was most valuable because it streamlined the process of locating, completing, and submitting forms. Its organized layout and intuitive interface reduced time spent searching for the right documents and ensured accuracy by guiding users through each step. It also helped maintain consistency and compliance across teams.	0	0	1	1
Forms Ace was valuable because it turned what could be a complex, error-prone process into a more streamlined and reliable workflow.	0	0	1	1
Forms are the actual documents. Getting familiar with them really ties together the concepts and the regulations.	0	0	1	1
Forms are the main reason that I go to the website. Finding Forms is tricky with government websites.	1	0	0	1
Gathering and storing info	0	0	1	1
Generating compliance forms	1	0	0	1
Getting a copy of the forms, or filling out a dummy copy of the forms, to identify the information applicants need to have on hand to complete forms.	0	0	1	1
Getting forms. But I would like to download NRC forms even though you need an ATT. It is great to give the client examples of what forms they need to have the subs complete.	1	0	0	1
Good info on there	1	0	0	1
Good overview	0	0	1	1
Good starting point	0	0	1	1
Great for HERS testing	0	0	1	1
Great for compliance testing	0	0	1	1
Great leads without a ton of second guessing.	1	0	0	1
Great to have a tool that helps me fill out the tool correctly, as opposed to manually inputting	1	0	0	1

what I think/guess is best.				
Great tool for plan check.	0	0	1	1
Great tool to add and complete projects that require the forms.	1	0	0	1
Guidelines on what is required	1	0	0	1
Guides you through and troubleshooting of the forms	0	0	1	1
Hard to always know what forms apply. I will provide this link to expeditors and contractors so they can get guided to the correct forms.	1	0	0	1
Have not used	0	0	1	1
Have not used in my role.	0	0	1	1
Haven't used it much	0	0	1	1
Having everything in one place needed to complete my work	0	0	1	1
Having the forms available at a few clicks for reference.	0	0	1	1
Help me to fill out the forms and check compliance.	1	0	0	1
Help with filling out forms	1	0	0	1
Helped fill out all the nonsense	1	0	0	1
Helpful in prescriptive compliance path to meet energy code.	0	0	1	1
Helpful information, organized well	0	0	1	1
Helpful to find the material.	0	0	1	1
Helpful with getting projects permitted.	1	0	0	1
Helps find information	0	0	1	1
Helps get the right forms in order	1	0	0	1
Helps me comply with Title 24	1	0	0	1
Helps me identify what forms to use for a project	0	0	1	1
Helps me to recognize which Energy compliance forms are required for each different plan review.	0	0	1	1
Helps slog through the completely unnecessary compliance forms	0	0	1	1
Helps streamline documentation for compliance	1	0	0	1
How to comply with title 24 and how to fill out forms	1	0	0	1
I can see what they look like.	0	0	1	1
I do not remember, I let our consultants do most of the forms	0	0	1	1
I don't need to research hundreds of pages of text. I have been able to rely on system, vast improvement over prior State system. IF questions, can send and get answers.	1	0	0	1
I don't really use Forms Ace, but have refereed many installers to the features at Energy Code Ace	0	0	1	1

I had to use this to create some reports when energy. Code software could not be used for things like prescriptive envelope compliance in multi family. Hoping the software problems get working out on the coming code.	0	0	1	1
I have not watched any but I think this is useful.	0	0	1	1
I have to have them for compliance	1	0	0	1
I haven't used forms ace much.	0	0	1	1
I loke forms ace. I can select all the forms needed for a job.	1	0	0	1
I love it!! it saves me all the time... best part of the website.	0	0	1	1
I need to fill out forms	1	0	0	1
I think this is the service on the website that guides me through the process of filling out the forms online. It was very helpful the first few times, then I knew what to do.	1	0	0	1
I tried to get some forms to give to a contractor	0	0	1	1
I use these all the time to show anyone how I am completing forms.	0	0	1	1
Identifying which forms are relevant to a project	0	0	1	1
If I can get this information	0	0	1	1
Important documents	1	0	0	1
Information	1	0	0	1
Information access	1	0	0	1
Inspection Check lists	0	0	1	1
It can be difficult to find the appropriate prescriptive forms	1	0	0	1
It creates the forms I need.	0	0	1	1
It guides me what forms I will need for my projects.	0	0	1	1
It helped me complete the forms	1	0	0	1
It is great way to supply the CA compliance forms for Title 24.	1	0	0	1
It is very helpful for navigating and selecting the relevant forms that are needed to show compliance. I have not tried the virtual compliance assistant, but that sounds like a helpful variation on this tool as well.	0	0	1	1
It makes it easy to access forms	1	0	0	1
It makes sure that I fill out all of the necessary forms to get a construction permit as fast as possible.	1	0	0	1
It was helpful in finding & completing some forms I don't	0	0	1	1

normally use.				
It was helpful in finding the specific form I was looking for.	1	0	0	1
It was very useful.	0	0	1	1
It's the only option for some things, so less "valuable" and more forced.	0	0	1	1
Its a necessity	1	0	0	1
It's a great resource for quickly pulling the right forms and confirming what information needs to be included	0	0	1	1
It's very helpful that missing or non-compliant entries are highlighted along the way and there are notes to help to fix. The links to relevant code sections are great. I also really like the info bubbles.	1	0	0	1
Knowing that all the forms are there.	1	0	0	1
Knowing what information is needed	1	0	0	1
Leads me to the forms I need to complete for various projects	1	0	0	1
Learning information	0	0	1	1
Lighting Occ Sensors	0	0	1	1
Made the lighting compliance process smoother	1	0	0	1
Makes code compliance a simpler, streamlined, quicker task	1	0	0	1
Makes completing forms easy and quick. Also allows us to save projects for later work. Takes away any second guessing that often comes with the Rabbit Hole that is the energy code.	0	0	1	1
Makes filling out easier	1	0	0	1
Managing firms	1	0	0	1
Mechanical Commissioning	1	0	0	1
Might have had this confused with the compliance assistant.AH! I think the compliance assistant found the forms, and Forms Ace helps me fill them. Now that I have experience I can reliably jump straight to the correct forms day-to-day, but the compliance assistant still has a lot of value if the Codes change or if I am handling an unusual situation.	0	0	1	1
Must useful on projects	1	0	0	1
N/A	0	0	1	1
NA	0	0	1	1
NO	0	0	1	1
Na	1	0	1	2
Nice to have access when you	1	0	0	1

need them.				
No comment	0	0	1	1
No comment.	1	0	0	1
Non specific	0	0	1	1
Nonresidential energy code forms	1	0	0	1
Not having to search through the internet with questions.	1	0	0	1
Not quite as amazing as Virtual Compliance Assistant but is useful when you need to know which forms are triggered if it is not obvious.	1	0	0	1
Not so much. I don't have to create the forms, just verify compliance	0	0	1	1
Not sure what that means.	1	0	0	1
Assumes it means the forms in filling out a project. It is what it is. The value is wasting time trying to fill things in without ability to copy from one project to another. Hence, there is no value!				
Appreciate time savers, not time wasters. As far as that goes, Energy Code Ace forms are not helpful.				
Not used	0	0	1	1
Not used them yet	0	0	1	1
Not utilized much	0	0	1	1
Not very familiar with as I don't use it much	0	0	1	1
Nothing	1	0	0	1
Ok I wanted to use Forms Ace very early in the 2022 cycle, before the 2022 forms were online. So technically it wasn't valuable - but the ability to review individual forms without relying on a consultant would have been valuable if available at the time. And links to forms on the CEC website are sometimes broken, so it's very helpful to have them available in more than one location.	0	0	1	1
Outlining compliance form requirements	1	0	0	1
Pre and post commissioning and inspector requirements	1	0	0	1
Prescriptive compliance	0	0	1	1
Provide thorough orientation of what is needed to accomplish the tasks and requirements of the CODE.	0	0	1	1
Provides a nearly fail safe platform for completing T24 documents needed for building	1	0	0	1

dept. submissions.				
Quality of information provided.	1	0	0	1
Quick access to correct forms needed	1	0	0	1
Quick forms filled out without doing modelling - or getting the right form	0	0	1	1
Quick list of needed forms, although sometimes not accurate	1	0	0	1
Readily accessible	1	0	0	1
Reference sections	0	0	1	1
Reference tool	1	0	0	1
Required compliance forms for T24 Compliance	1	0	0	1
Residential energy compliance	0	0	1	1
Same	1	0	0	1
Same as last answer	1	0	0	1
Same as previous	1	0	0	1
Same as previous 2 answers	0	0	1	1
Saves a lot of time when generating Title 24 forms. They make it easy to fill out prescriptive forms; otherwise, it would take 4 times as long deciphering all the columns and tables individually.	1	0	0	1
Seeing what's required	0	0	1	1
Sheets to fill in	0	0	1	1
Shortcut	1	0	0	1
Show required information needed to be completed.	0	0	1	1
Showing clients what is needed for submittal, inspection and for final	1	0	0	1
Sign Lighting NRCC-LTS-E and NRCI-LTS-E	1	0	0	1
Similar to VCA in terms of my opinion	0	0	1	1
Similar to previous comments	1	0	0	1
Sometimes I just have questions about what's on the forms and filling out prescriptive projects is made much easier with forms ace.	1	0	0	1
Speed at which forms can be generated	0	0	1	1
Standardized forms	0	0	1	1
Streamlines filling out Title 24 forms	1	0	0	1
Super helpful in getting me the right compliance forms	0	0	1	1
T-24 Energy compliance.	1	0	0	1
The ability to fill out (prescriptive) compliance forms online, thus allowing the use of load calculation software other than EnergyPro and CBECC. Also, help with filling out the form and explanation of form input.	1	0	0	1

The ease of filling in the forms	1	0	0	1
The ease of using the application and having it guide you through the form filling with clear, concise and job specific questions	1	0	0	1
The forms	1	0	0	1
The forms are very well-organized in their multiple categories (in building type, but also the different forms within each building type). Makes it much easier to find what you're looking for, and get started on the form you need.	0	0	1	1
The quick access and unified place to find these forms are the most helpful things about Forms ACE.	0	0	1	1
The take offs tool is friendly and easy to populate, often designers and contractors are not always certain about which forms are needed so i can use the tool to properly assess their needs and send the pdf package to them	1	0	0	1
The thoroughness of the forms	0	0	1	1
They are usefull.	0	0	1	1
They were there and required to use to submit installation documents	1	0	0	1
This could work better for DIY clients	0	0	1	1
This is a great tool that helps guide me to which forms I need and how to complete them	0	0	1	1
This is the only place to get the compliance and installation forms for the electrical and plumbing requirements without owning an energy compliance software.	1	0	0	1
Time saving	1	0	0	1
Title 24	1	0	0	1
Title 24 Part 6	0	0	1	1
Title 24.	1	0	0	1
To know what needs to be filed for compliance	1	0	0	1
To understand how code triggers and requirements are confirmed via reviewers and designers.	1	0	0	1
Too many forms. This makes it easier	0	0	1	1
UI	0	0	1	1
Unsure	0	0	1	1
Used forms from this section when required to.	1	0	0	1
Useful for determining what forms to use on a project.	1	0	0	1
Useful for filling out the very large	1	0	0	1

and confusing documents needed for permits				
Useful info	0	0	1	1
Useful to finding the right forms for my job	1	0	0	1
User Interface	1	0	0	1
User friendly way to complete prescriptive compliance forms	0	0	1	1
Valuable	0	0	1	1
Verification of what forms are required.	0	0	1	1
Very accessible and easy to use as long as I can find the compliance id	1	0	0	1
Very valuable	0	0	2	2
Way easier than the old forms and automatically checks compliance.	1	0	0	1
We are able to obtain some of the forms required for permit applications.	1	0	0	1
Well designed and simple for residential contractors	0	0	1	1
What do I need to complete to document compliance?	0	0	1	1
What forms to expect, and when	0	0	1	1
When I need to find a specific form, Forms Ace is a great way to find it.	0	0	1	1
YES	0	0	1	1
Yes, it helps a lot in prescriptive compliance.	1	0	0	1
—	0	0	1	1
ability to fill in forms electronically and online quick and easily	1	0	0	1
actually find this a tad difficult to use	0	0	1	1
all	1	0	0	1
all of it	1	0	1	2
area category	0	0	1	1
as a reference	0	0	1	1
being able to complete the required formwork on-line	1	0	0	1
being able to fill out the forms online and getting PDF files.	1	0	0	1
being able to identify the required forms quickly and efficiently	0	0	1	1
better than CEC	0	0	1	1
can be helpful for project teams	0	0	1	1
cf2r	0	0	1	1
completing Title 24 prescriptive forms	1	0	0	1
compliance forms and mandatory measures outputs	1	0	0	1
conditional questions	0	0	1	1
conveniently finding forms	1	0	0	1
did not use	1	0	0	1

document gathering.	1	0	0	1
don't know	1	0	0	1
dont recall	1	0	0	1
drop downs that filter the allowed inputs in the following sections	1	0	0	1
easily being able to have forms developed for prescriptive situations	1	0	0	1
easily know which forms to use	0	0	1	1
easy	0	0	1	1
easy of use	0	0	1	1
easy to look up	1	0	0	1
ending with a completed form	1	0	0	1
energy compliance forms	1	0	0	1
exterior envelope compliance	1	0	0	1
filling and printing forms for our design build contract documents	1	0	0	1
find forms quick and easy	1	0	0	1
for some projects, it is easier to get the forms i need, rather than using EnergyPro	1	0	0	1
general review check list	0	0	1	1
gives guidance for calculations	1	0	0	1
great companion to Trigger Sheets	0	0	1	1
great to give to customers- most dont know how to find them	0	0	1	1
having access to all the required forms in one place and being able to digitally fill them out is valuable. Also, having a verification for which forms specifically apply to my project is great.	1	0	0	1
having the correct forms	0	0	1	1
helpful to send to clients when they need them, fast and easy and clean	0	0	1	1
helps to file project online	0	0	1	1
helps with working with energy compliance engineer	0	0	1	1
i haven't actually used this yet	1	0	0	1
info	1	0	0	1
interested for using this	0	0	1	1
it simplified filling out and understanding the required Energy Code forms. It guided me through each step, reduced errors, and saved time by ensuring the correct forms were used for my project.	0	0	1	1
knowing which forms I need	0	0	1	1
letting contractors know it is a resource for them to use.	0	0	1	1
lighting	1	0	0	1
list accurately all that is needed to complete the forms	1	0	0	1
mech e	1	0	0	1

n/a	0	0	3	3
na	2	0	0	2
none	0	0	1	1
nonresidential indoor and outdoor lighting compliance forms	1	0	0	1
not much	1	0	0	1
not sure	2	0	0	2
not used	1	0	0	1
one stop shop for not only current forms but for legacy forms also	1	0	0	1
online form generation rather than pdf edits	1	0	0	1
preparation of compliance forms	1	0	0	1
pretty self explanatory and easy to use, but needs work with the editing feature	1	0	0	1
process development	1	0	0	1
quick and informative	1	0	0	1
quickly identify what forms i need	1	0	0	1
reference point	0	0	1	1
resource	0	0	1	1
see last question	1	0	0	1
short	0	0	1	1
simplified compliance documentation	0	0	1	1
so helpful for getting forms	0	0	1	1
t-24	0	0	1	1
the easy form filling	1	0	0	1
they are helpful. only way to do some things	0	0	1	1
title 24 forms and lighting	1	0	0	1
title 24 sheets	1	0	0	1
to see and understand how to complete forms	1	0	0	1
understanding what clients/homeowners need to fill out from their side	0	0	1	1
use all	0	0	1	1
useful information	1	0	0	1
very informative	0	0	1	1
very organized	0	0	1	1
what forms to use	0	0	1	1
yes	1	0	0	1
yes very much valuable.	1	0	0	1
Total	243	75	234	552

**Tabulation of Q7j S1**

What about Product Finder was most valuable to you?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
	173	75	137	385
----	1	0	0	1
.	3	0	2	5
A reliable tool when finding specifics on equipment isnt available or hard to find	1	0	0	1
ABEINSA EPC TRANSFORMERS.	0	0	1	1
AI	1	0	0	1
Ace tools for energy code product finder for building components and CSI numbers.	1	0	0	1
All	0	0	1	1
As a reference	1	0	0	1
Assisted InDesign choices	1	0	0	1
Being able to get pre-approved title 20 or 24 products and getting them checked instantly for the AHJ. Often I have used the printed output in plans for purposes of plan check and have had them accepted every time.	1	0	0	1
Building Component	0	0	1	1
Can be an easy way to find products that comply with key standards.	0	0	1	1
Checking SKUs for T24 application	0	0	1	1
Compliant products	1	0	0	1
Didnt use it	0	0	1	1
Different method to search	0	0	1	1
Dont really use it	0	0	1	1
Dont use it	0	0	1	1
Easy to compare similar products.	0	0	1	1
Easy to find	0	0	1	1
Easy to navigate	0	0	1	1
Easy to use	0	0	1	1
Easy way to find compliant products and materials	0	0	1	1
Equipment selections	1	0	0	1
Expert knowledge you can't find anywhere else	1	0	0	1
Find appliances that are listed and approved	1	0	0	1
Find compliant products	0	0	1	1
Find products that meet minimum standards	1	0	0	1
Find qualified products eligible for	0	0	1	1

energy rebates/incentives				
Finding compliant products, especially when recent changes to the Code have made updates to products necessary and the big names are lagging behind, is a huge thing. I still like the Venstar thermostats.	0	0	1	1
Finding qualifying products	1	0	0	1
Good info on there	1	0	0	1
Good tool to have	1	0	0	1
Great for energy modeling and green building consulting	0	0	1	1
Great search engine and helpful to find systems that I don't have all of the specifications for yet.	0	0	1	1
Guided me to the correct application.	1	0	0	1
HVAC Equipment selection	1	0	0	1
Have not used	0	0	1	1
Have not used in my role.	0	0	1	1
Have not used it	0	0	1	1
Haven't used but will explore	0	0	1	1
Haven't used	0	0	1	1
Haven't usef	1	0	0	1
Helped find products that would be useful in achieving compliance.	1	0	0	1
Helps find products	0	0	1	1
Helps locate better equipment	1	0	0	1
Helps to find Energy code compliant products for each project i work on	0	0	1	1
Helps us make decisions to at impact code	0	0	1	1
Hmmm... this one I have not used yet. But I way give it a whirl.	0	0	1	1
I can obtain cut sheets for required equipment.	1	0	0	1
I don't use this product	0	0	1	1
I dont have a favorite	1	0	0	1
I don't use it.	1	0	0	1
I have not used it yet, because, many products I had to find locally, so I use more local stores, because it is there not mean it is locally.	0	0	1	1
I have not used this	0	0	1	1
I have not used this option.	0	0	1	1
I have not used this.	0	0	1	1
I have used this to determine whether or not specifically regulated products are approved for specific uses.	0	0	1	1
I haven't really used it.	1	0	0	1
I haven't used it,	0	0	1	1
I haven't used the product finder tool, but I am interested in	1	0	0	1

checking it out				
I think I used it to check window ratings, but I might be misremembering.	0	0	1	1
If ours is listed	0	0	1	1
Information	1	0	0	1
Informative	1	0	0	1
It is an easy lookup	1	0	0	1
It was helpful at times	1	0	0	1
It's always difficult to stay current with new and improved products this helps.	0	0	1	1
It's extremely useful when comparing products on the spot.	0	0	1	1
Being able to confirm code compliance before ordering prevents costly changes later in the project				
Locating specs needed.	0	0	1	1
Looking for availability and knowing there is a resource to pass on to developers.	0	0	1	1
More of a secondary tool, but useful in the right situations.	1	0	0	1
N/A	3	0	2	5
N/A	0	0	2	2
NA	0	0	1	1
NO	0	0	1	1
NOT THAT FAMILIAR WITH PRODUCT FINDER	1	0	0	1
Never use	0	0	1	1
Never used	1	0	0	1
No comment	0	0	2	2
Not familiar with this	0	0	2	2
Not much	0	0	2	2
Not sure	1	0	1	2
Not sure.	0	0	1	1
Not used	0	0	1	1
Not used it	1	0	0	1
Not used much	1	0	0	1
Not used.	1	0	0	1
Not very familiar with as I don't use it much	0	0	1	1
Nothing	2	0	0	2
Product Finder was valuable because it provided a reliable, efficient way to select compliant products and avoid costly mistakes.	0	0	1	1
Product info. Helps for compliance work.	0	0	1	1
Product selection to pick manufacturers and their products	1	0	0	1
Quality of information provided.	1	0	0	1
Quickly find products that meet requirements when the alternative - searching individual product data	0	0	1	1

Researching materials	0	0	1	1
Researching products.	1	0	0	1
Same	1	0	0	1
Saves time on hunting down products	0	0	1	1
Shortcut	1	0	0	1
Speeds up identification of qualifying projects, and reduces the time needed to research individual manufacturers.	0	0	1	1
Suggests compliant products	1	0	0	1
The Product Finder was most valuable because it simplified the process of identifying the right products based on specific needs and eligibility criteria. Its filtering options and guided prompts made it easy to compare offerings and make informed decisions quickly. It saved time and reduced confusion, especially when navigating a wide range of options.	0	0	1	1
The depth of the list.	0	0	1	1
The most valuable part of the Product Finder was how easily it helped me locate Energy Code compliant products. It saved time by providing verified options and clear information about efficiency ratings and certification requirements.	0	0	1	1
The product information provided	0	0	1	1
There have been many changes to the manufacturing environment which make it difficult to find compliant products. Product Finder doesn't always work, but it helps.	0	0	1	1
This helps with specifying products in my design that will meet compliance.	0	0	1	1
Title 20 items	0	0	1	1
Title 24.	1	0	0	1
Unsure	1	0	0	1
Useful for adding information of products to have a more accurate title 24	1	0	0	1
Useful info	0	0	1	1
Very valuable	0	0	1	1
YES	0	0	1	1
Yes	0	0	1	1
Yes valuable	0	0	1	1
acceptable	0	0	1	1
compliance and planning	1	0	0	1

ease of finding the needed information	0	0	1	1
easy to find products	0	0	1	1
easy to look up	1	0	0	1
finding a basis of design product for the contractors to bid on	0	0	1	1
helped direct to required forms	1	0	0	1
helps finding products	1	0	0	1
helps with search to find products,	0	0	1	1
holy crap	0	0	1	1
i dont know for me, as I am all okay.	1	0	0	1
know what's available	0	0	1	1
locating what interests me	0	0	1	1
look for alternate products for compliance	1	0	0	1
n/a	1	0	2	3
na	2	0	0	2
need to use this more - haven't used it much	0	0	1	1
none	0	0	2	2
not much	1	0	0	1
not too familiar with product finder.	1	0	0	1
only used a couple times	0	0	1	1
options	0	0	1	1
products are the means for achieving compliance	1	0	0	1
providing information to customers efficiently.	0	0	1	1
rarely uses this resource	1	0	0	1
same	0	0	1	1
to find better options	1	0	1	2
to find product	1	0	0	1
verified compliance of purchased product	0	0	1	1
yes	1	0	0	1
<b>Total</b>	<b>243</b>	<b>75</b>	<b>234</b>	<b>552</b>

### Tabulation of Q7k S1

What about noteblocks was most valuable to you?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
----	191	75	153	419
----	1	0	0	1
.	2	0	2	4
AI	1	0	0	1
ALL 2025/2022 Mandatory noteblocks	0	0	1	1
All	0	0	1	1
Allows record of exceptions or	1	0	0	1

when a question is not applicable in the form				
Avoid plan check comments.	0	0	1	1
Can let design professional know to add these to there sets	0	0	1	1
Cut and paste and comfort that they are current each time we go get them. I discourage my team from relying on noteblocks that are copied from previous projects because of this problem of outdated notes.	1	0	0	1
Did not use too much	0	0	1	1
Didn't use them	0	0	1	1
Didn't use	1	0	0	1
Dont really use it	0	0	1	1
Easy to navigate	0	0	1	1
Easy to place onto construction drawings to ensure compliance with the energy code.	1	0	0	1
Easy to use	0	0	1	1
Expert knowledge you can't find anywhere else	1	0	0	1
Finding summary	0	0	1	1
For guidance to comply with CA building and appliance energy efficiency standards	1	0	0	1
Good place for notes	1	0	0	1
Good quick reference information.	0	0	1	1
Good reference	0	0	1	1
Haven't used but will explore	0	0	1	1
Havent used.	1	0	0	1
Haven't used	0	0	1	1
Helpful as reference	0	0	1	1
Helpful reminders	0	0	1	1
Helpful to add to plans along with energy code documents for building department submittal. Shows parts of the energy code requirements that are "behind the scenes".	0	0	1	1
I can use it to make sure my clients are given information.	1	0	0	1
I forget.	0	0	1	1
I have not used NOTEBLOCKS.	0	0	1	1
I have not used noteblocks and have not heard of it??	1	0	0	1
I have not used this option.	0	0	1	1
I use them on every project	0	0	1	1
I've only used them a couple of times in the past and haven't done much since then. I thought they helped me to develop some of my own blocks that I've continued to customize.	0	0	1	1
Intuitive	0	0	1	1

It creates the noteblocks so I don't get planchecker comments.	0	0	1	1
It helps to miss important information	0	0	1	1
It provided short, summaries of complex title 24 requirements	1	0	0	1
Language to aid in compliance.	1	0	0	1
MANDATORY	1	0	0	1
Mandatory measures	0	0	1	1
N/A	3	0	2	5
N/A	0	0	1	1
NA	0	0	3	3
NO	0	0	1	1
NOT THAT FAMILIAR WITH NOTEBLOCKS.	1	0	0	1
Na	1	0	0	1
Never used	1	0	0	1
No comment	0	0	1	1
Not sure	1	0	0	1
Not sure I've actually used this	0	0	1	1
Not used	2	0	0	2
Not used them yet	0	0	1	1
Not used yet, I have to check into.	0	0	1	1
Not used yet.	1	0	0	1
Note sure	0	0	1	1
Noteblocks were most valuable because they allowed me to quickly capture and organize key insights, reminders, and action items in one place. Their flexibility made it easy to jot down thoughts during meetings or while reviewing materials, and having everything accessible in context helped improve follow-through and collaboration.	0	0	1	1
Noteblocks were valuable because they condensed complex code requirements into practical, accessible guidance that supported both learning and day-to-day compliance work.	0	0	1	1
Nothing	1	0	0	1
Occasionally used	0	0	1	1
Quality of information provided.	1	0	0	1
Quick resource for document set.	0	0	1	1
Residential energy compliance	0	0	1	1
SSR ENGINEERS.	0	0	1	1
Same	1	0	0	1
Same.	0	0	1	1
Saves some drafting busywork and is always up-to-date.	0	0	1	1
Saves time	0	0	1	1
Simple way to gather all documents about a specific topic and learn what I need to know for that topic.	0	0	1	1

Some	0	0	1	1
The ability to load into a pdf editor and then customize to fit a project without having to type from scratch.	0	0	1	1
The density of information available.	0	0	1	1
The drawings	1	0	0	1
The output is easy to insert into drawings	1	0	0	1
They were helpful at times	1	0	0	1
They're quick and to the point, perfect for reviewing code updates or reminders without digging through long guides	0	0	1	1
Title 24.	1	0	0	1
Unsure	1	0	0	1
Updated info	1	0	0	1
Using the noteblocks as a reference for creating noteblocks on our own plans to satisfy code requirements.	0	0	1	1
Very little used	0	0	1	1
Very valuable	0	0	1	1
We use them all the time.	0	0	1	1
YES	0	0	1	1
Yes	0	0	1	1
Yes, super useful. I simply paste them in the plans and they are very helpful to see if the design complies with relevant sections of the code,	1	0	0	1
a nice addition to the formwork.	1	0	0	1
a space to learn and document	0	0	1	1
ability to download	1	0	0	1
acceptable	0	0	1	1
all	1	0	0	1
copy and paste details for design documentation	0	0	1	1
customizing relevant notes and deleting DNA items	0	0	1	1
easy summary of requirements to just add to the drawings	1	0	0	1
easy to look up	1	0	0	1
explanations that are cogent to current operations	1	0	0	1
have not used	0	0	2	2
have not used it	0	0	1	1
have not used them	1	0	0	1
informative	0	0	1	1
mandatory measures	0	0	1	1
mandatory measures output	1	0	0	1
n/A	0	0	1	1
n/a	0	0	3	3
na	1	0	0	1
need to use them more to further enhance our deliverables to make	0	0	1	1

it easier on architects and builders				
none	0	0	2	2
not familiar	1	0	0	1
not sure	1	0	0	1
not sure for this one as well.	1	0	0	1
noteblocks are a great guide but i dont use them much	1	0	0	1
quick reference to specifics	0	0	1	1
ready made	0	0	1	1
resource	0	0	1	1
so I can get noteblocks for my drawings? duh	0	0	1	1
the easy access	1	0	0	1
this seems like a good tool, I will try to use it in the future, do not have experience with it.	0	0	1	1
yes	1	0	0	1
<b>Total</b>	<b>243</b>	<b>75</b>	<b>234</b>	<b>552</b>

### Tabulation of Q8a S1

How can fact sheets be improved to further increase their value to you?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
	172	75	181	428
----	1	0	0	1
.	1	0	0	1
A Powerpoint version would be great, so I can present these to staff.	1	0	0	1
ADMINISTRATIONS ROC TAIWAN, USAF ADMINISTRATION.	0	0	1	1
Ace providing an index and automatic link to the actual code language would be ideal	0	0	1	1
Advertise better so users know where to find them.	1	0	0	1
Continue with auto filling, required compliance based on project characteristics,	0	0	1	1
Continuous update of FAQs	1	0	0	1
Dedicated fact sheets for alterations.	1	0	0	1
Describe typical compliance pathways.	0	0	1	1
Don't know	1	0	0	1
Easing up on the left leaning ideals.	1	0	0	1
Easy to understand quick reference guides.	0	0	1	1
Education	1	0	0	1
Energycode ace website isn't	1	0	0	1

intuitive. I've been in the industry for nearly 20 years, worked on thousands of homes, have been a CEA since 2008 and have a bachelor's degree in computer information systems. The website like to give "cute" names that things. Until recently I was not able to find the standards on the website. A colleague told me to look at "reference ace". No where on the website does it define it's not so cute names.

Every thing can	1	0	0	1
Expand	1	0	0	1
Fine as they are.	0	0	1	1
Gear them more toward the electrical design	1	0	0	1
Get the word out about everything that is available through Energy Ace	0	0	1	1
Hard to digest sometimes.	0	0	1	1
Have not done enough California projects to reference this.	1	0	0	1
Helpful link to provide to applicant in the construction phase	1	0	0	1
How to deal with fully electric buildings	1	0	0	1
I don't remember them well, you'd need to do in-person study and show them to me first asking me this.	1	0	0	1
I don't	1	0	0	1
I like the way it is now	1	0	0	1
I think Energy Ace is a great resource that I do not use often as I depend on my Title 24 Consultants.	1	0	0	1
I would like to have access to someone who can assist with Q&A for additional questions not fully clear	1	0	0	1
I'm done.	0	0	1	1
I'm not sure.	0	0	1	1
Idk	0	0	1	1
Include more project details	1	0	0	1
Information	0	0	1	1
Integration with ai. Ask a question and have it pull together response including compliance	0	0	1	1
It condensed complex title 24 requirements Into clear and easy to understand summaries	1	0	0	1
It could be helpful to have an easier way to search for applicable fact sheets for designers. Maybe a	0	0	1	1

way to search for key terms that exist on available sheets.				
It would be helpful if the tools were more integrated so when I look up a code section in Reference Ace, I could instantly open the related form, checklist, or fact sheet. That kind of connectivity would make compliance much faster for small businesses managing multiple projects	0	0	1	1
KISS Keep It Simple Stupid for the general public	1	0	0	1
Keep the sheets updated with the current adopted code in use, and when searching for a form, the current code is the default returned unless the applicable code year is used as part of the search.	0	0	1	1
Keep them interesting and relevant	1	0	0	1
Keep up to date and accessible	0	0	1	1
List data sheets with more specificity	0	0	1	1
Make Title 24 go away	1	0	0	1
Make VCA better and mandatory for nonresidential projects. Require training and certification of VCA users before giving them access.	0	0	1	1
Make a lot more that apply to nonresidential projects. there are very few focused specifically on NR, and a ton focused on SF, LM, and or residential types.	0	0	1	1
Make it easier to navigate and find information relevant to my needs	1	0	0	1
Make them less complicated	1	0	0	1
Maybe be a little less condensed.	0	0	1	1
More broadly available	1	0	0	1
More facts	0	0	1	1
More links to code	0	0	1	1
N/A	2	0	1	3
N/A. I think they're valuable as-is.	1	0	0	1
Maybe be more comprehensive?				
Have a consolidated one and an expanded one.				
N/a	1	0	0	1
NA	1	0	1	2
Na	1	0	0	1
No comment.	1	0	0	1
No real value	0	0	1	1
Non-Res and multifamily forms work slowly, faster work desired	0	0	1	1
None	2	0	0	2

None I can think of	1	0	0	1
Not enough experience using these to offer feedback.	1	0	0	1
Not sure	0	0	1	1
Nothing at this time	0	0	1	1
Nothing to note	0	0	1	1
On overall code cycle benefits	1	0	0	1
Personally, I feel their layouts are very good and have vast amounts of useful information.	1	0	0	1
Product the FACTS. Go look for a 100 gal compliant water heater for a restaurant in CALIFORNIA, under \$10K. your whole energy code is BS and the people who run the energy commission are nothing more than BRIBED IGNORANT CLOWNS, with no background in energy. FUCKING SCAM for ignorant liberals to steal tax dollars.	1	0	0	1
Provide them for more cases.	1	0	0	1
The content is good, but all of this information misses the mark of motivating implementation.	0	0	1	1
The information can be presented in a more flowing manner.	0	0	1	1
They are just confusing. Code language is confusing and the Fact sheets just spit code out which doesn't make it any easier to figure anything out.	0	0	1	1
Title 24.	1	0	0	1
Try to cover more options than the standard ones.	0	0	1	1
Update and explain how net zero will be rolled out.	1	0	0	1
Where verifying compliance	0	0	1	1
Would like something about building envelope and T24	1	0	0	1
YES	0	0	1	1
Zero in on more specific topics	1	0	0	1
a lot of info here that doesn't apply to my work	0	0	1	1
better user interface, interactive website	1	0	0	1
easy to look up	1	0	0	1
good for sharing	1	0	0	1
greater awareness of what is available will be valuable	0	0	1	1
i'm only interested in residential...I see there are 30 online. I should look at these more.	1	0	0	1
make more interesting	0	0	1	1
maybe	0	0	1	1
more concise	2	0	0	2

more specific key terms	1	0	0	1
more videos that are not constrained and will permit broader topics	0	0	1	1
n/a	1	0	2	3
n/a	0	0	1	1
na	3	0	1	4
no changes, nice to know that they are there	0	0	1	1
no opinion	1	0	0	1
no suggestion	1	0	0	1
none	1	0	0	1
none	0	0	1	1
not familiar	1	0	0	1
not much	1	0	0	1
not sure	3	0	2	5
search function could use some help.	1	0	0	1
specific sheets that are geared towards an architect - outlining pluses and minuses and different design options	0	0	1	1
they are good.	1	0	0	1
they're pretty good	1	0	0	1
training webinars and presentations to explain the purpose	0	0	1	1
utilize ai	0	0	1	1
very effective	1	0	0	1
<b>Total</b>	<b>243</b>	<b>75</b>	<b>234</b>	<b>552</b>

#### Tabulation of Q8b S1

How can reference guides be improved to further increase their value to you?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
	165	75	165	405
no idea	0	0	1	1
----	1	0	0	1
.	2	0	2	4
?	1	0	0	1
A LOT of information. Difficult to navigate.	1	0	0	1
A more complete set of reference guides for multifam, single fam, and nonres	0	0	1	1
ACCURATE UP TO DATE INFORMATION, UNLIKE A YEAR AGO WHEN NOTHING WAS CORRECT.	1	0	0	1
AI	1	0	0	1
Always work toward simplicity	0	0	1	1
As lighting guy and acceptance	0	0	1	1

test technician I like to see more clear and practical literature and eideos				
Be easier to find for the certain use cases.	1	0	0	1
Better advertising/availability so users are more aware they exist and what they are for.	1	0	0	1
Cannot be improved	0	0	1	1
Detail pdf of addressing online t20 form will helps me more if possible	1	0	0	1
Ditto - try yo focus on real world issues that are often encountered	1	0	0	1
Easier to access referencing of sources.	0	0	1	1
Easy to find	0	0	1	1
Eliminate all California energy commission requirements	0	0	1	1
Expand the information and make it easier to cross over with other materials.	1	0	0	1
Gives me direction on where to look.	1	0	0	1
Good as is	0	0	1	1
Good information.	0	0	1	1
Great question. I think that training about the reference guides should be provided to the staff members in order that they know how to positively use these tools	1	0	0	1
Have a better user interface for guiding the people to the right locations.	1	0	0	1
Have not done enough California projects to reference this.	1	0	0	1
Haven't use these much	1	0	0	1
Having recorded training sessions is what i am searching forever. i wish we have some recorded training sessions available in the website. For all the scenarios.	1	0	0	1
Helped some in guidance	0	0	1	1
How to deal with fully electric buildings, especially for performance-based compliance	1	0	0	1
I am unable to cite a specific reference	1	0	0	1
I don't remember them well, you'd need to do in-person study and show them to me first asking me this.	1	0	0	1
I dont know	1	0	0	1
I don't know	1	0	0	1
I found everything somewhat confusing and hard to understand	1	0	0	1

I need to know what is available	0	0	1	1
I never find what I am looking for	0	0	1	1
I'm not sure.	0	0	1	1
Idk	0	0	1	1
I'd like to see the Reference	0	0	1	1
Guides more connected to other tools like Forms Ace and Reference Ace, so you can jump directly from an explanation to the related compliance form or code section				
KCH CONSULTING ENGINEERS, MATH TUTOR UND, ND	0	0	1	1
KISS Keep It Simple Stupid for the general public	1	0	0	1
Make easier to find. There is no category for this on the Energy Code Ace website.	0	0	1	1
Make it easier to navigate and find information relevant to my needs	1	0	0	1
Make them easier to find on the webpage.	1	0	0	1
Make them less complicated	1	0	0	1
More complete	1	0	0	1
More easily searchable and navigation. Going back is a bit difficult.	1	0	0	1
More info	1	0	0	1
More links to code	0	0	1	1
More nonresidential, most of the docs focus on residential.	0	0	1	1
More streamlines appendices	0	0	1	1
N/A	2	0	1	3
NA	1	0	2	3
NO COMMENT	1	0	0	1
Na	1	0	0	1
Need better clarity and user friendly	1	0	0	1
Need more picture of the new equipment and summary installation requirements.	1	0	0	1
No Comment	0	0	1	1
No comment	0	0	1	1
No comment.	1	0	0	1
No opinions yet	0	0	1	1
No suggested improvement.	0	0	1	1
None	1	0	0	1
None I can think of	1	0	0	1
Not sure	2	0	2	4
Not sure.	1	0	1	2
Nothing at this time	0	0	1	1
Nothing to note	0	0	1	1
Only affect the few who are interested in following up.	0	0	1	1
Personally, I feel their layouts are very good and have vast amounts	1	0	0	1

of useful information.				
Provide a deeper synopsis of the reference	1	0	0	1
Provide them for current code cycle	1	0	0	1
Same thing ai directed would give solutions and references applied.	0	0	1	1
Simplify	1	0	0	1
Some kind of project questionnaire that acts as a trigger sheet. I find E+A+A projects have a lot of moving parts in regards to what is triggering code requirements.	0	0	1	1
Stay current with all the ongoing revisions.	0	0	1	1
These are fine as they are.	0	0	1	1
They need to be organized better and easier to find. When things are out of date, they need to be removed because searching alot of time bring up out of date things.	0	0	1	1
Title 24.	1	0	0	1
Too many words, not enough visual aids.	1	0	0	1
Too much information	0	0	1	1
Training on how to navigate website	0	0	1	1
Unknown	2	0	0	2
Update and explain how net zero will be rolled out.	1	0	0	1
YES	0	0	1	1
—	0	0	1	1
a	0	0	1	1
a lot of info here that doesn't apply to my work	1	0	0	1
ditto	0	0	1	1
do you mean reference Ace?	1	0	0	1
question not clear				
don't know	1	0	0	1
easier to find	1	0	0	1
easy to look up	1	0	0	1
greater awareness and understanding of what is available.	0	0	1	1
The fact that I am responding on Saturday tells you about my schedule				
hot links	0	0	1	1
i dont use these	0	0	1	1
it's good as it is.	1	0	0	1
it's to slow, if you have a building with multiple floors and lots of individual spaces, the system boogs down. you should be able to do each floor separately, then merge them at the end.	0	0	1	1
make more interesting	0	0	1	1

maybe	0	0	1	1
maybe a basic FLOW DIAGRAM/DECISION MATRIX	1	0	0	1
more detail information	1	0	0	1
n/a	0	0	5	5
n/a	0	0	1	1
na	2	0	3	5
no comments	1	0	0	1
no ideas	1	0	0	1
no opinion	1	0	0	1
no specific response.	0	0	1	1
no suggestions	1	0	0	1
none	1	0	0	1
not interested	0	0	1	1
not sure	3	0	2	5
nothing	1	0	0	1
opening the reference link in a separate tab so that it's easy to compare to the base code section	1	0	0	1
organized by code year	1	0	0	1
provide sample	1	0	0	1
seem to be fine	1	0	0	1
speed up forms processing	0	0	1	1
utility ai	0	0	1	1
very few	0	0	1	1
very little experience with using resources to offer comments on improvement	1	0	0	1
what's difference between reference guide and reference ace	1	0	0	1
<b>Total</b>	<b>243</b>	<b>75</b>	<b>234</b>	<b>552</b>

#### Tabulation of Q8c S1

How can checklists be improved to further increase their value to you?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
	162	75	155	392
Pand	1	0	0	1
---	1	0	0	1
.	3	0	4	7
?	1	0	0	1
ACCURACY AND EASY TO FIND, unlike everything the energy commission does.COMMON SENSE IS THE THING THAT IS ALWAYS LEFT OUT BY LIBERAL BULLSHIT!! GIVE YOU BIDEN, HARRIS AND OBAMA, AND CALIFORNIA AS EXAMPLES. Know nothing	1	0	0	1

clowns!				
AI	1	0	0	1
Automate	1	0	0	1
Checklists tend to over-simplify things, complex NR systems are rarely that simple. I know it's hard but it's important for exceptions to be noted.	0	0	1	1
Clear	1	0	0	1
Condensing the forms and lists would be helpful.	0	0	1	1
Doesn't work for me plan checking	0	0	1	1
Don't know / no opinion	1	0	0	1
Good, but necessarily complicated.	1	0	0	1
HELPFUL TO DIRECT CUSTOMERS TO FOR QUICK CHECK.	1	0	0	1
Have more options or platforms to learn and choose from	1	0	0	1
Have not used in my role.	0	0	1	1
I do not know.	0	0	1	1
I don't remember them well, you'd need to do in-person study and show them to me first asking me this.	1	0	0	1
I don't use the checklist much. I'm not sure how to improve them.	0	0	1	1
I dont know	1	0	0	1
I have not used this. Now that I am aware of this, I will start using it.	0	0	1	1
I like it for now	1	0	0	1
I think they are pretty effective as they are, so no suggestion.	0	0	1	1
Idk	0	0	1	1
Improve but very useful as is	1	0	0	1
Instructions could be a little easier to understand.	0	0	1	1
It's good enough	1	0	0	1
I'm not sure	0	0	1	1
Keep current	0	0	1	1
Keep updating them for each code cycle.	0	0	1	1
Make forms easier to get to via internet. Difficult unless one is familiar with the website. Hard to send other to get the forms and information without having to help them navigate the website.	0	0	1	1
Make sure that they are complete and have code reference.	1	0	0	1
Make them easier to use and enforce	0	0	1	1
Make them more easily accessible	1	0	0	1
Make them more easily found	1	0	0	1
Make these compatible with other	1	0	0	1

PDF readers				
Making them easy to find with a link.	1	0	0	1
Maybe a more interactive online version to walkthrough different reviews	1	0	0	1
Might they vary based on project type?	0	0	1	1
More available help.	1	0	0	1
More of them, for more roles and types of permits.	0	0	1	1
More on line classes , video, more download able materials	0	0	1	1
Most of the training was based off of cbecc. How to run the software. No real explanation on what was the correct of best ways to specify things. The goal seemed to be just to achieve compliance but no real way of knowing whats practical and works best in real world	0	0	1	1
N/A	3	0	1	4
N/A Haven't used them	0	0	1	1
N/a	2	0	0	2
NA	3	0	5	8
Na	1	0	0	1
No comment	1	0	0	1
No comment at this time.	0	0	1	1
No comment.	1	0	0	1
No improvements I can think of.	1	0	0	1
No so much	0	0	1	1
No suggested improvement.	0	0	1	1
None	1	0	0	1
None I can think of	1	0	0	1
None of these have been useful .	0	0	1	1
Not frequently used	0	0	1	1
Not much of a value to me to be honest but it can help to determine if everything needed is included	1	0	0	1
Not much; they're most useful in training and when developing our own checklists.	0	0	1	1
Not sure	2	0	4	6
Not sure.	0	0	2	2
Not using	1	0	0	1
Not very familiar with as I don't use it much	0	0	1	1
Nothing specific comes to mind.	0	0	1	1
Nothing to add	1	0	0	1
Nothing to note	0	0	1	1
Notify if checklists should be performed by a specific party, sometimes contractors are unclear that they are responsible for filling out information.	1	0	0	1

Perhaps slightly larger font	1	0	0	1
Same	0	0	1	1
Separate checklists for alterations	1	0	0	1
Shorter	1	0	0	1
TAIWAN POWER	0	0	1	1
HEADQUARTERS BUILDING				
The checklists are great, but a mobile-friendly version with clearer visual cues and quick links to supporting guidance (like Fact Sheets or Reference Guides) would make them more effective for on-site use	0	0	1	1
The checklists are nice and complete, they just have an impact of office people not generally field personnel. This has been the problem from this programs inception.	0	0	1	1
The website is clunky and not user friendly. Where do I start? I don't like the author, designer, etc. section for the emails. My boss never has time to review the T24 online. The forms themselves are terrible. I cannot read them at all. Make better T24 forms that we can understand.	0	0	1	1
These are pretty straightforward	0	0	1	1
They are good as is	1	0	0	1
They need to be organized better and easier to find. When things are out of date, they need to be removed because searching alot of time bring up out of date things. They need to be catergories better too.	0	0	1	1
Title 24.	1	0	0	1
Update and explain how net zero will be rolled out.	1	0	0	1
Update software that is works on all platforms.	1	0	0	1
YES	0	0	1	1
—	0	0	1	1
a	0	0	1	1
adequate	1	0	0	1
cannot be improved	0	0	1	1
continue to keep everything up to date and further condense most complex code changes to ensure simple, streamlined function and purpose to highlight required code compliance items for retrofit work (based on my specific role at current company).	0	0	1	1
ditto specific for architects	0	0	1	1
don't know	1	0	0	1

easy to look up	1	0	0	1
encompassing list	1	0	0	1
forms are still very difficult to use.	0	0	1	1
want to understand more how to fill out different forms				
good	0	0	1	1
greater awareness and understanding	0	0	1	1
integrate EV charging into Calgreen resources so there is one document	0	0	1	1
laying them out as plan set sheets, making them dynamic - but mostly, just keeping them updated and easily accessible	0	0	1	1
make it more popular	1	0	0	1
make more interesting	0	0	1	1
maybe	0	0	1	1
maybe more real world examples	1	0	0	1
more accessible and available	1	0	0	1
more details on INDUSTRIAL type construction	1	0	0	1
more focused around design	0	0	1	1
n/a	3	0	3	6
n/a	0	0	1	1
na	4	0	0	4
no comment	1	0	0	1
no opinion	1	0	0	1
none	1	0	0	1
not sure	3	0	1	4
not sure, these are great as they are	0	0	1	1
nothing	1	0	0	1
nothing.	1	0	0	1
omit	0	0	1	1
pdf opener does not work on Revu	0	0	1	1
refer to specific code sections in checklists	1	0	0	1
remove them	0	0	1	1
see previous comment	1	0	0	1
simply to things that might affect cost of construction	1	0	0	1
they are OK	1	0	0	1
training webinars on using checklists	0	0	1	1
unsure	0	0	1	1
updates sent via email	0	0	1	1
very few	0	0	1	1
where are they? who are they for? are they current? what tests are they associated with.	1	0	0	1
Total	243	75	234	552

### Tabulation of Q8d S1

How can trigger sheets be improved to further increase their value to you?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
	183	75	165	423
higher visibility or linkage	0	0	1	1
----	1	0	0	1
.	2	0	1	3
?	0	0	1	1
Always work toward simplicity	0	0	1	1
Create more of them, covering specific situations. For the 2022 code, there appears to be only one trigger sheet.	0	0	1	1
Don't know / no opinion	1	0	0	1
Don't know if they can	0	0	1	1
FULLER THEOLOGICAL SEMINERY	0	0	1	1
Fine as they are	0	0	1	1
Have linkage to specify the compliance codes and standards.	1	0	0	1
Have more of them if possible for more circumstances.	1	0	0	1
Have not used in my role.	0	0	1	1
Have you sinarios which helped a little	0	0	1	1
I am not sure at this time	1	0	0	1
I do not know.	0	0	1	1
I dont know	1	0	0	1
I dont trust the information contained within them.	0	0	1	1
I don't know.	1	0	0	1
I haven't used this yet.	0	0	1	1
I haven't used these	0	0	1	1
I'm not familiar with thes sheets enough. I will look to use these more for a resoucre in the future.	0	0	1	1
If possible, a one page version to make it more like a flash card.	1	0	0	1
KISS Keep It Simple Stupid for the general public	1	0	0	1
Keep current	0	0	1	1
Keep them interesting and relevant.	1	0	0	1
MAYBE A "TIPS PAGE" ON HOW TO QUICKLY LOOK-UP WHAT YOU NEED (?)	1	0	0	1
Make it easier to understand. The charts are good but I is still dense.	0	0	1	1
Make more clear	0	0	1	1
Make the notes numbers/reference IDs (like the	0	0	1	1

little "A" or "1" superscripts) actually refer to a note on the same document. I've come across at least 2 NR docs where there's a note indicated but no actual note.				
Make them more available, easier to find.	0	0	1	1
More details on the relevant triggers	1	0	0	1
More sheets on more topics	0	0	1	1
N/A	2	0	2	4
N/A, not really used	0	0	1	1
NA	1	0	6	7
Na	0	0	1	1
No comment	0	0	1	1
No comment.	1	0	0	1
No opinion	1	0	0	1
No suggestions.	1	0	0	1
No use that much	1	0	0	1
None	1	0	0	1
None I can think of	1	0	0	1
Not aure	0	0	1	1
Not familiar enough to provide feedback.	1	0	0	1
Not sure	3	0	3	6
Not sure.	1	0	0	1
Not sure. Don't use these much.	0	0	1	1
Not used	1	0	0	1
Not used yet.	1	0	0	1
Not utilized much	0	0	1	1
Nothing at this time	0	0	1	1
Nothing to add	1	0	0	1
Offer more	1	0	0	1
Pewrhaps slightly larger font	1	0	0	1
Provide more case studies.	1	0	0	1
Same	0	0	1	1
Simplify	1	0	0	1
The Trigger Sheets are helpful, but they could be improved by including more detailed examples for existing building alterations and retrofit scenarios. Clarifying exactly when specific lighting or control requirements are triggered in partial-scope projects would make them even more useful				
The trigger sheets could be improved by allowing more project-specific customization. Including examples or checklists tailored to different building types or project phases would make them even more relevant to day- to-day design decisions.	0	0	1	1
These are usedul	0	0	1	1
They breakdown the codes into actual specific executions and	0	0	1	1

methods.				
They're fine.	0	0	1	1
Title 24.	1	0	0	1
Training on application	0	0	1	1
UPdate to current code.	1	0	0	1
Unknown	1	0	0	1
Update and explain how net zero will be rolled out.	1	0	0	1
Update for new code cycle	1	0	0	1
YES	0	0	1	1
—	0	0	1	1
a	0	0	1	1
cannot be improved	0	0	1	1
detail trigger situations	1	0	0	1
did not use them in the past	0	0	1	1
easier to read	1	0	0	1
easy to look up	1	0	0	1
few	0	0	1	1
good for sharing	1	0	0	1
greater awareness and understanding	0	0	1	1
havent used	1	0	0	1
include them in the pull down menu, a link on the home page,	0	0	1	1
keep information up to date, & inform about upcoming events	0	0	1	1
keep them simple	1	0	0	1
make more interesting	0	0	1	1
maybe	0	0	1	1
maybe provide them within the forms	1	0	0	1
more real world examples	1	0	0	1
n/a	1	0	2	3
na	2	0	0	2
no comments	1	0	0	1
no improvement needed for these.	0	0	1	1
no need	1	0	0	1
no suggestion	0	0	1	1
nor sure	0	0	1	1
not familiar with Trigger Sheets	1	0	0	1
not sure	1	0	2	3
nothing	1	0	0	1
provide examples	1	0	0	1
provide some information on how to solve the issues you get...	0	0	1	1
same	1	0	0	1
same as previous	0	0	1	1
same. who are they for?	1	0	0	1
training webinars	0	0	1	1
trigger sheets for other alterations such as envelope	1	0	0	1
unsure	0	0	1	1
utility ai	0	0	1	1
Total	243	75	234	552

**Tabulation of Q8e S1**

How can training videos be improved to further increase their value to you?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
	176	75	151	402
higher visibility	0	0	1	1
-	0	0	1	1
----	1	0	0	1
.	2	0	1	3
AI	1	0	0	1
Again it didn't really go into depth	0	0	1	1
Again, videos can be used for training and then discussion after the videos by the entire team and how those things found in the videos correlate with the job at hand	1	0	0	1
Already very good and valuable.	1	0	0	1
Better editing	1	0	0	1
Brief under 5-minutes for quick to-the-point training is good. Otherwise, it can drag-on...	0	0	1	1
CABLE TRAY & OVERWEIGHT CRASH	0	0	1	1
Can't think of anything.	0	0	1	1
Cover additional topics	1	0	0	1
Create more of them.	0	0	1	1
Don't know	1	0	0	1
Don't know / no opinion	1	0	0	1
Easier access through direction on the website. When I go to the home page I don't see a link to training videos as an example	1	0	0	1
Email	0	0	1	1
For building department staff in verifying compliance, like the videos on the PSR	0	0	1	1
Frankly, the entire code enforcement concept needs to be re-thought from the ground up. Everyone hates it.	0	0	1	1
Good as is	1	0	0	1
Good quality, very instructional. Again they are designed for the others singing in the same choir.	0	0	1	1
Great for changes or understanding	0	0	1	1
Hard to improve on..excellent instructors and production quality	1	0	0	1
Have not used but will investigate	1	0	0	1
Havent done it	1	0	0	1
Honestly providing more training videos.	1	0	0	1

I did not know there were training videos	0	0	1	1
I did not like the virtual course.	0	0	1	1
The presentation was boring				
I do not have time for the complexity	1	0	0	1
I dont know	1	0	0	1
I have not used the training videos	0	0	1	1
I have not used the training videos. But I will start.	1	0	0	1
I have not used this in the past. I will consider using this resource in the future.	0	0	1	1
I hope someone is paying you well to read all this nonsense	1	0	0	1
I liked the couple videos I watched. They were not too technical and easy to follow.	1	0	0	1
I seldom use Energy ACE, only if the project requires it. I have not tried the Virtual Compliance Assistant but it looks like its an improvement from before.	1	0	0	1
I simply prefer "print" resources, or things that I can read as a still reference or diagram rather than the format of videos (in general, not just with Energy Code Ace). I use videos when I am looking for additional context or how-to's. I find that with training videos, I am often pausing and going back in time to make sure I've followed along correctly. Alternately, I find myself trying to skip to the part that is most relevant to me.	1	0	0	1
I think they are already beneficial, no real changes needed.	0	0	1	1
I wish they would save and post webinars like they used to. That would be my one complaint because sometimes they are at times when I can't attend because I still need to work to make money!	0	0	1	1
I'm not sure.	0	0	1	1
If licensing CEUs were provided	0	0	1	1
It already helps me to find information relevant to my needs	1	0	0	1
It is better they are on demand	1	0	0	1
Iâ€™d like to see more videos geared toward small contractors and consultants doing lighting retrofits. Showing how to apply Title 24 requirements from design through inspection would make the content more practical and	0	0	1	1

directly relevant to our day-to-day work				
Keep them brief and to the point	0	0	1	1
Make more of the training available in on-demand form. Far too much of your content is limited to live presentations, usually scheduled at times when most working people cannot attend.	0	0	1	1
Make people more aware of them	1	0	0	1
Make them easier to find!	1	0	0	1
Make them interesting	1	0	0	1
Maybe make them a little condensed, but they are pretty good as is.	0	0	1	1
More direct and to the point.	1	0	0	1
More videos	0	0	2	2
More videos available. There are a lot of live events offered. Having more of the live events recorded would be helpful.	0	0	1	1
More!	1	0	1	2
N/A	2	0	4	6
NA	2	0	1	3
New ones	0	0	1	1
No Comments	1	0	0	1
No Opinions	0	0	1	1
No comment	1	0	0	1
No comment.	2	0	0	2
No need for them	0	0	1	1
None	1	0	0	1
None I can think of	1	0	0	1
Not applicable. I don't watch videos for information. Too hard to reference later on.	1	0	0	1
Not sure	1	0	1	2
Not sure.	0	0	2	2
Not used	1	0	0	1
Not used.	0	0	1	1
Not utilized much	0	0	1	1
Nothing at this time	0	0	1	1
Nothing to note	0	0	1	1
Offer intro guides to BEM for compliance (maybe this already exists)	0	0	1	1
Referring to online course- Specific course was a bit slow and could have been more focused.	0	0	1	1
Relevant topics	1	0	0	1
Shorter in length	0	0	1	1
The training need to be in small chunks, and something that is used daily.	0	0	1	1
The training videos could be improved by including more project-specific examples that	0	0	1	1

demonstrate how energy strategies are applied across different building types. Deeper dives into design decision-making would make them even more useful for architects.				
They are good as is, just need to stay up to date with each code cycle	0	0	1	1
They seem to be pretty good as is but as new information becomes available so should revisions and update on the videos as well.	1	0	0	1
This is too long....	0	0	1	1
Title 24.	1	0	0	1
To further increase their value, training videos could include interactive elements such as quizzes or knowledge checks to reinforce learning. Shorter, topic-specific segments would also make it easier to revisit specific content when needed.	0	0	1	1
Additionally, offering transcripts or downloadable summaries would help accommodate different learning styles and improve accessibility.				
Too long, focus on specific oft-encountered issues from real-world interventions with stakeholders. Use "take them into the field" onsite video to emphasize	1	0	0	1
Update and explain how net zero will be rolled out.	1	0	0	1
Update to current code cycle adoption.	0	0	1	1
Videos with more detail on filling out T24 calcs	1	0	0	1
We do not have time to watch and comprehend all the information provided in the videos. The Energy codes have become waaaaay to complex.	0	0	1	1
When code or standards are revised, have the educate videos to inform the users.	1	0	0	1
YES	0	0	1	1
-	0	0	1	1
a	0	0	1	1
acceptable	0	0	1	1
adding subtitles.	0	0	1	1
almost none	0	0	1	1
cover common issues	1	0	0	1
develop videos on common pitfalls, common mistakes, most	1	0	0	1

common questions that Energy Code Ace encounters				
don't know	1	0	2	3
easy to look up	1	0	0	1
hard to find the right resource	0	0	1	1
i am a home owner/self installer	1	0	0	1
info	1	0	0	1
keeping ups with updates	0	0	1	1
make it available online with clear topics	1	0	0	1
make more interesting	0	0	1	1
maybe	0	0	1	1
more new videos for 2026	0	0	1	1
more of them	0	0	1	1
n/a	0	0	3	3
na	2	0	1	3
need to do out reach to all energy consultants - make sure anyone who's doing T24 knows about it.	0	0	1	1
no improvements needed.	1	0	0	1
no suggestion	0	0	1	1
not aware of them. Need education	1	0	0	1
not sure	2	0	2	4
provide solutions to some of the issues you can come upon...	0	0	1	1
seems to the point	1	0	0	1
something simple for architects	0	0	1	1
they are good, just not used very often	0	0	1	1
they are helpful. compact and to the point.	0	0	1	1
they're fine	1	0	0	1
unsure	0	0	1	1
utilize ai	0	0	1	1
very informative	0	0	1	1
walk through a variety of unusual projects. that is where it gets tricky	1	0	0	1
yes	1	0	0	1
<b>Total</b>	<b>243</b>	<b>75</b>	<b>234</b>	<b>552</b>

#### Tabulation of Q8f S1

How can case studies be improved to further increase their value to you?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
	167	75	141	383
----	1	0	0	1
.	3	0	5	8
..	0	0	1	1
?	0	0	1	1
A diverse pool of Systems and	1	0	0	1

applications, perhaps a quarterly newsletter.				
A variety of project types and scales would be helpful.	0	0	1	1
AI	1	0	0	1
Be more representative and wholistic about their approach. A lot of case studies focus on lifetime costs assuming a 30-year equipment life, we all know that is 10-15 years longer than most equipment lasts. Also for NR projects there's little taken into account for how often tenant changes trigger renovations before the end of life. We can't force a new tenant to keep a system that doesn't work for their needs just because the previous tenant installed it. There's also not enough cost factored for controls in NR buildings. Case studies don't accurately represent how expensive it is to install and for the customer to maintain the advanced controls often required. Not just parts and running wire, but the thousands of hours needed for programming and troubleshooting.	0	0	1	1
Be sure to include the overall actual cost savings achieved not just projections.	1	0	0	1
Create summary handout for each climate zone that can be use by city	0	0	1	1
Detail information and data	0	0	1	1
Don't know	1	0	0	1
Don't know / no opinion	1	0	0	1
Don't know anything about them	0	0	1	1
During training	0	0	1	1
Email	0	0	1	1
Few times, only to understand the process.	0	0	1	1
Give more information geared toward the electrical design process	1	0	0	1
Good, but make sure these are ubiquitous issues, and focus on those that are	1	0	0	1
Have more of them.	0	0	1	1
Haven't used will investigate	1	0	0	1
Highlight the solutions to the challenges	0	0	1	1
Honestly, Energy Code Ace is really great so I don't have a recommendation.	0	0	1	1

I Dont Trust the reports from the case studies that have been prepared by both the CEC and PUC. They are heavily weighted to support the current ideology on global warming and CO2 emissions. Therefore I dont use or reference.	0	0	1	1
I actually didn't know about these and cannot find them on the website.	1	0	0	1
I did not find them	0	0	1	1
I don't even bother looking at these anymore. I don't feel they are motivational and instructive, field people, the ones doing the installations are not interested in these at all, only the interns and folks sitting behind desks find them interesting.	0	0	1	1
I don't find to much value here	1	0	0	1
I don't have any specific thoughts at the moment.	0	0	1	1
I dont know	1	0	0	1
I don't know	1	0	0	1
I have not reviewed any case studies.	0	0	1	1
I have not used this in the past. I will look to using this resource in the future.	0	0	1	1
I haven't used these	0	0	1	1
I think the way to search for relevant case studies could be improved. Maybe a way to search for key terms that exist on available studies.	0	0	1	1
I think they are pretty effective as they are, so no suggestion.	0	0	1	1
Include more case studies for comparison.	1	0	0	1
It helps to compare it with projects that I'm doing, like a measuring stick.	1	0	0	1
I've never seen them.	1	0	0	1
KISS Keep It Simple Stupid for the general public	1	0	0	1
Keep providing case studies for current code	1	0	0	1
Label what part of the world these take place to see if climate zone affects the story	0	0	1	1
Looking forward to this	1	0	0	1
Make it easier to navigate and find information relevant to my needs	1	0	0	1
Make people more aware of them	1	0	0	1
Make them more visible	0	0	1	1
More and different situations to	0	0	1	1

fit actual real life problems				
More case studies for different types of projects	1	0	0	1
More examples	2	0	0	2
More of them	0	0	2	2
More on underused feature.	1	0	0	1
Perhaps Air sealing or Heat Recovery Ventilation				
Multiple case studies	0	0	1	1
N/A	2	0	2	4
N/A	0	0	1	1
NA	1	0	4	5
NO COMMENT	1	0	0	1
Need to read into some more to determine	0	0	1	1
Never used	1	0	0	1
New case studies on leading uses and systems.	0	0	1	1
No Idea	1	0	0	1
No comment	0	0	1	1
No comment.	2	0	0	2
None	1	0	0	1
Not applicable for contractors	0	0	1	1
Not applicable typically to practice. Show cases by example.	0	0	1	1
Experienced professionals are beyond this				
Not familiar	1	0	0	1
Not familiar too much	0	0	1	1
Not really; I think case studies are fundamentally more useful to people who have never done something before than to someone who has. They absolutely have their place and they should not be dropped, but the Energy Code isn't /that/ complicated so after a few case studies I am off and running.				
Not sure	1	0	0	1
Not sure.	1	0	0	1
Not used	1	0	1	2
Not used much by my office.	1	0	0	1
Not used.	0	0	1	1
Not utilized much	0	0	1	1
Not very familiar with as I don't use it much	0	0	1	1
Nothing	1	0	0	1
Nothing at this time	0	0	2	2
Nothing to note	0	0	1	1
Provide a list of the main points from the study.	1	0	0	1
Relatability	0	0	1	1
Relevance	1	0	0	1
Relevancy	0	0	1	1
Summary sheet of findings	0	0	1	1
THE VERY FIRST POWER	0	0	1	1

PLAN PROJECT MANAGER				
The case studies could be improved by including more examples of real retrofit projects, especially showing how Title 24 requirements were met step by step	0	0	1	1
The more case studies shown, the better understanding of the codes and standards.	1	0	0	1
There is not much value if the case study is not entirely like the project I'm working on.	1	0	0	1
These are already working well in their current format; they just need to be regularly updated for new projects and new code requirements.	0	0	1	1
They already have a value to me not sure if there is any improvement needed	1	0	0	1
They are fine the way I see it	1	0	0	1
They never seem to match the project I'm looking at.	0	0	1	1
Title 24.	1	0	0	1
To further increase their value, case studies could include more diverse scenarios and outcomes, including lessons learned from challenges or failures not just successes. Adding visual elements like infographics or short video summaries would make them more engaging. It would also be helpful to include clear takeaways or best practices that can be directly applied to similar projects.	0	0	1	1
Too many words. Not enough visual aids.	1	0	0	1
Update and explain how net zero will be rolled out.	1	0	0	1
Use real life cases	0	0	1	1
Would be good to see errors or problem cases.	0	0	1	1
YES	0	0	1	1
–	0	0	1	1
acceptable	0	0	1	1
almost none	0	0	1	1
don't know	1	0	0	1
easy to look up	1	0	0	1
education	1	0	0	1
good examples	1	0	0	1
have not used	0	0	1	1
haven't thought about it	0	0	1	1
i need to look more into these before I comment	0	0	1	1
include design parameters	0	0	1	1

just continue expanding the types of case studies - mixing existing/new construction	1	0	0	1
less wordy	1	0	0	1
make more interesting	0	0	1	1
maybe	0	0	1	1
more corner cases	1	0	0	1
more wide areas to cover	1	0	0	1
n/a	2	0	3	5
na	3	0	0	3
no suggestion	0	0	1	1
none	1	0	0	1
not interested	0	0	1	1
not much	1	0	0	1
not so much	0	0	1	1
not sure	5	0	3	8
provide an email summary of case studies so that I can identify relevant case studies	0	0	1	1
provide different scenarios/circumstances of projects that you can compare	0	0	1	1
real life examples for clients	0	0	1	1
real world examples are hard to match to my projects	0	0	1	1
same answer	1	0	0	1
show better detail of case Studies.	0	0	1	1
Project parameters and shown required results.				
there probably fine.	0	0	1	1
they are pretty good already...	0	0	1	1
theyre good	1	0	0	1
unsure	0	0	1	1
use industry terms for dummies, simplify reporting with charts/ graphs etc.	1	0	0	1
videos	0	0	1	1
x	0	0	1	1
yes	1	0	0	1
<b>Total</b>	<b>243</b>	<b>75</b>	<b>234</b>	<b>552</b>

### Tabulation of Q8g S1

How can Reference Ace be improved to further increase its value to you?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
	173	75	156	404
higher visibility	0	0	1	1
----	1	0	0	1
.	2	0	2	4
?	1	0	0	1
?	0	0	1	1
A preview of how things will	1	0	0	1

appear on the actual form or what sections correspond to where would be helpful.				
Add updates.	1	0	0	1
Availability	1	0	0	1
Better served by ai	0	0	1	1
Better to have intelligible and understandable codes in the first place.	0	0	1	1
Change the building code to be less vague i.e. ducts in directly conditioned space as apposed to ducts in conditioned space. If the code was more concise, I wouldn't have to spend three days trying to clarify a simple discrepancy with the Reference Ace	0	0	1	1
Continue to develop	0	0	1	1
Display , make it less cluttered	1	0	0	1
Do not know	1	0	0	1
Don't know anything about this	0	0	1	1
Eliminate ridiculous energy code requirements	1	0	0	1
Email	0	0	1	1
Expand	1	0	0	1
Expansive glossary	0	0	1	1
Good	1	0	0	1
Good as is	0	0	2	2
Great resource	1	0	0	1
Honestly, I think this is a good resource already.	1	0	0	1
I do not have comments for this at this time.	0	0	1	1
I don't remember them well, you'd need to do in-person study and show them to me first asking me this.	1	0	0	1
I dont know	1	0	0	1
I don't know	1	0	0	1
I feel the ease of use and searching ability is great as is.	1	0	0	1
I like it	0	0	1	1
I like the Reference Ace, but I've been using UpCodes more often than Energy Code Ace. It is much faster.	1	0	0	1
I think it is pretty effective as they are, so no suggestion.	0	0	1	1
IDK.	0	0	1	1
Idk	0	0	1	1
Improve navigation & user interface for less-expert users	1	0	0	1
It doesn't get me to what I am looking for - everything looks like a cartoon character	0	0	1	1
KISS Keep It Simple Stupid for the general public	1	0	0	1

Keep updated	0	0	1	1
Make easier to search for topics	1	0	0	1
Make it easier to find the proper material in a search.	1	0	0	1
Make it easier to navigate and find information relevant to my needs	1	0	0	1
Make less complicated	1	0	0	1
May need updated design	0	0	1	1
More alternate product selection	1	0	0	1
More awareness	0	0	1	1
More information	1	0	0	1
N/A	2	0	2	4
NA	1	0	3	4
Nice product, I don't see it them in the field.	0	0	1	1
No Opinions	0	0	1	1
No changes	1	0	0	1
No comment	1	0	2	3
No specific suggestions.	0	0	1	1
No suggestions	0	0	1	1
No suggestions at this time the tool looks good.	0	0	1	1
None	1	0	0	1
Nonsense. Best to go by the code	0	0	1	1
Not sure	0	0	2	2
Not sure.	1	0	2	3
Not very familiar with as I don't use it much	0	0	1	1
Nothing to add	1	0	0	1
Provide illustration details	0	0	1	1
Reference Ace could be improved by integrating direct links to related Fact Sheets, Forms Ace, and Checklists. That way, once a code section is found, users can immediately access supporting materials and compliance documentation without switching tools	0	0	1	1
Searchable feature.	1	0	0	1
Simple Links to specific reference, not general marketing site.	1	0	0	1
Simplify	1	0	0	1
Stop making 10,000 different "Aces," Forms ace, ref ace, ref guides, trigger sheets, fact sheets, compliance ace, etc. Split Non residential and residential better and support NR more.	0	0	1	1
THE KING OF SPAIN DEMAND TWICE OF THE EQUIPMENTWHICH EQUALS TO FOUR SETS OF SYSTEM MATERIALS TO BE USER.	0	0	1	1
They are good	1	0	0	1
They are good as is, just need to	0	0	1	1

stay up to date with each code cycle				
They are good now	0	0	1	1
They need to be organized better and easier to find. When things are out of date, they need to be removed because searching alot of time bring up out of date things.	0	0	1	1
This is awesome. Why is 2025 still in beta?	1	0	0	1
This was the worst offender and ABSOLUTELY WORTHLESS. GET RID OF ENERGY ACE. Title 24.	1	0	0	1
To further improve Reference Ace, adding advanced search filters and tagging options would make it even easier to locate specific resources quickly. A personalized dashboard or bookmarking feature could help users save frequently used materials. Additionally, integrating user feedback or ratings for each resource could highlight the most helpful content and guide future improvements.	0	0	1	1
Too many words, not enough visual aids.	1	0	0	1
Unsure, sorry. It's good because it can get you to the right information quickly, sometimes you get unlucky though	1	0	0	1
Update and explain how net zero will be rolled out.	1	0	0	1
Useability	1	0	0	1
Used infrequently, it functions as needed when I do access it	0	0	1	1
YES	0	0	1	1
Yes, Simplify the requirements for housing and one and two story buildings	0	0	1	1
–	0	0	1	1
a	0	0	1	1
acceptable	0	0	1	1
again, training should be provided pm all of the Energy Code Ace resources so they can be utilized properly and correctly. Also, energy codes are probably the most difficult to understand. Anything that would simplify these tools would help for better enforcement	1	0	0	1
cannot be improved	0	0	1	1
clearer directions from the home screen to go to reference Ace, I	1	0	0	1

don't clearly see it when I log into the home screen				
currently sufficient	1	0	0	1
easy to look up	1	0	0	1
explain what reference ace is!	1	0	0	1
Maybe give an explanation of what it is when the user's mouse hovers over it.				
greater awareness and understanding	0	0	1	1
have not used	0	0	1	1
i don't know	1	0	0	1
i use very occasionally	0	0	1	1
integrate EV charging into Calgreen resources so there is one document				
keeping it updated	0	0	1	1
make more interesting	0	0	1	1
maybe	0	0	1	1
more accessible	1	0	0	1
more detail	1	0	0	1
more useful for design	0	0	1	1
more, better, faster	0	0	1	1
n/a	2	0	1	3
n/a	0	0	1	1
na	2	0	1	3
need education	1	0	0	1
never used.	1	0	0	1
no comments	2	0	0	2
no complaints with current	1	0	0	1
no suggestion	0	0	1	1
none	1	0	1	2
not sure	4	0	1	5
nothing	1	0	0	1
nothing I can think of	0	0	1	1
omit	0	0	1	1
pretty good already...	0	0	1	1
speed up the process as i listed previously				
they are helpful. compact and to the point.	0	0	1	1
unsure	0	0	1	1
very few	0	0	1	1
very good already	0	0	1	1
yes	1	0	0	1
Total	243	75	234	552

Tabulation of Q8h S1				
How can the Virtual Compliance Assistant be improved to further increase its value to you?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
	181	75	159	415
?	0	0	1	1
no ideas	0	0	1	1
-	0	0	1	1
----	1	0	0	1
.	1	0	2	3
?	0	0	1	1
Additional SM training	0	0	1	1
Assure the high problem areas are covered with feedback from users and stakeholders	1	0	0	1
Been a while, but there were a few bugs or exceptions you couldn't take advantage of.	1	0	0	1
Did not help the first time, won't waste my time again.	1	0	0	1
Didn't use	0	0	1	1
Didn't really use it	0	0	1	1
Doesn't understand my needs.	0	0	1	1
Don't know	1	0	0	1
Dont use	0	0	1	1
Don't know anything about this	0	0	1	1
Don't use it much	1	0	0	1
EXPERIENCE ARE	0	0	1	1
TRANSFERS FACE-				
Easier application and faster work flow for results	0	0	1	1
Easier to find	1	0	0	1
Every week I find a new error/issue in the compliance form programming. I get it, programmers don't know the code like we do, but every time I find an issue and it gets fixed, another one pops up. ALSO, MAKE "PROJECT" MANAGEMENT BETTER. I can't update a project's compliance ID, add more than one certificate of installation to a single project, or delete projects so I end up with a bunch of "dead" projects taking up space in my projects and your servers. Also let's talk about how every time I "hide" a project, the whole list of hidden projects expands, then if I hide another the list contracts again. It's a joke. E.C.A is a joke.	0	0	1	1

Extend to single-family residential	0	0	1	1
Feels cumbersome and restrictive.	0	0	1	1
Would be better if could proceed without all the info				
GOOD	0	0	1	1
Have not done enough California projects to utilize	1	0	0	1
Have not used in my role.	0	0	1	1
Haven't used	1	0	0	1
Help fill in the address field and also easy way to complete the last page info ( Form and designer)	1	0	0	1
I don't use this enough to make a suggestion.	0	0	1	1
I dont know	1	0	0	1
I don't know.	1	0	0	1
I f'n hate the virtual compliance assistant. it's quirky and has a learning curve. I do not use it very often. When I have to use it, I always stumble a little just to find where to print the forms I just created. Print form is hidden in a menu that doesn't appear until you find the correct icon. why not make print the form more pronounced since that is purpose of the "virtual compliance assistant"	1	0	0	1
I haven't used this	0	0	1	1
I never use this	1	0	0	1
I'd have to use it more to have any worthwhile suggestions.	0	0	1	1
I'm not really sure what this is.	1	0	0	1
It is of no help to me. I am a HERS Rater, but I cannot use it for any forms I fill out because they are not available because the VCA does not differentiate between people with-in the industry and general public	0	0	1	1
It would be awesome if you could save light fixtures and mechanical equipment to a library that could be used on all projects; this would be a nice to have feature, but not necessary.	1	0	0	1
Just be sure to keep it up to date and to give advanced notice of changes.	1	0	0	1
Make it easier to use	0	0	1	1
Make it like chatgpt	1	0	0	1
More exposure	0	0	1	1
More instructions	0	0	1	1
More user friendly	0	0	1	1
My previous response was actually meant to go here. Previews of	1	0	0	1

how the forms will be populated would be great.				
N/A	1	0	0	1
N/A	0	0	2	2
N/A I need to use this resource more	0	0	1	1
N/A, not really used	0	0	1	1
NA	1	0	3	4
NO COMMENT	1	0	0	1
Na	0	0	1	1
No Idea	1	0	0	1
No changes	1	0	0	1
No clear direction at the home screen	1	0	0	1
No comment	1	0	1	2
No comment.---- maybe a training class. I use Energy Pro software, so not much need for VCA.	0	0	1	1
No experience with this.	0	0	1	1
No suggested improvement.	0	0	1	1
None	1	0	1	2
None that I can think of	0	0	1	1
Not familiar enough to provide feedback	1	0	0	1
Not sure	1	0	1	2
Not sure they can be	0	0	1	1
Not sure.	1	0	1	2
Not used	1	0	0	1
Not used enough	0	0	1	1
Not used. I'll have to try it. I've been using CoPilot from Microsoft to help me compliance issues.	1	0	0	1
Nothing at this time	0	0	1	1
Nothing to add	1	0	0	1
Provide hints when progressing through forms	1	0	0	1
Should be expanded to use ai	0	0	1	1
Still figuring out how to use it.	0	0	1	1
The Virtual Compliance Assistant could be improved by adding more detailed explanations and examples for retrofit projects.	0	0	1	1
The current one is very useful, cannot think any improvements needed.	1	0	0	1
They are fine	0	0	1	1
They are good now for me.	0	0	1	1
Enhance access for DIY users.				
This one has never been useful to me because I do very simple alterations.	1	0	0	1
This one is kind confuse, because I expected more, but I still filling out forms, it helps to know there is information needs to be fix.	0	0	1	1
Good... I think.				

Title 24.	1	0	0	1
Update and explain how net zero will be rolled out.	1	0	0	1
When I get questions I can go there and get help - its quick and easy to use	0	0	1	1
YES	0	0	1	1
a lot of choices in the tree that don't apply to my work	1	0	0	1
almost none	0	0	1	1
assists with verifying information	0	0	1	1
didnt know this existed- i will check it out	0	0	1	1
don't know	1	0	0	1
easy to look up	1	0	0	1
educating consultants to assist in my reviews	0	0	1	1
for one thing I didn't know or at least know where to find them	1	0	0	1
get rid of this....	0	0	1	1
greater speed,	1	0	0	1
have not used this yet	0	0	1	1
haven't used it much	1	0	0	1
i haven't used yet...i should try on my next project	1	0	0	1
i like to see the thing rather than too much words of requirements.	1	0	0	1
nowadays, the HVAC and Heating system are getting more and more complex.				
it is buggy generally and i usually just have to go to forms ace	1	0	0	1
less wait time	1	0	0	1
make it user friendly	1	0	0	1
make more interesting	0	0	1	1
maybe	0	0	1	1
more details on INDUSTRIAL type construction	1	0	0	1
more useful for design	0	0	1	1
n/A	0	0	1	1
n/a	1	0	1	2
n/a	0	0	1	1
na	2	0	1	3
need education and example	1	0	0	1
no comments	1	0	0	1
no suggestion	0	0	1	1
none at the moment	1	0	0	1
not exactly intuitive	0	0	1	1
not much	1	0	0	1
not sure	1	0	2	3
nothing	1	0	0	1
seminars on how to use	0	0	1	1
there probably fine.	0	0	1	1
unsure	0	0	1	1
utilize ai	0	0	1	1
works half the time	1	0	0	1
yes	1	0	0	1

Total	243	75	234	552
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**Tabulation of Q8i S1**

How can Forms Ace be improved to further increase its value to you?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
	164	75	154	393
----	1	0	0	1
.	2	0	4	6
AI	1	0	0	1
Allowing information from multiple pages to be assembled or referenced on other pages would make it easier to cross check information as it's being filled out.	1	0	0	1
As a design engineer I usually am using Energy Soft EnergyPro to file forms. I do not use Forms Ace.	0	0	1	1
Better questiobs	1	0	0	1
Cannot thing of a good way currently.	1	0	0	1
Clear and concise communication.	1	0	0	1
Continue to improve as changes develop	0	0	1	1
Continuing to update the user interface to make easier for users.	1	0	0	1
Don't know / no opinion	1	0	0	1
Dont Use	0	0	1	1
Easier to find	1	0	0	1
Eliminate the corporate red tape to make building easier in California.	1	0	0	1
Filling out the forms can be frustrating when one doesn't know which option to select. Especially difficult is when alterations and new construction are lumped together. They should be completely separate. The person writing the code needs to have better understanding of the different options. I find that I can't get the forms to follow the letter of the code on simple like-for-like alterations.	1	0	0	1
GOOD	0	0	1	1
Good	1	0	0	1
Good for a limited audience, plan checkers, document preparers, but that is who needs them.	0	0	1	1
Good now.	0	0	1	1
Great as they are.	0	0	1	1

Have downloadable PDFs, instead of online only.	1	0	0	1
Have not used in my role.	0	0	1	1
I don't use it enough to have any suggestions.	0	0	1	1
I don't use the Forms Ace	0	0	1	1
I don't know.	1	0	0	1
I haven't used Forms Ace much myself. I have refereed many business owners, contractors, and installers to Energy Code Ace and have heard good things about Forms Ace	0	0	1	1
I like the Forms Ace. No suggestions on how to improve.	1	0	0	1
I preferred when I could fill out the forms manually.	1	0	0	1
Idk	0	0	1	1
Impossible to say.	1	0	0	1
Incorporate AI assistance to help navigate code requirements through a chat interface rather than scanning through webpages and documents.	1	0	0	1
It would be even more useful if it were linked directly to Reference Ace and the Virtual Compliance Assistant	0	0	1	1
KISS Keep It Simple Stupid for the general public	1	0	0	1
Looking forward to 2025	1	0	0	1
Make it easier to verify which form is required for your specific project.	0	0	1	1
Make it simple	1	0	0	1
Make them easier to fill out.	0	0	1	1
Maybe easier navigation tools and direction, I struggle using the web site	1	0	0	1
More available hope.	1	0	0	1
More data fields	1	0	0	1
More detailed explanations about each form input and more streamlined user interface. Access to Q&A with energy code experts who provide quick and helpful responses.	1	0	0	1
More explanation of the codes	1	0	0	1
More exposure	0	0	1	1
More training on their use	0	0	1	1
Most of these forms are a kind of "big brother" compliance overkill.	0	0	1	1
I would do away with everything except CF1s				
N/A	1	0	1	2
N/A	0	0	1	1
N/a	1	0	0	1

NA	0	0	3	3
Na	0	0	1	1
Need more experience with it to comment	0	0	1	1
Need updated design	0	0	1	1
No comment	1	0	1	2
No comment.	1	0	0	1
No comment	1	0	0	1
No improvement	0	0	1	1
No suggestions at this time	0	0	1	1
No that helpful to me, but somewhat	0	0	1	1
None	2	0	0	2
Not having to input things like conditioned square footage on multiple forms across the same project would be cool.	1	0	0	1
Not sure	2	0	2	4
Not sure it can be don't have any ideas	0	0	1	1
Not sure.	0	0	1	1
Not utilized much but when I have, helps with assuring the correct forms are used on plans	0	0	1	1
Not very familiar with as I don't use it much	0	0	1	1
Nothing at this time	0	0	1	1
Nothing to add	1	0	0	1
Provide examples of correctly completed forms for various project types.	0	0	1	1
Provide fillable PDF or Excel versions of the forms (with the necessary formulas), so we do not have to go onto the website to complete the forms required by local agencies for permit applications.	1	0	0	1
Same	0	0	1	1
See "Compliance Assistant" comments, E.C.A. is a joke	0	0	1	1
See previous answer	0	0	1	1
Simplifying Title 24 energy codes, honestly. I think the difficulty with Title 24 stems from the fact that the calculations, requirements, etc. are a little tough to navigate unless you deal in it frequently	1	0	0	1
Sometimes it is difficult to find the right form. They need to be organized better and easier to find. When things are out of date, they need to be removed because searching alot of time bring up out of date things. We need to have a way to verified that a form	0	0	1	1

is correct, and most up to date and is acceptable to the energy commission.				
Start with a new application, instead of the last one that I did.	1	0	0	1
Support 2025 forms	1	0	0	1
The Single Family forms themselves could have self-revealing names as with Multifamily and Nonresidential	1	0	0	1
The forms are cumbersome and present issues for transferring projects between staff when staff depart. There are ways around this, but the pdf forms were better.	1	0	0	1
These used to be very valuable, and I was able to use the forms, for instance CF1R for an addition under 1000sf, but now everything changed and I'm no longer allowed to fill these out and submit them to the County of San Luis Obispo. Also if I were to look up a form for an addition less than 1000sf, the website refers you to energy.gov. Their forms on e are not allowed by the County of San Luis Obispo. I don't bother with the forms on this website anymore. <a href="https://www.energy.ca.gov/filebrowser/download/5025">https://www.energy.ca.gov/filebrowser/download/5025</a>	0	0	1	1
They seem good as is	1	0	0	1
This seems to rely on more understanding than I might have of the code. Unacceptable choices are selected because I'm unsure of some terms	1	0	0	1
Title 24.	1	0	0	1
Too dynamic	0	0	1	1
Too many words, not enough visual aids.	1	0	0	1
Update and explain how net zero will be rolled out.	1	0	0	1
Useability	1	0	0	1
WITH FORMS TO BE DISTRIBUTED FROM SERVILLA ABEGOA SPAIN, NOTHING CAN BE DONE BY BUREAU VERITUS PARIS FRANCE.	0	0	1	1
Works as is.	1	0	0	1
YES	0	0	1	1
–	0	0	1	1
a	0	0	1	1
able to open in other pdf program	0	0	1	1
actually provide blank interactive	0	0	1	1

forms, I miss those				
better explanation of how to fill out forms.	0	0	1	1
better room descriptions for say, ball parks (professionally), and Hospitals. to name a few	0	0	1	1
cannot be improved	0	0	1	1
current form is working well	1	0	0	1
don't know	1	0	0	1
don't remeber a problem with forms, it was just EVERYTHING ELSE THAT SUCKED!	1	0	0	1
dont know	1	0	1	2
easier to find	1	0	0	1
easy to look up	1	0	0	1
helps with forms	0	0	1	1
i havnt tried	1	0	0	1
it likes to show to the customers	1	0	0	1
it's good	1	0	0	1
kinda slow on website and screen gets cut off	0	0	1	1
links out to resources support answering each question	0	0	1	1
make more interesting	0	0	1	1
make them easier to fill out than energypro.	1	0	0	1
maybe	0	0	1	1
more details on INDUSTRIAL type construction	1	0	0	1
more details on how to fill	1	0	0	1
more examples	0	0	1	1
more useful for design	0	0	1	1
n/a	1	0	3	4
n/a	1	0	0	1
na	2	0	2	4
needs work with editing control types if they differ from the NRCC reports. For instance if demand response is check yes by mistake then forms ace won't let you manually check it. It will she an error and make the forms unusable. They need to be marked as demand response is include and manually changed once the form is download.	1	0	0	1
next	0	0	1	1
no comment	1	0	0	1
no improvement needed on these.	0	0	1	1
no suggestion	0	0	1	1
none	0	0	1	1
not much use	1	0	0	1
not needed	1	0	0	1
not sure	2	0	0	2
nothing comes to mind	1	0	0	1
omg nothing	1	0	0	1
omit	0	0	1	1

pretty good already...	0	0	1	1
see previous comment	1	0	0	1
seminars on how to use, greater awareness. As an architect we are bombarded with requirements--tremendous time pressure	0	0	1	1
something that I can give to contractors which is easy for them to navigate and understand - and a resource that they can call for advice	0	0	1	1
speed up	0	0	1	1
very few	0	0	1	1
what is forms ace? define it. I have no idea what that is supposed to mean.	1	0	0	1
yes	1	0	0	1
<b>Total</b>	<b>243</b>	<b>75</b>	<b>234</b>	<b>552</b>

### Tabulation of Q8j S1

How can the product finder be improved to further increase its value to you?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
-	177	75	146	398
----	0	0	1	1
---	1	0	0	1
.	2	0	4	6
?	0	0	1	1
A bigger registry	0	0	1	1
ABEINSA EPC WAS THE ORIGINAL SYSTEM DESIGNERS AND BULDER BY SAUDI ARABIA.	0	0	1	1
Adequate - it has to be constantly updated.	0	0	1	1
Connect to other tools	1	0	0	1
Didn't really use it. You may be able to suggest products, but they have to be affordable and locally available	0	0	1	1
Don't know / no opinion	1	0	0	1
Don't use	1	0	0	1
Dont know	1	0	0	1
Don't know anything about this	0	0	1	1
Easier to search.	1	0	0	1
Good as is	1	0	0	1
Have not used in my role.	0	0	1	1
Have not used this yet.	0	0	1	1
Haven't used.	0	0	1	1
I believe the products I use are pretty straight forward. No need	1	0	0	1

for improvement				
I don't use product finder	1	0	0	1
I dont know	1	0	0	1
I have not used Product Finder, however, it does not minimize its usefulness.	0	0	1	1
I have not used or seen the product finder??	1	0	0	1
I haven't really used this feature.	1	0	0	1
I think it is pretty effective as it is, so no suggestion.	0	0	1	1
I would have to review the product finder to answer this.	1	0	0	1
I'm not sure.	0	0	1	1
Include definitions of different product classes and easier filtering options.	0	0	1	1
It could help me find title 24 compliant options for purchase	1	0	0	1
Just keep up with the latest and greatest	0	0	1	1
KISS Keep It Simple Stupid for the general public	1	0	0	1
Keep it up to date	1	0	0	1
Limited use	0	0	1	1
Link to specific product.	1	0	0	1
Make it easier to access.	0	0	1	1
Make it easier to find	1	0	0	1
Make more easier and simpler	0	0	1	1
Make more responsive to new available products.	0	0	1	1
Make more visible	0	0	1	1
More complete	1	0	0	1
More exposure	0	0	1	1
More products	1	0	0	1
N/A	2	0	5	7
N/A	0	0	1	1
N/A, not really used	0	0	1	1
NA	1	0	3	4
NO COMMENT	1	0	0	1
Na	1	0	0	1
Need to utilize it more to determine if it will help in my business	0	0	1	1
Never use it	0	0	1	1
No Idea	1	0	0	1
No Opinion, haven't used it	0	0	1	1
No comment	1	0	1	2
No comment.	1	0	0	1
No ideas right now. The MAEDBS, however: I frequently have to search multiple times because I don't know what "category" (commercial, light commercial, residential) of water heater a particular model is. Maybe put in some "meta-	0	0	1	1

categories" which will combine some of those categories which separate products by subtle/technical/market segment details so that the users can find their water heater (or whatever) faster.				
None	1	0	1	2
Not familiar enough to provide feedback	1	0	0	1
Not needed	0	0	1	1
Not sure	2	0	4	6
Not sure what it is.	0	0	1	1
Not sure.	0	0	1	1
Not used	1	0	1	2
Not very familiar with as I don't use it much	0	0	1	1
Not very familiar with it	0	0	1	1
Nothing	1	0	0	1
Nothing at this time	0	0	2	2
Nothing to note	0	0	1	1
Rarely Used	0	0	1	1
Same	0	0	1	1
TRY MAKING IT WORK THIS TIME. MY SUGGESTION IS TO HAVE THE LOW PERSON ON YOUR STAFF FILE AN APPLICATION USING YOUR SYSTEM EVERY DAY! THAT WAY YOU KNOW IT'S SCREWED UP BEFORE WE START ASKING FOR TECH SUPPORT. tHAY MAKES SENSE SO I KNOW THAT WON'T HAPPEN.	1	0	0	1
The product finder is not as intuitive especially if I don't have a CSI number. If there is a way to search for available product types to point me in the right direction would be helpful.	0	0	1	1
They are fine.	0	0	1	1
They are great the way they are	1	0	0	1
This one is tough, products change all the time.	0	0	1	1
This works fine as is.	1	0	0	1
Title 24.	1	0	0	1
To further improve the Product Finder, adding more advanced filtering options such as by price range, energy efficiency ratings, or customer reviews would enhance usability. Including side-by-side comparisons and real-time availability or rebate eligibility would also make it more actionable. A mobile-friendly	0	0	1	1

version or app integration could increase accessibility on the go.				
Update and explain how net zero will be rolled out.	1	0	0	1
Wider selection	0	0	1	1
YES	0	0	1	1
able to have selection by type of Product	1	0	0	1
acceptable	0	0	1	1
add more links...	0	0	1	1
architects and designers like it when specifying	0	0	1	1
better search and filtering engine on the website.	0	0	1	1
cannot be improved	0	0	1	1
did not use them but I will look them up now	0	0	1	1
don't use this much	1	0	0	1
easier U/I experience.	0	0	1	1
easy to look up	1	0	0	1
fine as is	1	0	0	1
i dont look for products	0	0	1	1
identify supplier cut sheets.	1	0	0	1
it's good	1	0	0	1
make it simple	1	0	0	1
make more interesting	0	0	1	1
maybe	0	0	1	1
more products less chances for errors	1	0	0	1
more?	0	0	1	1
n/a	1	0	2	3
na	4	0	0	4
need to look more into these before i comment	0	0	1	1
no opinion	1	0	0	1
no suggestion	0	0	1	1
none	1	0	1	2
none at this time	1	0	0	1
not sure	3	0	3	6
not sure, never used.	1	0	0	1
not used	0	0	2	2
nothing, didnt use it much	1	0	0	1
once again keep the information up to date.	1	0	0	1
pretty good already	1	0	0	1
there probably fine.	0	0	1	1
unsure	0	0	1	1
utilize ai	0	0	1	1
widen scope to include other data bases. MAEDBS etc.	0	0	1	1
wider cover	1	0	0	1
x	0	0	1	1
yes	1	0	0	1
Total	243	75	234	552

#### Tabulation of Q8k S1

How can Noteblocks be improved to further increase its value to you?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCodeAce website	Attending a training course	Both	Total
	190	75	158	423
-	0	0	1	1
----	1	0	0	1
.	1	0	5	6
?	0	0	2	2
A searchable or categorized NoteBlock library would make it easier to find relevant topics quickly. It would also help if each NoteBlock linked directly to supporting materials like forms or trigger sheets	0	0	1	1
Ability to export to AutoCAD and Revit formats. Explanatory note on EnergyCodeAce about whether noteblocks are required and/or recommended to be placed on construction drawings.	1	0	0	1
Again Not Used	1	0	0	1
Can't think of anything at the moment.	0	0	1	1
Did not use	0	0	1	1
Don't know.	1	0	0	1
Dont really use it	0	0	1	1
Don't know anything about this	0	0	1	1
Don't use	1	0	0	1
EACH BLOCK OWNER	0	0	1	1
RESPONSES TO THE CONTRACTUAL REQUIREMENTS.				
Have not used this yet	0	0	1	1
Haven't used.	0	0	1	1
Havent used it.	1	0	0	1
I am unclear on this also.	1	0	0	1
I dont know	1	0	0	1
I don't know.	1	0	0	1
I have not even heard of noteblock, and have no idea what it could help with	1	0	0	1
I really have not studied this resource, I would like to learn more so that I can use it.	0	0	1	1
Keep them relevant	0	0	1	1
Keep updated	0	0	1	1
Make easy to access	1	0	0	1
Make it easier to edit (limit the number of clicks to get to noteblocks)	1	0	0	1
More references to relevant information	1	0	0	1

N/A	2	0	0	2
N/A	0	0	2	2
N/A, not really used	0	0	1	1
NA	0	0	4	4
NO COMMENT	1	0	0	1
NOT SURE	1	0	0	1
Never use it.	0	0	1	1
No comment.	2	0	0	2
No experience with NoteBlocks.	0	0	1	1
No opinion	1	0	1	2
None	1	0	1	2
Not familiar	1	0	0	1
Not sure	1	0	3	4
Not sure yet	0	0	1	1
Not sure, I don't use that much.	0	0	1	1
Not sure.	0	0	1	1
Not used	1	0	0	1
Not utilized much	0	0	1	1
Not very familiar	0	0	1	1
Note blocks are a complete waste of time. I would like to use them, but they have a functionality problem, and I have yet to be able to download one yet.	1	0	0	1
Nothing	2	0	0	2
Nothing at this time	0	0	2	2
Nothing specific comes to mind.	0	0	1	1
Provide more for different scenarios	1	0	0	1
Reference to codes	0	0	1	1
Same	0	0	1	1
Their value will remain the same.	1	0	0	1
They are fine.	0	0	1	1
They are good enough	0	0	1	1
Tie them to specific examples of compliance	0	0	1	1
Title 24.	1	0	0	1
To further improve Noteblocks, adding features like tagging, color-coding, and the ability to link notes to specific resources or tasks would enhance organization and usability. A search function within Noteblocks and the option to export or share notes with team members would also increase their collaborative value. Integration with calendars or task management tools could make them even more actionable.	0	0	1	1
Training/explanation	0	0	1	1
Uncertain	0	0	1	1
Update and explain how net zero will be rolled out.	1	0	0	1
Useless - drop them	0	0	1	1
YES	0	0	1	1
–	0	0	1	1

acceptable	0	0	1	1
cannot be improved	0	0	1	1
collaborate with building depts	0	0	1	1
dont know	1	0	0	1
easy to look up	1	0	0	1
education	1	0	0	1
have not really used them	1	0	0	1
have not used	0	0	1	1
i don't know i dont use it	0	0	1	1
idk.	0	0	1	1
integrate with CAD drawing	0	0	1	1
maybe	0	0	1	1
n/a	1	0	2	3
na	3	0	0	3
never use	1	0	0	1
never used	0	0	1	1
never used this	1	0	0	1
no notes	1	0	0	1
no suggestion	0	0	1	1
none	0	0	2	2
none at the moment	1	0	0	1
not familiar	1	0	0	1
not much	1	0	0	1
not sure	4	0	1	5
not used	0	0	2	2
nothgin	1	0	0	1
pretty good already...	0	0	1	1
set them up as 24x36 plan set sheets to be included with the T24 reports. Make them dynamic to be made to meet the particular project.	0	0	1	1
there probably fine.	0	0	1	1
unsure	0	0	1	1
updates sent via email	0	0	1	1
utilize ai	0	0	1	1
when required these are great	1	0	0	1
x	0	0	1	1
yes	1	0	0	1
Total	243	75	234	552

**Tabulation of Q12\_1\_TEXT S1**

Were there any online resources	How have you encountered California's
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not available on topics you needed, or tools that could have helped you but were not available?  Yes, please explain.	Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
	167	75	158	400
Solar sunshade studies	0	0	1	1
.	2	0	1	3
A better performance tool than CBECC	1	0	0	1
A specific form for 1-for-1 and like-for-like indoor lighting replacement.	1	0	0	1
A tool to just do the green code calculations instead of needing to hire a third party	1	0	0	1
AI integration to aid with questions regarding the code, currently AI tools are not specific to T24 exactly and i often need to provide them the building code and have it cite sections which i then need to go and analyze	1	0	0	1
Access to all training videos.	0	0	1	1
An Artificial Intelligence search tool of the codes and the compliance manual would be helpful.	0	0	1	1
An index tool that would take you to various different areas of code sections that we could reference and decide which sections(s) are applicable.	0	0	1	1
As a third-party tester the added layer of documation is difficult. before 2022 I created NRCI documents at the CALCTP website. The updated (2022) CALCTP website data entry and forms process needs improvement. The two sources could be combined under one or intergraded better.	0	0	1	1
BOOK OR REFERENCE NOTES	1	0	0	1
Clarification on verbiage used for system types, etc.	1	0	0	1
Code change summaries that focus less on the wording of the code and more on the physical differences in design changes that will be reflected in cost of construction. As MEP engineers,	0	0	1	1

our architectural and developer clients ask us for summaries of 'what is changing in this code cycle'. They really only want to know the items that will show up as line items in their cost estimates or will take up space.				
Compliance Self-Inspection Tool Federal and State Regulations Comparison Tool etc.	1	0	0	1
DOE 2 code base	1	0	0	1
Easier to understand things for homeowners	1	0	0	1
Energy Compliance has become more and more difficult to navigate over the past couple decades. Anything that ACE can do to streamline this process further than it already has would be a huge help to the industry.	1	0	0	1
Excellent tools	0	0	1	1
Forms, once they migrated back to the CEC website.	0	0	1	1
Found it clunky and force to go with a specialist. When the specialist had issues I had to call Sacramento who verified there was a computer software glitch. Pure WORK!	1	0	0	1
Having the forms in the cloud is cumbersome and is not conducive to using BIM to populate the information for the forms.	1	0	0	1
Help with the meaning of the code sections and how to do the calculations.	1	0	0	1
I NEED MORE PROJECT EXAMPLES FOR COMPLIANCE ON RESIDENTIAL PROJECTS. FOR EXAMPLE, ADU DETACHED, ADU ATTACHED, RESIDENTIAL ADDITION, ADU CONVERSION WITHIN RESIDENCE, ETC.	0	0	1	1
I am HVAC, it does not break down the information by trades. Lighting does not affect me at all. I sent an inquiry in and did not hear back.	1	0	0	1
I find it easier to search the code documents than to go to the Energy Code Ace website	0	0	1	1
I find the energy code over the top complex and it need not be	1	0	0	1
I had a use case for Forms Ace	0	0	1	1

early in the 2022 code cycle, before Forms Ace had 2022 forms. (There was an issue with the software that had been used to make the active forms, which delayed their availability. I think the delay was about a year - but it seemed like a budget issue combined with software change management - i.e. beyond the control of the program.)

I had lot of issues with things like the multifamily forms being in flux/not available and delayed.

I have sent in questions and got good answers especially finding the exact code section. The T24 still lacks a comprehensive list that can be sorted. I would like to be able to type in 'office' and go there.

I like to see better interpterion or clarifications of each requirement to help deal with new and green Plan checkers.

I need E.C.A. compliance to work, be accurate, and have projects be more manageable. I'm forced to use a broken system, and it makes me resentful of the site, the CEC, all of it.

I spoke with commission staff it was so bad. I have NO CONFIDENCE in any government agency in California, local, county or state. I lost that when the governments started hiring morons and the mentally incompetent based on a "pulse" for positions of authority governing LIFE SAFETY. AND your system was apparently not working, so I got a call from the only person that actually had a degree and a license in mechanical engineering. Only took me two weeks to get to him. He should be the HEAD of the CA energy commission and fire the other morons who only collect a check anyway.

I think the compliance form need a better way to make sure it the correct form. It common for people to provide you a form, and I am not sure if it the correct or updated form. It looks correct,

1 0 0 1

1 0 0 1

1 0 0 1

0 0 1 1

1 0 0 1

0 0 1 1

but where did you get it?				
I use chat gpt and was surprised how much time was saved	0	0	1	1
I used this stuff a while ago, but had to resort to a large number of sources of information, primary ones being the original reference manuals. I didn't find everything I needed on EnergyCodeAce. I'd need to work on a project again from scratch to be able to effectively answer these questions. I would like for the tool to be able to populate project address, design professional and document author signature, license #, date, address, and phone number.	1	0	0	1
I would like to be able to access HERS forms so I can print them out and show builders what I am looking for and/or requiring them to do	0	0	1	1
I would love to see more in depth application of energy modeling, and take offs. Since most of the modeling courses are very code heavy, might be beneficial to see measuring plans to inputs in a software in a live environment.	0	0	1	1
Information regarding compliance for refrigerant requirements for HVAC systems as we are switching to selecting R32 units in our designs.	0	0	1	1
Interpretations/disagreements with contractors and colleagues that require input from the regulatory body.	0	0	1	1
Interpretive manuals	0	0	1	1
It can be confusing for applicants	1	0	0	1
It would be great to have publicly available data on building permits and code applications.	0	0	1	1
It would have been helpful to have more online tools that support early-stage energy modeling or quick comparative analysis of design options. Integrating such tools would make it easier to evaluate energy performance before detailed engineering input. Additional resources tailored to specific building types or climates would be valuable. Context-sensitive examples or templates could help apply the EnergyACE principles	0	0	1	1

more effectively in diverse project conditions. Regularly updated online modules or short refresher sessions could help professionals stay current with evolving energy codes and best practices. Ongoing learning opportunities would increase long-term engagement and value. A shared online workspace or collaboration tool would be useful for coordinating with consultants and tracking progress against energy goals. This would make it easier to integrate EnergyACE resources into real project workflows.

It's not really about the resources. They are what they are. The energy code ace website is horrendous to use. Only allows one person to edit. Doesn't allow copying of information to other similar projects. It's truly a time suck with little benefit.

Just the 2025 energy code.

Looking forward to it!

Maybe providing compliant manufacturers products

More AI

More Trigger sheets and more training videos would be helpful.

More information on paths of egress.

More information on the NRCC forms and choices would be nice.

More topic on solar pv and batteries

More trigger sheets, more compliance info, more examples of code applications

NEMNR HVAC and Ventilation details

Navigating the Reference

Appendix, the Joint Appendix; both the non-residential and residential Appendix can be very intimidating and challenging for the average person to do and find information. Even for the typical professional, it is difficult and time consuming to navigate.

Need better information on who fills out what form. Basically ECA states that ATT has to sign, or another person. But there isn't much context. My biggest headaches ar epushback from

1 0 0 1

0 0 1 1

1 0 0 1

1 0 0 1

0 0 1 1

1 0 0 1

0 0 1 1

0 0 1 1

1 0 0 1

0 0 1 1

0 0 1 1

0 0 1 1

GC's and subs on NRCA and NRCI forms. I need communications material that is more detailed than the quick description on the website, but more digestible and east to understand than the Fact Sheets and literally reading code.	0	0	1	1
Need more information on Demand Response. Also more training videos	1	0	0	1
Note Blocks was unusable. Now that the CalCerts QII handbook is no longer posted online, it might be useful to have a detailed QII reference that is posted online that we could refer builders to.	0	0	1	1
On line weather data and joint appendix information would be useful	0	0	1	1
PDF versions of the forms for circumstances that do not fit neatly into the available options.	1	0	0	1
Personally, I need more training. Provide a simple template that includes what forms are required for your specific project. Include on template a code section that specifically applies. I believe based on my office staff and Architects that I work with that a simple means to verify what forms are required for your specific project needs to be readily available. A very specific simple means so that anyone at any experience level can understand. This needs to be available on the first page of the website. Possibly a banner on you can click on to send you directly to a flow chart that can be followed to find what is required.	1	0	0	1
Quicker access to the high level changes in the new code so I know what is coming.	0	0	1	1
Really would like the on demand videos to make a come back	0	0	1	1
Reference ACE was very glitchy for a while and wouldn't let you navigate seamlessly	1	0	0	1
Resources for 2025 codes. A submitted design uses an air to water heat pump. This seems to be allowed by the Energy Code but there does not seem to be way to enter it in the forms or	1	0	0	1

determine what is triggered.				
Retrofit-specific guidance: Most resources focus on new construction, but retrofit projects often present unique compliance challenges. More targeted guides or case studies would be valuable.	0	0	1	1
Sections regarding requirements for single family residential alterations and additions are typically offered at the end of the webinar. It would be helpful if this information was presented in a separate webinar and given more attention.	0	0	1	1
Simply had to abandon ACE and return to old methods. Too many redirection was wasting my time. Maybe I was not familiar with the process.	1	0	0	1
Some forms were not available and some needed special apps to open them	1	0	0	1
Something for us to refer contractors for documenting and finding and filling forms. They are uncomfortable doing it and find it confusing	0	0	1	1
Sometime the energy code ace wizard is a little difficult. If for instance you have a building that is providing exhaust ventilation only, the wizard will require additional measures to be answered even though they are not applicable. It would be good to provide override sections and perhaps a comment section as to why the system isnt complying as sometimes there are project specific constraints or the additional measure that are being asked arent applicable to the project but you cannot get around them.	1	0	0	1
The Lighting Trigger sheets are hard to follow.	0	0	1	1
The biggest challenge with enforcing the Energy Code is demonstrating to applicants that are filling out the forms wrong. Often this devolves into opinions on each side with no clear documentation on the correct approach to model the design.	0	0	1	1
The compliance forms save in a pdf format that is not compatible	1	0	0	1

with the drafting software that I use. Being able to choose a pdf writer, or some other method, to allow the pdf to be more compatible.				
The compliance forms software from the CEC should be replaced with a more user friendly software where plans can be uploaded and the scope marked up and compliance shown.	0	0	1	1
The energy code needs to be drastically simplified. It should be like structural engineering, but it's single-issue, so could be just a few pages.	0	0	1	1
The pace of energy compliance rules development has exceeded most building departments ability learn them. Energy compliance is only one part of the plan review process and the fees do allow the needed time to properly verify compliance in a detailed manner.	0	0	1	1
The program has nice tools, trouble is the authors don't understand tradespeople, everything is designed for people disconnected from the field. Not by design, but by implementation means. Forms are the most important element, but forms do not install measures.	0	0	1	1
There are times I could use the NRCA forms generated by the CEC to show what will be in the actual report.	1	0	0	1
There's so much info sometimes hard to sort through	0	0	1	1
They may have been available but I could not find them.	1	0	0	1
This may be due to my own lack of searching for them, but additional video tutorials for sample projects to truly understand how each section is meant to be filled out for the mechanical compliance forms.	1	0	0	1
Title-24 Acceptance Test requirements	0	0	1	1
Too many referrals to the CEC website	0	0	1	1
Too much of the training was not available as a practical matter because it was only offered at a time I could not attend.	0	0	1	1
Trigger sheets for the most recent	1	0	0	1

codes (2022 and 2025). Include trigger sheets or data for common energy efficiency measures, including those that do not trigger code (i.e. repairs or those not covered by T24) and alterations that trigger only limited sections of codes (i.e. only mandatory and certain prescriptive sections). Many times utilities and regulators may assume sections of code apply to energy efficiency measures in existing buildings where they do not.

Unable to open some of the forms, this becomes frustrating  
Video case studies of plan review of new Energy code cycle requirements. There is nothing that can replace learning by doing or watching another 'do'.

Walkthroughs of modeling various mechanical systems in CBECC, how to add process loads. For 2025 how to model pool/spa systems.

Was difficult to understand  
We need recorded videos. That would be very useful.

When I can't get a form because an ATT has to fill it out online. I only want to see an example.

While the available resources were generally helpful, there were a few instances where I couldn't find in-depth guidance on more advanced or uncommon scenarios. A searchable FAQ or expert Q&A section could have filled those gaps. Additionally, having a centralized tool that recommends resources based on user activity or project type would have been valuable for discovering relevant materials I might have missed. It would also be helpful to include more content on controls for indoor environments and lighting controls for different areas, as these are critical for energy efficiency and operational effectiveness.

Yes, an AI tool would be helpful for application of energy code requirements.

Yes. Fillable, downloadable forms with working formulas would be

0	0	1	1
1	0	0	1
0	0	1	1
1	0	0	1
1	0	0	1
0	0	1	1
1	0	0	1
1	0	0	1

helpful.				
always good to get info on the new code cycle before its in place. i understand this is challenging though.	0	0	1	1
don't know yet. Probably give more links to different types of equipments.	1	0	0	1
hard to find information. Website is overwhelming	1	0	0	1
hope the code can be written in a more legible way. the energy code is super difficult to read or understand	0	0	1	1
information is usually available. The concern becomes timely information, as local code continuously changes as new products are introduced into our industry. For example, heat pump water heaters - there is a lack of consistent interpretation of code across the state and stakeholders.				
maybe an AI chatbot to communicate with and provide advice?	0	0	1	1
resources are there but the site is hard to navigate and the code itself is very hard to use	0	0	1	1
search tools could be improved.	0	0	1	1
sometimes links are broken on the forms or the entire form needs to be restarted because it bugs out	1	0	0	1
sure-- a way of making the code make sense when it doesn't. Or figuring out what to do when the codes conflict with other codes and its keystone cops trying to figure out what the right thing to do is.	0	0	1	1
there are some issues with the energypro program...I have asked for several solutions but they do not provide solutions...I check with energy ace and the same thing applies...it is very frustrating...	0	0	1	1
there was a lack of single family HVAC checklist, trigger sheets, and reference guides	0	0	1	1
<b>Total</b>	<b>218</b>	<b>75</b>	<b>218</b>	<b>511</b>

**Tabulation of Q15 S1**

Please explain why you were	How have you encountered California's
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satisfied/unsatisfied with your ability to get issues resolved.	Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
	113	75	129	317
occasional long respond time	0	0	1	1
.	1	0	1	2
?	0	0	1	1
Adding team members to the project should be easier	1	0	0	1
As I mentioned it is way too complex for what it could be	1	0	0	1
At this point I think I need to gain a better understanding of the resources.	0	0	1	1
Because after two weeks I got the info I needed, but I wasted more time than your system is/was worth. utter failure. WOULD REALLY HELP IF YOUR IDIOT WEBMASTER MADE SURE IT WORKED EVERYDAY, before the tech calls start.	1	0	0	1
Because it worked but could be better and improved	1	0	0	1
Because the software does not allow this.	1	0	0	1
Been able to reach out and get issues resolved by the compliance staff. Great customer service.	1	0	0	1
Brian Selby has helped me more than a few times with my compliance issues. He generously gave his time via zoom calls on at least 2 occasions and helped solved my issues	1	0	0	1
Can't always find what I need	1	0	0	1
Completing the compliance forms for power and lighting are cumbersome on the web site.	1	0	0	1
Confusing	1	0	0	1
Conveinence	0	0	1	1
Deleting projects is currently not an option.	1	0	0	1
Development seems to be in process	1	0	0	1
Did not get fully resolved	1	0	0	1
Didn't know how To proceed	1	0	0	1
Difficult to navigate unless very familiar with the systeem	0	0	1	1
Difficult to read the screen with multiple sidebars.	0	0	1	1
Documentation	1	0	0	1
Don't know, didn't use	1	0	0	1

energycodeace for most Title24 work because it wasn't the most useful back then				
EVERYONE HAS TO CHIP IN THEIR BEST.	0	0	1	1
Energy modeling basics were fine, but with all the training, it would be helpful if it could make suggestions. I am sure that energy modeling in the future will incorporate AI which will be helpful in making better decisions rather than guessing	0	0	1	1
EnergyCode Ace has always been my go to for all things energy, from learning, to researching to providing support to clients and contractors both in meetings and out on-site	1	0	0	1
EnergyCodeAce is slow to make improvements, if any are made at all	1	0	0	1
Eventually, I am able to communicate with persons at ECA or the CEC to get what I need.	0	0	1	1
Everything is great, just need to firm up the issues on compliance that is triggered in the wizard when it isnt applicable and provide user overrides.	1	0	0	1
Figured out what I was doing wrong.	0	0	1	1
Found relevant information	1	0	0	1
Gina Rodda and her team of experts have done a great job and service to the Building Industry.	0	0	1	1
Good customer support	0	0	1	1
Had to print out docs and scan them for municipalities to be able to open them	1	0	0	1
Has not been resolved	1	0	0	1
Hasn't changed	1	0	0	1
Have not tried to fix the web site	0	0	1	1
Help is an email away. Appreciate the support to get through unusual or tough code to understand how to apply in unique situations.	0	0	1	1
Hit it more	0	0	1	1
I NEEDED MORE EASE TO FIND THE INFORMATION I WAS LOOKING FOR	0	0	1	1
I am a slow learner	1	0	0	1
I asked for some help with Note Blocks, but the answer was way too complex and required some	1	0	0	1

re-setting of my computer browser, which I was reluctant to do.				
I can't figure out a way to make the .pdf file come out with all of the information.	1	0	0	1
I did not follow up with the problem.	0	0	1	1
I did not get T24 to pass.	1	0	0	1
I didn't attempt to get these resolved	0	0	1	1
I didn't pursue resolving the broken link as it wasn't very important	1	0	0	1
I don't believe its been resolved	1	0	0	1
I dont have any issues so doesnt required to resolve.	1	0	0	1
I don't know	1	0	0	1
I eventually found my issue with the fenestration data entry and compliance, but it was through my own trial and error.	1	0	0	1
I eventually found what I needed without any help.	1	0	0	1
I feel like I am going around in circles on the website. I do not use website on a regular basis. I believe most people going to the website are not experienced with the energy Thus being the reason they are going there. Need a simple means to navigate like a flow chart that can be expanded. Be thorough and see it through the eyes of a person that does not understand or completely know all definitions. Again I believe this is your typical audience.	0	0	1	1
I found another way to get the information	0	0	1	1
I get a lot of responses like "we see the issue and it will be fixed in the coming weeks." I've wasted so many work hours troubleshooting and explaining issues to ECA. It's a monumental waste of my time and my employer's resources. Shame on you all.	0	0	1	1
I got all the help I needed	0	0	1	1
I had to contact a colleague for the answer	0	0	1	1
I have called upon the technical team to help resolve challenges. The knowledge and help Gina Rodda and Brian Selby provide are invaluable. I am thankful they are available to help work through	0	0	1	1

my challenges.				
I haven't reached out to deal with them. I find work arounds	1	0	0	1
I just have to feel my way through and note the differences.	1	0	0	1
I just look it up myself if the links are broken	0	0	1	1
I never found the information and never heard back	1	0	0	1
I never reported the issue	1	0	0	1
I often work through the issues on my own, as reaching out to anyone takes a long response time	1	0	0	1
I still had to use my best judgement on some issues rather than having specific guidance from the website.	0	0	1	1
I stopped using it and put the handouts in a drawer. Use online searches	0	0	1	1
I think, Energy Ace, need to do more marketing because Energy Ace does not feel like it a official website approved <a href="https://www.energy.ca.gov/">https://www.energy.ca.gov/</a>	0	0	1	1
The design need to change to make it look more official in my opinion to look more credible.				
I was able to find what I needed eventually, but needed to register and develop a mockup design to understand if it was in compliance or not, rather than just using a FAQ or chatbot to ask the question regarding compliance.	1	0	0	1
I was able to find work arounds to show compliance.	1	0	0	1
I was able to finish the task	1	0	0	1
I was able to shorten my content to fix the smaller boxes on the form.	1	0	0	1
I was in a time crunch and didn't have time to try and fix the issues, just had to deal with it.	1	0	0	1
I was somewhat satisfied because most issues were eventually resolved, but it sometimes took multiple steps to find the right contact or resource. Clearer guidance on where to go for specific types of questions would make the process smoother. While the support team was helpful, responses could take time, and some questions about technical details or resource navigation weren't fully addressed. A more	0	0	1	1

direct feedback channel within the online platform would improve efficiency.				
I've provided information previously on what needs to be changed.	0	0	1	1
IT IS MOSTLY LIKELY CODE ISSUES NOT THE ACE ISSUES.	0	0	1	1
ITS NEVER BEEN ADDRESSED.	1	0	0	1
TABBED/ARROW NAVIGATION SHOULD BE IMPLEMENTED. WHEN COMPLETING PROJECT WHICH HAVE UPWARD OF 50 LIGHT FIXTURES IT WOULD BE A HUGE TIME SAVER AND SANITY SAVER.				
If couldn't find the info, just searched elsewhere.	0	0	1	1
Im not sure how to fix it myself	0	0	1	1
Issues were brought-up but not resolved, even after months...	0	0	1	1
It is overbearing	0	0	1	1
It makes it easy to get the required compliance forms	1	0	0	1
It never fails there is a missing sheet or something is not filled out right	1	0	0	1
It took a long time	1	0	0	1
It took far too long to get them resolved	1	0	0	1
It was fine	0	0	1	1
It was resolved but took a few days	1	0	0	1
It wasn't always easy to find what I needed	0	0	1	1
It's easy enough to select new projects.	1	0	0	1
It's not that slow. It's not a big deal.	0	0	1	1
Its hard to find applicable fact sheets and such within so much content. There may be more I could use that I can't find easily	0	0	1	1
Just be patient	1	0	0	1
Just had website issues but didn't reach out to support	0	0	1	1
Loading time have usually been resolved by reloading the page and data i have inputted is usually remembered.	1	0	0	1
Loading times are ok but could be better	1	0	0	1
Loading times are still slow and the website is kind of buggy	1	0	0	1

sometimes.				
Long loading times sometimes, not all of the time.	0	0	1	1
Mainly missing trigger sheets for most recent code years.	1	0	0	1
Materials tend to get updated in a timely manner, once the EnergyCode Ace staff is able to get to it.	0	0	1	1
Most of it is being resolved by either brute forcing through to find the information I need or using additional search queries, rather than receiving assistance from another source. I am satisfied to be able to navigate better through reading and learning but having to get to that point was a struggle.	1	0	0	1
Most of the time I can locate the information I'm looking for...but I have to go through multiple areas to do so	0	0	1	1
Most were resolvable, didn't matter to compliance or found a workaround	1	0	0	1
N/A	2	0	1	3
N/A	0	0	1	1
NA	0	0	2	2
NA	1	0	0	1
Na	0	0	1	1
Navigating reference ace is a nightmare on mobile. the navigation pane loses focus and you get stuck on certain pages.	1	0	0	1
No change was made	0	0	1	1
No comment.	1	0	0	1
No easy to find ways to fix problems with site	1	0	0	1
No help provided	1	0	0	1
No issues. Quick responses	0	0	1	1
No obvious way to follow up	1	0	0	1
No time. Did not go back	0	0	1	1
No website is perfect	0	0	1	1
Not clear resolution	1	0	0	1
Not close enough to the ongoing process	0	0	1	1
Overly complicated	1	0	0	1
Pages started loading quicker	1	0	0	1
Phone service or responses could be better.	0	0	1	1
Process can always be better	1	0	0	1
Refreshing the page helped with the slow loading.	1	0	0	1
Resolution in progress	0	0	1	1
Resorted to my own index	0	0	1	1
SLOW WEBSITE LOADS,	1	0	0	1

ESPECIALLY FOR LARGER PROJECTS.I NEVER COMPLAINED ABOUT IT, I JUST DEALT WITH IT, SO ISSUE WAS NEVER RESOLVED.				
SOMETIMES NOT CLEAR THE RUNNING QUESTIONS IN THE FORMS	0	0	1	1
Searches on the positive side come back with many many options but on the negative side, there are many search returns to sort through	1	0	0	1
See comment earlier	1	0	0	1
See previous comments	1	0	0	1
Sent questions and didn't get thorough explanation in answers, Responses were generic	0	0	1	1
Slow loading g is still a factor	1	0	0	1
Slow loading times not resolved	1	0	0	1
So that I can do my work.	0	0	1	1
Some information regarding code sections is hard to find.	1	0	0	1
Some methods of searching for resources are not as intuitive as others, but I think after some more time with it I will be more familiar with how to utilize the tools.	0	0	1	1
Some of the trainings on the website are a bit dated and need to be either removed or updated. Some of this is difficult considering the code changes over the various code cycles.	0	0	1	1
Some time website is very slow	1	0	0	1
Sometimes I can't find the information I'm looking for.	1	0	0	1
Sometimes flawless other times can take awhile	1	0	0	1
Sometimes it seems the forms lag when saving and clicking next.	1	0	0	1
Still have intermittent issues with items not downloading.	0	0	1	1
Stop it	1	0	0	1
Take a long time to get a live person sometimes	0	0	1	1
Tech support was quick to resolve issues	1	0	0	1
The help desk is hands down fabulous! Brian Selby and Gina Rodda, answer your questions fast and fully. I always know I am going to get the right answer when I ask a question there. The CEC hotline.... not so much	0	0	1	1

The issue took a little time to resolve, but it was resolved eventually. Note, generally I have very few issues with the program / website.	0	0	1	1
The issue was resolved at a later time	0	0	1	1
The issues I encountered were initiated at the State level, there nothing Energy Code Ace or I could do to resolve them.	0	0	1	1
Sometimes all you can do is accept that things are not ideal and outside of your control.				
The password reset tool has been broken for awhile	1	0	0	1
The process is too complicated.	1	0	0	1
The results did not satisfy the building departments	0	0	1	1
The rules are complicated and I do not use the energy code daily.	0	0	1	1
The slow load speeds often times just need to be waited out.The broken links weren't too big of a deal due to being able to search the code myself.	1	0	0	1
The slow loading time happens with Reference Ace and sometimes when I'm filling out compliance form. There's not much that can be done about that from my end.	1	0	0	1
The state needs to think through how regulation applications are mandated. We are all trying to minimize the impact that our buildings have, but the rigors of the mandated processes are too onerous.	0	0	1	1
The support staff has been open to looking into issues, but the solutions aren't always timely and issues still persist.	0	0	1	1
The web is good, slow sometimes, no consistence in information, like 2019 forms with description of how to fill out and why, but 2022 forms version do have this version.	0	0	1	1
The website is difficult to navigate	0	0	1	1
The website is slow sometimes, it's still slow. How do you get it resolved? This question and survey is lame. Are you going to get useful results out of this with questions like these?	0	0	1	1
The website layout is somewhat	0	0	1	1

confusing, but I can typically find what I need after some digging.				
The whole thing is overly-complicated and cumbersome. Simplify.	0	0	1	1
The whole website is slow to load. It's overall poorly designed. The worst are the actual pull down menus to fill in information for each and every section on a project.	1	0	0	1
There have been times where it took multiple days to get the project access back to a usable speed	1	0	0	1
There really isn't a way to resolve slow software on my end. We just accept the fact the sometimes the system is slow.	0	0	1	1
There was no "NOT APPLICABLE" option. I don't do enough work in CA for it to be a huge issue, just annoyed that I'm spending more time on T24 than I was ~10yrs ago due to it being an online form.	1	0	0	1
There was no resolution.	1	0	0	1
These issues could not be resolved due to website design.	1	0	0	1
They eventually fixed the issue in later versions of the forms.	0	0	1	1
They haven't been resolved?	0	0	1	1
This is why I usually don't respond to surveys	1	0	0	1
This year many contents available on web site earlier before next 2025 codes effective cm	0	0	1	1
Took time and reworking	1	0	0	1
Unsure	1	0	0	1
We have too much work to do to be slowed down	0	0	1	1
We hear applicants struggle to reach anyone	1	0	0	1
Website can be very slow at times	1	0	0	1
Well, I just clicked on all of the links to see if it leads me to the place I hope is what I need. It's not efficient, but didn't take all that much time either.	1	0	0	1
Work overload.	1	0	0	1
access to live personnel is quite difficult	0	0	1	1
any time a building official can gain compliance, or find tools that help to gain compliance are welcome	1	0	0	1
because i was able to help my	1	0	0	1

costumers				
because your system is to slow.	0	0	1	1
big buildings with lots of rooms.				
you need to able to break a				
building down floor by floor, then				
when done combine them. that				
would speed this up.				
can't really recall, as it was too	0	0	1	1
long ago				
contact virtual assistant to send a	1	0	0	1
working link				
creating a log-in does not seem to	0	0	1	1
shorten search time.				
difficulty getting answers.	0	0	1	1
eventually completed	1	0	0	1
documentation needed				
eventually found what I needed	0	0	1	1
forms have to be recreated if	1	0	0	1
compliance ID can't be found my				
energycodeace				
helpful to ensure I understand	1	0	0	1
ensuring title 24 compliance.				
i didn't encounter many and the	0	0	1	1
website was helpful enough				
it finally worked after restarting	1	0	0	1
it was an internet issue	1	0	0	1
items were difficult to find.	1	0	0	1
its still relatively slow	0	0	1	1
itâ€™s frustrating	0	0	1	1
materials on the job are	1	0	0	1
compliant, but generating a doc				
that demonstrated compliance to				
submit for a permit was tedious				
most information is there, just not	0	0	1	1
necessarily intuitive to find				
my ability doesn't have much to	1	0	0	1
do with server maintenance lol				
n/a	1	0	1	2
n/a	1	0	0	1
na	1	0	1	2
no available phone number to call	0	0	1	1
and have someone walk me thru				
the issues...				
no comment here	0	0	1	1
no explanation	1	0	0	1
no issue	1	0	0	1
no problem	1	0	0	1
none	0	0	1	1
not clear structure of website and	1	0	0	1
somewhat difficulty to find				
requirements of the code				
not everything is available	1	0	0	1
ongoing issue	1	0	0	1
quick solution	0	0	1	1
quickly fixed upon email showing	1	0	0	1
the issue.				
referrals to the CEC website for	0	0	1	1

forms, or other information				
slow response times	1	0	0	1
some code references and exceptions are difficult to navigate in such a rigid environment.	1	0	0	1
some content was hard to locate	0	0	1	1
sometimes you just have to figure out the right way to do things even if it's not always clear immediately - like the virtual compliance assistant takes me in circles a lot. but i just had to go to forms ace to make it actually work.	1	0	0	1
speaks for itself	0	0	1	1
still slow sometimes	0	0	1	1
the less graphical intensity helps	1	0	0	1
the on demand videos are unavailable, we can only attend live webinars now	0	0	1	1
the speed is still the sa	1	0	0	1
the website is very slow	1	0	0	1
there was no way to get help on the problems... no link	0	0	1	1
took a couple days to get an email back	1	0	0	1
unable to open some documents	0	0	1	1
was not allowed to enter info as shown in the energy efficient standards	1	0	0	1
yes	1	0	0	1
<b>Total</b>	<b>243</b>	<b>75</b>	<b>234</b>	<b>552</b>

### Tabulation of Q26 S1

What would have improved your level of satisfaction with the course(s)?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
	243	74	222	539
AI based software	0	0	1	1
Better trainers. Trainers who are not so arrogant. The interface program is a nightmare. Too many windows.	0	0	1	1
Everything	0	0	1	1
Having a building professional that knows the code instead of what appeared to be a homeowner that had only one project to reference	0	0	1	1
I don't need more algorithms just a simple way to know which forms are required for the scope	0	0	1	1

of work.				
If the instructors actually understood the realities of construction and the issues facing contractors. They seem overly interested in paperwork, but maybe that is all Sac is truly interested in.	0	0	1	1
More real examples of applications	0	0	1	1
More time to learn all of the material	0	0	1	1
NA	0	0	1	1
Topics should be very specific - like applicable to one trade only.	0	0	1	1
Just Envelope, Lighting, Mechanical HVAC, etc. Don't make me sit through or space out on sections that I can't use only to gloss over the section that is most important to me. In my case, Nonres mechanical HVAC + covered processes.				
can't recall	0	0	1	1
if these energy changes excluded greenhouses. reach out if you want to know the impacts these changes will have, they will result in higher op costs and eliminate new construction. Do what you want to cannabis producers it's the other 95% of greenhouse users that you are harming	0	1	0	1
utilize ai	0	0	1	1
<b>Total</b>	<b>243</b>	<b>75</b>	<b>234</b>	<b>552</b>

**Tabulation of Q33 S1**

What additional training courses	How have you encountered California's
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would be useful to further increase your level of knowledge about codes applicable to your work?	Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Carbon issues	0	1	0	1
	243	0	0	243
no idea	0	0	1	1
-	0	0	1	1
.	0	0	4	4
0	0	0	1	1
2025 changes	0	0	1	1
?	0	0	1	1
? too many questions!!	0	0	1	1
A	0	1	0	1
A course on reading and interpreting the Certificates of Compliance would probably be the most helpful. You can know the code requirements, but they often are interdependent. The Certificate of Compliance is how you know the overall combination of features complies.	0	0	1	1
A longer in depth course on energy modeling with instructors reviewing and real recommendations.	0	0	1	1
ACQUIRING UPDATE OF TITLE 24 COMPLIANCE FORMS.	0	1	0	1
ATTCP-Mech	0	0	1	1
Additional Title 20	0	1	0	1
Additional resources for solar compliance	0	0	1	1
Additional training courses that would be highly valuable include those focused on lighting controls both indoor and outdoor for different areas across residential, non-residential, and multifamily buildings. Understanding how to apply code-compliant control strategies in various settings, such as common areas, parking lots, hallways, and individual units, would enhance both design and compliance efforts. Courses covering solar integration with lighting and control systems, as well as updates on evolving energy codes, would also be beneficial for staying current and ensuring best practices.	0	0	1	1

Additional training courses throughout the year to provide plan reviewers the most up to date requirements as they're constantly changing along with all the State bills coming down.	0	0	1	1
Additional training on practical application of current energy codes particularly how to document compliance and coordinate with engineering disciplines would be very useful. Courses that walk through real project scenarios or common code challenges would strengthen my ability to ensure compliance efficiently.	0	0	1	1
All information is valuable.	0	0	1	1
Alternate means and materials options, section 104 CBC	0	0	1	1
Any and all.	0	1	0	1
Any. Your material is great.	0	1	0	1
Anything energy or green code related courses	0	1	0	1
As an architect primarily interested in general requirements/intent. We have other consultants helping us and versed in all requirements.	0	1	0	1
Battery storage	0	1	0	1
Big picture goal of the state.	0	0	1	1
Building Envelope	0	0	1	1
Commissioning				
Building and Mechanical code training.	0	0	1	1
Building component short training courses	0	0	1	1
Building science courses to explain the rationale and background for the codes would help to clarify the "why" and how to best apply the code options.	0	1	0	1
CLIMATE ZONE SPECIFIC REQUIREMENTS	0	1	0	1
California Building Code	0	1	0	1
California codes energy integrated trainings, fire, plumbing, mechanical.	0	0	1	1
Can't think of any.	0	0	1	1
Can't think of anything at the moment.	0	0	1	1
Cant think of anything	0	0	1	1
Can't think of any off hand	0	0	1	1
Changing over from gas to electric appliances and what effects that has.	0	0	1	1
Classes that focus on cost	0	1	0	1

effective decarbonization strategies.				
Code change courses, online, self instructed	0	0	1	1
Code changes	0	0	1	1
Code compliance options	0	0	1	1
Code update course for 2026	0	1	0	1
Code update courses are the most valuable for us at this time.	0	0	1	1
Code update seminars or meeting	0	0	1	1
Code updates.	0	1	0	1
Commissioning.	0	1	0	1
Compliance courses	0	0	1	1
Compliance with DSA	0	0	1	1
Courses on ADA compliance	0	1	0	1
Courses providing "real" examples of products and procedures used to comply.	0	1	0	1
Courses specific to mechanical engineers for energy modeling and utilizing new advancements in HVAC technology and how it relates to compliance.	0	0	1	1
Courses specifically focused on single family alterations and additions.	0	0	1	1
Courses tailored to specific roles	0	0	1	1
Current courses adequate.	0	0	1	1
DIFFERENT KINDS OF RESIDENTIAL PROJECTS WITH SAMPLE OF MODELS WITH COMPLIANCE TO TROUBLESHOOT	0	0	1	1
Demand and response. and actual testing videos for Title 24 lighting occ sensors	0	0	1	1
Documentation pdf format	0	0	1	1
Don't know	0	0	1	1
ESS systems	0	0	1	1
Easy to use resources for follow up review.	0	1	0	1
Electrification issues including service upgrades to existing buildings.	0	0	1	1
Energy Compliance, Mechanical Systems, Plumbing Systems	0	0	1	1
Energy Incentives for Data Center	0	1	0	1
Energy Modeling	0	0	1	1
Energy compliance training that only pertains to the building envelope (i.e.: not a more general training that also includes mechanical and lighting energy compliance).	0	1	0	1
Energy modeling + plan take offs in real time- with less focus on the energy code, but more how to	0	0	1	1

apply it in the modeling software and a case study plan set.				
Energy modeling for residential	0	1	0	1
Energy modeling in IES VE	0	0	1	1
Everything related to the built environment	0	0	1	1
Filling out documentation for non-residential mechanical permits	0	0	1	1
Get me out of this survey.	0	0	1	1
Rrdundant				
Great to have zero net carbon courses that also satisfy Calif architectural license requirements	0	0	1	1
HCAI CODES	0	1	0	1
HERSS/ECC and ATT training	0	0	1	1
HVAC DDC	0	1	0	1
HVAC SYSTEM IN NON RESIDENTIAL.	0	1	0	1
HVAC controls	0	0	1	1
Healthcare	0	0	1	1
How the NRCC forms get generated and the choices made in the dynamic forms.	0	0	1	1
How to deal with building officials/plan checker that does not know the Standards	0	0	1	1
I am not interested in trainings through ECA any longer. They really are a waste of my time.	0	0	1	1
I can not think in anything right now.	0	0	1	1
I can't think of any. Energy Code Ace does a good, comprehensive job of providing courses and materials	0	1	0	1
I can't think of anything at this time.	0	0	1	1
I cannot think of any.	0	0	1	1
I cant think of any	0	0	1	1
I don't know	0	0	1	1
I don't think ECA is capable of helping me, I have to help them.	0	0	1	1
I need to look them up more.	0	0	1	1
Have not spent much time reviewing them				
I seem to always get the sticky widget questions that I cant answer - I know the basics but its usually easy to get answers	0	0	1	1
I think a clear path on what triggers, and how to comply with information easily searched with support email, to help answer questions.	0	0	1	1
I would like to learn more about insulation, and exterior rigid	0	1	0	1

insulation.				
I would love to have a thorough knowledge of more complex commercial mechanical design	0	0	1	1
I would prefer in-person trainings	0	0	1	1
I would really like a course or some guidance on how to read the code in broad senes. How do different pieces fit together, how can someone navigate it generally to ensure that you're not missing something. It's all a bit spaghetti code and if you don't spend a lot of time reading through it, it can difficult to navigate and ensure you are compliant, and also have intellegent conversation with contractors, architects, and designers.	0	1	0	1
I'd like more on alteration and additions to existing buildings	0	0	1	1
I'm not sure	0	0	1	1
I'm not sure.	0	0	1	1
IDK	0	0	1	1
Idk	0	0	1	1
Improve the code so all these classes and guides are less necessary	0	0	1	1
Increasing my general knowledge of the CalGreen and T24 requirements for non residential projects	0	1	0	1
Introduction to BEM for compliance modeling.	0	0	1	1
It seems like EnergyCodeAce generally covers most of what I'm looking for.	0	0	1	1
It seems like the cover all the topic I need them too. I just wish the webinars were still recorded so I could watch them if I miss them.	0	0	1	1
I'm retired as of this month so this isn't applicable	0	1	0	1
Just updates	0	0	1	1
Keep doing what you're doing - maintenance courses for those of us who have been doing it awhile and courses to start out the new engineers & designers.	0	0	1	1
Keep up the great work!	0	0	1	1
LANGUAGES.	0	0	1	1
LED commercial and residential lighting codes and installation standards training	0	0	1	1
Like full time concierge training courses 1 on 1 with an expert who can solve my issues immediately	0	0	1	1

on demand on my projects?				
Look up when needed applied to project	0	0	1	1
Looking for multifamily less than 3 stores because someone i have project for 4 units really confuse me which way should I move go with single family or go with multifamily 3 store or more.	0	1	0	1
MORE NONRESIDENTIAL COMPLIANCE COURSES	0	1	0	1
MORE TRAINING COURSES	0	0	1	1
Major CODE Cycle changes	0	0	1	1
Modeling- Res and Non ResOnline forms	0	0	1	1
More T24 training for commercial spaces and demand response. The Demand requirement is so expensive and ultimately not being used so ways to work around to save customer money!	0	0	1	1
More Title 24 code courses	0	1	0	1
More courses specific to retrofit work	0	0	1	1
More examples of typical project types	0	1	0	1
More in depth commercial mechanical training	0	0	1	1
More in-depth on non-residential to spend more time on changes in each of the significant trades/ disciplines (mechanical, electrical, lighting, plumbing)	0	1	0	1
More multifamily specific courses about code standards	0	0	1	1
More on battery storage and resiliency, also EV and PV panel integration	0	0	1	1
More on how to document alterations, often a challenge	0	0	1	1
More on non-residential, since this is the majority of the work that most Architects/Engineers do.	0	0	1	1
More short practical courses	0	0	1	1
More specifics on ADUs	0	0	1	1
Mostly commercial.	0	0	1	1
Multifamily courses	0	0	1	1
My entire job is to clarify part 6 for other people, there is very little new information you can tell me about part 6	0	0	1	1
My work focuses mostly on replacement HVAC projects, so more focus on the prescriptive requirements for alteration work would be helpful for me.	0	0	1	1

N/A	0	2	6	8
N/A	0	0	1	1
N/A retiring :-)	0	1	0	1
N/A what is being offered is very user friendly the way it is	0	0	1	1
NA	0	0	8	8
NO OPINION	0	0	1	1
NR Mechanical	0	0	1	1
Na	0	0	1	1
New code 2025; courses on NRCA and NRCI and who fills them out.	0	0	1	1
New code updates	0	0	1	1
No comment	0	0	1	1
No suggestion at this time	0	0	1	1
No suggestions here. I haven't even had a chance to take all the EnergyCodeAce training which is currently available.	0	0	1	1
Non Residential compliance & multifamily buildings	0	1	0	1
Non-residential applications	0	0	1	1
None	0	1	5	6
None I can think of at the moment.	0	0	1	1
None I can think of.	0	1	0	1
None-Residential project code compliance	0	0	1	1
None.	0	1	2	3
Not applicable	0	0	1	1
Not enough training with real projects to feel confident	0	0	1	1
Not sure	0	1	4	5
Not sure, the offering is pretty broad already	0	0	1	1
Not sure.	0	0	1	1
Not that I can think of.	0	0	1	1
Nothing in specific	0	1	0	1
Nothing specific comes to mind	0	0	1	1
Nothing to note	0	0	1	1
On site battery design parameters	0	1	0	1
Plans examiner and Energy Software	0	0	1	1
Please have someone contact me after October 20 to take a tour of your website. Thank you.	0	0	1	1
Possibly specialized training based on a specific project we are working on. Something where we could submit the plans and receive training on for compliance for the codes relevant to the project.	0	0	1	1
Practical implementation and an understanding of building dynamics.	0	0	1	1
Prescriptive non-residential modeling	0	0	1	1

Provide basic code requirement short cut layout. Cheat Sheet	0	0	1	1
Refrigerant record keeping and reporting. Leak detection and repair thresholds	0	1	0	1
Regular publications	0	0	1	1
Regular updates on Title 24 courses and possibly OSHPD as well.	0	0	1	1
Renovation	0	1	0	1
Residential energy compliance	0	0	1	1
Residential/commercial Permits	0	1	0	1
Retrofit and Alterations	0	0	1	1
Compliance: Focused on how Title 24, Part 6 applies to retrofit projects, tenant improvements, and equipment replacements, since these situations often create unique compliance challenges.				
Simplified navigating energy compliance documents for the field Inspector.	0	0	1	1
Solar	0	0	1	1
Solar & battery training	0	0	1	1
Solar and battery backup	0	0	1	1
Solar panels design	0	0	1	1
Solar.	0	0	1	1
Something that shows the creators of these courses actually know how to construct buildings.	0	0	1	1
Specific course focused on the Title 24 Part 6 updates in the state triennial code process.	0	1	0	1
Split the course between say a Beginner level versus a more Intermediate/Advanced level providing detail for plan reviews where time is not a factor.	0	1	0	1
Stop codes	0	0	1	1
T-24	0	1	0	1
The list is vast...	0	0	1	1
The ones being provided and those proposed are usually within my needs for knowledge about the codes and applications in my work.	0	1	0	1
There is a good cycle of courses available for review. There appear to have a good number of courses available which are instructor lead.	0	0	1	1
Title 20	0	1	0	1
Title 24 lighting	0	1	0	1
Title 24 p6 update course	0	0	1	1
Title-24 Acceptance Test	0	0	1	1
To be honest, the codes themselves are the major impediment to understanding	0	0	1	1

their applicability. They should be drastically simplified.				
Training on CA's renewable energy goals and what CA is doing to meet them	0	0	1	1
Unknown	0	1	1	2
Unsure	0	0	2	2
Unsure.	0	1	0	1
Updated material for code cycle change.	0	0	1	1
Utilize the resources available at College of San Mateo & ICC	0	1	0	1
We architects need to know a lot of things. The Energy Code is a small part, and at times, not really important. I would rather spend my time on design. So I just learn enough to secure a Building Permit competently.	0	0	1	1
What would be most useful at this time is training at a more micro level since code is being applied differently by local jurisdiction. OR offer local jurisdiction training to they apply code consistently across the state.	0	0	1	1
Will let you know	0	0	1	1
Yes. Controls	0	1	0	1
a better understanding of the resources available and how to use them	0	0	1	1
ai agents	0	0	1	1
at this point in this ridiculously long survey I'm tired and am just typing in words	0	0	1	1
business practices	0	0	1	1
code applications in construction	0	0	1	1
code changes	0	0	1	1
commercial	0	1	0	1
dont know	0	0	1	1
general knowledge	0	0	1	1
high level overview of new codes and changes vs. detailed code courses on how to implement the codes at an engineering level.	0	1	0	1
how architects can achieve compliance without having to rely on models	0	1	0	1
how to talk with your client about the value added by working with the energy consultant as a trusted resource. CEA's are a MUST in this industry, and any and every T24 person who is not a CEA should be required to become one. An energy consultant's role is very critical in helping people	0	0	1	1

expeirence the built environment, our role, our knowledge and our guidance has over anywhere from \$10,000 to \$500,000+ of impact on a proeject and getting consultants to understand that will lead to more involvement and education with their clients.				
hvac acceptancec testing. Non resd.	0	0	1	1
i dont know	0	0	1	1
i think the courses are comprehensive in covering new and coming changes, which are the things i feel they are most useful for.	0	0	1	1
in depth class on T24 recommendations for improved energy efficiency to owners and builders	0	0	1	1
live online options work best for me...	0	0	1	1
longer courses, more in depth each section	0	0	1	1
maybe provide an occasional course on some of the specialty topics that are currently relevant in the industry. i.e. Data Centers, Manufacturing facilities (including renovations), Laboratories, Industrial applications or Utilities.	0	1	0	1
maybe would be good to get a better handle on general requirements. my practice focuses on observatory design (for telescopes). its not always straight forward to know what is required.	0	1	0	1
modeling walkthroughs of non-standard or not often used systems	0	0	1	1
more code review and explanation	0	0	1	1
more on demand interactive courses on any topic	0	0	1	1
more residential courses	0	1	0	1
more videos on MECHANICAL ACCEPTANCE TESTING	0	0	1	1
multi-family and the NRCC mechanical form	0	0	1	1
n/a	0	2	6	8
n/a	0	0	1	1
na	0	0	3	3
net zero complaince, passive strategies	0	0	1	1
no	0	0	2	2
no comment	0	1	1	2
no suggestion	0	0	1	1

none	0	1	4	5
none	0	0	1	1
none come to mind	0	1	0	1
none- all are good	0	0	1	1
not applicable	0	1	0	1
not sure	0	0	2	2
nothing I can think of.	0	0	1	1
nothing for now	0	0	1	1
projected changes/ regular presentations for each code cycle	0	0	1	1
regular updates on code changes and reasons for their changes	0	1	0	1
residential	0	0	1	1
revit design	0	1	0	1
solar	0	0	1	1
solar and hotel specific training and codes	0	0	1	1
stories telling intent behind code complexities	0	0	1	1
understanding how the program works and who to communicate with when there are errors in the software	0	0	1	1
unsure	0	1	0	1
unsure	0	0	1	1
wesfw	0	1	0	1
wui requirements	0	0	1	1
x	0	0	1	1
~	0	1	0	1
<b>Total</b>	<b>243</b>	<b>75</b>	<b>234</b>	<b>552</b>

#### Tabulation of Q34 S1

What could the California Compliance Improvement Program do to make compliance with codes easier for you and your company?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
	243	0	0	243
renew energy code ace	0	0	1	1
-	0	0	2	2
.	0	0	4	4
1. Make energy code more readable by using model code organizational structure.2. Make general public and local govt. aware of the importance of energy codes.	0	0	1	1
A lot, but I cannot name them.	0	0	1	1
A more unified system would help a lot. If the compliance tools and rebate documentation could be	0	0	1	1

linked together, it would eliminate redundant data entry and make it easier for small businesses like ours to handle multiple projects efficiently. More clarity around how Title 24 interacts with utility rebate requirements would also simplify the process

0 1 0 1

A sample or template of a noncompliant vs. compliant design.

0 0 1 1

Actually get some HERS testing oversight that works. We deal with hundreds of projects where other HERS testing companies fake documentation. Its extremely frustrating to see. Currently the energystar review of compliance documentation means there is basically no in-field QA to guarantee HERS raters are doing their jobs correctly. The CEC has no teeth when it comes to dealing with these companies and CHEERS has zero incentive to pull their licenses as they are getting paid directly by the fraudulent HERS raters. The system is massively flawed and someone needs to do something about it.

Add ai

0 0 1 1

Allow more for professional judgement

0 0 1 1

Always work toward simplicity

0 0 1 1

Annotated code access

0 1 0 1

Audit HERS Rater projects and enforce compliance with HERS verification standards.

0 0 1 1

Be sure that Architects and Building Officials of all Jurisdictions Having Authority are informed. More importantly, before a General Contractor is able to RENEW their CA license, they must PASS the content of each major CODE Cycle Change with a satisfactory 70% passing score before being issued their new license. THIS IS CRITICAL to better understanding and CODE compliance !!!

0 0 1 1

Be understood in the broader design community as a resource; much of our time is spent teaching that the code is required and applicable to projects. Only

0 0 1 1

energy professionals and architects understand how much building design is driven by energy concerns.				
Better guidance for GC's on managing NRCA's and NRCI's CHEERS is too expensive. It is cost prohibitive for multifamily projects. This is another inflationary component of housing development. This needs to be fixed now.	0	0	1	1
Better interface on the website.	0	0	1	1
Better software that is easier to use. As an example commercial mechanical unit change outs should not require the knowledge of an engineer or energy consultant to use the software to fill out a simple compliance form.	0	0	1	1
CREATE HANDOUT FOR SPECIFIC CLIMATE ZONE REQUIREMENTS	0	1	0	1
Can live workshops be available on the weekends or weekdays after 5pm?	0	1	0	1
Can't think of anything at the moment.	0	0	1	1
Code updates	0	0	1	1
Codes and compliance are two subjects in CA. I just finished a training and in discussions with contractors many do not worry about the energy code. Many cities are only nominally interested in part 6. Some inspectors (and raters) admit to drive by follow through on Part 6	0	0	1	1
Complete real case studies about NR modeling, including building plans	0	0	1	1
Continue to have ongoing changes/update review/discussion so we as licensed professionals are aware of major changes to code requirements.	0	1	0	1
Continue to offer courses on line, provide outreach for training awareness	0	0	1	1
Continue to offer the training and resources	0	0	1	1
Continue to send emails about upcoming courses	0	1	0	1
Continue training	0	0	1	1
Continue with providing quick reference sheets	0	1	0	1

Continue work on code language for readability	0	0	1	1
Continue your work. Thanks	0	1	0	1
Correcting compliance software prior to code changes	0	0	1	1
Create handouts for climate zone 10 that we can put it on our city web site instead of creating handouts ourselves that takes a lot of time.	0	0	1	1
Detangle the language, organize the information in a simpler format. Stop with the cartoon images.	0	0	1	1
Develop an interactive AI based energy modeling software.	0	0	1	1
Doing a good job now	0	1	0	1
Dont know	0	0	1	1
Easier human interface with the compliance software, sometimes errors come to the models and the explanation is un helpful.	0	1	0	1
Easier to	0	0	1	1
Encourage enforcement of code in the field, especially on DSA projects. These project have design reviewers who are not concerned with compliance with the energy code, they are concerned with compliance with Fire, access, and structural code requirements. Inspectors in the field don't seem to know about or enforce various energy code requirement like acceptance testing. This leads to the entire construction side of the industry not being aware of code requirements because of lack of enforcement.	0	0	1	1
Energy Code Ace really helps. The only thing I can think of is simply making the code itself simpler.	0	0	1	1
FREQUENT USERS	0	0	1	1
G	0	0	1	1
Get involved earlier in project timelines to ensure compliance	0	0	1	1
Get other jurisdictions to enforce the energy code. It is difficult to enforce the code when other inspectors and AHJ do not.	0	0	1	1
Have a more robust helpline and enforcement arm.	0	0	1	1
Have a single log-on for team members. It's a hassle to have to "appoint" someone else to finish	0	0	1	1

up the work.				
Have more availability to talk with someone live and a response to questions asked in a reasonable amount of time	0	0	1	1
Help reduce codes	0	0	1	1
Hold webinars on the weekend.	0	0	1	1
Honestly, Energy Code Ace is really great so I don't have a recommendation.	0	0	1	1
I can't think of anything at this time.	0	0	1	1
I don't know, I'm not optimistic about CCIP capabilities.	0	0	1	1
I don't know.	0	0	1	1
I enjoy receiving magazines with articles regarding changes in residential codes and how they came about, etc.	0	1	0	1
I have been satisfied with the program, and it has really helped me to be compliant with code changes	0	0	1	1
I think it is fine	0	0	1	1
I think the CCIP is already doing a great job, and the hardest part is breaking through to users within a crowded work and media context.	0	0	1	1
I think the info sheets are great. keep them coming!	0	1	0	1
I think this is a very comprehensive program as is.	0	0	1	1
I'm not sure.	0	0	1	1
I'm still not totally sure what the Compliance Improvement Program is	0	0	1	1
Im not sure	0	0	1	1
In person training	0	0	1	1
In-person (2 - Day) deep dive of the entire T24 2025 edition.	0	0	1	1
Instead of focusing on obscure and precise compliance focus on big ticket items	0	0	1	1
It's been very valuable, I'm impressed	0	0	1	1
It's all good	0	0	1	1
Just keep up the updates (emails, etc)	0	1	0	1
Keep current information available	0	0	1	1
Keep doing what you're doing!	0	0	1	1
Keep growing	0	0	1	1
Keep the Reference Ace quick and up to date	0	0	1	1
Keep the messaging clear, cut , and voncise	0	1	0	1
LP and NG are cost effective	0	1	0	1

methods to heat greenhouses				
Less compliance sheets needed.	0	0	1	1
Less paperwork! Simplify the interface.	0	0	1	1
Lobby the CEC for simplified codes	0	0	1	1
Lunch and learn?	0	0	1	1
Lunch time, hour training sessions.	0	0	1	1
MORE REFERENCES OF COMPLIANCE MODELS TO HELP TROUBLESHOOT WHEN I CAN'T GET PROJECTS TO COMPLY	0	0	1	1
MORE TRAINING	0	0	1	1
Make all live training available afterwards	0	0	1	1
Make courses shorter - it's difficult to include a 3-hr course in the working day!	0	0	1	1
Make self-pace learning and recorded webinar options more available.	0	1	0	1
Make the new constructions comply easier because now a days complying with energy pro 9.4 its really hard.	0	1	0	1
Make them easier to read and follow	0	1	0	1
Make these surveys shorter	0	0	1	1
Make this SURVERY shorter	0	0	1	1
Make us aware of everything available to us	0	0	1	1
Maybe a contact to ask questions and list general questions	0	1	0	1
More availably for the courses	0	1	0	1
More classes	0	0	1	1
More courses	0	1	0	1
More detail explanation for code requirement.	0	0	1	1
More in person training	0	0	1	1
More information about course offerings that we can attend.	0	0	1	1
More literature	0	0	1	1
More online training	0	0	1	1
More paid internships	0	0	1	1
More robust search function	0	0	1	1
More targeted training to builders and hvac installers. i know there was a shift with more training and awareness for AHJ's so keep that moving. The more AHJ's we educate the less crappy plans get approved in the cities. It should stop with the PE	0	0	1	1
More training for code changes.	0	1	0	1
More training for plan checkers	0	0	1	1

More training opportunities	0	0	1	1
More training resources.	0	0	1	1
More training videos; more webinars/classes.	0	0	1	1
More trigger sheets	0	0	1	1
More trigger sheets and more training videos and classes	0	0	1	1
N/A	0	0	4	4
N/A	0	0	1	1
NA	0	0	4	4
NONE	0	1	0	1
Na	0	0	1	1
No - you guys are great	0	0	1	1
No comment	0	0	2	2
No comments at this time.	0	0	1	1
No suggestions.	0	0	1	1
None	0	0	1	1
Norhing	0	0	1	1
Not aure	0	0	1	1
Not sure	0	1	4	5
Not sure I do not know enough about this program	0	0	1	1
Not sure what would it be.	0	0	1	1
Not sure yet	0	0	1	1
Not sure.	0	0	1	1
Nothing	0	1	1	2
Nothing I can think of	0	0	1	1
Nothing at this time	0	0	1	1
Nothing comes to mind	0	0	1	1
Nothing else I can think of	0	0	1	1
Nothing extra	0	1	0	1
Nothing specific comes to mind.	0	0	1	1
Nothing to note	0	0	1	1
Nothing, really - you guys have put out a ton of effort; but people would rather grumble about energy compliance than execute on it.	0	0	1	1
Nothing.	0	1	0	1
Nothing. Energy Code Ace is amazing and we use it on a daily basis.	0	0	1	1
Offer alternative methods for compliance vs. costs.	0	0	1	1
Offer more self-paced learning opportunities	0	0	1	1
Offer more training opportunities which are not limited to in-person seminars.	0	1	0	1
Offer more training.	0	1	0	1
On line	0	1	0	1
Online training	0	0	1	1
Organize the material in a way that is easy understandable and delete old forms, and triggers, so the revelation information can be found. THEN with compliance doc	0	0	1	1

make it easier for us to know which form is the correct form. Right now, if a contractor gives me a form. Unless it a form I am familiar with, how do I verify it the correct form?				
Outreach to builders and end users	0	0	1	1
Overall, the program could make compliance easier by reducing complexity, improving usability, and offering more targeted training and support that aligns with real-world project needs.	0	0	1	1
Perhaps a portal with information on guidance where CBC, CEC, CALGreen, etc converge.	0	0	1	1
Periodic publications	0	0	1	1
Please continue to invest in Energy Code Ace.	0	0	1	1
Post handout/notes ahead of time to see how relevant the topics covered will be to me.	0	0	1	1
Probably more in person code compliance meetings.	0	0	1	1
Provide clear guidance on Refrigerant leak detection and reporting requirements	0	1	0	1
Provide courses with high level overviews of code changes and new codes.	0	1	0	1
Provide example projects to follow and learn from	0	0	1	1
Provide free weblinks to all code books.	0	1	0	1
Provide more info	0	1	0	1
Provide more information on what's changed for the new code cycle	0	0	1	1
Provide plan review agencies with same information	0	1	0	1
Provide summaries of changes to new code cycles as early as possible for project planning	0	0	1	1
Provide training on mechanical and plumbing codes also. Have an AI search tool that allows me to ask questions about applying the code.	0	0	1	1
QUIT CHANGING THE DAMN CODE TO FIT GEOPOLITICAL NONSENSE	0	0	1	1
Quick (5-15 min) training videos would be helpful.	0	1	0	1
Quit making so many changes	0	0	1	1
Reach more architects with code compliance methods and code	0	0	1	1

cycle changes.				
Record the webinars so I ca. watch them later!	0	0	1	1
Reduce all-electric and electric ready requirements for new residential and for new commercial kitchens.	0	0	1	1
Reduce the number of levels of compliance checks to just the plan checker and the construction checker.	0	0	1	1
Reformat the California Energy code. Teh numbering system is impossible to follow through multiple pages and to quickly know what section and parent sections you are referencing on any given page.	0	0	1	1
Regular updates on the code compliance process.	0	1	0	1
Remove all codes	0	0	1	1
Require contractors to update their knowledge of the building codes with each license renewal.	0	1	0	1
Resources	0	1	0	1
Resources are good now.Enhance consistency between AHJs.	0	0	1	1
Return to "Good Housekeeping" seal of product approval .	0	1	0	1
See previous answer	0	0	1	1
See previous response	0	1	0	1
Seems great. Maybe the website could be modernized once more, but it does work ok.	0	0	1	1
Shorten the training time from 4.5 hours to 1 hour increments.	0	0	1	1
Shorter training spread out over longer days	0	1	0	1
Simplicity is always the best. Flexibility is also a good thing. Not every project will meet the specific requirements and therefore the code should accommodate. Rigid rules tend to push projects away from trying to make the necessary compliances even if not perfect.	0	1	0	1
Simplify codes and use common sense	0	0	1	1
Simplify required docs applicability searches	0	0	1	1
Simplify the code requirements	0	0	1	1
Simplify the codes	0	0	1	1
Simplify the procedures for applying requirements	0	0	1	1
Simplify what is needed to comply. Clearly communicate	0	0	1	1

what is required as far as required forms to be completed, what forms are to be collected and verified and code sections that apply to the project. Personally i feel the compliance documents already do a decent job of providing code sections that apply. The energy code should be able to clearly explain in each of the sections what forms are necessary for compliance.

Simplify, simplify, simplify!

Stop changing the energy code

Stop doing anything, you've already screwed everthing up at this point.

Suggestions and recommendations for compliance with codes for projects.

TRAINING.

Teach more sections of code!

The Energy Code Ace provisions have been very helpful in the past and I have come to rely on them as foundational updates for each code cycle. Please keep these coming!

The Title 24 Reference Ace should be easier to find on the homepage. Also, it's somewhat difficult to navigate. When I have to jump back and forth between code sections to read references in the code I'm currently researching, sometimes I lose my place, or it goes back to the index with no indication of where I currently was. I think my biggest issue with the Reference Ace is that the sections are not shown in the index. For example, let's say I just have to find section 130.1 without knowing the section heading, Mandatory Lighting Controls. The only way to find it is click random chapters until I find the section I'm looking for. I guess what I'm saying is that it would be helpful if each index entry had the code section ranges listed next to it.

Hope that makes sense.

Otherwise, the website has been a very helpful tool.

The program could make compliance easier by simplifying documentation requirements and

0	1	0	1
0	0	1	1
0	0	1	1
0	0	1	1
0	1	0	1
0	0	1	1
0	1	0	1
0	1	0	1
0	0	1	1
0	0	1	1

providing clearer, step-by-step guidance on what's needed for each project type. Standardized templates or visual flowcharts would help reduce confusion and save time during submittals.

There is aspect of the energy code and compliance requirements that I could discuss in more detail. My main concern is getting the installing requirements understood. Many well qualified installers don't fully understand and don't want to be bothered with the energy code, and there are many under qualified installers that have no knowledge of the code. These types of installers rarely read all of the information that is part of the design, certainly not the NRCC documents that are required as part of the approved design. I would advocate for a notice, clearly place on each page of the electrical design that informs (reminds) the installer that the lighting controls have been designed to meet the energy code and must be installed as per the design. I would also advocate for a program the contacts installing contractors (general and electrical) through the mail, email, and maybe somehow working with the material supply industry; to promote energy code understanding.

There's a lot of resources, sometimes hard to find the one I need

They do so much already, but I would say Checklists are of great value to us.

They're doing a great job right now.

To be honest, remove the requirement so these inspections are not required anymore. It cost too much money for the owners which cost will never have a payback and has constant maintenance cost for the entire future of the building. Basically, there is no savings for owner in most construction projects.

To offer courses live, in person. Courses offered at an accessible

0 0 1 1

0 0 1 1

0 1 0 1

0 0 1 1

0 0 1 1

0 1 0 1

venue, conveniently located near mass transit hubs.				
Training reminders	0	1	0	1
Unfortunately, this at the mercy of the Energy Commission. The more complicated and convoluted they make compliance the more difficult it is for enforcement agencies and contractors to comply. We all want to comply but if the requirements are complex beyond the comprehension of a person with average intelligence, no amount of training will be adequate.	0	0	1	1
Update trigger sheets for each T24 code cycle	0	0	1	1
Work closely with the College of San Mateo Building Inspection program to strengthen the students understanding. These students range between 18 yr olds living in their parents basements to experienced, licensed Calif Contractors who are both working and/or retired. Collaborate closely with this esteemed program and the other programs in the California Junior Colleges.	0	1	0	1
Work more collaboratively with the sister agencies like the CEC who are actively working towards assessing statewide code compliance. The various programs that are doing this work are doing too fractured.	0	0	1	1
Yes, definitely yes.	0	0	1	1
You do a good job for those who use it. Sell it as a way to be creative and still in compliance with the Energy Code requirements.	0	0	1	1
a	0	1	0	1
ai agents	0	0	1	1
at this point in this ridiculously long survey I'm tired and am just typing in words	0	0	1	1
better UI, better outreach.	0	0	1	1
collaboration with AIA California				
better search links	0	0	1	1
combination classes with building officials and compliance checkers together as a group so both are hearing the same information.	0	1	0	1
continue on the path of providing and developing the resources.	0	0	1	1

continue to make accessible and navigable information available to us	0	0	1	1
continue with you method	0	0	1	1
easier to use website	0	0	1	1
eliminate the CEC	0	0	1	1
emails promoting the courses	0	0	1	1
emails with the new updated 2025 code	0	0	1	1
explain code changes better	0	1	0	1
free training courses	0	1	0	1
have a annual conference	0	0	1	1
have more training available	0	0	1	1
have shorter survey	0	0	1	1
i dont know	0	0	1	1
in my opinion, the courses are very available at no cost. Nothing else is needed.	0	1	0	1
in person training	0	0	1	1
interactive tools where you can apply different scenarios - like a virtual game where you walk into a house with different needs and you have to identify code compliance based on the dwelling's unique needs.	0	0	1	1
it is already convenient	0	1	0	1
keep funding the energy code ace website as a resource to the design community	0	0	1	1
keep up partnering with AIA for course information	0	1	0	1
keeping up with whats new using methods like this one to determine what's needed and how to fullfill those needs re: Code Compliance..	0	1	0	1
less complicated codes	0	0	1	1
make code compliance easier by offering clearer digital tools for documentation, expanding training for designers on Title 24 and CALGreen updates, and streamlining coordination between local agencies and ECC-Raters to reduce permitting delays.	0	1	0	1
make code easier to understand	0	1	0	1
make it available online at all times	0	0	1	1
make it more straight forward	0	0	1	1
make the website more mobile friendly so clients can use it from the field on their phones	0	0	1	1
make them less strict	0	0	2	2
more self-paced seminars	0	1	0	1
more training videos	0	0	1	1
more training, easy to use	0	0	1	1

software, ability to quickly replicate forms for similar projects				
more understanding on how CBECC energy model works in the background when the running the model	0	0	1	1
n/a	0	2	6	8
n/a	0	0	1	1
na	0	0	1	1
no answer	0	1	0	1
no comment	0	1	2	3
no suggestion	0	0	1	1
none	0	1	2	3
not applicable	0	1	0	1
not much	0	0	1	1
not sure	0	0	1	1
not sure just now	0	0	1	1
nothing	0	0	1	1
nothing comes to mind	0	1	0	1
offer on-demand training again	0	0	1	1
provide additional courses on a wider variety of project types.	0	1	0	1
provide free beer and pizza...	0	0	1	1
provide more trainings	0	0	1	1
provide software	0	1	0	1
res/.	0	0	1	1
review and enforce compliance with existing regulations under purvue of building departments that they fail to follow through on.	0	0	1	1
simplify the code. outcome based code.	0	0	1	1
speed up the process	0	0	1	1
stored clients info for filling out forms	0	0	1	1
testing videos	0	0	1	1
text and email me about news	0	1	0	1
the code itself is a mess. things derive from it are also mess	0	0	1	1
the work is already great	0	1	0	1
thoughtful, realistic requirements that can be implemented easily on the filed by contractors & not just in "theory".	0	0	1	1
title 24	0	1	0	1
to be able to copy one job (previously filed) to new job & then modify	0	0	1	1
too many repetitive questions	0	0	1	1
unknown	0	0	1	1
unsure	0	0	2	2
~ Online courses are good and effective.	0	1	0	1
Total	243	75	234	552

## Cross Tabulation of Non-Open-Ended Questions from Code Compliance Improvement Program Process Evaluation

### Tabulation of S1 S1

How have you encountered California's Compliance Improvement Program?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Registering as a user on EnergyCode Ace website	243	0	0	243
Attending a training course	0	75	0	75
Both	0	0	234	234
Total	243	75	234	552

### Tabulation of S2 S1

In what role did you engage the program?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Architect	22	27	36	85
Builder	2	1	1	4
Building official/inspector	9	7	25	41
Contractor	25	5	9	39
Energy consultant	28	7	49	84
Design professional	63	7	29	99
Home or business owner	12	1	4	17
Mechanical engineer	43	5	25	73
Plans examiner	7	6	18	31
Trade professional	21	2	16	39
Other	11	7	22	40
Total	243	75	234	552

**Tabulation of S2\_10\_TEXT S1**

In what role did you engage the program? - Trade professional, please specify: -	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
	221	72	217	510
3rd Party Acceptance Tester-Lighting Control	0	0	1	1
Acceptance test technician	0	0	1	1
Air Balancer / MATT	0	0	1	1
Architect, Energy Consultant, Mechanical System Designer	0	0	1	1
Commissioning Authority	0	0	1	1
Commissioning Provider	0	0	1	1
E16592	0	0	1	1
ELECTRICAL	0	0	1	1
ELECTRICAL ENGINEER	1	0	0	1
Educator	0	1	0	1
Electrical	0	0	1	1
Designer/Contractor/Electrician				
Electrical Engineer	2	0	0	2
Electrical Engineering Consultant	1	0	0	1
Electrical Signs	1	0	0	1
Electrical and design build	0	0	1	1
Electrician	1	0	0	1
Expeditor	1	0	0	1
HERS Rater	2	0	1	3
HVAC	1	0	1	2
HVAC Consultant	1	0	0	1
HVAC Technician	0	0	1	1
HVAC tech	1	0	0	1
LCATT	1	0	0	1
Lighting Controls Acceptance Testing Technician	1	0	0	1
Lighting Manufacturer	1	0	0	1
MEP Coordinator for GC	0	0	1	1
Permit Center Supervisor	1	0	0	1
Plan check	0	1	0	1
Project Manager	1	0	0	1
Project Manager for Building Envelope Subcontractor	1	0	0	1
RD	1	0	0	1
SIGNAGE	1	0	0	1
We also train codes lighting and controls rep	0	0	1	1
permit expediter	1	0	0	1
<b>Total</b>	<b>242</b>	<b>74</b>	<b>233</b>	<b>549</b>

**Tabulation of S2\_11\_TEXT S1**

In what role did you engage the program? - Other, please specify: - Text	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
	227	68	209	504
AHJ: policy staff	0	0	1	1
Acceptance test technician	0	0	1	1
Admin	0	0	1	1
As a energy efficiency program administrator for a public electric utility, I use energy code ace to understand upcoming building code changes to help design utility offerings that go above code requirements.	0	0	1	1
Associate for program implementer	0	1	0	1
City sustainability staff	0	0	1	1
Code developer	0	1	0	1
ESCO / ESP	0	0	1	1
Electrical Engineer	4	0	0	4
Equipment Manufacturer	1	0	0	1
Green Rater, HERS Rater, LEED AP, work with CEA's	0	0	1	1
HERS RATER	0	0	1	1
HERS Rater, Energy Consultant & contractor	0	0	1	1
I wear multiple hats here.	0	0	1	1
Manufacture of products that touch energy codes	0	0	1	1
Manufacturer	0	0	1	1
Permit Tech supervisor	1	0	0	1
Permit Technician	0	0	1	1
Program Manager	1	0	0	1
Staffing	0	1	0	1
State Agency Observer	0	0	1	1
State Worker (CEC)	0	0	1	1
Student Assistant for part 6 hotline	0	0	1	1
Student at College of San Mateo enrolled in their Building Information Tech program	0	1	0	1
Sustainability staff	1	0	0	1
Testing laboratory	0	0	1	1
Third-Party Certification Implementor	0	1	0	1
Title 24 Acceptance Testing and Consulting administrator	0	0	1	1
administrator	0	1	0	1
all of the above in one capacity or another	0	0	1	1
commercial greenhouse	0	1	0	1

manufacturer				
electrical engineer	0	0	1	1
energy Efficiency Coordinator	0	0	1	1
equipment manufacturer	1	0	0	1
permit processor	1	0	0	1
program manager	1	0	0	1
program technical assistance	0	0	1	1
Total	238	75	231	544

**Tabulation of Q1\_1 S1**

From a regional energy network (REN) organization	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
No	220	63	182	465
Yes	23	12	52	87
Total	243	75	234	552

**Tabulation of Q1\_2 S1**

From a trade organization	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
No	206	51	176	433
Yes	37	24	58	119
Total	243	75	234	552

**Tabulation of Q1\_3 S1**

From a utility	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
No	215	55	182	452
Yes	28	20	52	100
Total	243	75	234	552

**Tabulation of Q1\_4 S1**

From a colleague	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCodeAce website	Attending a training course	Both	Total
No	146	50	157	353
Yes	97	25	77	199
Total	243	75	234	552

**Tabulation of Q1\_5 S1**

Other	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCodeAce website	Attending a training course	Both	Total
No	172	70	199	441
Yes	71	5	35	111
Total	243	75	234	552

**Tabulation of Q1\_5\_TEXT S1**

Please specify	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCodeAce website	Attending a training course	Both	Total
	161	68	186	415
?	0	0	1	1
? The email requesting feedback?	1	0	0	1
AHJ	2	0	0	2
Article	1	0	0	1
Back in 2013, from CALCTP	1	0	0	1
Building department	1	0	0	1
CA Title 24 / energy code "help desk"	1	0	0	1
CABEC AND ENERGY CODE ACE	0	0	1	1
CALBO	1	0	0	1
CEC	0	0	1	1
CEC Staff	0	0	1	1
CPUC	0	0	1	1
CPUC Evaluation	1	0	0	1
Ca Energy Commission	0	0	1	1
Calif Energy Commission website	0	1	0	1
Came up while researching an HVAC replacement in the city of Palo Alto, that required a title 24	1	0	0	1
City Government	1	0	0	1
City building department	1	0	0	1
City building officials	1	0	0	1
City of Riverside B&S	1	0	0	1
City official	1	0	0	1
County building permits office	1	0	0	1
County energy review	1	0	0	1
County of San Luis	0	0	1	1
County planning department	1	0	0	1
DSA n CAB, ceu requirement for renewal!	0	1	0	1
Division of the State Architect	0	1	0	1
Don't remember	0	0	1	1
Don't remember..I've been using EnergyCodeAce for a long time.	0	0	1	1
EMAIL	0	0	1	1
EVERY 2-YEARS REVISIONS	0	0	1	1
Energy Code ACE	0	0	1	1
Energy Commission	0	0	1	1
Energy Commission mailer	0	0	1	1
Forced to use it for new lighting acceptance testing	1	0	0	1
From an email invitation	0	0	1	1
From web search for T-24	1	0	0	1
From: Mike Mitchell at College of San Mateo	0	1	0	1
Google	5	0	0	5
Google Search	1	0	0	1

Google search for T24	0	0	1	1
Googling	1	0	0	1
HVAC instructor	1	0	0	1
Haven't heard of it. Is it energy code ace? or something else?	0	0	1	1
I couldn't download T24 form any more.	1	0	0	1
I follow the program	0	0	1	1
I have been using Energy Code Ace for years. I do not recall how I was introduced to this service	0	0	1	1
I have just now heard about this program.	1	0	0	1
I have not heard of the program	0	0	1	1
I used to be the Manager of Codes and Standards	1	0	0	1
I worked on Title 24 code change proposals as part of the CASE program previously	1	0	0	1
Idk	0	0	1	1
Internet News	1	0	0	1
Internet search	2	0	0	2
Mailer, invitation to attend a seminar in Benicia	1	0	0	1
NOt sure	0	0	1	1
No idea it was years ago	0	0	1	1
Online research	1	0	0	1
Opinion Dynamics	1	0	1	2
Past engagement	1	0	0	1
RESEARCH	0	0	1	1
Received an email. Not sure how they got my email address.	1	0	0	1
Required prof. educ.	0	0	1	1
SEMINAR	0	0	1	1
San Francisco DBI	1	0	0	1
Signed up	0	0	1	1
Software Vendor	1	0	0	1
TITLE 24 WEBSITE	1	0	0	1
The energy commision	0	0	1	1
Unsure	1	0	0	1
Work	0	0	1	1
building department	2	0	0	2
cant remember	1	0	0	1
either email or web	1	0	0	1
email	3	1	3	7
email from Energy Commission	0	0	1	1
from T24 energy consultants	1	0	0	1
from Title 24	1	0	0	1
from the internet	1	0	0	1
google	1	0	0	1
google search	3	0	0	3
had not heard of it at all.	1	0	0	1
i have not heard of the program but have heard of energy code ace.	1	0	0	1
i really not sure	1	0	0	1
internet	1	0	0	1

internet email	1	0	0	1
never heard of it	1	0	0	1
online	1	0	0	1
random email	1	0	0	1
search for info	1	0	0	1
the city permit	1	0	0	1
web search	3	0	1	4
<b>Total</b>	<b>232</b>	<b>73</b>	<b>221</b>	<b>526</b>

**Tabulation of Q2\_1\_1 S1**

Email	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not by email	8	3	6	17
Email	12	9	42	63
<b>Total</b>	<b>20</b>	<b>12</b>	<b>48</b>	<b>80</b>

**Tabulation of Q2\_1\_2 S1**

Phone call	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCodeAce website	Attending a training course	Both	Total
Not by phone call	20	11	48	79
Phone call	0	1	0	1
<b>Total</b>	<b>20</b>	<b>12</b>	<b>48</b>	<b>80</b>

**Tabulation of Q2\_1\_3 S1**

Conference	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not a conference	15	12	40	67
Conference	5	0	8	13
<b>Total</b>	<b>20</b>	<b>12</b>	<b>48</b>	<b>80</b>

**Tabulation of Q2\_1\_4 S1**

Social media	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not from social media	19	12	43	74
Social media	1	0	5	6
Total	20	12	48	80

**Tabulation of Q2\_1\_5 S1**

Direct mail	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not from direct mail	19	10	45	74
Direct mail	1	2	3	6
Total	20	12	48	80

**Tabulation of Q2\_1\_6 S1**

TV/radio advertisement	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not from a TV/radio advertisement	20	12	48	80
Total	20	12	48	80

**Tabulation of Q2\_1\_7 S1**

Something else	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not applicable	17	11	42	70
Something else	3	1	6	10
Total	20	12	48	80

**Tabulation of Q2\_2\_1 S1**

Email	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not by email	10	3	7	20
Email	27	19	49	95
Total	37	22	56	115

**Tabulation of Q2\_2\_2 S1**

Phone call	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not by phone call	35	22	55	112
Phone call	2	0	1	3
Total	37	22	56	115

**Tabulation of Q2\_2\_3 S1**

Conference	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not a conference	31	18	39	88
Conference	6	4	17	27
Total	37	22	56	115

**Tabulation of Q2\_2\_4 S1**

Social media	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not from social media	33	20	49	102
Social media	4	2	7	13
Total	37	22	56	115

**Tabulation of Q2\_2\_5 S1**

Direct mail	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not from direct mail	32	21	53	106
Direct mail	5	1	3	9
Total	37	22	56	115

**Tabulation of Q2\_2\_6 S1**

TV/radio advertisement	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not from a TV/radio advertisement	36	22	55	113
TV/radio advertisement	1	0	1	2
Total	37	22	56	115

**Tabulation of Q2\_2\_7 S1**

Something else	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not applicable	34	22	55	111
Something else	3	0	1	4
Total	37	22	56	115

**Tabulation of Q2\_3\_1 S1**

Email	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not by email	8	2	9	19
Email	19	18	42	79
Total	27	20	51	98

**Tabulation of Q2\_3\_2 S1**

Phone call	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCodeAce website	Attending a training course	Both	Total
Not by phone call	25	18	47	90
Phone call	2	2	4	8
Total	27	20	51	98

**Tabulation of Q2\_3\_3 S1**

Conference	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCodeAce website	Attending a training course	Both	Total
Not a conference	25	18	40	83
Conference	2	2	11	15
Total	27	20	51	98

**Tabulation of Q2\_3\_4 S1**

Social media	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCodeAce website	Attending a training course	Both	Total
Not from social media	25	18	47	90
Social media	2	2	4	8
Total	27	20	51	98

**Tabulation of Q2\_3\_5 S1**

Direct mail	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCodeAce website	Attending a training course	Both	Total
Not from direct mail	25	19	49	93
Direct mail	2	1	2	5
Total	27	20	51	98

**Tabulation of Q2\_3\_6 S1**

TV/radio advertisement	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not from a TV/radio advertisement	27	20	51	98
Total	27	20	51	98

**Tabulation of Q2\_3\_7 S1**

Something else	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not applicable	24	19	46	89
Something else	3	1	5	9
Total	27	20	51	98

**Tabulation of Q2\_4\_1 S1**

Email	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not by email	37	7	21	65
Email	58	18	53	129
Total	95	25	74	194

**Tabulation of Q2\_4\_2 S1**

Phone call	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not by phone call	74	23	60	157
Phone call	21	2	14	37
Total	95	25	74	194

**Tabulation of Q2\_4\_3 S1**

Conference	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not a conference	88	23	64	175
Conference	7	2	10	19
Total	95	25	74	194

**Tabulation of Q2\_4\_4 S1**

Social media	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not from social media	92	24	73	189
Social media	3	1	1	5
Total	95	25	74	194

**Tabulation of Q2\_4\_5 S1**

Direct mail	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not from direct mail	93	25	72	190
Direct mail	2	0	2	4
Total	95	25	74	194

**Tabulation of Q2\_4\_6 S1**

TV/radio advertisement	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not from a TV/radio advertisement	95	25	73	193
TV/radio advertisement	0	0	1	1
Total	95	25	74	194

**Tabulation of Q2\_4\_7 S1**

Something else	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not applicable	70	19	60	149
Something else	25	6	13	44
<b>Total</b>	<b>95</b>	<b>25</b>	<b>73</b>	<b>193</b>

**Tabulation of Q2\_5\_1 S1**

Email	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not by email	34	1	13	48
Email	48	6	33	87
<b>Total</b>	<b>82</b>	<b>7</b>	<b>46</b>	<b>135</b>

**Tabulation of Q2\_5\_2 S1**

Phone call	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not by phone call	75	7	44	126
Phone call	7	0	2	9
<b>Total</b>	<b>82</b>	<b>7</b>	<b>46</b>	<b>135</b>

**Tabulation of Q2\_5\_3 S1**

Conference	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not a conference	77	7	36	120
Conference	5	0	10	15
<b>Total</b>	<b>82</b>	<b>7</b>	<b>46</b>	<b>135</b>

**Tabulation of Q2\_5\_4 S1**

Social media	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not from social media	80	7	46	133
Social media	2	0	0	2
Total	82	7	46	135

**Tabulation of Q2\_5\_5 S1**

Direct mail	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not from direct mail	81	7	44	132
Direct mail	1	0	2	3
Total	82	7	46	135

**Tabulation of Q2\_5\_6 S1**

TV/radio advertisement	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not from a TV/radio advertisement	82	7	46	135
Total	82	7	46	135

**Tabulation of Q2\_5\_7 S1**

Something else	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not applicable	51	5	34	90
Something else	31	2	12	45
Total	82	7	46	135

**Tabulation of Q2\_1\_7\_Text S1**

Please specify how else you received information from a regional energy network	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCodeAce website	Attending a training course	Both	Total
	238	74	228	540
ACE ENERGY CODE	0	1	0	1
BayREN and Energy Code Ace have been around for so long and I have been involved directly or indirectly in so many ways it is difficult to provide a specific answer. I would almost classify this as common knowledge with no specific source.	0	0	1	1
Browsed the internet and found the information I was looking for.	0	0	1	1
Energysoft	0	0	1	1
Google search and consultant	1	0	0	1
I was in a chapter meeting where they were a contributor.	0	0	1	1
Meeting/webinar	1	0	0	1
not sure	1	0	0	1
website	0	0	1	1
<b>Total</b>	<b>241</b>	<b>75</b>	<b>233</b>	<b>549</b>

**Tabulation of Q2\_2\_7\_Text S1**

Please specify how else you received information from a trade organization.	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCodeAce website	Attending a training course	Both	Total
	238	75	232	545
Email	1	0	0	1
From Energy Commission Website	1	0	0	1
I took a class at the IBEW training center.	1	0	0	1
web search	0	0	1	1
website info	1	0	0	1
<b>Total</b>	<b>242</b>	<b>75</b>	<b>233</b>	<b>550</b>

**Tabulation of Q2\_3\_7\_Text S1**

Please specify how else you received information from a utility.	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCodeAce website	Attending a training course	Both	Total
	240	74	229	543
Attending a course at PG&E	0	0	1	1
Face to Face at the service desk	1	0	0	1
I don't remember	1	0	0	1
I reviewed the utility's educational courses listed in the utility's website.	0	1	0	1
PG&E references EnergyCodeAce through many of its online pages and classes.	0	0	1	1
Utility program meetings	0	0	1	1
Word of mouth	1	0	1	2
<b>Total</b>	<b>243</b>	<b>75</b>	<b>233</b>	<b>551</b>

**Tabulation of Q2\_4\_7\_Text S1**

	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCodeAce website	Attending a training course	Both	Total
Please specify how else you received information from a colleague.				
---	218	69	220	507
Chat	1	0	0	1
Conversation	0	1	0	1
Direct interaction (talking) in person	1	0	0	1
Discussed as a way to fill out the 2019 T24 forms that was more stable than the pdf's at the time.	1	0	0	1
Discussing, in person, where to get reliable information and help about energy code compliance	0	0	1	1
Forwarded email or text message	0	1	0	1
From discussion	1	0	0	1
From his colleague	1	0	0	1
I cannot remember	0	0	1	1
I was introduced to energy code ace's resources as part of my basic training, so that I could direct people to the website as necessary	0	0	1	1
I worked with Gina Rodda, she told me	0	0	1	1
In a written notebook of instructions.	1	0	0	1
In office discussions'	1	0	0	1
In person	1	0	1	2
In person advice	1	0	0	1
In person conversation.	0	1	0	1
In person, colleague is a co-worker	1	0	0	1
In-person discussion with other colleagues in the office.	1	0	0	1
It is vital to know and enforce Title 24 code as a commissioning provider and now owner. I was directed to various T24 resources over 8 years ago.	0	0	1	1
Mentioned in live conversation	1	0	0	1
My coworkers	0	0	1	1
Orally	0	0	1	1
Personal conversation	0	0	1	1
See previous response.	0	0	1	1
Talking	1	0	0	1
They told me about it verbally when I started in my role	0	0	1	1
Verbal	1	0	0	1
We have many internal resources detailing how to use EnergyCodeAce	1	0	0	1
We were chatting over coffee and	0	0	1	1

she mentioned the program.				
When i was getting trained my colleague told me about compliance and energycodeace	1	0	0	1
While applying for a permit at the San Francisco Permit Center, the planner at the Electrical department told me about it.	1	0	0	1
Word of mouth	3	2	0	5
Workplace conversations	0	0	1	1
discussion	1	0	0	1
shown in person	1	0	0	1
talking about it in the office	1	0	0	1
word of mouth	1	1	0	2
<b>Total</b>	<b>243</b>	<b>75</b>	<b>233</b>	<b>551</b>

**Tabulation of Q2\_5\_7\_Text S1**

Please specify how else you received information from Other	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
	210	73	220	503
(Can't find back button.) Internet search.	0	0	1	1
A google search for Title 24 Compliance documents	1	0	0	1
A helpful suggestion during over-the-counter electrical plan check review	1	0	0	1
As a senior architect for DSA we were informed by state architect	0	1	0	1
As part of the CUBE program	0	0	1	1
Trane work with SCE on many years ago.				
CA title 24 website, somewhere listed energy code ace as an acceptable compliance program	1	0	0	1
Conversations in the field	1	0	0	1
Direct Conversation.	1	0	0	1
ECA website	1	0	0	1
Face to face during CAD training	1	0	0	1
Found link to their website	1	0	0	1
Google	1	0	0	1
I don't remember how I heard about Energy Code Ace. But it could be from some training such as CALBO Education Week.	0	0	1	1
I had to find another way to get the forms. The website said to go to that site.	1	0	0	1
I heard that the requirements for acceptance testing were going to become mandatory and I was introduced to Energy Code Ace after becoming an Acceptance Tester	1	0	0	1
I know the website and check it from time to time	0	0	1	1
I searched for Title 24 compliance forms and it came up.	1	0	0	1
I think that the provided a link to the website	1	0	0	1
I work in the Standards Compliance Branch of the CEC so I work closely with compliance programs, professionals, and tools across the state.	0	0	1	1
I'm not super familiar with this program, but it may have just been from the energy code ace	1	0	0	1

site as referenced in the initial question.				
Idk	0	0	2	2
In person	1	0	0	1
In person advice	1	0	0	1
Internet search regarding energy compliance	1	0	0	1
Internet search results contained a link to the EnergyCodeAce site.	1	0	0	1
Itâ€™s website	1	0	0	1
Logging on & filling out Title 24 compliance forms.	1	0	0	1
Meeting	0	0	1	1
Mike Mitchell is a BI (retired), a phenomenal teacher, and advocate for Energy conservation along with investigating new and novel ideas to later come to fruition in the Build environment. This Building Inspector program at CSM is without parallel. It needs MORE support from the California Junior College system.	0	1	0	1
NEEDED INFORMATION FOR COMPLIANCE FORMS, SO WENT TO TITLE 24 WEBSITE	1	0	0	1
Part of an evaluation process.	1	0	0	1
Regional ICC and Training Groups.	0	0	1	1
Researched on line	0	0	1	1
Search query	1	0	0	1
The building department website	1	0	0	1
Through their Help Desk Team.	1	0	0	1
Trying to work on Title 24 submission for an ADU, seeking as much information on compliance options	1	0	0	1
email	0	0	1	1
googled information on cal energy code	1	0	0	1
i don't recall...assuming somehow thru energy code ace	1	0	0	1
i have not heard of the program but have heard of energy code ace..	1	0	0	1
online research	1	0	0	1
only resource I've had is CALCTP.	1	0	0	1
web search	0	0	1	1
<b>Total</b>	<b>241</b>	<b>75</b>	<b>232</b>	<b>548</b>

**Tabulation of Q3\_1 S1**

What would you say are the most effective ways to reach professionals in your role?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not email	36	6	20	62
Email	207	69	214	490
Total	243	75	234	552

**Tabulation of Q3\_2 S1**

What would you say are the most effective ways to reach professionals in your role?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not a phone call	216	70	213	499
Phone call	27	5	21	53
Total	243	75	234	552

**Tabulation of Q3\_3 S1**

What would you say are the most effective ways to reach professionals in your role?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not a conference or speaking engagement	156	40	105	301
Conference or speaking engagement	87	35	129	251
Total	243	75	234	552

**Tabulation of Q3\_4 S1**

What would you say are the most effective ways to reach professionals in your role?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not social media	200	59	196	455
Social media	43	16	38	97
Total	243	75	234	552

**Tabulation of Q3\_5 S1**

What would you say are the most effective ways to reach professionals in your role?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not postal mail	224	67	211	502
Postal mail	19	8	23	50
Total	243	75	234	552

**Tabulation of Q3\_6 S1**

What would you say are the most effective ways to reach professionals in your role?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not Radio or TV	240	74	232	546
Radio or TV	3	1	2	6
Total	243	75	234	552

**Tabulation of Q3\_7 S1**

What would you say are the most effective ways to reach professionals in your role?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not word of mouth	164	61	162	387
Word of mouth	79	14	72	165
Total	243	75	234	552

**Tabulation of Q3\_8 S1**

What would you say are the most effective ways to reach professionals in your role?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
N/A	218	71	217	506
Other: please specify	25	4	17	46
Total	243	75	234	552

**Tabulation of Q3\_8\_TEXT S1**

What would you say are the most effective ways to reach professionals in your role?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
	217	70	217	504
AIA	0	0	1	1
ASHRAE Meetings	0	0	1	1
BayREN Forum (e.g. related training)	0	0	1	1
CALBO	0	0	1	1
CEU course	0	1	0	1
City Building Counter	1	0	0	1
Colleges and Universities	1	0	0	1
Design documents	0	0	1	1
Guides on how to streamline use would be helpful	1	0	0	1
Handouts for building departments	1	0	0	1
Internet Searches	1	0	0	1
LINK ON TITLE 24 WEBSITE	1	0	0	1
LU Credits	1	0	0	1
Learning Units for Continuing Education	1	0	0	1
Lunch & Learn presentations; possibly in collaboration with a professional organization like AIA	1	0	0	1
Lunch and learns	0	0	1	1
Newsletter	0	0	1	1
On the code websites	0	0	1	1
On-going in person events/lectures	1	0	0	1
Online. So much of the local/municipal codes are online. Making sure there is high visibility online (via California Building Codes, T24, etc.) is the best way I think	1	0	0	1
Podcast/Blog	1	0	0	1
Professional Organization membership	0	1	0	1
Professional digital monthly newsletter	0	1	0	1
Providing training opportunities.	0	0	1	1
SEMINAR	0	0	1	1
THROUGH LOCAL AHJ'S AND TRAINING CETNERS	0	0	1	1
THROUGH THE T24 WEBSITE	1	0	0	1
Text	0	0	1	1
The ICC local chapters	0	1	0	1
Training Opportunities	1	0	0	1
Web search	1	0	0	1

Webinar	0	0	2	2
Webinars	1	0	1	2
Website (AHJ)	1	0	0	1
What about using LinkedIn to share a story of how the resources were used... then ask affiliated pros to share it.	0	1	0	1
code websites	1	0	0	1
free, on-demand webinar	1	0	0	1
if i google search "california Title 24 compliance" having your site/an article about your website show up near the top	1	0	0	1
lunch and learns	1	0	0	1
search results	0	0	1	1
should be something obvious for anyone planning a remodel or build, so this info should come from the city where you get permits.	1	0	0	1
specify requirements on associated websites.	1	0	0	1
web page	1	0	0	1
webinars	0	0	1	1
www	1	0	0	1
<b>Total</b>	<b>242</b>	<b>75</b>	<b>234</b>	<b>551</b>

#### Tabulation of Q4\_1 S1

From a regional energy network (REN) organization	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not from a REN	159	48	134	341
From a regional energy network (REN) organization	84	27	100	211
<b>Total</b>	<b>243</b>	<b>75</b>	<b>234</b>	<b>552</b>

#### Tabulation of Q4\_2 S1

From a trade organization	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not from a trade organization	140	36	118	294
From a trade organization	103	39	116	258
<b>Total</b>	<b>243</b>	<b>75</b>	<b>234</b>	<b>552</b>

**Tabulation of Q4\_3 S1**

From a utility	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not from a utility	167	42	145	354
From a utility	76	33	89	198
Total	243	75	234	552

**Tabulation of Q4\_4 S1**

From a colleague	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not from a colleague	129	41	140	310
From a colleague	114	34	94	242
Total	243	75	234	552

**Tabulation of Q4\_5 S1**

Other: please specify	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
N/A	220	73	224	517
Other: please specify	23	2	10	35
Total	243	75	234	552

**Tabulation of Q4\_5\_TEXT S1**

	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCodeAce website	Attending a training course	Both	Total
Other	216	73	222	511
A consultant that works in that field	0	0	1	1
AHJ'S	0	0	1	1
Aia state organization/ncarb webinars	1	0	0	1
Building department plan checkers	1	0	0	1
CAB n State architect	0	1	0	1
CABEC	0	0	1	1
CALBO	1	0	0	1
CBC	0	1	0	1
City Building Counters	1	0	0	1
Code official/AHJ	1	0	0	1
County or city	1	0	0	1
Directly from the government or enforcing body would be great.	0	0	1	1
ECA directly	0	0	1	1
EGIA.org	1	0	0	1
Email	1	0	0	1
Energy Code Ace	1	0	0	1
EnergyCodeAce	0	0	1	1
From Government Agency	1	0	0	1
From the code itself	0	0	1	1
Handouts for building departments	1	0	0	1
I don't know what this question is asking	1	0	0	1
LINK ON TITLE 24 WEBSITE	1	0	0	1
Local Building Department	1	0	0	1
Local Govt.	0	0	1	1
Municipalities/building Dept.	1	0	0	1
Organizations like CALBO	1	0	0	1
SEMINAR	0	0	1	1
State agencies or their delegates	0	0	1	1
The entity that sets the requirements from Energy Code Ace	1	0	0	1
i really don't know	1	0	0	1
jurisdictions having authority	1	0	0	1
locatable website	1	0	0	1
regulating body	1	0	0	1
website	1	0	0	1
<b>Total</b>	<b>239</b>	<b>75</b>	<b>232</b>	<b>546</b>

**Tabulation of Q5a S1**

Familiarity with Fact Sheets	How have you encountered California's Compliance Improvement Program?		
	Registering as a user on EnergyCode Ace website	Both	Total
Very Familiar	65	128	193
Somewhat Familiar	73	69	142
Not Too Familiar	43	21	64
Not At All Familiar	62	16	78
Total	243	234	477

**Tabulation of Q5b S1**

Familiarity with Reference Sheets	How have you encountered California's Compliance Improvement Program?		
	Registering as a user on EnergyCode Ace website	Both	Total
Very Familiar	61	105	166
Somewhat Familiar	74	89	163
Not Too Familiar	56	27	83
Not At All Familiar	52	13	65
Total	243	234	477

**Tabulation of Q5c S1**

Familiarity with Checklists	How have you encountered California's Compliance Improvement Program?		
	Registering as a user on EnergyCode Ace website	Both	Total
Very Familiar	52	90	142
Somewhat Familiar	76	78	154
Not Too Familiar	55	48	103
Not At All Familiar	60	18	78
Total	243	234	477

**Tabulation of Q5d S1**

Familiarity with Trigger Sheets	How have you encountered California's Compliance Improvement Program?		
	Registering as a user on EnergyCode Ace website	Both	Total
Very Familiar	35	94	129
Somewhat Familiar	50	60	110
Not Too Familiar	56	42	98
Not At All Familiar	102	38	140
Total	243	234	477

**Tabulation of Q5e S1**

Familiarity with Training Videos	How have you encountered California's Compliance Improvement Program?		
	Registering as a user on EnergyCode Ace website	Both	Total
Very Familiar	26	82	108
Somewhat Familiar	55	92	147
Not Too Familiar	81	37	118
Not At All Familiar	81	23	104
Total	243	234	477

**Tabulation of Q5f S1**

Familiarity with Case Studies	How have you encountered California's Compliance Improvement Program?		
	Registering as a user on EnergyCode Ace website	Both	Total
Very Familiar	11	30	41
Somewhat Familiar	47	81	128
Not Too Familiar	84	72	156
Not At All Familiar	101	51	152
Total	243	234	477

**Tabulation of Q5g S1**

Familiarity with Reference Ace	How have you encountered California's Compliance Improvement Program?		
	Registering as a user on EnergyCode Ace website	Both	Total
Very Familiar	81	123	204
Somewhat Familiar	58	68	126
Not Too Familiar	50	26	76
Not At All Familiar	54	17	71
Total	243	234	477

**Tabulation of Q5h S1**

Familiarity with Virtual Assistance	How have you encountered California's Compliance Improvement Program?		
	Registering as a user on EnergyCode Ace website	Both	Total
Very Familiar	35	57	92
Somewhat Familiar	52	65	117
Not Too Familiar	72	64	136
Not At All Familiar	84	48	132
Total	243	234	477

**Tabulation of Q5i S1**

Familiarity with Forms Ace	How have you encountered California's Compliance Improvement Program?		
	Registering as a user on EnergyCode Ace website	Both	Total
Very Familiar	108	115	223
Somewhat Familiar	72	79	151
Not Too Familiar	32	21	53
Not At All Familiar	31	19	50
Total	243	234	477

**Tabulation of Q5j S1**

Familiarity with Product Finder	How have you encountered California's Compliance Improvement Program?		
	Registering as a user on EnergyCode Ace website	Both	Total
Very Familiar	24	34	58
Somewhat Familiar	46	70	116
Not Too Familiar	69	70	139
Not At All Familiar	104	60	164
Total	243	234	477

**Tabulation of Q5k S1**

Familiarity with Noteblocks	How have you encountered California's Compliance Improvement Program?		
	Registering as a user on EnergyCodeAce website	Both	Total
Very Familiar	11	24	35
Somewhat Familiar	28	52	80
Not Too Familiar	81	80	161
Not At All Familiar	123	78	201
Total	243	234	477

**Tabulation of Q6a S1**

Value of Fact Sheets	How have you encountered California's Compliance Improvement Program?		
	Registering as a user on EnergyCode Ace website	Both	Total
Very Valuable	85	156	241
Somewhat Valuable	57	46	103
Not Too Valuable	10	6	16
Not At All Valuable	4	1	5
Total	156	209	365

**Tabulation of Q6b S1**

Value of Reference Sheets	How have you encountered California's Compliance Improvement Program?		
	Registering as a user on EnergyCode Ace website	Both	Total
Very Valuable	89	139	228
Somewhat Valuable	66	52	118
Not Too Valuable	8	16	24
Not At All Valuable	4	1	5
Total	167	208	375

**Tabulation of Q6c S1**

Value of Checklists	How have you encountered California's Compliance Improvement Program?		
	Registering as a user on EnergyCode Ace website	Both	Total
Very Valuable	72	116	188
Somewhat Valuable	64	56	120
Not Too Valuable	15	21	36
Not At All Valuable	2	2	4
Total	153	195	348

**Tabulation of Q6d S1**

Value of Trigger Sheets	How have you encountered California's Compliance Improvement Program?		
	Registering as a user on EnergyCodeAce website	Both	Total
Very Valuable	53	111	164
Somewhat Valuable	39	50	89
Not Too Valuable	12	18	30
Not At All Valuable	9	1	10
Total	113	180	293

**Tabulation of Q6e S1**

Value of Training Videos	How have you encountered California's Compliance Improvement Program?		
	Registering as a user on EnergyCode Ace website	Both	Total
Very Valuable	41	106	147
Somewhat Valuable	54	64	118
Not Too Valuable	11	17	28
Not At All Valuable	2	2	4
Total	108	189	297

**Tabulation of Q6f S1**

Value of Case Studies	How have you encountered California's Compliance Improvement Program?		
	Registering as a user on EnergyCode Ace website	Both	Total
Very Valuable	20	51	71
Somewhat Valuable	46	59	105
Not Too Valuable	21	29	50
Not At All Valuable	9	5	14
Total	96	144	240

**Tabulation of Q6g S1**

Value of Reference Ace	How have you encountered California's Compliance Improvement Program?		
	Registering as a user on EnergyCode Ace website	Both	Total
Very Valuable	85	124	209
Somewhat Valuable	49	54	103
Not Too Valuable	12	20	32
Not At All Valuable	9	4	13
Total	155	202	357

**Tabulation of Q6h S1**

Value of Virtual Assistance	How have you encountered California's Compliance Improvement Program?		
	Registering as a user on EnergyCode Ace website	Both	Total
Very Valuable	55	77	132
Somewhat Valuable	35	47	82
Not Too Valuable	18	21	39
Not At All Valuable	9	7	16
Total	117	152	269

**Tabulation of Q6i S1**

Value of Forms Ace	How have you encountered California's Compliance Improvement Program?		
	Registering as a user on EnergyCode Ace website	Both	Total
Very Valuable	117	116	233
Somewhat Valuable	63	64	127
Not Too Valuable	10	13	23
Not At All Valuable	6	3	9
Total	196	196	392

**Tabulation of Q6j S1**

Value of Product Finder	How have you encountered California's Compliance Improvement Program?		
	Registering as a user on EnergyCode Ace website	Both	Total
Very Valuable	28	40	68
Somewhat Valuable	42	57	99
Not Too Valuable	17	26	43
Not At All Valuable	7	5	12
Total	94	128	222

**Tabulation of Q6k S1**

Value of Noteblocks	How have you encountered California's Compliance Improvement Program?		
	Registering as a user on EnergyCode Ace website	Both	Total
Very Valuable	20	33	53
Somewhat Valuable	32	48	80
Not Too Valuable	9	21	30
Not At All Valuable	12	7	19
Total	73	109	182

**Tabulation of Q9\_1 S1**

Have you used the website to provide clients/colleagues with information on code	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
No	148	75	101	324
Yes	95	0	133	228
Total	243	75	234	552

**Tabulation of Q9\_2 S1**

Have you used the website to understand compliant design choices?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
No	118	75	86	279
Yes	125	0	148	273
Total	243	75	234	552

**Tabulation of Q9\_3 S1**

Have you used the website to verify compliance requirements?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
No	65	75	46	186
Yes	178	0	188	366
Total	243	75	234	552

**Tabulation of Q9\_4 S1**

Have you used the website to provide consistent compliance documentation?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
No	101	75	103	279
Yes	142	0	131	273
Total	243	75	234	552

**Tabulation of Q9\_5 S1**

Have you used the website to train employees/contractors on code compliance?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
No	182	75	132	389
Yes	61	0	102	163
Total	243	75	234	552

**Tabulation of Q9\_6 S1**

Other	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
No	228	75	219	522
Yes	15	0	15	30
Total	243	75	234	552

**Tabulation of Q9\_6\_TEXT S1**

	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCodeAce website	Attending a training course	Both	Total
Other: please specify	219	75	216	510
As a code development consultant	1	0	0	1
Assisting with studying for the CEA	0	0	1	1
Completing T-24 acceptance testing and using the documents for CALcTP and AHJ submission	1	0	0	1
Creation of installation documents	1	0	0	1
Driving myself crazy working around the terrible site mechanics and constant errors led me to create my own "sanity checks" so I can more easily identify when E.C.A. is making mistakes.	0	0	1	1
Easier to read these resources than the energy code book.	1	0	0	1
EnergyCodeAce is a critical tool for professionals to stay current on energy codes.	0	0	1	1
Forms for testing	1	0	0	1
Getting familiar with the compliance requirements. Right now, we depend on our consultant for this information.	1	0	0	1
Giving clients examples of forms they need to complete.	1	0	0	1
Had to fill it out for rebate with SCE	1	0	0	1
I assist my colleagues with filling out compliance forms.	0	0	1	1
I mostly find it useless. The mandatory summaries sometimes are useful.	0	0	1	1
I ran compliance software on a couple of projects, but found it confusing	0	0	1	1
I think the Ca Energy code is one of the most poorly designed and organized codes section. The organization of the information needs to be redone. Energy Ace, helps	0	0	1	1
I use the forms I do on Energy Code Ace directly in my documentation. I put in the note blocks as well	1	0	0	1
I was looking for information on the upcoming 2025 Title24 changes. Specifically HVAC.	0	0	1	1
I would not be in this industry	0	0	1	1

without Energy Code Ace and the local ren's they help you navigate the code				
Power and lighting form compliance.	1	0	0	1
Providing forms and links to forms, identifying rarely applicable requirements, explaining compliance paths to applicants	0	0	1	1
Reviewing details of relationships between local ordinances and Energy Standards & related resources.	0	0	1	1
Tracking development updates	1	0	0	1
Understanding code compliant energy baselines for energy efficiency measures.	1	0	0	1
Understanding what is required and what is possible when working with developers, TIs and homeowners to promote electrification and resilience measures	0	0	1	1
Use it to fill out the lengthy and often duplicated information on title 24 documents. Place on required plan documents. Believe there's room for improvement with the forms.	1	0	0	1
Utilizing the forms for permit applications.	1	0	0	1
We do not use the website for anything other than completing the NRCC forms. All our Title 24 knowledge comes from reading the code ourselves and talking with peers	0	0	1	1
We don't use any of this information when training, I have followed a training session, and was told if my training was as poor as this they would get up and leave, no one left.	0	0	1	1
it has given me the beginnings only of understanding the requirements	0	0	1	1
valuable resources that I can use which otherwise does not exist.	0	0	1	1
<b>Total</b>	<b>233</b>	<b>75</b>	<b>232</b>	<b>540</b>

**Tabulation of Q10 S1**

Which of these applications is most important for your work?	How have you encountered California's Compliance Improvement Program?		
	Registering as a user on EnergyCode Ace website	Both	Total
Providing clients and colleagues with detailed information on how to comply with codes	16	22	38
Understanding compliant building/product design choices	22	27	49
Verifying compliance requirements	76	91	167
Providing consistent compliance documentation	47	26	73
Training employees/contractors on code compliance	12	16	28
Other	5	9	14
<b>Total</b>	<b>178</b>	<b>191</b>	<b>369</b>

**Tabulation of Q11 S1**

Satisfaction with EnergyCodeAce Resources	How have you encountered California's Compliance Improvement Program?		
	Registering as a user on EnergyCode Ace website	Both	Total
Very Satisfied	121	150	271
Somewhat Satisfied	103	71	174
Not Too Satisfied	13	10	23
Not At All Satisfied	6	3	9
<b>Total</b>	<b>243</b>	<b>234</b>	<b>477</b>

**Tabulation of Q12 S1**

Were there online resources not available?	How have you encountered California's Compliance Improvement Program?		
	Registering as a user on EnergyCode Ace website	Both	Total
Yes, please explain.	51	60	111
No, the resources and tools I needed were available.	192	174	366
<b>Total</b>	<b>243</b>	<b>234</b>	<b>477</b>

**Tabulation of Q12\_1\_TEXT S1**

Yes, please explain.	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
	167	75	158	400
Solar sunshade studies	0	0	1	1
.	2	0	1	3
A better performance tool than CBECC	1	0	0	1
A specific form for 1-for-1 and like-for-like indoor lighting replacement.	1	0	0	1
A tool to just do the green code calculations instead of needing to hire a third party	1	0	0	1
AI integration to aid with questions regarding the code, currently AI tools are not specific to T24 exactly and i often need to provide them the building code and have it cite sections which i then need to go and analyze	1	0	0	1
Access to all training videos.	0	0	1	1
An Artificial Intelligence search tool of the codes and the compliance manual would be helpful.	0	0	1	1
An index tool that would take you to various different areas of code sections that we could reference and decide which sections(s) are applicable.	0	0	1	1
As a third-party tester the added layer of documation is difficult. before 2022 I created NRCI documents at the CALCTP website. The updated (2022) CALCTP website data entry and forms process needs improvement. The two sources could be combined under one or intergraded better.	0	0	1	1
BOOK OR REFERENCE	1	0	0	1
NOTES				
Clarification on verbiage used for system types, etc.	1	0	0	1
Code change summaries that focus less on the wording of the code and more on the physical differences in design changes that will be reflected in cost of construction. As MEP engineers, our architectural and developer	0	0	1	1

clients ask us for summaries of 'what is changing in this code cycle'. They really only want to know the items that will show up as line items in their cost estimates or will take up space.				
Compliance Self-Inspection Tool	1	0	0	1
Federal and State Regulations Comparison Tool etc.				
DOE 2 code base	1	0	0	1
Easier to understand things for homeowners	1	0	0	1
Energy Compliance has become more and more difficult to navigate over the past couple decades. Anything that ACE can do to streamline this process further than it already has would be a huge help to the industry.	1	0	0	1
Excellent tools	0	0	1	1
Forms, once they migrated back to the CEC website.	0	0	1	1
Found it clunky and force to go with a specialist. When the specialist had issues I had to call Sacramento who verified there was a computer software glitch. Pure WORK!	1	0	0	1
Having the forms in the cloud is cumbersome and is not conducive to using BIM to populate the information for the forms.	1	0	0	1
Help with the meaning of the code sections and how to do the calculations.	1	0	0	1
I NEED MORE PROJECT EXAMPLES FOR COMPLIANCE ON RESIDENTIAL PROJECTS. FOR EXAMPLE, ADU DETACHED, ADU ATTACHED, RESIDENTIAL ADDITION, ADU CONVERSION WITHIN RESIDENCE, ETC.	0	0	1	1
I am HVAC, it does not break down the information by trades. Lighting does not affect me at all. I sent an inquiry in and did not hear back.	1	0	0	1
I find it easier to search the code documents than to go to the Energy Code Ace website	0	0	1	1
I find the energy code over the top complex and it need not be	1	0	0	1
I had a use case for Forms Ace early in the 2022 code cycle,	0	0	1	1

before Forms Ace had 2022 forms. (There was an issue with the software that had been used to make the active forms, which delayed their availability. I think the delay was about a year - but it seemed like a budget issue combined with software change management - i.e. beyond the control of the program.)

I had lot of issues with things like the multifamily forms being in flux/not available and delayed.

I have sent in questions and got good answers especially finding the exact code section. The T24 still lacks a comprehensive list that can be sorted. I would like to be able to type in 'office' and go there.

I like to see better interpretation or clarifications of each requirement to help deal with new and green Plan checkers.

I need E.C.A. compliance to work, be accurate, and have projects be more manageable. I'm forced to use a broken system, and it makes me resentful of the site, the CEC, all of it.

I spoke with commission staff it was so bad. I have NO CONFIDENCE in any government agency in California, local, county or state. I lost that when the governments started hiring morons and the mentally incompetent based on a "pulse" for positions of authority governing LIFE SAFETY. AND your system was apparently not working, so I got a call from the only person that actually had a degree and a license in mechanical engineering. Only took me two weeks to get to him. He should be the HEAD of the CA energy commission and fire the other morons who only collect a check anyway.

I think the compliance form need a better way to make sure it the correct form. It common for people to provide you a form, and I am not sure if it the correct or updated form. It looks correct, but where did you get it?

1 0 0 1

1 0 0 1

1 0 0 1

0 0 1 1

1 0 0 1

0 0 1 1

I use chat gpt and was surprised how much time was saved	0	0	1	1
I used this stuff a while ago, but had to resort to a large number of sources of information, primary ones being the original reference manuals. I didn't find everything I needed on EnergyCodeAce. I'd need to work on a project again from scratch to be able to effectively answer these questions.	1	0	0	1
I would like for the tool to be able to populate project address, design professional and document author signature, license #, date, address, and phone number.	1	0	0	1
I would like to be able to access HERS forms so I can print them out and show builders what I am looking for and/or requiring them to do	0	0	1	1
I would love to see more in depth application of energy modeling, and take offs. Since most of the modeling courses are very code heavy, might be beneficial to see measuring plans to inputs in a software in a live environment.	0	0	1	1
Information regarding compliance for refrigerant requirements for HVAC systems as we are switching to selecting R32 units in our designs.	0	0	1	1
Interpretations/disagreements with contractors and colleagues that require input from the regulatory body.	0	0	1	1
Interpretive manuals	0	0	1	1
It can be confusing for applicants	1	0	0	1
It would be great to have publicly available data on building permits and code applications.	0	0	1	1
It would have been helpful to have more online tools that support early-stage energy modeling or quick comparative analysis of design options.	0	0	1	1
Integrating such tools would make it easier to evaluate energy performance before detailed engineering input. Additional resources tailored to specific building types or climates would be valuable. Context-sensitive examples or templates could help apply the EnergyACE principles more effectively in diverse project				

conditions. Regularly updated online modules or short refresher sessions could help professionals stay current with evolving energy codes and best practices. Ongoing learning opportunities would increase long-term engagement and value. A shared online workspace or collaboration tool would be useful for coordinating with consultants and tracking progress against energy goals. This would make it easier to integrate EnergyACE resources into real project workflows.

It's not really about the resources. They are what they are. The energy code ace website is horrendous to use. Only allows one person to edit. Doesn't allow copying of information to other similar projects. It's truly a time suck with little benefit.

Just the 2025 energy code. Looking forward to it!

Maybe providing compliant manufacturers products

More AI

More Trigger sheets and more training videos would be helpful.

More information on paths of egress.

More information on the NRCC forms and choices would be nice.

More topic on solar pv and batteries

More trigger sheets, more compliance info, more examples of code applications

NEMNR HVAC and Ventilation details

Navigating the Reference Appendix, the Joint Appendix; both the non-residential and residential Appendix can be very intimidating and challenging for the average person to do and find information. Even for the typical professional, it is difficult and time consuming to navigate.

Need better information on who fills out what form. Basically ECA states that ATT has to sign, or another person. But there isn't much context. My biggest headaches are pushback from GC's and subs on NRCA and

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NRCI forms. I need communications material that is more detailed than the quick description on the website, but more digestible and east to understand than the Fact Sheets and literally reading code.	0	0	1	1
Need more information on Demand Response. Also more training videos	1	0	0	1
Note Blocks was unusable. Now that the CalCerts QII handbook is no longer posted online, it might be useful to have a detailed QII reference that is posted online that we could refer builders to.	0	0	1	1
On line weather data and joint appendix information would be useful	0	0	1	1
PDF versions of the forms for circumstances that do not fit neatly into the available options.	1	0	0	1
Personally, I need more training. Provide a simple template that includes what forms are required for your specific project. Include on template a code section that specifically applies. I believe based on my office staff and Architects that I work with that a simple means to verify what forms are required for your specific project needs to be readily available. A very specific simple means so that anyone at any experience level can understand. This needs to be available on the first page of the website. Possibly a banner on you can click on to send you directly to a flow chart that can be followed to find what is required.	1	0	0	1
Quicker access to the high level changes in the new code so I know what is coming.	0	0	1	1
Really would like the on demand videos to make a come back	0	0	1	1
Reference ACE was very glitchy for a while and wouldn't let you navigate seamlessly	1	0	0	1
Resources for 2025 codes. A submitted design uses an air to water heat pump. This seems to be allowed by the Energy Code but there does not seem to be way to enter it in the forms or determine what is triggered.	1	0	0	1

Retrofit-specific guidance: Most resources focus on new construction, but retrofit projects often present unique compliance challenges. More targeted guides or case studies would be valuable.	0	0	1	1
Sections regarding requirements for single family residential alterations and additions are typically offered at the end of the webinar. It would be helpful if this information was presented in a separate webinar and given more attention.	0	0	1	1
Simply had to abandon ACE and return to old methods. Too many redirection was wasting my time. Maybe I was not familiar with the process.	1	0	0	1
Some forms were not available and some needed special apps to open them	1	0	0	1
Something for us to refer contractors for documenting and finding and filling forms. They are uncomfortable doing it and find it confusing	0	0	1	1
Sometime the energy code ace wizard is a little difficult. If for instance you have a building that is providing exhaust ventilation only, the wizard will require additional measures to be answered even though they are not applicable. It would be good to provide override sections and perhaps a comment section as to why the system isnt complying as sometimes there are project specific constraints or the additional measure that are being asked arent applicable to the project but you cannot get around them.	1	0	0	1
The Lighting Trigger sheets are hard to follow.	0	0	1	1
The biggest challenge with enforcing the Energy Code is demonstrating to applicants that are filling out the forms wrong. Often this devolves into opinions on each side with no clear documentation on the correct approach to model the design.	0	0	1	1
The compliance forms save in a pdf format that is not compatible with the drafting software that I	1	0	0	1

use. Being able to choose a pdf writer, or some other method, to allow the pdf to be more compatible.				
The compliance forms software from the CEC should be replaced with a more user friendly software where plans can be uploaded and the scope marked up and compliance shown.	0	0	1	1
The energy code needs to be drastically simplified. It should be like structural engineering, but it's single-issue, so could be just a few pages.	0	0	1	1
The pace of energy compliance rules development has exceeded most building departments ability learn them. Energy compliance is only one part of the plan review process and the fees do allow the needed time to properly verify compliance in a detailed manner.	0	0	1	1
The program has nice tools, trouble is the authors don't understand tradespeople, everything is designed for people disconnected from the field. Not by design, but by implementation means. Forms are the most important element, but forms do not install measures.	0	0	1	1
There are times I could use the NRCA forms generated by the CEC to show what will be in the actual report.	1	0	0	1
There's so much info sometimes hard to sort through	0	0	1	1
They may have been available but I could not find them.	1	0	0	1
This may be due to my own lack of searching for them, but additional video tutorials for sample projects to truly understand how each section is meant to be filled out for the mechanical compliance forms.	1	0	0	1
Title-24 Acceptance Test requirements	0	0	1	1
Too many referrals to the CEC website	0	0	1	1
Too much of the training was not available as a practical matter because it was only offered at a time I could not attend.	0	0	1	1
Trigger sheets for the most recent codes (2022 and 2025). Include	1	0	0	1

trigger sheets or data for common energy efficiency measures, including those that do not trigger code (i.e. repairs or those not covered by T24) and alterations that trigger only limited sections of codes (i.e. only mandatory and certain prescriptive sections). Many times utilities and regulators may assume sections of code apply to energy efficiency measures in existing buildings where they do not.

Unable to open some of the forms, this becomes frustrating  
Video case studies of plan review of new Energy code cycle requirements. There is nothing that can replace learning by doing or watching another 'do'.

Walkthroughs of modeling various mechanical systems in CBECC, how to add process loads. For 2025 how to model pool/spa systems.

Was difficult to understand  
We need recorded videos. That would be very useful.

When I can't get a form because an ATT has to fill it out online. I only want to see an example.

While the available resources were generally helpful, there were a few instances where I couldn't find in-depth guidance on more advanced or uncommon scenarios. A searchable FAQ or expert Q&A section could have filled those gaps. Additionally, having a centralized tool that recommends resources based on user activity or project type would have been valuable for discovering relevant materials I might have missed. It would also be helpful to include more content on controls for indoor environments and lighting controls for different areas, as these are critical for energy efficiency and operational effectiveness.

Yes, an AI tool would be helpful for application of energy code requirements.

Yes. Fillable, downloadable forms with working formulas would be helpful.

0	0	1	1
1	0	0	1
0	0	1	1
1	0	0	1
1	0	0	1
0	0	1	1
1	0	0	1
1	0	0	1

always good to get info on the new code cycle before its in place. i understand this is challenging though.	0	0	1	1
don't know yet. Probably give more links to different types of equipments.	1	0	0	1
hard to find information. Website is overwhelming	1	0	0	1
hope the code can be written in a more legible way. the energy code is super difficult to read or understand	0	0	1	1
information is usually available. The concern becomes timely information, as local code continuously changes as new products are introduced into our industry. For example, heat pump water heaters - there is a lack of consistent interpretation of code across the state and stakeholders.	0	0	1	1
maybe an AI chatbot to communicate with and provide advice?	0	0	1	1
resources are there but the site is hard to navigate and the code itself is very hard to use	0	0	1	1
search tools could be improved.	0	0	1	1
sometimes links are broken on the forms or the entire form needs to be restarted because it bugs out	1	0	0	1
sure-- a way of making the code make sense when it doesn't. Or figuring out what to do when the codes conflict with other codes and its keystone cops trying to figure out what the right thing to do is.	0	0	1	1
there are some issues with the energypro program...I have asked for several solutions but they do not provide solutions...I check with energy ace and the same thing applies...it is very frustrating...	0	0	1	1
there was a lack of single family HVAC checklist, trigger sheets, and reference guides	0	0	1	1
<b>Total</b>	<b>218</b>	<b>75</b>	<b>218</b>	<b>511</b>

**Tabulation of Q13\_1 S1**

What issues, if any, did you experience with the EnergyCodeAce website?	How have you encountered California's Compliance Improvement Program?		
	Registering as a user on EnergyCode Ace website	Both	Total
Not applicable	196	187	383
Difficulty or inability to find the materials I needed	47	47	94
<b>Total</b>	<b>243</b>	<b>234</b>	<b>477</b>

**Tabulation of Q13\_2 S1**

What issues, if any, did you experience with the EnergyCodeAce website?	How have you encountered California's Compliance Improvement Program?		
	Registering as a user on EnergyCode Ace website	Both	Total
Not applicable	232	227	459
Unable to download materials I needed	11	7	18
<b>Total</b>	<b>243</b>	<b>234</b>	<b>477</b>

**Tabulation of Q13\_3 S1**

What issues, if any, did you experience with the EnergyCodeAce website?	How have you encountered California's Compliance Improvement Program?		
	Registering as a user on EnergyCode Ace website	Both	Total
Not applicable	235	224	459
Unable to access the website/materials on my mobile device	8	10	18
<b>Total</b>	<b>243</b>	<b>234</b>	<b>477</b>

**Tabulation of Q13\_4 S1**

What issues, if any, did you experience with the EnergyCodeAce website?	How have you encountered California's Compliance Improvement Program?		
	Registering as a user on EnergyCode Ace website	Both	Total
Not applicable	190	203	393
Slow loading times	53	31	84
Total	243	234	477

**Tabulation of Q13\_5 S1**

What issues, if any, did you experience with the EnergyCodeAce website?	How have you encountered California's Compliance Improvement Program?		
	Registering as a user on EnergyCode Ace website	Both	Total
Not applicable	229	226	455
Visually unappealing content	14	8	22
Total	243	234	477

**Tabulation of Q13\_6 S1**

What issues, if any, did you experience with the EnergyCodeAce website?	How have you encountered California's Compliance Improvement Program?		
	Registering as a user on EnergyCode Ace website	Both	Total
Not applicable	223	221	444
Outdated or irrelevant content	20	13	33
Total	243	234	477

**Tabulation of Q13\_7 S1**

What issues, if any, did you experience with the EnergyCodeAce website?	How have you encountered California's Compliance Improvement Program?		
	Registering as a user on EnergyCode Ace website	Both	Total
Not applicable	226	219	445
Broken links to materials	17	15	32
Total	243	234	477

**Tabulation of Q13\_8 S1**

What issues, if any, did you experience with the EnergyCodeAce website?	How have you encountered California's Compliance Improvement Program?		
	Registering as a user on EnergyCode Ace website	Both	Total
Not applicable	241	232	473
Security issues	2	2	4
Total	243	234	477

**Tabulation of Q13\_9 S1**

What issues, if any, did you experience with the EnergyCodeAce website?	How have you encountered California's Compliance Improvement Program?		
	Registering as a user on EnergyCode Ace website	Both	Total
N/A	216	216	432
Other	27	18	45
Total	243	234	477

**Tabulation of Q13\_10 S1**

What issues, if any, did you experience with the EnergyCodeAce website?	How have you encountered California's Compliance Improvement Program?		
	Registering as a user on EnergyCode Ace website	Both	Total
I experienced issues with the EnergyCodeAce website	126	104	230
I did not experience issues with the EnergyCodeAce website	117	130	247
Total	243	234	477

**Tabulation of Q13\_9\_TEXT S1**

What issues, if any, did you experience with the EnergyCodeAce website?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
	203	75	201	479
Accuracy	0	0	1	1
Can be confusing for applicants	1	0	0	1
Cannot delete projects. Deleting projects should be an available option	1	0	0	1
Changes in how the Energy Commission provide the compliance forms has limited Energy Code Ace's ability to provide as complete guidance to forms as was provided in the past.	0	0	1	1
Difficulty assigning team leaders to cooperate on the specific portion of the project.	1	0	0	1
Directions for DIY applicants	0	0	1	1
Forcibly making me initiate my project using an old existing compliance form, instead of starting a new one.	1	0	0	1
Found it clunky and force to go with a specialist. When the specialist had issues I had to call Sacramento who verified there was a computer software glitch. Pure WORK!	1	0	0	1
HTML forms are difficult to apply to all circumstances, and there are no workarounds.	1	0	0	1
Have to create each lighting fixture without being able to copy one that I already input and just change the 1 or 2 items on it. Different electrical demand, etc. Should be able to store a Library of fixtures for future use on other projects.	1	0	0	1
Having to download factsheets to view them	1	0	0	1
Having to register a specific job rather than getting general answers to questions on which forms and requirements apply to each circumstance within a specific discipline (i.e.: lighting control requirements) makes the Forms Ace cumbersome to use.	0	0	1	1
I don't think you need so many	1	0	0	1

windows...its hard to distinguish difference between what is in Forms Tab vs Buildings Tab...seems to be a lot of overlap I may not be using it correctly but program doesn't seem to have the ability to have multiple buildings under a single project. I have to create a separate project for each building on a school campus.	1	0	0	1
I sometimes find it difficult to know exactly what resource to use to get the information I need. I think more regular familiarization would help, but aside from that, a little bit clearer instructions on which resource to use would be nice.	1	0	0	1
I was doing T24 calcs for building enclosure but I could not get it to pass. I was told that doing performance specs using Energy code ace will not work.	1	0	0	1
MOSTLY VAGUE CODE ISSUES NOT THE ACE ISSUES.	0	0	1	1
Malfunctioning I/O forms.	0	0	1	1
Maybe figure out how to narrow down the drop selection options? It's pretty redundant selecting every time for each item. It'd be nice if it asked in the beginning whether it applies to certain category or something like that.	1	0	0	1
NO	0	0	1	1
TELECOMMUNICATIONS AVAIL TO MOST BUT PROJECT MANAGERS OR DIRECTORS.	0	0	1	1
Navigating the Commercial forms,	0	0	1	1
Occasionally glitchy	1	0	0	1
Problems refreshing data, inability to delete buildings, problem navigating to change applicable forms once one is selected, opaque selection for fan power calcs	1	0	0	1
Simplify and be to the point on the website. Provide the current forms online to visually verify them.	0	0	1	1
Slow input for simple tasks - primarily static pressure / hp credits.	1	0	0	1
Some PDFs forms do not	0	0	1	1

properly display across different mediums and/or apps and software.

TOO MANY CLICKS REQUIRED FOR MENU AND FORM COMPLETION. THE FORMS SHOULD SUPPORT KEYBOARD ONLY ENTRY USING TABBING AND ARROWS.

The .pdf file does not include all of the information entered into the form online. The address of the job and the applicant are always missing and have to be added.

The Energy Code Hotline does not work. I wish this was active again because receiving an email back can take a LONG time

The online exams after a training course do not always record your score. Especially true with retaking the exam. This has prevented me from obtaining a certificate needed for my CEUs.

The process of entering in all my fenestration data for each facade of the building is very tedious. I have run into issues where I did not achieve compliance, but the form was not specific enough about which portion was non-compliant. With many different data entries, it took a long time to troubleshoot.

The specific form I used had very small content boxes so it was sometimes hard to fill in all the information that was needed.

There are times when trying to do the NRCI forms that the compliance ID doesn't work requiring contacting tech support. I have had numerous contractors contact me about this. As all of the AHJs in my area will not final a job without acceptance testing and I am required to upload the NRCI forms this delays turning the space over to the owner/tenant

There have been a number of errors I have come across when using energy code ace to create the NRCC-MCH-01-E form. It's inability to properly identify which

1 0 0 1

1 0 0 1

0 0 1 1

0 0 1 1

1 0 0 1

1 0 0 1

1 0 0 1

0 0 1 1

acceptance tests are applicable is an issue as it means it's up to the designers to manually add this each time the forms are created. This almost surely means systems aren't being verified in the field properly to ensure code compliance.				
Too many prompts	0	0	1	1
Virtual Assistant / Fill forms, it has very limited information to fill out, and sometimes the Program Energy Pro showed more flexibility on this. (FYI Process_Comercial Hoods )	0	0	1	1
Want to be able to copy file to start another job as base point instead of redoing it every time. Time killer.	1	0	0	1
Website feels cumbersome. Lots of "pretty" but really need just the facts.	0	0	1	1
When using Reference Ace and clicking on internal links, a new sidebar opens and it makes it difficult to read. It would be better if a pop-up window opened.	0	0	1	1
Would be good to have a workaround solution while the website is going through maintenance. I understand manual form is phased out, but when I needed it in a pinch, I do recall wishing it wasn't going through maintenance.	1	0	0	1
issues with compliance ID number	1	0	0	1
some options in the T24 forms drop downs were not available to select i.e. missing an insulation value shown on the JA4 tables.	1	0	0	1
sometimes forms did not lend themselves to a particular situation.	1	0	0	1
the on-demand trainings going away has been frustrating	0	0	1	1
when searching for specific sections by number isn't very efficient.	1	0	0	1
<b>Total</b>	<b>230</b>	<b>75</b>	<b>219</b>	<b>524</b>

**Tabulation of Q14 S1**

Satisfaction with ability to get issues resolved	How have you encountered California's Compliance Improvement Program?		
	Registering as a user on EnergyCode Ace website	Both	Total
Very Satisfied	24	18	42
Somewhat Satisfied	63	57	120
Not Too Satisfied	37	24	61
Not At All Satisfied	6	6	12
Total	130	105	235

**Tabulation of Q16 S1**

How aware were you of code changes applicable to your work beforehand?	How have you encountered California's Compliance Improvement Program?		
	Registering as a user on EnergyCode Ace website	Both	Total
Very aware	62	71	133
Somewhat aware	123	127	250
Not too aware	39	29	68
Not at all aware	19	7	26
Total	243	234	477

**Tabulation of Q17 S1**

How aware were you of code changes applicable to your work after?	How have you encountered California's Compliance Improvement Program?		
	Registering as a user on EnergyCode Ace website	Both	Total
Very aware	133	150	283
Somewhat aware	88	78	166
Not too aware	15	3	18
Not at all aware	7	3	10
Total	243	234	477

**Tabulation of Q18 S1**

How knowledgeable were you about codes applicable to your work before?	How have you encountered California's Compliance Improvement Program?		
	Registering as a user on EnergyCode Ace website	Both	Total
Very knowledgeable	55	59	114
Somewhat knowledgeable	141	134	275
Not too knowledgeable	35	31	66
Not at all knowledgeable	12	10	22
Total	243	234	477

**Tabulation of Q19 S1**

How knowledgeable were you about implementing these codes to your work after?	How have you encountered California's Compliance Improvement Program?		
	Registering as a user on EnergyCode Ace website	Both	Total
Very knowledgeable	129	149	278
Somewhat knowledgeable	101	76	177
Not too knowledgeable	10	5	15
Not at all knowledgeable	3	4	7
Total	243	234	477

**Tabulation of Q20\_1 S1**

How have you participated in California code compliance training courses in the past?	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Live, in-person	34	113	147
Total	34	113	147

**Tabulation of Q20\_2 S1**

How have you participated in California code compliance training courses in the past?	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Live, online	55	161	216
Total	55	161	216

**Tabulation of Q20\_3 S1**

How have you participated in California code compliance training courses in the past?	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Self-paced online training	25	97	122
Total	25	97	122

**Tabulation of Q20\_4 S1**

How have you participated in California code compliance training courses in the past?	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Pre-recorded webinar	19	111	130
Total	19	111	130

**Tabulation of Q21\_1 S1**

What is your preference for participating in California code compliance training in the future?	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Not live, in-person	50	153	203
Live, in-person	25	81	106
Total	75	234	309

**Tabulation of Q21\_2 S1**

What is your preference for participating in California code compliance training in the future?	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Not live, online	25	84	109
Live, online	50	150	200
Total	75	234	309

**Tabulation of Q21\_3 S1**

What is your preference for participating in California code compliance training in the future?	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Not self-paced online training	37	115	152
Self-paced online training	38	119	157
Total	75	234	309

**Tabulation of Q21\_4 S1**

What is your preference for participating in California code compliance training in the future?	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Not pre-recorded webinar	50	119	169
Pre-recorded webinar	25	115	140
Total	75	234	309

**Tabulation of Q21\_5 S1**

What is your preference for participating in California code compliance training in the future?	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
NA	73	228	301
Other	2	6	8
Total	75	234	309

**Tabulation of Q21\_5\_TEXT S1**

What is your preference for participating in California code compliance training in the future?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
	243	73	225	541
AIA	0	1	0	1
AI self paced query	0	0	1	1
Eliminate req't	0	0	1	1
Interactive AI based recommendations	0	0	1	1
It be nice to have some form of certificate or certification.	0	0	1	1
Live in person better but online can reach more people	0	0	1	1
Make handout so we can download and study when we have time	0	0	1	1
Sorry, Retired, no need	0	1	0	1
<b>Total</b>	<b>243</b>	<b>75</b>	<b>231</b>	<b>549</b>

**Tabulation of Q22\_1 S1**

Which of the following courses have you attended? Please select all that apply.	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Not applicable	34	98	132
Residential	41	136	177
<b>Total</b>	<b>75</b>	<b>234</b>	<b>309</b>

**Tabulation of Q22\_2 S1**

Which of the following courses have you attended? Please select all that apply.	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Not applicable	55	145	200
Residential models	20	89	109
<b>Total</b>	<b>75</b>	<b>234</b>	<b>309</b>

**Tabulation of Q22\_3 S1**

Which of the following courses have you attended? Please select all that apply.	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Not applicable	49	149	198
General	26	85	111
Total	75	234	309

**Tabulation of Q22\_4 S1**

Which of the following courses have you attended? Please select all that apply.	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Not applicable	43	96	139
Non-residential and multi-family	32	138	170
Total	75	234	309

**Tabulation of Q22\_5 S1**

Which of the following courses have you attended? Please select all that apply.	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Not applicable	44	100	144
Non-residential	31	134	165
Total	75	234	309

**Tabulation of Q22\_6 S1**

Which of the following courses have you attended? Please select all that apply.	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Not applicable	62	160	222
Non-residential models	13	74	87
Total	75	234	309

**Tabulation of Q22\_7 S1**

Which of the following courses have you attended? Please select all that apply.	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Not applicable	58	161	219
Residential accessory dwelling unit	17	73	90
Total	75	234	309

**Tabulation of Q22\_8 S1**

Which of the following courses have you attended? Please select all that apply.	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Not applicable	44	138	182
Solar	31	96	127
Total	75	234	309

**Tabulation of Q22\_9 S1**

Which of the following courses have you attended? Please select all that apply.	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Not applicable	61	202	263
Title 20	14	32	46
Total	75	234	309

**Tabulation of Q22\_10 S1**

Which of the following courses have you attended? Please select all that apply.	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Not applicable	71	231	302
Other	4	3	7
Total	75	234	309

**Tabulation of Q22\_10\_TEXT S1**

Which of the following courses have you attended? Please select all that apply.	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
	243	71	228	542
Accessibility	0	0	1	1
Energy	0	1	0	1
I am hoping someone from energy coat. Ace will reach out to me and familiarize me with your website. This is why I am signing up and hoping it will be different experience.	0	0	1	1
In house DSA for plan reviewers	0	1	0	1
Title 24	0	1	0	1
Title 24 performance	0	1	0	1
title 24	0	0	1	1
<b>Total</b>	<b>243</b>	<b>75</b>	<b>231</b>	<b>549</b>

**Tabulation of Q23\_1 S1**

Which of the following courses are you interested in attending in the future? Please select all that apply.	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Not applicable	40	118	158
Residential	35	116	151
<b>Total</b>	<b>75</b>	<b>234</b>	<b>309</b>

**Tabulation of Q23\_2 S1**

Which of the following courses are you interested in attending in the future? Please select all that apply.	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Not applicable	51	157	208
Residential models	24	77	101
<b>Total</b>	<b>75</b>	<b>234</b>	<b>309</b>

**Tabulation of Q23\_3 S1**

Which of the following courses are you interested in attending in the future? Please select all that apply.	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Not applicable	49	142	191
General	26	92	118
Total	75	234	309

**Tabulation of Q23\_4 S1**

Which of the following courses are you interested in attending in the future? Please select all that apply.	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Not applicable	48	100	148
Non-residential and multi-family	27	134	161
Total	75	234	309

**Tabulation of Q23\_5 S1**

Which of the following courses are you interested in attending in the future? Please select all that apply.	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Not applicable	43	99	142
Non-residential	32	135	167
Total	75	234	309

**Tabulation of Q23\_6 S1**

Which of the following courses are you interested in attending in the future? Please select all that apply.	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Not applicable	54	152	206
Non-residential models	21	82	103
Total	75	234	309

**Tabulation of Q23\_7 S1**

Which of the following courses are you interested in attending in the future? Please select all that apply.	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Not applicable	49	137	186
Residential accessory dwelling unit	26	97	123
Total	75	234	309

**Tabulation of Q23\_8 S1**

Which of the following courses are you interested in attending in the future? Please select all that apply.	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Not applicable	39	117	156
Solar	36	117	153
Total	75	234	309

**Tabulation of Q23\_9 S1**

Which of the following courses are you interested in attending in the future? Please select all that apply.	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Not applicable	56	167	223
Title 20	19	67	86
Total	75	234	309

**Tabulation of Q23\_10 S1**

Which of the following courses are you interested in attending in the future? Please select all that apply.	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Not applicable	71	227	298
Other	4	7	11
Total	75	234	309

**Tabulation of Q23\_10\_TEXT S1**

Which of the following courses are you interested in attending in the future? Please select all that apply.	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
.	243	71	224	538
Battery	0	0	1	1
CEA prep	0	0	1	1
HVAC, recommending improvements	0	0	1	1
More take offs and modeling classes and load calcs	0	0	1	1
Multifamily less than 3 stories	0	1	0	1
Non residential mechanical only, it's the most complicated part and shouldn't be glossed over and grouped with other sections.	0	0	1	1
None needed, retired	0	1	0	1
None. I find it more cost effective to meet with an energy consultant	0	0	1	1
SCE workshops	0	1	0	1
greenhouse model	0	1	0	1
<b>Total</b>	<b>243</b>	<b>75</b>	<b>231</b>	<b>549</b>

**Tabulation of Q24\_1 S1**

Please rate your satisfaction with the following aspects of the training course(s) you took - Instructor	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Very Satisfied	55	168	223
Somewhat Satisfied	19	53	72
Not Too Satisfied	0	11	11
Not At All Satisfied	1	2	3
<b>Total</b>	<b>75</b>	<b>234</b>	<b>309</b>

**Tabulation of Q24\_2 S1**

Please rate your satisfaction with the following aspects of the training course(s) you took – Applicability of Material to Your Work	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Very Satisfied	43	162	205
Somewhat Satisfied	30	60	90
Not Too Satisfied	0	11	11
Not At All Satisfied	2	1	3
Total	75	234	309

**Tabulation of Q24\_3 S1**

Please rate your satisfaction with the following aspects of the training course(s) you took – Usability of the Material After the Course	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Very Satisfied	38	149	187
Somewhat Satisfied	36	72	108
Not Too Satisfied	0	11	11
Not At All Satisfied	1	2	3
Total	75	234	309

**Tabulation of Q24\_4 S1**

Please rate your satisfaction with the following aspects of the training course(s) you took – Relevance of the Material	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Very Satisfied	47	169	216
Somewhat Satisfied	26	56	82
Not Too Satisfied	0	8	8
Not At All Satisfied	2	1	3
Total	75	234	309

**Tabulation of Q24\_5 S1**

Please rate your satisfaction with the following aspects of the training course(s) you took – Quantity of New Material Learned	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Very Satisfied	43	145	188
Somewhat Satisfied	31	75	106
Not Too Satisfied	0	11	11
Not At All Satisfied	1	3	4
Total	75	234	309

**Tabulation of Q24\_6 S1**

Please rate your satisfaction with the following aspects of the training course(s) you took – Length of the Course	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Very Satisfied	45	148	193
Somewhat Satisfied	29	78	107
Not Too Satisfied	0	6	6
Not At All Satisfied	1	2	3
Total	75	234	309

**Tabulation of Q24\_7 S1**

Please rate your satisfaction with the following aspects of the training course(s) you took – Availability of the Course	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Very Satisfied	40	150	190
Somewhat Satisfied	31	68	99
Not Too Satisfied	3	14	17
Not At All Satisfied	1	2	3
Total	75	234	309

**Tabulation of Q25 S1**

Overall, how satisfied are you with the California code compliance training courses you have taken?	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Very Satisfied	50	161	211
Somewhat Satisfied	24	61	85
Not Too Satisfied	0	9	9
Not At All Satisfied	1	3	4
Total	75	234	309

**Tabulation of Q27\_1 S1**

Have you used course information to provide clients/colleagues with detailed information on code compliance?	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Not applicable	35	113	148
Yes	40	121	161
Total	75	234	309

**Tabulation of Q27\_2 S1**

Have you used course information to understand compliant building/product design choices?	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Not applicable	18	91	109
Yes	57	143	200
Total	75	234	309

**Tabulation of Q27\_3 S1**

Have you used course information to verify compliance requirements?	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Not applicable	33	60	93
Yes	42	174	216
Total	75	234	309

**Tabulation of Q27\_4 S1**

Have you used course information to provide consistent compliance documentation?	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Not applicable	48	120	168
Yes	27	114	141
Total	75	234	309

**Tabulation of Q27\_5 S1**

Have you used course information to train employees/contractors on code compliance?	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Not applicable	60	136	196
Yes	15	98	113
Total	75	234	309

**Tabulation of Q27\_6 S1**

Have you used course information for something else?	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Not applicable	72	230	302
Yes	2	3	5
Total	74	233	307

**Tabulation of Q27\_6\_TEXT S1**

In what other ways have you applied the information you learned in the course(s) to your work?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
	243	71	222	536
Evolving energy compliance requirements and building technology	0	1	0	1
For Phil requirement for training hours	0	1	0	1
I am only feeling this out so that someone will contact me to show me how to use the website. None of the answers really apply because I have not used it.	0	0	1	1
I learned that even the "experts" teaching the courses don't really know the code that well. Consultants who aren't mechanical engineers shouldn't be "teaching" about mechanical engineering. It's an insult and far from helpful.	0	0	1	1
I need more info about the available courses	0	0	1	1
I usually go straight to the code itself	0	0	1	1
Nothing worth using	0	0	1	1
We use the material in training our team on how not to provide good training to the trades. We do not focus on paper but on mechanics, simplified methods to meet the code, ways to implement the code within their organization and make money, reduce call backs, and improve building quality	0	0	1	1
Total	243	73	228	544

**Tabulation of Q28 S1**

What of these applications is most important for your work?	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Providing clients and colleagues with detailed information on how to comply with codes	15	25	40
Understanding compliant building/product design choices	20	33	53
Verifying compliance requirements	17	68	85
Providing consistent compliance documentation	3	33	36
Training employees/contractors on code compliance	1	14	15
Other	2	2	4
<b>Total</b>	<b>58</b>	<b>175</b>	<b>233</b>

**Tabulation of Q29 S1**

How aware were you of code changes applicable to your work before you took courses through the program?	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Very aware	10	60	70
Somewhat aware	47	141	188
Not too aware	17	25	42
Not at all aware	1	8	9
<b>Total</b>	<b>75</b>	<b>234</b>	<b>309</b>

**Tabulation of Q30 S1**

How aware were you of code changes applicable to your work after you took courses through the program?	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Very aware	41	164	205
Somewhat aware	31	66	97
Not too aware	2	2	4
Not at all aware	1	2	3
<b>Total</b>	<b>75</b>	<b>234</b>	<b>309</b>

**Tabulation of Q31 S1**

How would you assess your level of knowledge about codes applicable to your work before the course(s)?	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Very knowledgeable	9	59	68
Somewhat knowledgeable	52	142	194
Not too knowledgeable	14	26	40
Not at all knowledgeable	0	7	7
<b>Total</b>	<b>75</b>	<b>234</b>	<b>309</b>

**Tabulation of Q32 S1**

How knowledgeable were you about codes applicable to your work after the course(s)?	How have you encountered California's Compliance Improvement Program?		
	Attending a training course	Both	Total
Very knowledgeable	30	151	181
Somewhat knowledgeable	43	78	121
Not too knowledgeable	1	3	4
Not at all knowledgeable	1	2	3
<b>Total</b>	<b>75</b>	<b>234</b>	<b>309</b>

**Tabulation of Q35 S1**

How satisfied are you with the Compliance Improvement Program?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Very Satisfied	109	36	130	275
Somewhat Satisfied	111	34	89	234
Not Too Satisfied	15	4	12	31
Not At All Satisfied	8	1	3	12
<b>Total</b>	<b>243</b>	<b>75</b>	<b>234</b>	<b>552</b>

**Tabulation of Q36 S1**

Which of the following best describes your company?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Building/Construction Firm	39	12	29	80
Architecture/Design Firm	40	26	53	119
Developer/Real Estate Development Firm	3	1	2	6
Engineering Firm	99	10	56	165
Other: please specify	62	26	94	182
<b>Total</b>	<b>243</b>	<b>75</b>	<b>234</b>	<b>552</b>

**Tabulation of Q36\_5\_TEXT S1**

	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Other: please specify	180	48	137	365
Jurisdictional plan reviewer	0	1	0	1
AHJ	1	0	1	2
Architectural Sign Company	1	0	0	1
BUILDING DEPARTMENT	0	1	0	1
Building Codes Consultants	0	0	1	1
Building Department	1	2	3	6
Building Envelope Design Build and Manufacturer	1	0	0	1
Building Inspector	0	0	1	1
Building Owner	0	0	1	1
Building and Safety Department	0	1	0	1
Building and safety department	1	0	0	1
Building department	1	0	1	2
Building departmnt	1	0	0	1
Building dept	0	0	1	1
Business owner	0	1	0	1
CLCATT	1	0	0	1
CODE COMPLIANCE	0	0	1	1
OFFICIAL/CONSULTING AND SPECIFYING ENGINEER				
Calgreen Code consultant	1	0	0	1
California Energy Commission	0	0	1	1
City	0	0	1	1
City Building Department	0	0	1	1
City Building Dept	0	1	1	2
City Building Official under contract	0	0	1	1
City Building dept.	0	0	1	1
City sustainability	0	0	1	1
Commissioning Authority	0	0	1	1
Consultant	3	0	2	5

Consulting	0	0	1	1
Consulting Firm	1	0	0	1
Consulting firm	1	0	0	1
EC Consultant	1	0	0	1
Electrical Sign Fabricator and Installer	1	0	0	1
Electrical Signage	1	0	0	1
Electronic	1	0	0	1
Energy Consultant	1	0	2	3
Energy Consultant Firm	0	0	1	1
Energy Consultant, GreenPoint Rater, ICC CALGreen Inspector.	0	0	1	1
Energy Consulting	2	0	2	4
Energy Consulting Firm	0	0	1	1
Energy Consulting and Hers rating	0	0	1	1
Energy Efficiency Consulting	0	0	1	1
Energy Efficiency Program Implementer	1	0	0	1
Energy compliance	0	0	1	1
Energy consultant	0	1	3	4
Energy consultant/HERS Rater	0	0	1	1
Energy consulting	0	0	3	3
Energy consulting & lighting retrofit	0	0	1	1
Enforcement Agency	0	0	1	1
Enforcing Local Government	1	0	0	1
Engineering Consulting, HERS, CALGreen Inspectors	0	0	1	1
Equipment Manufacturer	1	0	0	1
Former Tile Contractor soon to be accredited by ICC for B2	0	1	0	1
GOVERNMENT	1	0	0	1
Government	0	1	4	5
Government Agency	0	0	1	1
Government Building Division	0	1	0	1
Government agency	1	1	0	2
Government/Building Dept	0	0	1	1
Green Building Program	1	0	0	1
Green Building Special Inspector	0	0	1	1
HERS RATER	0	0	1	1
HERS Rater	0	0	1	1
HVAC	0	1	0	1
HVAC Contractor	1	0	0	1
HVAC Inspection and operational company	1	0	0	1
HVAC contractor	1	0	0	1
Home Inspection	0	1	0	1
Homeowner / former tradesman	1	0	0	1
Homeowner, DIY	1	0	0	1
I told you before-- most of the above yo	0	0	1	1
Inspector	0	0	1	1
Inspector trainer	0	0	1	1
Integrated Engineering & Architecural Design Firm	1	0	0	1
Iâ€™m a homeowner	1	0	0	1
Jurisdiction	0	0	1	1
Jursidiction support (plan review,	0	0	1	1

inspection, staff augmentation)				
LCATT	1	0	0	1
LED Lighting/Energy Conservation Consultants	0	0	1	1
Local AHJ	0	0	1	1
Local Government	1	0	2	3
Local Governmental Agency	0	0	1	1
Local Jurisdiction	0	0	1	1
Local government	1	0	0	1
Local government AHJ	0	0	1	1
Local government energy and sustainability	0	0	1	1
Manufacture	0	0	1	1
Manufacturer	0	0	1	1
Manufacturer Lighting	1	0	0	1
Mechanical Design/Build Firm	0	0	1	1
Municipal Agency	0	1	0	1
Municipality	0	0	1	1
Nonprofit	0	1	0	1
Owner	0	0	1	1
Owner builder	2	0	0	2
Permit expeditors	1	0	0	1
Public agency	0	1	0	1
Publicly owned utility	0	0	1	1
Rep agency	0	0	1	1
Sign Company	2	0	0	2
Sign contractor	1	0	0	1
Sign design and fabrication	1	0	0	1
State Agency	0	0	1	1
State Government	0	1	0	1
Student and concerned family member	1	0	0	1
Sustainability	1	0	0	1
Sustainability/Energy Consulting	0	0	1	1
T24 and Green building Consulting	0	0	1	1
THIRD PARTY INSPECTIONS	0	0	1	1
Technical Home Performance Consultant	0	0	1	1
Third party acceptance tester	0	0	1	1
Title 24 Acceptance Testing and Consulting	0	0	1	1
Title 24 Lighting ATT	1	0	0	1
Title 24 design	0	0	1	1
Training	0	0	1	1
Utility	0	0	2	2
WE PROVIDE THE ENERGY FORMS FOR THE DESIGN AND MANUFACTURERS FOR THE PERMIT PROCESS	1	0	0	1
We do field and hands-on training	0	0	1	1
Window company	1	0	0	1
commercial greenhouse manufacturer	0	1	0	1
community College educator	0	1	0	1
consultant	0	0	2	2
development	0	0	1	1
education	0	1	0	1

energy compliance	0	0	1	1
energy consultant	1	0	1	2
energy consultant, self employed	1	0	0	1
energy consulting firm	1	0	0	1
energy efficiency	0	1	0	1
environmental consultant	0	1	0	1
equipment manufacturer	1	0	0	1
government	0	2	1	3
home owner	1	0	0	1
homeowner	0	0	1	1
jurisdiction	0	0	2	2
local govt	1	0	0	1
local govt.	0	0	1	1
mechanical hvac contractor	1	0	0	1
non profit utility program implementor	0	0	1	1
outside services permit processing owner / builder	1	0	0	1
permits	0	0	1	1
product manufacturer	1	0	0	1
self installer	0	1	0	1
third party contractor	1	0	0	1
utility	1	0	0	1
<b>Total</b>	<b>242</b>	<b>74</b>	<b>231</b>	<b>547</b>

#### Tabulation of Q37 S1

How long have you been in your role in the industry?	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Less than 1 year	2	2	0	4
1 to 5 years	47	8	27	82
6 to 10 years	39	9	35	83
More than 10 years	155	56	172	383
<b>Total</b>	<b>243</b>	<b>75</b>	<b>234</b>	<b>552</b>

#### Tabulation of Q38\_1 S1

Which of the following associations do you or your company belong to? Please select all that apply.	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not applicable	237	71	221	529
California Building Industry Association (CBIA)	6	4	13	23
<b>Total</b>	<b>243</b>	<b>75</b>	<b>234</b>	<b>552</b>

**Tabulation of Q38\_2 S1**

Which of the following associations do you or your company belong to? Please select all that apply.	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not applicable	223	67	188	478
California Association of Building Energy Consultants (CABEC)	20	8	46	74
<b>Total</b>	<b>243</b>	<b>75</b>	<b>234</b>	<b>552</b>

**Tabulation of Q38\_3 S1**

Which of the following associations do you or your company belong to? Please select all that apply.	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not applicable	225	62	190	477
California Building Officials (CALBO)	18	13	44	75
<b>Total</b>	<b>243</b>	<b>75</b>	<b>234</b>	<b>552</b>

**Tabulation of Q38\_4 S1**

Which of the following associations do you or your company belong to? Please select all that apply.	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not applicable	231	69	214	514
Association of Energy Engineers (AEE)	12	6	20	38
<b>Total</b>	<b>243</b>	<b>75</b>	<b>234</b>	<b>552</b>

**Tabulation of Q38\_5 S1**

Which of the following associations do you or your company belong to? Please select all that apply.	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not applicable	240	72	231	543
Associated General Contractors of California (ASG CA)	3	3	3	9
<b>Total</b>	<b>243</b>	<b>75</b>	<b>234</b>	<b>552</b>

**Tabulation of Q38\_6 S1**

Which of the following associations do you or your company belong to? Please select all that apply.	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not applicable	217	53	190	460
American Institute of Architects-California (AIA CA)	26	22	44	92
<b>Total</b>	<b>243</b>	<b>75</b>	<b>234</b>	<b>552</b>

**Tabulation of Q38\_7 S1**

Which of the following associations do you or your company belong to? Please select all that apply.	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not applicable	236	71	222	529
Institute of Heating & AC Industries (IHACI)	7	4	12	23
<b>Total</b>	<b>243</b>	<b>75</b>	<b>234</b>	<b>552</b>

**Tabulation of Q38\_8 S1**

Which of the following associations do you or your company belong to? Please select all that apply.	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not applicable	211	58	165	434
International Code Council (ICC)	32	17	69	118
Total	243	75	234	552

**Tabulation of Q38\_9 S1**

Which of the following associations do you or your company belong to? Please select all that apply.	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not applicable	240	70	220	530
Residential Energy Services Network (RESNET)	3	5	14	22
Total	243	75	234	552

**Tabulation of Q38\_10 S1**

Which of the following associations do you or your company belong to? Please select all that apply.	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not applicable	200	60	196	456
Other	43	15	38	96
Total	243	75	234	552

**Tabulation of Q38\_11 S1**

Which of the following associations do you or your company belong to? Please select all that apply.	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
Not applicable	118	58	176	352
My company does not belong to any associations	125	17	58	200
<b>Total</b>	<b>243</b>	<b>75</b>	<b>234</b>	<b>552</b>

**Tabulation of Q38\_10\_TEXT S1**

Which of the following associations do you or your company belong to? Please select all that apply.	How have you encountered California's Compliance Improvement Program?			
	Registering as a user on EnergyCode Ace website	Attending a training course	Both	Total
	196	59	189	444
AABC, ACG	0	0	1	1
ACCA	0	0	1	1
ACEEE	0	0	1	1
ACG	0	0	1	1
ACIA, DSA	0	1	0	1
AIBD	1	0	0	1
AIBD, CIC	0	0	1	1
AIPE	0	0	1	1
ASCE	0	0	1	1
ASHRAE	9	1	4	14
ASHRAE, DBIA	1	0	0	1
ASHRAE, IAPMO	0	0	1	1
ASPE, ASHRAE	0	0	1	1
ASTM	0	0	1	1
AWWEE	1	0	0	1
American Society of Heating & Air Conditioning Engineers	0	0	1	1
ASHRAE				
American Society of home inspectors	0	1	0	1
BPCA, BPI,	1	0	0	1
Board of Professional Engineers	1	0	0	1
CA Sign Association	1	0	0	1
CALCTP	1	0	1	2
CSA	1	0	0	1
CSI	0	1	1	2
Certified Energy Manager	0	0	1	1
EGIA.org	1	0	0	1
Green Building, Project 2030	0	0	1	1
HERS, BPI	0	1	0	1
IAMPO	0	0	1	1
IAPMO	1	0	1	2
IBPSA, ASHRAE	1	0	0	1
IEEE	1	0	0	1
IEEE, IAEI	1	0	0	1
IEEE, NSPE	1	0	0	1
IEIA, NFPA, WECA, NEMA	0	0	1	1
IES	1	0	0	1
ISA International Sign Association	1	0	0	1
Ieee	1	0	0	1
Illuminating Engineering Society	1	0	0	1
Internantional Sign aSSOC. / California Electric Sign Assoc.	1	0	0	1
LEED	0	0	2	2
MEP2040, Center for the Built Environment	1	0	0	1

NACC	1	0	0	1
NAESCO	0	1	0	1
NARI	0	0	1	1
NASRC	0	1	0	1
NCARB	1	1	0	2
NCARB, SCUP, USGBC	0	0	1	1
NECA	1	0	0	1
NEMI, SMACNA	0	0	1	1
NFPA	3	1	0	4
NGMA	0	1	0	1
NSPE	1	0	0	1
National Roofing Contractors Association, Roofing Contractors Association of California, Roofing Contractors Association of Southern California, Western States Roofing Contractors Association	1	0	0	1
Natural Resources Agency	0	0	1	1
Ncarb	1	1	0	2
OTHER	1	0	0	1
Organization of Women Architects	0	1	0	1
PROFISSIONAL ENGINEERS	0	1	0	1
Passive House CA	1	0	0	1
Passive House California (PHCA)	0	0	1	1
RSES, HERS, NCI	0	0	1	1
SEAOCC	0	0	1	1
SMACNA	1	0	0	1
SMACNA, ASHRAE, IAPMO, CPTC	0	0	1	1
SMACNA, ASHRAE, MCAA	0	0	1	1
SVABO	1	0	0	1
Society of Women Engineers	1	0	0	1
USGBC	0	1	0	1
USGBC, ASHRAE	0	0	1	1
USGBC-LA	0	0	1	1
WECA	0	0	1	1
iaei	0	0	1	1
llumination Engineering Society	0	0	1	1
organization of Women Architects	0	1	0	1
Total	239	74	227	540

**CPUC Group B California Code Compliance Improvement Program Process Evaluation – Draft Report May 18, 2026**

<b>Comment Number</b>	<b>Comment with Context</b>	<b>E Source Response</b>	<b>Organization</b>
1	<p>However, the evaluation is incomplete because it does not examine related and complementary CI efforts beyond IOU-administered programs. This includes REN Codes and Standards programs, which were specifically designed to complement IOU activities, offer regionally tailored support, and address gaps in local government engagement and code compliance.</p>	<p>Thank you for providing this comment. Unfortunately, this request is out of scope for this specific evaluation that was intentionally focused on the IOU efforts as the main area of interest given budget available for this study and CPUC priorities.</p>	<p>BayREN</p>
2	<p>The evaluation focuses exclusively on IOU-administered CI programming without reference to its positioning within the wider CI environment, or how that position is complemented by REN C&amp;S programming. Although select REN staff were interviewed as market actors, complementary REN programs and contributions were omitted.</p>	<p>Thank you for providing this comment. Unfortunately, this request is out of scope for this specific evaluation that was intentionally focused on the IOU efforts as the main area of interest given budget available for this study and CPUC priorities.</p>	<p>BayREN</p>

<p>3</p>	<p>Consequently, the evaluation does not present a comprehensive view of statewide code compliance activities, making some of its recommendations redundant to existing efforts that address identified gaps.</p>	<p>Thank you for providing this comment. Unfortunately, this request is out of scope for this specific evaluation that was intentionally focused on the IOU efforts as the main area of interest given budget available for this study and CPUC priorities.</p>	<p>BayREN</p>
<p>4</p>	<p>Further, despite the report noting that 16% of CI participants were referred by RENs, the recommendation does not recognize that many RENs partner with and cross-promote the IOU-administered CI program, the platform evaluated in this study.</p>	<p>The report recognizes the role of RENs in section 4.2 of report.</p>	<p>BayREN</p>
<p>5</p>	<p>By excluding REN programming from the evaluation, the study does not capture how the CI program is supported through REN infrastructure, which risks characterizing existing solutions as unmet needs.</p>	<p>Thank you for providing this comment. Unfortunately, this request is out of scope for this specific evaluation that was intentionally focused on the IOU efforts as the main area of interest given budget available for this study and CPUC priorities.</p>	<p>BayREN</p>

6	<p>The evaluation’s Conclusion and Recommendation #2 identifies building officials, inspectors, and AHJs as hard-to-reach audiences and recommends tailored engagement strategies. BayREN agrees with this characterization but notes that some REN C&amp;S programs, such as BayREN’s, were purpose-built to address exactly this challenge. REN programs routinely work with cities and counties—including jurisdictions with limited staff capacity or no dedicated building departments—to establish sustained relationships and deliver customized trainings, shorter instructional formats, checklists, and targeted technical support in response to local constraints. These tailored participation pathways are already operational and actively supporting CI objectives at the regional level.</p>	<p>The report has been updated to acknowledge REN efforts but we clarified that it is still an issue, statewide, even with existing efforts.</p>	<p>BayREN</p>
7	<p>The report also recommends creating tailored participation pathways for hard-to reach groups such as local building department staff, as well as providing shorter trainings, checklists, and customized outreach. All of these are already provided by REN C&amp;S programming and delivered in coordination with IOU-administered CI programs, cities and counties to achieve compliance improvement.</p>	<p>The report has been updated to acknowledge REN efforts but we clarified that it is still an issue, statewide, even with existing efforts.</p>	<p>BayREN</p>
8	<p>Lastly, Conclusion #5 and Recommendation #6 calling for shorter course formats do not reflect the full diversity of programming that is already available to participants from the wider CI environment. RENs already offer shorter training courses within their programming. Rather than recommending longer courses be shortened, greater cross-promotion of complementary programming such as the shorter REN formats is recommended to achieve the diversity formats identified.</p>	<p>Given the study focus on the IOU program, we have not changed this recommendation as the findings in the study lead to this conclusion. The IOUs will have a chance to respond to these recommendations as part of the RTR process and may opt for cross-promotion instead or some combination.</p>	<p>BayREN</p>

<p>9</p>	<p>CEA has had a long-term commitment on Compliance Improvement. The CPUC’s evaluation process should incorporate the perspectives of California’s diverse energy stakeholders. Incorporating the insights of industry stakeholders and local communities, which include building departments, installers, contractors, manufacturers, software technologies, and energy consumers will result in a healthier, more equitable built environment for all Californians. The CEA is encouraged by Opinion Dynamics and the CPUC’s inclusion of California’s diverse energy stakeholders in its current report (as seen on page 19 and 29). CEA recommends this type of participatory engagement beyond the publishing of reports.</p>	<p>Noted but no report revisions were made in response.</p>	<p>CEA</p>
<p>10</p>	<p>The CEA recommends a revision of the Draft Reports title. The current title, “California Code Compliance Improvement Program Process Evaluation” mostly writes into the outreach and awareness efforts administered by existing compliance and energy code education programs. What it does not do is perform a thorough evaluation of compliance improvement in California. Considering the cost of noncompliance to California’s energy consumers, the CEA encourages the IOUs, under CPUC leadership, to invest in solutions-based methodologies that will benefit local communities, its diverse workforce, and building department leaders to improve enforcement of Title 24. When addressing compliance, the CEA encourages the CPUC to consider not only the health of the built environment but also the energy consumers who reside, work, and maintain California’s buildings.</p>	<p>Added 'IOU' to report title.</p>	<p>CEA</p>
<p>11</p>	<p>In agreement with the Draft Report, CEA acknowledges that Building Departments lack the resources to meet the escalating enforcement demands of Title 24. Paying attention to the needs of building departments will improve compliance in California.</p>	<p>Noted but no report revisions were made in response.</p>	

<p>12</p>	<p>a. The Draft Report notes that building department operations remain a primary impediment for compliance improvement efforts. While CEA acknowledges this to be true, the causality lies not with the building departments themselves. There has been a sustained misalignment between the State’s enforcement expectations placed on building departments and the capacity of building departments to undertake Title 24 Part 6 enforcement activities. The observation is that building departments are under-resourced and remain separated from workforce and software solutions that could make the enforcement task feasible to implement for their local community (e.g. CEC mandated Acceptance Testing).</p>	<p>Noted but no report revisions were made in response.</p>	
<p>13</p>	<p>b. The CEA encourages the CPUC’s evaluation team to inquire whether the type of support provided to building departments is adequate in scale and matches the needs of building department professionals to properly enforce Title 24. California is a diverse market economy that has provided options and solutions outside of training available. The Draft Report misses to acknowledge the existing work of California’s diverse market actors who are also engaging in improving compliance in California. Besides the CPUC’s longstanding implementation partners, the CEA is reminding the CPUC to incorporate the insights of industry stakeholders and local communities, which include building departments, installers, contractors, manufacturers, software technologies, and energy consumers to achieve a healthier, more equitable built environment for all Californians.</p>	<p>This relates to enforcement and is thus out of scope of this evaluation.</p>	<p>CEA</p>
<p>14</p>	<p>c. When thinking about the resources invested in compliance, the report should reference the CEC’s November 2025 estimate on the Cost of Noncompliance for Title 24, calculated at \$2.8 billion / year for the new Title 24 2022 measures alone (CEC Presentation, PDF page 16). Across the whole of the Standards, the cost could be four times that size. Are the solutions and resources that the IOUs putting forward for Compliance Improvement commensurate with an energy efficiency shortfall of that scale?</p> <p>Presentation link:  <a href="https://efiling.energy.ca.gov/GetDocument.aspx?tn=267632&amp;DocumentContentId=104649">https://efiling.energy.ca.gov/GetDocument.aspx?tn=267632&amp;DocumentContentId=104649</a></p>	<p>Noted, updated report on page 10.</p>	

<p>15</p>	<p>While the distinction between compliance and enforcement can appear to be mere semantics, CEA wishes to bring a distinction to the fore. <i>The government enforces regulations and the building industry complies</i> with regulations. To achieve the intended benefits of Title 24, both compliance and enforcement need to be improved.</p>	<p>Noted. No updates to the report were made. The report already distinguishes between compliance and enforcement.</p>	
<p>16</p>	<p>a. In a 2008 ACEEE paper, PG&amp;E reinforced the primary importance of enforcement: <i>“Standards Education and Training is no substitute for code enforcement, nor is it as effective. Without enforcement by the California Energy Commission, complete compliance in California with all building and appliance standards will never be achieved. In addition, enforcement and education are most effective if conducted in parallel. A little enforcement goes a long way towards motivating industry practitioners to learn more about how to comply with regulations.” (emphasis added)</i></p> <p>Pat Eilert, PG&amp;E, et al. “Standards Education and Training as a Resource Program”, ACEEE 2008, pg. 8-62.</p>	<p>Noted on the comment. No updates to the report were made.</p>	
<p>17</p>	<p>b. Similarly, the Draft Report reports a universal acknowledgment on the importance of building department to Title 24 compliance outcomes: “According to nearly all of the program stakeholders we interviewed, these groups [AHJ staff] are central to the success of code compliance efforts and finding solutions to integrate them into the compliance improvement process more meaningfully is a significant priority for stakeholders.”</p>	<p>Noted on the comment. No updates to the report were made.</p>	

<p>18</p>	<p>c. Eighteen years after PG&amp;E's insights at ACEEE, it appears that IOU compliance improvement programs continue to over-index on Compliance Improvement and under-index on Enforcement Improvement. Even in a resource constrained world, focusing more on enforcement assistance could deliver greater benefits per dollar of ratepayer allocation. With foregone Title 24 savings likely in the billions of dollars, increased investment in Enforcement Improvement is likely to be a prudent use of ratepayer dollars even if there is hesitation about how to measure the benefits.</p>	<p>Noted on the comment. No updates to the report were made.</p>
<p>19</p>	<p>d. California's IOUs have indicated in a number of contexts going back well over a decade that they have chosen to avoid direct support of enforcement assistance efforts. These self-imposed limits constrain the types of solutions that IOUs can offer for Compliance Improvement. Given the centrality of Enforcement Improvement to the efficacy of Title 24, the limitations on providing enforcement assistance should be the central part of a CPUC evaluation. If limitations create notable enforcement and implementation gaps, then the CPUC evaluation team should make recommendations to address the resulting gaps.</p>	<p>Noted on the comment. No updates to the report were made.</p>
<p>20</p>	<p>e. For example: Software systems that support a wide range of city operations collect names and addresses, as that is necessary to manage a city's oversight responsibilities. The existing IOU Virtual Compliance Assistant does not collect building addresses, claiming there is an external limitation on collecting that information. Addresses are central to building department Title 24 enforcement, so CPUC evaluators should seek to understand if there are real external limitations or if the restriction on managing addresses is self-imposed. In addition, the evaluators should seek to understand how that limitation might impact the integration of the VCA tool with other parts of the compliance and enforcement process, such as direct support of building department operations.</p>	<p>Noted on the comment. No updates to the report were made.</p>

CEA

<p>21</p>	<p>f. The IOU Program Theory Logic Models indicate that the IOUs seek to “maximize” outcomes from Title 24. Maximizing outcomes seems close to impossible if IOU Compliance Assistance programs cannot directly assist enforcement processes that are “central to the success” of the entire system.</p>	<p>Noted on the comment. No updates to the report were made.</p>	
<p>22</p>	<p>Enforcement Improvement and Compliance Improvement should exist for their own sake, not as a contributor to Code Advocacy.</p>	<p>Noted on the comment. No updates to the report were made.</p>	
<p>23</p>	<p>a. The Draft Report explains that a key purpose of the IOU Compliance Improvement program is to support IOU code advocacy efforts.</p> <p>“According to Pacific Gas and Electric (PG&amp;E), the program’s lead administrator, in its 2024–2027 Business Plan, the program mitigates ‘resistance to future advocacy and ensures that the potential savings from Codes and Standards (C&amp;S) advocacy efforts are realized and persist over time.’ ”</p>	<p>Noted on the comment. No updates to the report were made.</p>	

<p>24</p>	<p>b. The central objective of Compliance Improvement programs should be to improve compliance with Title 24, not to support Code Advocacy. While there are synergies between Compliance Improvement and Code Advocacy, there are also tensions and sensitivities between the two important efforts. An evaluation should assess if the linkage is in some manner undermining Compliance Improvement efforts in California. Would greater independence between Code Advocacy and Compliance Improvement deliver greater ratepayer benefits? The CEA encourages the CPUC and Opinion Dynamics to consider this comment submitted to the California Energy Commission (source below) noting, in part, how Code Advocacy efforts have systematically underestimated impacts on building departments during the code development process to justify the adoption of additional Title 24 measures.</p> <p>CodeCycle.org, "Systemic Underestimation of AHJ Impacts from Title 24 Part 6", November 2025, CEC Docket 25-BSTD-03  <a href="https://efiling.energy.ca.gov/GetDocument.aspx?tn=267682&amp;DocumentContentId=104702">https://efiling.energy.ca.gov/GetDocument.aspx?tn=267682&amp;DocumentContentId=104702</a></p>	<p>Noted on the comment. No updates to the report were made. Perspective on what the CPUC should focus evaluation on can be communicated through other official channels such as calls for comments on proceedings and draft decisions or public postings of study workplans.</p>	<p>CEA</p>
<p>25</p>	<p>c. The observation is that the existing Compliance Improvement program by the IOUs is treated subservient to its Code Advocacy program. As a result, the real challenges faced by building departments or the broader construction industry are devalued, undermining the energy savings that energy consumers could be benefiting from given easier enforcement and better compliance. It is difficult to see how the existing Compliance Improvement program, managed by California's IOUs, can properly assess solutions, allocate resources, and maximize compliance if ongoing new measure adoption (i.e. Code Advocacy) remains the overriding objective.</p>	<p>Noted on the comment. No updates to the report were made.</p>	

<p>26</p>	<p>d. The CEA encourages the CPUC’s evaluation team and researchers from Opinion Dynamics to continuously engage with California’s diverse stakeholders to understand the complicated dynamics that might be impeding statewide Compliance Improvement efforts.</p>	<p>Noted on the comment. Diverse stakeholders will be engaged in the next study related to Code. Please see refer to PDA for future scopes of work related to Codes and Standards.</p>	
<p>27</p>	<p>Is the right blend of strategies being deployed?</p>		
<p>28</p>	<p>a. As noted previously, an initial assessment by the CEC suggests that Title 24 compliance problems are likely costing Californians billions of dollars per year. It is important that ratepayer funds not only be used to provide a wide array of well-received solutions, but the Draft Report should also assess whether the IOU’s distribution of Codes &amp; Standards resources matches the challenge. That analysis, in turn, requires a dissection of the Title 24 regulations themselves, construction processes, and how industry members interact with each other to support compliant outcomes.</p>	<p>Noted on the comment. No updates to the report were made. Perspective on what the CPUC should focus evaluation on can be communicated through</p>	<p>CEA</p>

<p>29</p>	<p>b. Following the TurboTax analogy of the draft report: user satisfaction has some value as a metric, but if IOU tools assess a \$10,000 tax bill when, in reality, \$20,000 is due, that will please the software users while leaving the government underfunded (or in the case of Title 24, promised energy savings under-delivered).</p>	<p>other official channels such as calls for comments on proceedings and draft decisions or public postings of study workplans.</p>	<p>CEA</p>
<p>30</p>	<p>c. Potential questions the CPUC and its evaluation team should consider when seeking to better align strategies to improve compliance:</p> <p>i. Does the heavy reliance on outreach and education, essentially a 'manual' approach to compliance, have the capacity to address the systemic complexity of Title 24, or is it a limited strategy that cannot scale and match today's pace of integration and automation?</p> <p>ii. If that is true, how is the CPUC in partnership with California's IOUs building or selecting the type of automation that serves California's energy consumers? CEA encourages the CPUC to consider compliance solutions from the state's diverse economy. The CPUC has the ability to conduct a dialogue with market players who have the technical and workforce solutions to improve compliance statewide. Increasing their participating in this</p>		
<p>31</p>	<p>CEA agrees with the Draft Report's recommendation to increase software options for document completion. However, true modernization requires the State and IOUs to look beyond the static 'document' model. By leveraging contemporary digital assets, California can transition toward a dynamic, data-driven compliance framework that reflects the technological standards of the 21st century.</p>	<p>Noted, no action needed in response.</p>	<p>CEA</p>

32	<p>a. In the recommendations, ideas such as “short checklists” are put forward. These ideas are easy to conceive, but the complexity and length of the Standards make the Standards fairly immune to “short checklists” that accurately reflect the requirements of the code. This is properly acknowledged in the Draft Report:</p> <p>“ . . . simplifying messaging to reach a broader audience is becoming more challenging as code becomes more complex.” Almost any effort to simplify the standards in a written form will leave out critical elements of the Standards, thereby fostering noncompliance. Algorithms can simplify the compliance and enforcement processes without deleting the regulatory requirements.</p>	Noted. No action needed in response.	
33	CEA encourages the CPUC to evaluate if the IOU's 'compliance assistance' tools such as the Virtual Compliance Assistant (VCA) facilitate accurate enforcement or are merely streamlining the submission of non-compliant designs.	See next comment.	
34	<p>a) The Draft Report uses Turbo Tax as an analogy to describe the user experience of the Virtual Compliance Assistant (VCA). While TurboTax confirms eligibility for tax benefits such as deductions, VCA, on the other hand, will frequently accept the users assertion that a project qualifies for an exemption with confirming eligibility based on underlying attributes. This will lead the VCA to note that a project “complies” with Title 24 based solely on the regulatory assertion of the user. The “complies” stamp on the VCA forms create a significant risk of building department enforcement staff overinterpreting the results, thinking that they do not need to double-check the regulatory assertions. This overinterpretation of seemingly-automated results allows non-compliant projects to pass through plan check and field inspection without correction, leading to the underrealization of Title 24 savings.</p>	The report accurately describes what we heard from research participants who noted their experience was like turbotax as verbatim responses to survey questions. There is no other reference to this in the report. This remains unchanged in the report to accurately reflect what was reported by research participants.	CEA

<p>35</p>	<p>b) One consequence of this dynamic is that Acceptance Testing Technicians are routinely asked to test the functionality of building elements that are not in compliance with the attribute requirements, essentially being asked to test the functionality of something that is not in the building.</p>	<p>Noted. No changes to the report in response.</p>	
<p>36</p>	<p>c) The CPUC evaluators should review the technical details of what the phrase “complies” means in a VCA output and assess what potential problems that might cause for building department workloads as well as for the downstream ratepayers in buildings that are noncompliant.</p>	<p>Noted. No changes to the report in response.</p>	
<p>37</p>	<p>The Role of Acceptance Testing Technician was considered in the Draft Report but only as a minor segment of the program’s target market.</p>		

<p>38</p>	<p>CEA recommends Opinion Dynamics and the CPUC's evaluation team to read this letter submitted to the CEC to understand the essential scope of work Acceptance Test Technicians (ATTs) (source below) in securing California's energy savings objectives and compliance of Title 24, Part 6.</p> <p>DOCKET LOG 24-BSTD-05, TN 267713, California Energy Alliance Comments - [CEA] Compliance Improvement - Title 24, Part 6 Language on the Role of ATT</p>	<p>Noted, no changes to the report are needed in response.</p>	<p>CEA</p>
<p>39</p>	<p>PG&amp;E and SCE request clarification as to whether Energy Division or the CPUC has any policy governing the use of AI in evaluation reports. Current guidance from reputable organizations generally emphasizes transparency regarding which tasks used AI and how human reviewers oversaw those outputs. Accordingly, we request that ODC add a "Limitations" section that, in addition to standard study limitations, discloses whether and how AI was used in data collection, analysis, and reporting. In particular, the report should clarify whether AI note-taking tools were used and whether quotations were derived from AI-generated notes or directly transcribed from audio recordings.</p>	<p>Content added to acknowledgements page.</p>	<p>IOUs</p>
<p>40</p>	<p>It would be helpful to include a footnote for each table identifying the verbatim survey question used to generate the reported result.</p>	<p>Content added.</p>	<p>IOUs</p>

<p><b>41</b></p>	<p>Would Energy Division be willing to share the survey cross-tabulations? Several survey questions do not appear to be reflected in the report findings, including Q10, Q14, Q15, Q17, Q18, Q19, Q22, Q23, Q26, Q27, Q28, Q36, and Q37. It was difficult to determine which questions supported specific results. For each table or figure presenting survey results, we request a footnote identifying the verbatim survey question used.</p>	<p>Cross tabulations of results included in Appendix B. Survey questions added as footnotes to all figures and tables.</p>	<p>IOUs</p>
<p><b>42</b></p>	<p>In addition, many survey questions were open-ended and therefore difficult to assess from summarized findings alone. The Compliance Improvement program managers and implementers would appreciate access to anonymized raw responses to help identify trends that may not be apparent from the report. Several of the comments below could be addressed through disclosure of anonymized responses in lieu of further evaluator analysis.</p>	<p>Open-ended responses included in Appendix B.</p>	<p>IOUs</p>

<p>43</p>	<p><i>“According to Pacific Gas and Electric (PG&amp;E), the program’s lead administrator” Page 7</i></p> <p>The IOUs request clarification of this statement. There is no statewide or lead administrator for the Compliance Improvement programs; rather, these are locally implemented and separately filed programs. To reduce cost and administrative burden, PG&amp;E leads the website element, while PG&amp;E, SCE, and SDG&amp;E jointly lead other program elements, including regional and statewide stakeholder outreach, training, resource development, and tool design. In addition, the ECA website is a program element or delivery tool, not the program itself. We therefore request removal or revision of this statement to avoid mischaracterizing program administration. We note that similar feedback was provided in comments on the draft evaluation plan in May 2025, yet the same issue appears in this draft report. More broadly, we appreciate Energy Division’s collaboration in soliciting feedback on draft evaluation plans and suggest that future studies include a disposition of IOU comments on draft study plans, similar to the disposition provided for draft report comments.</p>	<p>Replaced administrator with coordinator in two instances; reviewed wording of website in report and revised as needed regarding the program as more than website, most notably in the introductory paragraph and recommendation 4; We will follow this process of inventoring comments moving forward.</p>	<p>IOUs</p>
<p>44</p>	<p><i>“Lastly, the IOU administered program is implemented by Binary Evolution and Energy Solutions, with the support of other third party organizations.” Page 9</i></p> <p>The IOUs request that the evaluators list all supporting vendors, including: Binary Evolution, Energy Solutions, NORESKO, Gabel Energy, Selby Energy, EnergySoft, Build Smart, McLain ID, Anchors Aweigh Energy, and Morton Green Building.</p>	<p>Content added.</p>	<p>IOUs</p>

<p>45</p>	<p><i>"However, the CI program does not claim energy savings, carbon savings, nor TSB, and therefore lacks a direct measurement of success for its investment. Table 3 lists the program budget for C&amp;S." Page 9</i></p> <p>The IOUs suggest consideration of a Kirkpatrick Model Level 2 evaluation. Specifically, the study could measure participants' knowledge, skills, and processes before training and again approximately two months after training to assess on-the-job application.</p>	<p>Noted. This is similar to item #9 in KPI table.</p>	<p>IOUs</p>
<p>46</p>	<p><i>Table 3 lists the program budget for C&amp;S. Page 9</i></p> <p>The IOUs note that Code Readiness and Decarbonization Support are PG&amp;E local programs only. SCE and SDG&amp;E address those activities through their Planning &amp; Coordination programs.</p>	<p>Footnote added.</p>	<p>IOUs</p>
<p>47</p>	<p><i>Research Objective 1 Page 11</i></p> <p>Several conclusions do not clearly support the corresponding recommendations, and in some cases the connection is not apparent. The report would be clearer if each conclusion explicitly restated the empirical finding that gives rise to the recommendation. As the "Guidelines for CPUC-ED and California IOU EM&amp;V Reports" state, recommendations should be clearly supported by findings and tied to measurable benefits; where no supporting data or measurable benefit exists, a recommendation should not be made.</p>	<p>Research Objective #1 has been updated in line with this comment.</p>	<p>IOUs</p>

<p>48</p>	<p><i>"successfully increase both awareness and knowledge of California energy codes "</i> Page 11</p> <p>The IOUs appreciate that 92% of survey respondents reported being “very satisfied” or “somewhat satisfied” with Compliance Improvement. We request that this finding be included in the Executive Summary.</p>	<p>Added to page 10.</p>	<p>IOUs</p>
<p>49</p>	<p><i>Use the key performance indicators (KPIs)</i> Page 11</p> <p>The evaluation identifies 83 recommended indicators for Compliance Improvement, compared with 143 indicators for the entire California Energy Efficiency Portfolio under CPUC Resolution E-5351 (June 12, 2025). Of those 143 indicators, only three were selected by the Commission for the IOUs’ Compliance Improvement programs. We therefore request that the evaluators prioritize the 83 recommended KPIs. Although the report appropriately acknowledges that compliance data are not within the IOU programs’ direct control, several proposed metrics appear to depend on such data and should be reconsidered or removed. For many other KPIs, the required data sources are either unclear or do not appear to exist, including measures such as use in private training scenarios, support-history error rates, super-user status, learner status, and cost per compliant building. Please clarify how the data for these KPIs would be obtained. Overall, we request that the KPI set be reviewed with particular attention to the cost-benefit of collecting and maintaining the proposed data.</p>	<p>Prioritization and cost-benefit analyses are not part of PTLM recommendations, as they are subject to budget processes within the CPUC and IOUs. The top 5 priorities are listed in the executive summary.</p>	<p>IOUs</p>

<p>50</p>	<p><i>"Footnote 8: Some KPIs described in Table 11 are also part of Resolution E 5351" Page 11</i></p> <p>Please note that only three of these indicators apply to the IOU Compliance Improvement programs; the remaining indicators apply to the RENs, which voluntarily elected to track them. The original business plan metrics may be the best source for confirming those assignments. Resolution E-5351 did not reassign metrics or indicators; it only deleted or converted them.</p>	<p>No action.</p>	<p>IOUs</p>
<p>51</p>	<p><i>"Users are generally satisfied with resources on the program website" Page 12</i></p> <p>Please clarify which survey question supports this conclusion. We believe the figure shown corresponds to Q13 ("What issues, if any, did you experience with the EnergyCodeAce website?"). Respondents may not equate the website itself with the broader set of Compliance Improvement online resources. To improve accuracy, the conclusion should refer specifically to the "EnergyCodeAce website," consistent with the wording of Q13. This distinction matters because addressing visually unappealing webpages is materially different from addressing concerns about the broader set of online resources, including the 12 tool types identified later in the report.</p>	<p>Question 11 and question 13</p>	<p>IOUs</p>
<p>52</p>	<p><i>"Treat the website as a product, not a program." Page 12</i></p> <p>Following internal discussion, the IOUs request clarification of this statement. The website is not a program; it is a program element or delivery mechanism.</p>	<p>Change made.</p>	<p>IOUs</p>

<p>53</p>	<p><i>"maintain website tools and content to current code standards, in order to minimize the time outdated materials remain on the program website as much as reasonably possible."</i> Page 13</p> <p>Tools and resources supporting the 2019 and 2022 code cycles remain on the site because many projects that were permitted under previous code cycles are only now being constructed, and installers continue to need support interpreting those requirements. The Help Desk regularly receives requests for older forms.</p>	<p>No action.</p>	<p>IOUs</p>
<p>54</p>	<p><i>Research Questions</i> Page 16</p> <p>Please provide a disposition of these research questions, particularly those addressing sufficiency and comparative program costs. For any questions that were not evaluable, please identify them and explain why. If feasible, it would also be helpful to link each conclusion back to the original research question.</p>	<p>Survey results attached as appendix. Conclusions are all linked back to research objectives. These are the section headings.</p>	<p>IOUs</p>
<p>55</p>	<p><i>"interviews with IOU program staff and other relevant market actors"</i> Page 17</p> <p>Please clarify whether the CEC is considered a relevant market actor in the context of Compliance Improvement.</p>	<p>For the purpose of this study, relevant market actors are anyone that the program targets with its training and information, or the intended "users" of the information. This is described in the report therefore no report changes were made in response.</p>	<p>IOUs</p>

<p>56</p>	<p><i>Table 8. "Program Role" column Page 17</i></p> <p>Please delete the "Program Role" column, as PG&amp;E is not the lead program administrator. The Compliance Improvement programs were filed individually to address local and regional needs. Similar feedback was provided during review of the draft evaluation workplan last year.</p>	<p>Column removed.</p>	<p>IOUs</p>
<p>57</p>	<p><i>Table 10. Interviewed Market Actors Page 19</i></p> <p>The report reflects 12 REN interviews but includes limited discussion of REN offerings or coordination with the IOUs. Because RENs are important partners in the broader Compliance Improvement effort, we request additional discussion of their role and coordination with IOU activities.</p> <p>Please add a note that acknowledges this is not a comprehensive list of market actors that engage with the Compliance Improvement program offerings. For example, missing from this list are individuals who design buildings, apply for permits, conduct plan checks, or perform inspections.</p>	<p>The full range of market actors that engage with the program are included in the participant interview pool, intended as end users of the program. Interviewed market actors are further associates of the program but not necessarily the end user targets. The report describes this difference therefore no changes were made to the report in response.</p>	<p>IOUs</p>
<p>58</p>	<p><i>"The evaluation team interviewed 13 key program participants " Page 19</i></p> <p>Please indicate how many interviewees represented each market actor category and provide the relevant firmographic characteristics of those participants, consistent with Questions 1 and 2 in the Participant Interview Guide.</p>	<p>Market actor and participant interviewee information regarding Question 1 can be found in Tables 10 and 11 . Question 2 data added to Table 11.</p>	<p>IOUs</p>

<p>59</p>	<p><i>"many participants utilized both the training and website components of the program"</i> Page 20</p> <p>"Many" appears understated here. All training participants must register through the website, so use of the training and website components is universal for that group.</p>	<p>Noted, the report has been updated to reflect the overlap.</p>	<p>IOUs</p>
<p>60</p>	<p><i>Table 13. Proposed Compliance Program PTLM Linkage Theories and Associated KPIs</i> Page 20</p> <p>The proposed KPIs would be more useful if the report defined the underlying terminology, data sources, calculation methodologies, and intended program decisions each KPI is meant to inform. We provide specific comments below on selected KPIs.</p> <p>Link 1: "Number of unique training courses" — please define "unique."</p> <p>Link 2: "Tool reliability measure" — please define "measure" in this context and explain how tool reliability would be assessed.</p> <p>Link 5: "Proportion of applicable market actors" — please clarify this metric, including the proposed numerator and denominator.</p> <p>Link 5: "Completion rate for all courses" — did the evaluation identify evidence suggesting that completion rates are currently deficient?</p>	<p>The level of detail provided in the report is in alignment with the purpose of creating this PTLM in the context of this study and the budget and resources available for the task. Please refer to the executive summary for the top 5 suggested metrics that this task intended to produce in addition to the desired outcome of giving the CPUC and ratepayers a sense of what this program does and it's intended outcomes.</p>	<p>IOUs</p>
<p>61</p>	<p><i>Figure 5. Compliance Improvement Program Organizational Chart</i> Page 31</p> <p>This chart appears inaccurate. The IOUs have direct relationships with all market actors shown and do not rely on local government agencies or RENs as intermediaries to reach those actors or trade associations. The IOUs also maintain direct relationships with multiple divisions within the CEC. Because the hierarchy shown is misleading, the chart should be revised or removed.</p>	<p>A figure note was added to clarify in the report.</p>	<p>IOUs</p>

<p>62</p>	<p><i>"PG&amp;E oversees the Energy Code Ace brand and website through eight vendors (See Appendix G for the full listing). The two main vendors are: Energy Solutions for technical expertise and Binary Evolution for building and managing the website."</i> Page 31</p> <p>Energy Solutions is not the main vendor for technical expertise. Please remove the two "main" vendors listed here or correctly explain their respective roles and responsibilities.</p>	<p>Removed "main".</p>	<p>IOUs</p>
<p>63</p>	<p><i>"SDG&amp;E contributes print materials for some course materials, handouts, brochures, and other printed needs."</i> Page 31</p> <p>Additional activities completed by SDG&amp;E include local stakeholder outreach, online and in-person course delivery, tool design, resource design, compliance form design, and printed materials for selected course materials, handouts, brochures, and other needs.</p>	<p>All IOUs do all of that, but each provides a unique contribution to the CI statewide effort. SDG&amp;E's was providing printing for everyone.</p> <p>Cited section of report is meant to delineate unique tasks in the division of labor across the IOU, therefore no change to the report was made.</p>	<p>IOUs</p>
<p>64</p>	<p><i>"the program delivers code-compliant construction and energy efficient upgrades to end-use customers "</i> Page 33</p> <p>The program does not directly deliver code-compliant construction or energy-efficient upgrades. Those are not program deliverables and should not be characterized as such.</p>	<p>Edited report to clarify .</p>	<p>IOUs</p>

<p>65</p>	<p><i>“Energy code isn’t a priority compared to safety or fire codes; people don’t know what they’re supposed to do.”</i> Page 33</p> <p>The IOUs request removal of this quote because it appears to mischaracterize the underlying concern. On the compliance enforcement side, permit technicians, plan examiners, and building inspectors are often not given sufficient time to enforce the energy code effectively. The issue is not lack of priority, but the need for adequate leadership support and time to perform the work appropriately.</p>	<p>Sentence removed.</p>	<p>IOUs</p>
<p>66</p>	<p><i>content provider</i> Page 36</p> <p>Please define “content provider” in the context of Compliance Improvement. This term has not previously been used in the report and does not appear to be used again after this paragraph.</p>	<p>This term was used to anonymize the response. Slightly altered description for clarity.</p>	<p>IOUs</p>
<p>67</p>	<p><i>“One of the stakeholders indicated they can struggle with attendance”</i> Page 36</p> <p>Please clarify this stakeholder’s role with respect to trainings. For example, is this individual a trainee?</p>	<p>Edited for clarity.</p>	<p>IOUs</p>

<p>68</p>	<p><i>Table 17. Course Registrations by IOU Service Territory</i> Page 37</p> <p>The IOUs' records show different totals, including a substantially higher number of participants from SCE territory during the study period. If the evaluators can describe how these data were derived, the IOUs would be glad to help reconcile the discrepancy.</p>	<p>Data was derived from a data request to the IOUs. The IOUs have since communicated that the data they provided mistakenly omitted a substantial number of participants that should have been included. The report has been updated to reflect this data reporting issue.</p>	<p>IOUs</p>
<p>69</p>	<p><i>"Only 9,220 users from these two groups shared the same email addresses"</i> Page 38</p> <p>Earlier in the report, the evaluators state that overlap between groups was sufficiently large that sample stratification was not used. Here, the report appears to indicate limited overlap. Please clarify whether this inconsistency has implications for the representativeness of the survey sample.</p>	<p>The first instance refers to the sample frame, the second to the full population.</p>	<p>IOUs</p>
<p>70</p>	<p><i>"One REN added, "Not everyone wants a 2-hour class. We need smaller modules, five or ten minutes, so people can get exactly what they need." Another added, "You can't just post it on a website; you have to meet people where they're at. "</i> Page 39</p> <p>These two statements appear to point in different directions. Please clarify how the IOUs are expected to efficiently deliver short, 5–10 minute modules other than through a website. We also request confirmation that these are directly transcribed quotations.</p>	<p>They are direct quotations, and the juxtapositioning is meant to communicate that the outreach needs to be done for each profession and ideally tailored to the profession, as noted in the previous paragraph and earlier in this paragraph.</p>	<p>IOUs</p>

<p>71</p>	<p><i>"... inspectors rely on custom checklists instead." "(It) would be better if checklists were editable " Page 39</i></p> <p>Please note that one challenge in permit-process compliance is the use of custom checklists. Jurisdiction-specific checklists can create barriers for builders and other participants working across multiple jurisdictions. The current checklists already allow customization by project scope, and that standardization is helping to improve the situation.</p>	<p>Quote removed.</p>	<p>IOUs</p>
<p>72</p>	<p><i>"PG&amp;E controls the bulk of the program budget" Page 40</i></p> <p>Please revise this statement. PG&amp;E controls the budget for the website program element, while the other IOUs control and/or jointly contribute to the budgets for other program elements.</p>	<p>Phrasing revised.</p>	<p>IOUs</p>
<p>73</p>	<p><i>Figure 9. Respondent Engagement with program Page 41</i></p> <p>Based on the survey instrument, respondents may have been confused by the answer options. There is no separate registration process for training courses; all training attendees are registered as users on the EnergyCodeAce website.</p>	<p>Noted. No changes.</p>	<p>IOUs</p>

<p>74</p>	<p><i>Figure 10. Respondents' Role</i> Page 41</p> <p>Please clarify how "design professionals" differ from architects and how "building officials" differ from plan examiners. Because these terms are used almost interchangeably in practice, the survey response options may have caused respondent confusion.</p>	<p>Architects are broken out on their own, as they represent a significant group of users. Design professionals would include anyone who identifies as a professional designer in the residential housing industry, such as interior designers or lighting designers. Design Professional could be architects or lighting designers. Building officials include plan examiners, inspectors, and managers. Added footnote to table 2 to describe.</p>	<p>IOUs</p>
<p>75</p>	<p><i>Figure 11. Association memberships</i> Page 42</p> <p>These data are useful. Thank you.</p>	<p>No changes.</p>	<p>IOUs</p>
<p>76</p>	<p><i>"based on their frequency of tool utilization "</i> Page 42</p> <p>Please define the thresholds for high-, moderate-, and low-frequency users, and provide the average number of visits for each group.</p>	<p>High/Medium/Low was based on familiarity and use of tools. This was scored from the survey = sum of all Q6 + Q7 + Q24 + Q27 variables. High &gt; 30, Moderate = 20-30, Low &lt; 20 and used for the interview sample.</p> <p>From the interviews: High=near daily use. Medium=used few time a month for authoritative guidance, Low=an available reference, but not incorporated into workflow</p> <p>This content was added to the report.</p>	<p>IOUs</p>

<p>77</p>	<p><i>"High-frequency users were most often plan examiners...Low frequency users were varied in their professions " Page 43</i></p> <p>It would be helpful to provide a breakdown of the composition of each group, either as a pie chart or, preferably, a table showing constituent types and average number of visits. We also note that the finding that high-frequency users were most often plan examiners appears difficult to reconcile with the conclusion that Compliance Improvement is not reaching AHJs sufficiently.</p>	<p>Plans examiners are checking plans all day every day. Once plans examiners are engaged and use ECA in their workflow they stay engaged. This is why we focus on broadening outreach.</p>	<p>IOUs</p>
<p>78</p>	<p><i>"awareness of code changes increased after using the online resources and attending courses ." Page 45</i></p> <p>The survey appears to address this through four separate questions. Please provide the responses to Q16, Q17, Q18, and Q19 regarding awareness and knowledge before and after use of EnergyCodeAce online resources.</p>	<p>Table of findings on p.47</p>	<p>IOUs</p>
<p>79</p>	<p><i>Table 20. Impact of Program Page 45</i></p> <p>Thank you. This is useful for validating continued use of the implementation partners' surveys.</p>	<p>No changes.</p>	<p>IOUs</p>

<p>80</p>	<p><i>Application of CI program content</i> Page 45</p> <p>Are these results drawn from Q9 (“How have you applied the information from the EnergyCodeAce website to your work? Please select all that apply.”)? If so, please revise the figure caption to reflect the survey wording more precisely. It is not clear whether respondents interpreted “information from the EnergyCodeAce website” to mean all online resources, including the 12 tools identified elsewhere in the report.</p>	<p>Drawn from Q9 and Q27. Figure caption updated.</p>	<p>IOUs</p>
<p>81</p>	<p><i>Figure 15. Application of Online and Course Information</i> Page 46</p> <p>Please use chart labels that match the survey language exactly. For example, “Providing consistent compliance documentation” differs materially from the shortened label “Provide compliance documentation.” The omission of “consistent” may affect interpretation of the response. Another potential source of confusion is that the courses are offered almost entirely online. Please clarify how respondents were expected to interpret this question in that context.</p>	<p>Chart options were updated to match the survey.</p>	<p>IOUs</p>
<p>82</p>	<p><i>“One plan examiner highlighted its value for enforcement consistency and completeness”</i> Page 46</p> <p>It is encouraging to see that once a hard-to-reach participant engages, they find Compliance Improvement valuable. At the same time, this appears difficult to reconcile with the earlier quoted concern regarding editable documents and checklist usability. Please confirm that these quotations were accurately transcribed and are not materially inconsistent.</p>	<p>They are accurately transcribed. The two quotations reflect the sentiment of participants. The resources are valuable in some ways and imperfect in others.</p>	<p>IOUs</p>

<p>83</p>	<p><i>"also suggested additional training topics " Page 47</i></p> <p>Please indicate how frequently each topic was suggested.</p>	<p>Verbatim responses may be found in the Appendix item: "Open Ended Responses For Final Report"</p>	<p>IOUs</p>
<p>84</p>	<p><i>Table 21. Suggestions for Improvement Page 50</i></p> <p>It would be helpful to provide counts or percentages showing how frequently each suggested improvement was mentioned.</p>	<p>Verbatim responses may be found in the Appendix item: "Open Ended Responses For Final Report"</p>	<p>IOUs</p>
<p>85</p>	<p><i>Table 21. "Widely regarded as essential" Page 49</i></p> <p>Please provide the percentage of respondents who found these resources valuable so they can be compared consistently with other resources.</p>	<p>These results are in figure 17.</p>	<p>IOUs</p>

<p>86</p>	<p><i>"Building officials/inspectors, contractors, and trade professionals were more likely to prefer live, in person training"</i> Page 52</p> <p>Please consider presenting this breakdown in a chart, such as a stacked bar chart with separate categories for each respondent type. That would materially improve usability. More broadly, please ensure chart colors meet accessibility guidance; for example, similar shades of blue are difficult to distinguish.</p>	<p>Survey data is available in the appendices for further analysis.</p>	<p>IOUs</p>
<p>87</p>	<p><i>Table 22. Suggested Program Courses</i> Page 53</p> <p>Please clarify whether this table is derived from Q23 ("Which of the following courses are you interested in attending in the future? Please select all that apply."). The listed suggestions do not appear to align with that question's response options. In addition, course topics such as "Code Compliance" and "Title 24" may not provide sufficiently actionable insight, since all EnergyCodeAce courses address some aspect of code compliance and Title 24 serves as the overarching framework for the more specific topics listed.</p>	<p>Refers to question 34. Footnote added.</p>	<p>IOUs</p>
<p>88</p>	<p><i>"Notably, a third of those with issues were still not satisfied with their ability to get them resolved "</i> Page 54</p> <p>Please identify where these data are presented. The results from Q14 and Q15 do not appear to be shown elsewhere in the report, including satisfaction with issue resolution and the related open-ended explanations.</p>	<p>Q14 and Q15 are not reported elsewhere. Detailed results may be found in the survey results appendix.</p>	<p>IOUs</p>

<p>89</p>	<p><i>"Respondents offered recommendations on how the program could simplify code compliance" Page 54</i></p> <p>There does not appear to be a survey question asking how the program could "simplify code compliance." Please identify which survey question produced the suggested program improvements shown in Table 23.</p>	<p>Question 34 was used for Table 22.</p>	<p>IOUs</p>
<p>90</p>	<p><i>Table 23. Suggested program improvements Page 54</i></p> <p>Please provide the percentage of respondents associated with each key consideration in the suggested program improvement categories.</p>	<p>Verbatim responses may be found in the Appendix item: "Open Ended Responses For Final Report"</p>	<p>IOUs</p>
<p>91</p>	<p><i>Program satisfaction Page 55</i></p> <p>Please clarify why overall satisfaction is 92% while satisfaction with courses and online resources is 96% and 93%, respectively. It would be helpful to understand what factors are reducing the overall satisfaction measure.</p>	<p>Sources of dissatisfaction with the program overall was not assessed as a follow up.  Sources of dissatisfaction with the website are addressed in Q11-Q15 and detailed in Appendix C.  Sources of dissatisfaction with the courses is addressed as a follow-up in Q26.  These are three different questions, and do not likely differ significantly from each other.  With satisfaction levels this high, it is our standard practice to not delineate sources of dissatisfaction, so as not to misrepresent the significance of these concerns. Full open-ended responses may be found in the survey results appendix.</p>	<p>IOUs</p>

<p>92</p>	<p><i>Figure 23. Quantity learned</i> Page 56</p> <p>Please use chart labels that match the actual response options. For example, the survey response “Quantity of new material learned” differs materially from the shorter label “Quantity learned” shown in the figure.</p>	<p>Chart options were updated to match the survey.</p>	<p>IOUs</p>
<p>93</p>	<p><i>“increase this rate to almost 100%”</i> Page 57</p> <p>Thank you for capturing this positive result and demonstration of success. The IOUs appreciate this finding, which reflects the collective efforts of the broader Compliance Improvement community to work together to maintain a high level of knowledge.</p>	<p>No changes.</p>	<p>IOUs</p>
<p>94</p>	<p><i>Appendix C</i> Page 64</p> <p>It would be far more useful to indicate how frequently each suggestion was raised, rather than relying only on qualitative descriptors such as “many” or “most.” Quantified prevalence would help Compliance Improvement prioritize next steps across tools on a consistent basis.</p>	<p>The majority of the language in Appendix C references quantities/proportions, “many” and “most” is used infrequently when the % does not add much value to the main take-away or result.</p>	<p>IOUs</p>

<p>95</p>	<p><i>Appendix C Page 64</i></p> <p>We suggest adding subheadings such as “Fact Sheets” and “Reference Guides” to improve readability and make the appendix easier to navigate.</p>	<p>Subheaders added.</p>	<p>IOUs</p>
<p>96</p>	<p><i>"15%–20% felt the guides were already effective or had limited experience using them" Page 64</i></p> <p>These two categories appear conceptually distinct and should not be grouped together.</p>	<p>Content (analysis and phrasing) updated.</p>	<p>IOUs</p>
<p>97</p>	<p><i>"About 27% highlighted the need to keep content current and visible " Page 64</i></p> <p>Please clarify what is meant by keeping content “visible.”</p>	<p>Respondents mean that they cannot find the content they are looking for. One mentioned that when they login to the home screen, they cannot navigate to Reference Ace. Three others mentioned that when they use the search feature, they still cannot find the Reference Ace resources they need. Updated report text for clarity.</p>	<p>IOUs</p>

<p>98</p>	<p><i>"Finally, 20% felt the checklists were already effective, had no suggestions, or had limited experience using them, indicating opportunities to improve awareness and onboarding."</i> Page 65</p> <p>These categories are qualitatively different and should not be combined.</p>	<p>Content (analysis and phrasing) updated.</p>	<p>IOUs</p>
<p>99</p>	<p><i>"Highlights the full online and in-person course list for 2022 and 2023"</i> Page 71</p> <p>Please explain why courses from 2019, 2020, and 2021 are not listed, given that the evaluation period covers 2019–2023.</p>	<p>These are the courses from which respondents were included in the sample frame. Description added for clarity.</p>	<p>IOUs</p>

## APPENDIX C. ACRONYM GLOSSARY

Table 26. Acronyms Appearing in Report

Acronym	Definition
AHJ	Authority Having Jurisdiction
AIA	American Institute of Architects
BayREN	Bay Area REN
BIA	Building Industry Association
CABEC	California Association of Building Energy Consultants
CaIBEM	California Building Energy Modeling
CEC	California Energy Commission
CEDARS	California Energy Data and Reporting System
CCR-REN	Central California Rural REN
CI Program	Compliance Improvement Program
C&S	Codes & Standards
CEU	Continuing Education Unit
CEA	Certified Energy Analyst
CPUC	California Public Utilities Commission
ECA	EnergyCodeAce.com
HVAC	Heating, Ventilation, and Air Conditioning
ICC	International Code Council
I-REN	Inland Regional Energy Network
IOU	Investor-Owned Utility
JCM	Joint Cooperation Memo
MAEDbS	Modernized Appliance Efficiency Database System
ME&O	Marketing, Education & Outreach
MEP	Mechanical, Electrical, and Plumbing firms
OEM	Original Equipment Manufacturer
PG&E	Pacific Gas & Electric
PTLM	Program Theory Logic Model
PY	Program Year
QA/QC	Quality Assurance/Quality Control
REN	Regional Energy Network
SCE	Southern California Edison
SDG&E	San Diego Gas and Electric
WE&T	Workforce, Education, and Training
ZNCD	Zero Net Carbon Design

## APPENDIX D. DETAILED DESCRIPTION OF RESOURCES' VALUE WITH SUGGESTED IMPROVEMENTS

### Fact Sheets

Ninety-four percent of respondents found **fact sheets** to be very or somewhat valuable. They valued them for providing clear, concise, and reliable summaries of complex energy code requirements, especially Title 24 (T24). The most cited benefit was quick access to essential information, allowing users to find answers faster than digging through full code books, along with plain-language explanations, organized tables, visuals, and bullet points that made technical requirements easier to understand and apply. Many emphasized their usefulness as reference tools for daily work, code verification, design and plan review, compliance decision-making, and understanding what's new in each code cycle. The fact sheets were also praised for being easy to share with architects, contractors, homeowners, and other stakeholders, as they helped clearly communicate requirements, supported training, and reduced confusion. Overall, respondents viewed them as trusted and practical resources that bridge the gap between dense code language and real-world applications.

Based on the 83 responses about how **fact sheets** could be more useful, about 20% felt the resources were already effective and needed little or no change. The most common suggestion, from roughly 35–40%, was to improve usability, including better search, clearer navigation and naming, improved website interface, and stronger integration between fact sheets, forms, and code references. About 20–25% wanted more targeted or expanded content, especially for nonresidential projects, alterations, and specific disciplines (e.g., electrical, envelope). About 15% suggested refinements to clarity and format, such as being more concise, better organized, or easier to digest. Finally, 10–15% emphasized increasing value through greater awareness, education, and support, including better promotion, training, videos, AI tools, or access to expert advice.

### Reference Guides

Ninety-two percent of respondents stated that **reference guides** were very or somewhat valuable in their work. Respondents described the reference guides as valuable because they provide quick, reliable, and in-depth access to T24 requirements in a searchable, organized format. Users rely on them to locate specific code sections, understand how requirements apply to real projects, and verify compliance details without having to navigate the full code book. The ability to jump between related sections, use hyperlinks, and access step-by-step explanations, visuals, and examples was frequently cited as saving time and improving confidence during plan review, energy modeling, form completion, and design decision-making. Overall, the reference guides are regarded as trusted and authoritative resources that bridge detailed code language with practical applications.

Based on 85 responses regarding improvements to this tool, about 45%–50% identified usability and navigation as the primary improvement opportunity for **reference guides**, including better search, clearer organization, and easier navigation. Roughly 20%–25% suggested enhancing clarity and simplicity by reducing text, adding visuals, using flow diagrams, and providing more practical examples. Around 20% called for expanded or more targeted content, especially for nonresidential and multifamily projects, current code-cycle updates, net-zero and all-electric buildings, and project-specific scenarios. Approximately 15% emphasized integration and awareness, recommending stronger connections to other Energy Code Ace tools, AI-assisted guidance, and more training and promotion. In comparison, approximately 10%–12% of respondents felt the guides were already effective, while an additional 6%–9% indicated they had no opinion or had not used the guides enough to provide meaningful feedback.

### Forms Ace

Based on 336 responses, **Forms Ace** is widely regarded as an essential time-saving tool for T24 compliance. About 70% of users highlighted faster form completion compared to PDFs or modeling software, while roughly 72% valued having all required forms in one easy-to-access location. Around 60% said it clearly identifies which forms apply to a given project, reducing confusion for designers, contractors, and clients. Nearly 50% noted improved accuracy and fewer errors due to guided workflows, dropdowns, and compliance checks. Overall, Forms Ace is viewed as a streamlined and reliable way to complete energy compliance documentation, with only a minority citing usability issues or limited value once users become highly experienced.

The most common improvement requests for **Forms Ace** focus on usability and clarity. Approximately 45% of the 126 respondents who answered this question prefer simpler navigation and easier ways to locate the correct forms, including better organization, clearer naming conventions, and the removal of outdated content. Roughly 38% requested clearer explanations, examples, and training, including sample completed forms, more guidance on answering questions, and seminars or tutorials. Around 30% mentioned streamlining the interface and workflow, including fewer clicks, faster performance, better editing controls, reuse of data across forms, and downloadable or fillable PDFs. About 20% suggested stronger integration and support, such as links to Reference Ace or the Virtual Compliance Assistant, AI/chat-based help, and access to experts. Notably, about 33% said no improvements were needed or had no opinion, often citing limited use or satisfaction with the tool as-is.

### Reference Ace

Based on 281 responses, **Reference Ace** is primarily valued as a code interpretation and lookup tool. About 65% of respondents cited its usefulness for quickly clarifying T24 requirements, triggers, and code language without having to search the full code. Roughly 52% highlighted time savings and confidence in decision-making, using it to verify requirements during design, compliance, or plan check. Around 41% described it as a training and learning resource, especially helpful for less familiar scenarios or onboarding staff. About 34% noted its role in supporting coordination and communication among designers, consultants, contractors, and reviewers. Overall, Reference Ace is seen as a valuable, reliable, authoritative reference foundation within Energy Code Ace, complementing tools like Forms Ace rather than replacing them.

Based on 115 responses, improvements to **Reference Ace** focus on simplicity, findability, and usability, with a large share also expressing satisfaction or no clear suggestions. About 46% of respondents seek better navigation, search tools, and organization, including clearer structure, advanced search or filtering, tagging, bookmarking, and easier ways to quickly locate the right code section. Roughly 39% emphasized simplification and clarity, noting that the content can feel wordy, cluttered, or overly complex, and requesting clearer language, simpler directions, and better separation of residential versus nonresidential content. Around 31% requested stronger visuals, examples, and explanations, such as illustrations, previews, glossaries, hover definitions, and clearer explanations of how code language applies in practice. About 27% highlighted the need to keep content current and easy to find, including timely updates each code cycle, clearer communication about changes (e.g., Net Zero, 2025 updates), and better homepage visibility and awareness of the tool. Approximately 22% suggested better integration and support, including links to Forms Ace, Fact Sheets, AI-assisted help, training, or guided workflows. Notably, about 30% of respondents said no improvements were needed, were unsure, or indicated limited use of Reference Ace.

### Checklists

Eighty-eight percent of respondents described the **checklists** as highly practical, step-by-step tools that help ensure nothing is missed throughout design, plan review, construction, and inspection. They were especially valued for quality control and Quality Assurance/Quality Control (QA/QC), helping users verify that all mandatory measures, documentation, and installation requirements are addressed before submittal or inspection. Many noted that checklists simplify complex T24 compliance into clear, manageable steps, support consistency across projects, reduce errors and

plan-check comments, and save time by providing a clear roadmap of what is required. Overall, checklists were viewed as reliable and easy-to-use resources that help keep projects organized, on track, and compliant.

About 42% of respondents suggested improving the **checklists'** usability, access, and navigation, including easier website access, better organization, mobile-friendly versions, PDF compatibility, and faster workflow. 22% highlighted the need to keep checklists current and accurate, updating each code cycle and removing outdated information. 20% recommended clearer guidance and structure, with simpler instructions, explicit code references, role responsibilities, and handling complex or nonresidential projects. 14% suggested expanded formats and support, such as interactive/automated checklists, AI assistance, webinars, videos, and email notifications. Finally, separate from the improvement themes above and reflecting mutually inclusive responses, approximately 10%–11% felt the checklists were already effective, about 9%–10% indicated limited experience using them, and roughly 20%–25% had no specific suggestions or were unsure.

### Trigger Sheets

About 78% of the 229 respondents said **trigger sheets** are most valuable for clearly identifying when energy code requirements are triggered, helping users quickly determine applicability for alterations, additions, retrofits, or equipment changes without having to dig through dense code language. Roughly 64% highlighted time savings and efficiency, noting they provide fast answers, prevent “rabbit holes,” and support early scoping, design decisions, and plan review. Around 58% emphasized simplicity and ease of use, citing concise tables, bullet points, visuals, and clear flow-chart-style logic that make complex requirements understandable. About 46% valued them as a communication and training tool, using them to explain requirements to clients, contractors, staff, inspectors, and field teams. Approximately 41% noted their role in reducing errors and missed requirements, helping avoid plan check comments, missed tests, or overlooked compliance items.

About 44% of 83 respondents want more **trigger sheets** covering additional scenarios, especially for existing buildings, retrofits, envelope work, partial-scope projects, and newer code cycles (e.g., 2022/2025). Roughly 37% emphasized the need to keep content current and clearly tied to the latest code, including better note references, clearer citations, and updates related to Net Zero and upcoming changes. Around 34% asked for clearer explanations, examples, and case studies, including real-world scenarios, checklists, and guidance on how to respond once a trigger applies. About 29% requested simpler, more readable formats, such as plainer language, larger fonts, one-page or “flash card” versions, and less dense charts. Approximately 26% highlighted better visibility, access, and training, including easier findability on the homepage, inclusion within Forms Ace, dropdown menus, webinars, and general awareness. Notably, about 30% of respondents stated that no improvements were needed, were unsure, or had not used Trigger Sheets sufficiently to comment.

### Training Videos

**Training videos** are highly valued as a flexible, visual learning tool for understanding and applying T24 requirements, according to 248 respondents. About 71% emphasized their role in improving understanding of complex code topics, citing clear explanations, step-by-step walkthroughs, and real-world examples that are easier to understand than code text. Roughly 63% highlighted convenience and on-demand access, noting the ability to pause, rewatch, and learn on their own schedule—especially valuable when live trainings are hard to attend. Around 58% valued videos for staying up to date on code changes, particularly during new code cycles (e.g., 2022/2025). About 46% mentioned their usefulness for onboarding, staff training, and refreshing knowledge, while 42% specifically cited visual demonstrations and software walkthroughs (forms, modeling, compliance tools) as critical for correctly applying requirements. Overall, training videos are seen as an essential, practical, and engaging way to learn, retain, and apply energy code requirements across experience levels.

From 117 responses, suggested improvements to **training videos** focus on access, format, relevance, and awareness, alongside a sizable group satisfied with the current offering. About 50% of respondents want more on-demand and recorded videos, including saving live webinars, easier access from the homepage, and clearer organization by topic. Roughly 44% asked for shorter, more focused content, preferring modules under 5 minutes, tighter editing, and videos that get straight to common, real-world issues. Around 38% requested expanded and more targeted topics, such as future code cycles (e.g., 2026/Net Zero), project-specific examples, lighting retrofits, and content tailored to architects, small contractors, and building officials. About 33% emphasized better visibility and outreach, noting they were unaware the videos existed or struggled to find them. Approximately 25% suggested enhanced learning features, including subtitles, transcripts, quizzes, AI support, or downloadable summaries. Notably, about 27% said no improvements were needed, were unsure, or had not used the videos enough to comment.

### Virtual Compliance Assistant

Based on 185 responses, the **Virtual Compliance Assistant** is valued primarily for streamlining T24 compliance and form completion, especially for nonresidential projects. About 58% highlighted its step-by-step, guided workflow that simplifies complex requirements, reduces guesswork, and helps avoid errors. Roughly 52% emphasized time savings and efficiency, noting faster completion of nonresidential certificate of compliance forms, nonresidential certificate of installation requirements, low-rise multifamily certificates of compliance, and mechanical forms, often describing it as essential or the only viable option for certain forms. Around 41% valued its clarity and decision support, including identifying which forms are required, flagging missed items, and providing real-time guidance. Approximately 29% cited ease of use and accessibility, comparing it to a “TurboTax-like” experience that boosts confidence for non-experts. At the same time, about 24% reported limited use or unfamiliarity, and 18% noted usability challenges or limitations, such as loopholes, complexity for advanced users, or reliance due to a lack of alternatives. Overall, the Virtual Compliance Assistant is seen as a critical, time-saving compliance tool that significantly lowers the barrier to accurate T24 documentation.

Drawing on 111 responses, feedback on improving the **Virtual Compliance Assistant** highlights a need for clearer usability, stronger reliability, and better user guidance, alongside a substantial group with limited experience using the tool. About 46% called for better usability and navigation, including a clearer home screen, fewer unnecessary decision paths, easier printing and exporting of forms, previews of populated forms, faster workflows, and more intuitive project management. Roughly 39% cited bugs, errors, or reliability issues, stressing the need for more consistent programming, fewer glitches, and stronger quality control as updates are made. Around 34% emphasized the need for greater awareness, training, and onboarding, noting they were unfamiliar with the tool and asking for tutorials, seminars, examples, or clearer explanations of how and when to use it. Approximately 27% requested more detailed guidance and examples, especially for retrofit, industrial, Net Zero, and design-specific scenarios, along with clearer explanations during form completion. About 21% suggested expanded functionality, such as AI-style interactions, equipment libraries, residential coverage, or role-specific workflows. Notably, about 30% reported no suggestions, uncertainty, or limited use, indicating an opportunity for broader adoption and education.

### Product Finder

The **Product Finder** is valued primarily for saving time and simplifying product compliance research; however, awareness and usage vary among the 147 respondents. About 52% of respondents highlighted its ability to quickly identify code-compliant products, reducing the need to search individual cut sheets and helping avoid costly specification or plan check issues. Roughly 38% emphasized its usefulness for product comparison and decision-making, including filtering options, verified efficiency ratings, and confidence that selected equipment meets T20/T24 requirements. Around 26% noted it supports design, modeling, and compliance documentation, such as specifying basis-of-design products, confirming eligibility for rebates, or attaching outputs for Authority Having Jurisdiction (AHJ)

review. At the same time, approximately 35%–40% reported limited familiarity or infrequent use, often because they rely on local suppliers, other tools, or have not yet explored the feature. Overall, users who engage with Product Finder view it as a reliable and efficient shortcut to compliant product selection, especially considering frequent code and manufacturing changes.

Based on 123 responses, suggested improvements to the **Product Finder** largely reflect requests for simplicity, broader coverage, and better search tools. Approximately 44% of respondents indicated limited use or lack of awareness, noting they had not used the tool enough (or at all) to offer specific feedback. Among active suggestions, about 29% called for stronger search and filtering, including easier ways to search without construction specification institute numbers, clearer product categories, advanced filters (e.g., efficiency, price, availability), and a more intuitive user interface. Roughly 24% emphasized the need to keep information current and expand the product database, citing frequent product changes, wider selection, and inclusion of additional databases. Around 18% asked for greater visibility and access, such as making the tool easier to find, more responsive, or better connected to other Energy Code Ace tools. Overall, while many users consider Product Finder adequate or “good as is,” the primary opportunity lies in enhancing awareness, simplifying navigation, and expanding up-to-date product coverage.

### Case Studies

Across 161 survey responses, **case studies** emerge as a practical learning tool that effectively connects energy code requirements to real-world projects and outcomes, enabling users to better understand and apply the code. About 62% of respondents emphasized real-world application and practicality, noting that case studies help visualize how T24 requirements are implemented, solved, and verified on actual projects. Roughly 41% highlighted their role in improving understanding and clarity, using examples to interpret complex code language, identify compliance pathways, and avoid plan check issues. Around 28% cited learning, benchmarking, and confidence-building, such as validating approaches, comparing scenarios, supporting client discussions, or training staff. At the same time, approximately 30% reported limited use or mixed relevance, often because the case studies did not match their project types or they had not explored them in depth. Overall, users see case studies as a high-value, solution-oriented resource that makes abstract energy code requirements tangible, especially when closely aligned with real project conditions.

Across 126 respondents, suggestions for improving **case studies** centered on making them more practical, easier to navigate, and better aligned with real-world projects, especially for day-to-day use. About 42% of respondents reported low awareness or infrequent use, noting they were unfamiliar with the case studies or rarely found ones that matched their projects. Among actionable suggestions, roughly 34% asked for more variety and relevance, including additional case studies across building types, retrofit scenarios, climate zones, corner cases, and real-world constraints (e.g., tenant turnover, controls costs, shorter equipment lifespans). Around 29% emphasized simplification and better presentation, calling for fewer words, clearer summaries, charts/graphics, key takeaways, and visual or video formats. Approximately 23% requested better searchability and visibility, such as improved navigation, keyword search, email summaries, or clearer links on the website. Finally, about 18% wanted deeper, more realistic detail, including step-by-step compliance paths, actual costs and savings, lessons learned, and examples of challenges or failures—not just successes. Overall, users want case studies that are easier to find, quicker to digest, more realistic, and better aligned with real projects.

### Noteblocks

**Noteblocks** were valued primarily for saving time and improving plan quality, though awareness and usage vary across 113 respondents. About 45% highlighted their usefulness as a quick, up-to-date reference that can be easily copied into drawings, helping ensure mandatory Title 24 requirements are captured and reducing plan check comments. Roughly 30% emphasized efficiency and consistency, noting that ready-made, current noteblocks eliminate drafting busy work and the risk of outdated notes. Around 25% cited their role as a learning and guidance tool, appreciating the

concise summaries of complex code language. At the same time, about 35%–40% reported limited use or unfamiliarity, indicating an opportunity to increase visibility and adoption of Noteblocks as a standard compliance aid.

Based on 100 responses, feedback on **Noteblocks** focused largely on awareness, usability, and integration. The most common theme was limited familiarity or use, cited by roughly 55%–60%, suggesting a need for better visibility, education, and examples of when and how Noteblocks should be used. About 20%–25% recommended functional improvements, such as easier editing, fewer clicks, searchability, tagging, and the ability to link to related resources like trigger sheets or forms. Approximately 15%–20% emphasized integration and export, requesting direct compatibility with AutoCAD/Revit, downloadable formats, or dynamic Noteblocks tailored to specific projects. A smaller group (10%–15%) felt Noteblocks were fine as-is or unnecessary, indicating that improvements should prioritize adoption and workflow fit rather than expanding content alone.

## APPENDIX E. COURSE NAME AND TARGET MARKET

Table 27 highlights the full online and in-person course list for 2022 and 2023 from which the survey sample frame for course attendees was compiled.

Table 27. Full Course List

Residential	Nonresidential	Nonresidential & Multifamily	Solar	General	Title 20
2019 Title 24, Part 6 Essentials on Demand – Residential Standards & Technology (subtopics on building envelope, heating, ventilation, and air conditioning, water heating, and solar)	2022 Code Breaker: Nonresidential HVAC	2022 Title 24, Part 6 Essentials – Nonresidential & Multifamily Standards (subtopics on standards for energy consultants, solar and battery storage, plans examiners, energy consultants, indoor/outdoor lighting compliance pathways, indoor/outdoor lighting)	2022 CodeBreaker: PV, Solar, and Zero Net Carbon Design	NRCI Forms: Walkthrough of Indoor Lighting Alteration Project (CALCTP)	Title 20 Essentials: The Water-Energy Nexus
2022 Title 24, Part 6 Essentials – Residential Standards: What’s New	2022 Title 24, Part 6 Essentials – Nonresidential Standards: What’s New	2022 Energy Code Multifamily Envelope Requirements	2022 Code Breaker: Photovoltaics (PV) and Battery Storage	2022 Code Breaker: Accessory Dwelling Units (ADU)	
2019 Residential CEA Exam Preparation Workshop	2019 Title 24, Part 6 Essentials – Nonresidential: Modeling	2022 Code Breaker: Nonresidential and Multifamily Mechanical		2022 Code Breaker: Accessory Dwelling Units (ADU) – 2022 Energy Code	
2019 Title 24, Part 6 Essentials – Residential Standards for Building Inspectors	2019 Title 24, Part 6 Essentials – Nonresidential Standards for Building Inspectors	2022 Code Breaker: Multifamily Update Overview		2022 Code Breaker: Envelope (Fenestration only)	
2019 Title 24, Part 6 Essentials – Residential Standards for HVAC Contractor Installers	2019 Title 24, Part 6 Essentials – Nonresidential Standards (subtopics on specifics for plans examiners, indoor lighting controls, small commercial heating, ventilation, and air conditioning contractors)	2022 Code Breaker: Nonresidential, Hotel/Motel and Multifamily Envelope		2022 Code Breaker: Quality Insulation Installation (QII) (BayRen)	
2022 Title 24 Part 6 Single-family Standards: Accessory Dwelling Unit (ADU) Requirements (BayREN)	2019 Title 24, Part 6 Essentials – Nonresidential Standards for Architects & Designers	2022 Title 24 Part 6 Multifamily Overview for Plan Checkers		Residential and Nonresidential Energy Efficiency Concepts	

Residential	Nonresidential	Nonresidential & Multifamily	Solar	General	Title 20
2019 Title 24, Part 6 Essentials – Residential Standards for HVAC Contractor Designers and Estimators	2019 Title 24, Part 6 Essentials – Nonresidential Standards: Indoor Lighting Compliance Pathways	2022 Title 24, Part 6 Essentials – Nonresidential & Multifamily Envelope: What's New			
2019 Title 24, Part 6 Essentials – Residential: Modeling Tips	2019 Title 24, Part 6 Essentials – Nonresidential: Introduction to Modeling	2022 Title 24, Part 6 Essentials – Nonresidential & Multifamily Standards: What Is Acceptance Testing? (PILOT)			
2019 Title 24, Part 6 Essentials – Residential Standards for Architects & Designers	A Climate Action Standard for ADUs	2022 Code Breaker: Multifamily All Electric & Zero Net Carbon Design			
2019 Title 24, Part 6 Essentials – Residential Standards for Energy Consultants	2022 Code Breaker: Multifamily All Electric				
2019 Title 24, Part 6 Essentials – Residential: Analyzing the CF1R	2019 Title 24, Part 6 Essentials – Nonresidential Standards for Small Commercial HVAC Contractors				
2019 Title 24, Part 6 Essentials – Residential Standards (subtopics on envelope & solar systems, plans examiners, lighting, and mechanical systems)	2019 Title 24, Part 6 Essentials – Nonresidential Standards for Energy Consultants				
2019 Title 24, Part 6 – EnergyPro Software for Residential Compliance: Introduction	2019 Nonresidential CEA Exam Preparation Workshop				
2019 Title 24, Part 6 – EnergyPro Software for Residential Compliance: Intermediate/Advanced	2019 Title 24, Part 6 Essentials – Nonresidential Standards: Outdoor Lighting				
Introduction to CBECC-Res Energy Modeling Software for Residential Buildings	2019 Title 24, Part 6 Essentials – Nonresidential Standards: What Is Acceptance Testing?				
2019 Title 24, Part 6 Essentials – Residential: Modeling	2019 Title 24, Part 6 – EnergyPro Software for Nonresidential Compliance: Introduction				

Residential	Nonresidential	Nonresidential & Multifamily	Solar	General	Title 20
2022 Code Breaker: Single-family All Electric	2019 Title 24, Part 6 – EnergyPro Software for Nonresidential Compliance: Intermediate/Advanced				
Advanced CBECC-Res Energy Modeling Software for Residential Buildings	2019 Title 24, Part 6 Essentials – Nonresidential Standards for Building Inspectors				
2019 Title 24, Part 6 Essentials – Residential: Introduction to Modeling	2022 Code Breaker: Nonresidential Mechanical Systems				
2019 Residential CEA Exam Preparation Workshop	2022 Code Breaker: Nonresidential Mechanical Systems Deep Dive				
2022 Title 24, Part 6 Essentials – Single Family Standards for HVAC Contractor Designers & Estimators	2022 Code Breaker: Nonresidential All Electric				
2022 Title 24, Part 6 Essentials – Single-family Compliance: EnergyPro Introduction	2022 Code Breaker: Completing Nonresidential Certificates of Installation (NRCI) in the Virtual Compliance Assistant				
2022 Title 24, Part 6 Essentials – Single-family Standards for Plans Examiners	2022 Title 24, Part 6 Essentials – Nonresidential Standards for Architects & Designers (PILOT)				
2022 Title 24, Part 6 Essentials – Single-family Standards (subtopics on standards for solar & battery storage, architects & designers, heating, ventilation, and air conditioning contractor designers and estimators, building inspectors, heating, ventilation, and air conditioning contractor installers, plans examiners, energy consultants)	2022 Title 24, Part 6 Essentials – Nonresidential Standards: Why Go Performance				

Residential	Nonresidential	Nonresidential & Multifamily	Solar	General	Title 20
Single-family Electrification Considerations and Requirements under the 2022 Energy Code	2022 Title 24, Part 6 Essentials – Nonresidential Standards: Introduction to the Performance Approach				
2019 Title 24, Part 6 Residential Energy Standards: Accessory Dwelling Units (ADU)					
2022 Title 24, Part 6 Essentials – Single-family Standards: Analyzing the CF1R (PILOT)					
2022 Title 24, Part 6 Essentials – Single-family Compliance: Modeling (PILOT)					
2022 Code Breaker: Single-family All Electric ZNCD					
2022 Title 24, Part 6 Single-Family Standards: HERS Verified Quality Insulation Installation (QII) (BayRen)					
2022 Title 24, Part 6 Essentials – Single-family Compliance: CBECC-Res Introduction (PILOT)					
2022 Title 24, Part 6 Essentials – Single-family Compliance: CBECC-Res Advanced (PILOT)					
2022 Title 24, Part 6 Essentials – Single-family Standards: Why Go Performance (PILOT)					

Table 28 summarizes broad course offerings and the target market by profession from 2019 to 2023. “Course Grouping” indicates a broad course category, and “Grand Total” indicates the number of unique courses in that category. The columns show how many courses in each category target specific market actors. For example, “2022 Res” includes 59 courses in total, with five of these courses specifically targeting Architects. “General” means the course was not explicitly targeted. The last column, “% of Total,” shows the percentage of total courses in that category.

Table 28. Course Offerings and Target Market by Profession (2019 to 2023)

Course Grouping	Architects	Consultants	Contractors	Examiners	Inspectors	Installers	General	Grand Total	% of Total
2022 Residential	5	3		15	9	1	26	59	20%
2022 Residential Models							31	31	11%
General					1		28	29	10%
2022 Nonresidential & Multifamily		1		4	4		18	27	9%
2022 Nonresidential	4	2	3		2		14	25	9%
2019 Residential	2					3	19	24	8%
2019 Nonresidential	4						18	22	8%
2022 Nonresidential Models							15	15	5%
2016 Nonresidential				3	6		4	13	4%
2019 Residential Models							10	10	3%
2022 Residential Accessory Dwelling Unit				4			5	9	3%
2016 Residential			1				7	8	3%
Certified Energy Analyst exam preparation							7	7	2%
2022 Solar							5	5	2%
2019 Nonresidential Models							4	4	1%
2019 Residential Accessory Dwelling Unit							1	1	0%
Title 20 Essentials							1	1	0%
<b>Grand Total</b>	<b>15</b>	<b>6</b>	<b>4</b>	<b>26</b>	<b>22</b>	<b>4</b>	<b>213</b>	<b>290</b>	

# APPENDIX F. EXISTING PROGRAM THEORY LOGIC MODELS FROM IOUS

Figure 26. PTLM #1: SDG&E

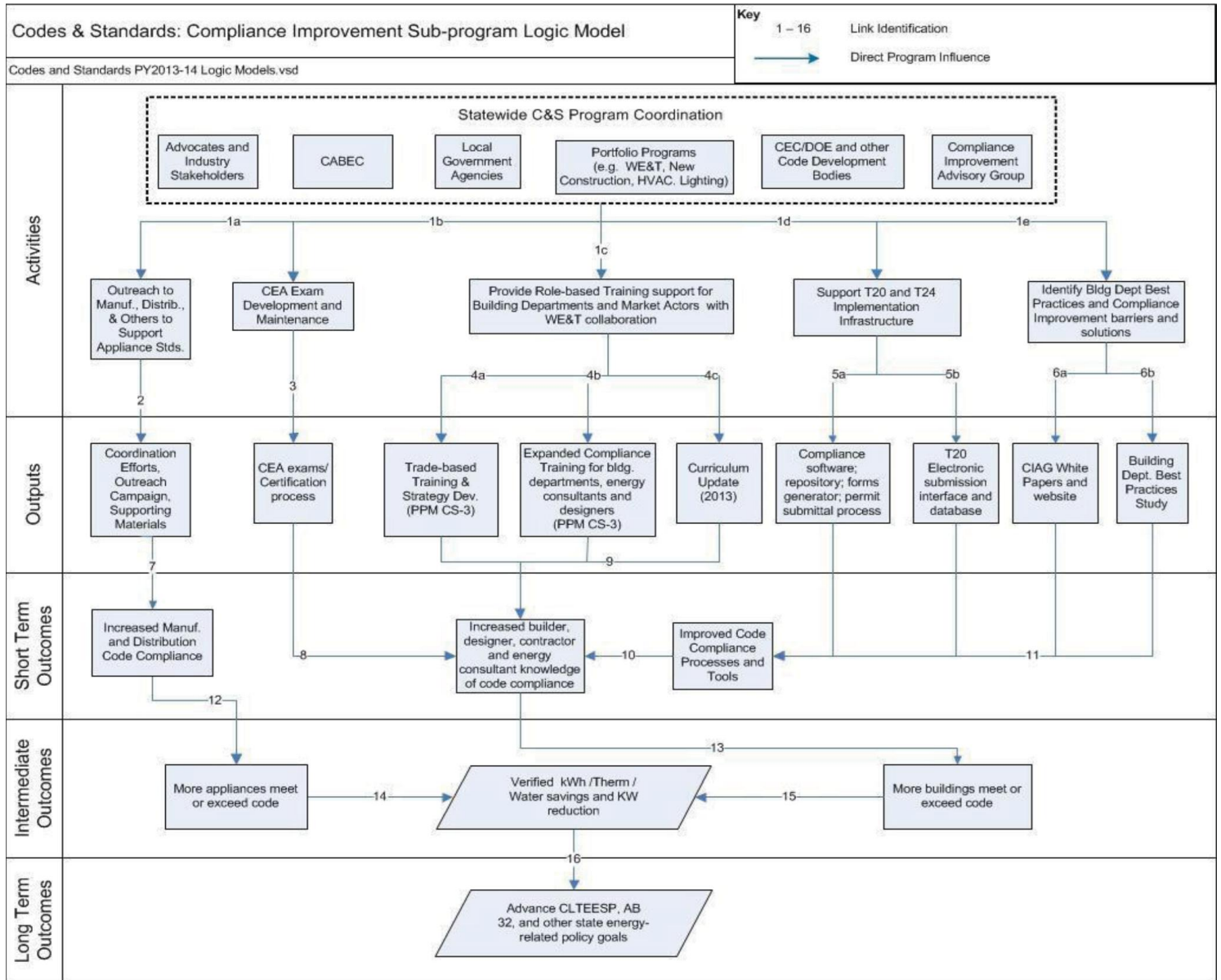
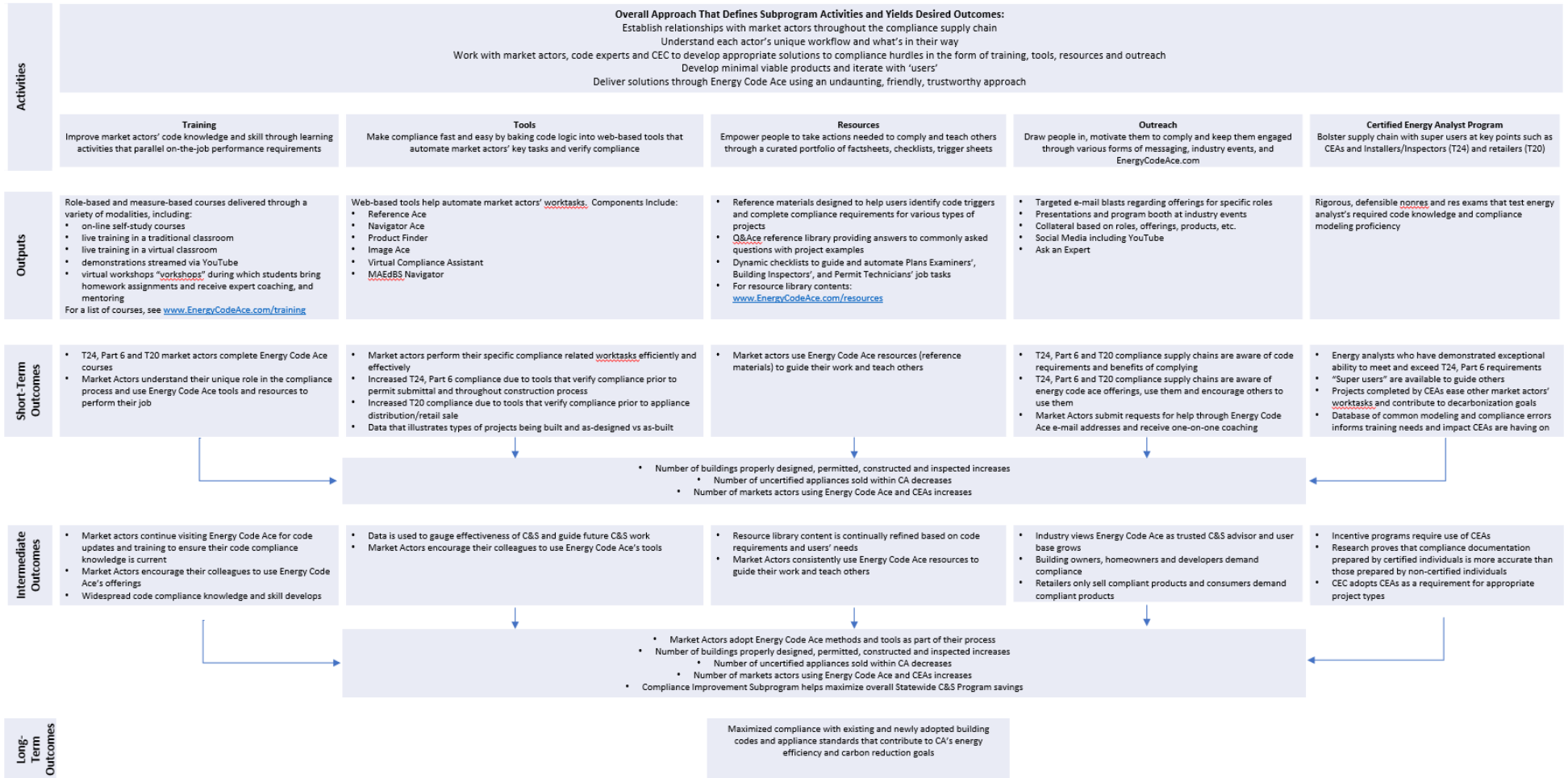


Figure 27. PTLM #2: PG&E and SCE

Draft submitted 5/28/21

Codes and Standards Compliance Improvement Subprogram  
Logic Model



# APPENDIX G. PTLM DEVELOPMENT RESOURCE GUIDE

## INTRODUCTION TO DEVELOPING A PROGRAM THEORY LOGIC MODEL (PTLM)

Underlying a program is a theory of how and why an initiative works. Theory-based programs anticipate project-caused effects by identifying program activities and the intended outputs and outcomes linked to those activities. A PTLM is a simplified picture of a program, initiative, or intervention that helps stakeholders understand the theory behind the program—why and how it is expected to produce the desired outcomes.

A PTLM is a systematic and visual way to represent the relationships among the resources available to operate a program, the activities planned, and the changes or results the program intends to achieve.<sup>29</sup> Specifically, a PTLM:

- Depicts a program’s theory of change
- Shows a categorization of program activities, outputs, and outcomes
- Ties programs activities to outcomes and impacts
- Focuses on outcomes of program activities, not its program processes

A theory-based program has a clear definition of the problem to be solved, including a defined target market, objectives, market barriers, and strategies that are consistent with program objectives. It is important to clearly articulate the assumptions underlying the problem a program aims to solve, so that program activities can be designed to address them with actionable strategies. There are typically five areas a PTLM should clearly address, as shown in Table 29.

Table 29. PTLM Components and Best Practice Considerations

PTLM Component	Purpose for PTLM	Best Practice Considerations
Barriers	Problem(s) to be addressed by the program	Ensure program activities are designed to adequately overcome identified barriers
Audience	Who the program is targeting for services	Clearly define based on targeted segment and sector (such as small-to-medium businesses within disadvantaged communities)
Activities	What services or elements the program will be offering or developing	These can be categorized based on the type of intervention (such as financial assistance, technical assistance, information and education, infrastructure deployment)
Outputs	Program deliverables; the amount of product or service the program will provide	This is usually quantitative (such as the number of people who adopt energy measures or the number of people enrolled in a listserv)
Outcomes	Desired impacts or what happens because of the outputs	These are typically categorized based on expectations for the timeline to achieve each outcome (such as short-term, medium-term, and long-term); the timeline for each category is dependent upon the program (for example, short-term can be within the first 1–2 years of program implementation, based on expectations for when short-term outcomes can be reasonably achieved)

A PTLM can be useful to program staff at all stages of a program life cycle. During the planning stage, a PTLM can help stakeholders reach a common understanding of program objectives and provide a framework for developing program strategies. During implementation, a PTLM can be used to develop a detailed management plan, identify areas of program operations to track and monitor, focus efforts on prioritized activities, and ensure day-to-day activities are consistent with program objectives. During evaluation, a PTLM provides a roadmap that allows evaluators to test the

<sup>29</sup> Logic Model Development Guide. W.K. Kellogg Foundation, 2004.  
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validity of the program theory. If the program is underperforming, evaluators use the model to gather evidence and determine whether the issue lies with the program's processes or with the program theory itself.

## PTLM AND LINKAGES TEMPLATE

Figure 28 provides a sample PTLM template for future CPUC programs. Once the PTLM components are identified (i.e., barriers, audience, activities, outputs, outcomes), program staff must identify the linkages between each to explain why intended outputs and outcomes are expected. Table 30 provides a template for explaining the PTLM linkages. Labels for each box in the PTLM help program staff easily tie the linkages together and identify data-collection needs to enable program performance tracking. There may be instances in which program activities may feed into each other. Program staff should add separate linkages for each, describing why those linkages occur (e.g., the audience learns about a program through a training, the audience learns about the training through a program). Each theory linkage should not just report that Activity A leads to Output D, but provide additional context regarding the program and include the "why" behind each theory segment, where relevant.

Figure 28. PTLM Sample Template

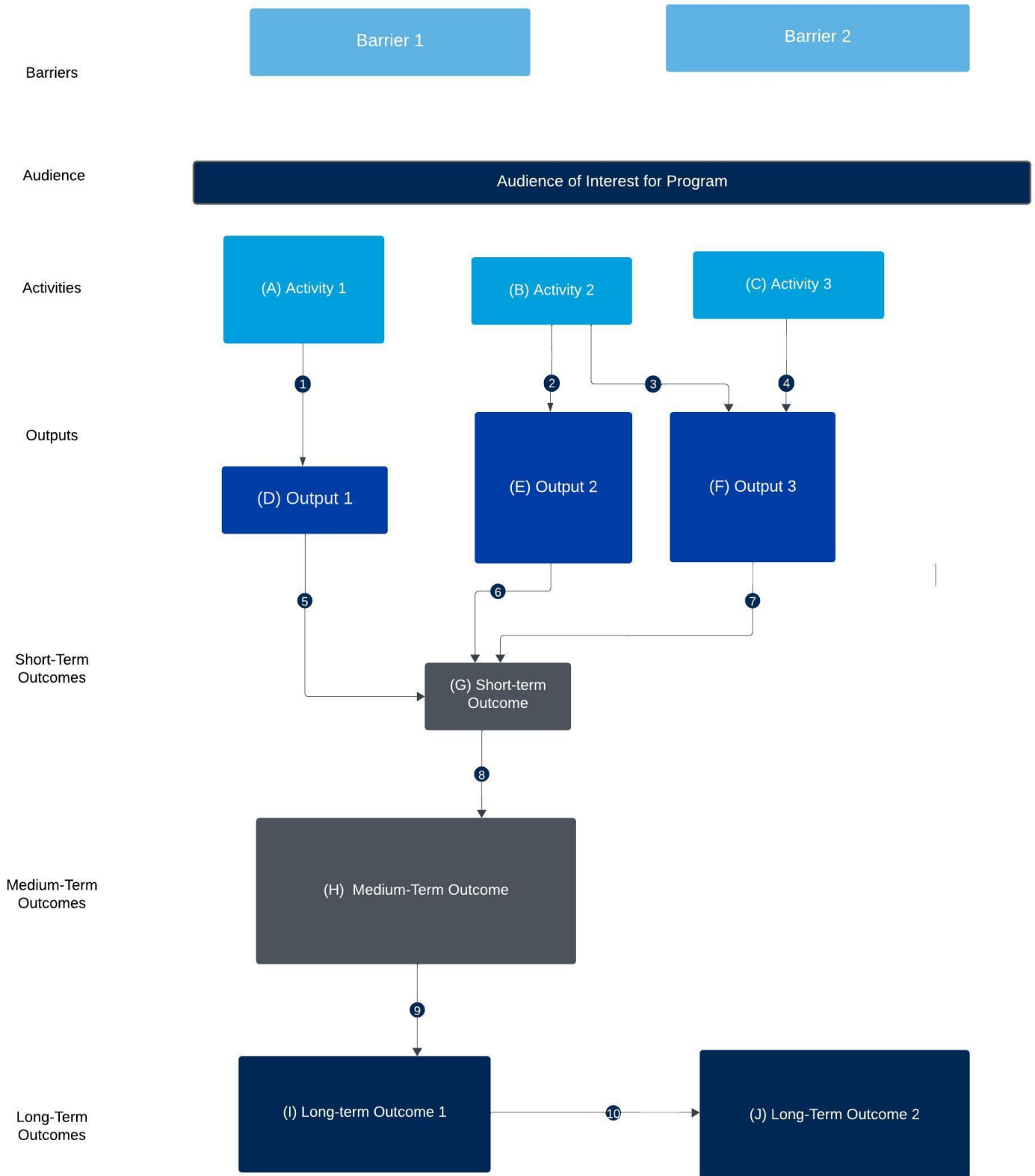


Table 30. Template for Linkage Theories

Link	Linkage Theory
1	The activity (A) will lead to Output 1 (F). This is important to the program because... X, Y, Z
2	Activity 2 (B) will lead to Output 2 (E) because... X, Y, Z
3	Activity 2 (B) will also lead to Output 3 (F) because... X, Y, Z
4	Activity 3 (B) will also lead to Output 3 (F) because... X, Y, Z
5	Output 1 (D) will lead to Short-term Outcome (G) because... X, Y, Z
6	Output 2 (E) will lead to Short-term Outcome (G) because... X, Y, Z
7	Output 3 (F) will lead to Short-term Outcome (G) because... X, Y, Z
8	In the medium-term, Short-term outcome (G) will lead to Medium-term Outcome (H) because... X, Y, Z
9	In the long-term, Medium-term Outcome (H) will lead to Long-term Outcome 1 (I) because... X, Y, Z
10	Long-term Outcome 1 (I) is expected to cause Long-term Outcome 2 (J) because... X, Y, Z

## SOFTWARE AND RESOURCES:

Table 31 provides software options for program staff to create a PTLM. Below are some additional resources to support a team's development of a PTLM.

[How to Develop a Program Logic Model \(evaluation.gov\)](http://evaluation.gov)

[Logic Model Training Handouts \(pointk.org\)](http://pointk.org)

[W.K. Kellogg Foundation Logic Model Development Guide \(betterevaluation.org\)](http://betterevaluation.org)

Table 31. Software Options to Create PTLMs

Software	Format	Cost	Ease of Use	Collaboration
<a href="#">Draw.io Online Diagram and FlowChart Maker</a>	Online App	Free	<p>Limited options for shapes, but sufficient for basic black and white graphics</p> <p>Projects must be saved outside of the application (e.g., Google Drive, Hard Drive) and then reopened in the online application.</p>	<p>Collaboration is available using Google Drive or other file-sharing applications (e.g., BOX, OneDrive), where individuals can open an existing project, but no ability for live collaboration</p>
<a href="#">LucidChart</a>	Online App	<p>Freemium (limited features)</p> <p>Premium (\$7.95 per month)</p>	<p>Premium provides pre-established templates to support</p> <p>Offers cloud storage within the application to reduce the likelihood of losing progress or documents.</p>	<p>Premium allows for live collaboration, version control, and easy exporting of images and final documents</p>
<a href="#">Microsoft Visio</a>	<p>Online App</p> <p>Desktop App with Premium</p>	<p>\$5 per month (limited features)</p> <p>\$15 per month</p>	<p>Steep learning curve, but can make complex diagrams and figures</p>	<p>OneDrive/Microsoft Compatible</p>



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