

Code Readiness Subprogram 2024-2029 Implementation Plan

Summary:

1. Program and/or Sub-Program Name: PG&E Codes and Standards Code Readiness Subprogram
2. Sub-Program ID number: PGE21056
3. Sub-program Budget Table:

2024-2029 Subprogram Budget

Program Name	Administrative Costs	Marketing and Outreach	Direct Implementation	Total 2024-2029 Budget
Code Readiness	\$1,700,000	\$0	\$33,000,000	\$34,700,000

4. Sub-program Gross Impacts Table: N/A
5. Sub-Program Cost Effectiveness (TRC): N/A
6. Sub-Program Cost Effectiveness (PAC): N/A
7. Type of Sub-Program Implementer (Core, third party or Partnership): 3rd Party Implemented
8. Market Sector (including multi-family, low income, etc): Residential (including single- and multi-family), commercial, industrial, agriculture, and public
9. Sub-program Type (Non-resource, resource acquisition, market transformation): C&S
10. Intervention Strategies (Upstream, downstream, midstream, direct install, non-resource, finance, etc.): Non-resource

Program Description:

PG&E's Codes and Standards Program (C&S) has identified a need to collect data and support market adoption of measures before including them in code. As a result, the Code Readiness Subprogram (CRS) is designed with the goal of achieving improved code compliance and advocacy support. The C&S team believes these two objectives can be realized through targeted data collection, customer inducements, and knowledge transfer.

The CRS will implement project-level activities to produce information that enhances advocacy and increases the feasibility of more comprehensive climate change mitigation through knowledge transfer to builders and others. In general, code readiness activities will be aimed at future regulations and will supplement existing advocacy efforts, such as research and development of code enhancement proposals, in order to accelerate climate change mitigation activity.

The measures that will be included in CRS will be measures that are not suitable for incentive programs due to cost effectiveness, level of support required, or other issues. Those measures that are unsuitable for incentive programs are key to achieving the C&S program goals. However, they require the effort provided by this subprogram to be included in building codes or appliance standards. The data collected and the increased market adoption will support rulemakings (e.g., CA Title 20, CA Title 24, US Department of

Energy Appliance Standards, and others) since the market will already be adopting the higher standards. Higher market adoption reduces the opposition to rulemakings.

Each measure included in CRS will have a customized strategy that will determine the current market barriers for the measure, data collection needs, potential markets, and targeted education plan. These efforts will be different for each measure and will be updated throughout the process to ensure they continue to effectively address market barriers. This coordinated effort supports market transformation and improved advocacy efforts. Some of the activities currently exist in the C&S Program, however the integrated plan with the customer inducements and increased data collection will provide improved savings for the program.

Program Delivery and Customer Services:

CRS is a non-resource subprogram that will perform the following activities:

- Data collection
- Customer and contractor inducements
- Knowledge transfer
- Marketing activities

Data Collection. The program will collect data from customer demonstration sites to understand the energy savings potential, load shapes, installation best practices, key indicators for optimal energy savings, measure targeting information, and measure cost data. This information is key for the C&S advocacy efforts and for the market to overcome market barriers.

Customer and Contractor Inducements. The program will provide customers and/or contractors a financial inducement to install the targeted measures. Inducements can include, but are not limited to, financial payments or technical assistance. Since each demonstration site will require extensive data collection, access to the site, occupant interviews and contractor interviews, a financial inducement will be necessary for customers to participate in the effort. It is assumed that the inducements will be offered for a limited number of sites to ensure that data is being collected at a reasonable sample of sites to ensure the data is representative of the targeted customer population.

Knowledge Transfer. Once the data has been collected from a sample of demonstration sites, it will be compiled into a learning module. PG&E will determine the biggest barriers to market adoption for each measure and determine the target audience(s) to overcome these market barriers. PG&E will create learning models for each targeted audience to provide the needed information to the market. These learning modules may include installation best practices, customer targeting, calculating energy savings, or measure payback information. The learning modules may also include calculation tools or other materials to support market adoption.

Program Design and Best Practices:

C&S advocates for higher standards and has been noted by California Energy Commission staff that additional data collection efforts are necessary for the advocacy efforts to support the rulemakings. CRS will produce information that enhances advocacy

and increases the feasibility of more comprehensive climate change mitigation by educating builders and the new construction market. Code readiness activities will be aimed at future regulations and will supplement existing research and development of code enhancement proposals.

CRS intends to target innovators and early adopters in order to accelerate changes to regulations early in the product life cycle, and to support implementation of these accelerated codes and standards activities. Measures will be selected based on their potential contributions to the residential or commercial ZNE goals. Participants will be selected based upon the CRS measures. As an example, for a CO₂ heat pump water heater, the program would select licensed plumbers and HVAC contractors to participate. These contractors would work with their existing customers to find appropriate participants for CRS. The customers and the contractors would receive inducements for their participation to cover the time and cost of installing the measure.

CRS measures will be those that are not suitable for incentive programs due to cost effectiveness, level of support required, or other constraints, as those measures are often key to achieving the C&S program goals. A customized strategy will be developed for each CRS measure, accounting for market barriers, data collection needs, potential markets, and a targeted education plan. These efforts will be different for each measure and will be updated throughout the process to ensure they continue to address market barriers.

The CRS program is a non-resource program and focused on data collection and advocacy support and does not include metrics to support these activities.

Innovation

CRS will identify opportunities to work with builders, designers, and manufacturers to install cutting edge efficiency measures that can be monitored to collect data for use in the development of future codes and standards. CRS will engage statewide new construction programs to identify potential sites for field data collection, to reduce the cost burden associated with site recruitment. The data collected during CRS projects will assist other EE program areas with potential incentive programs that can be implemented prior to the adoption of new codes and standards.

Metrics

Not applicable

For Programs claiming to-code savings

Not applicable

Pilots

Not applicable

Workforce Education and Training

Not applicable

Workforce Standards

Not applicable

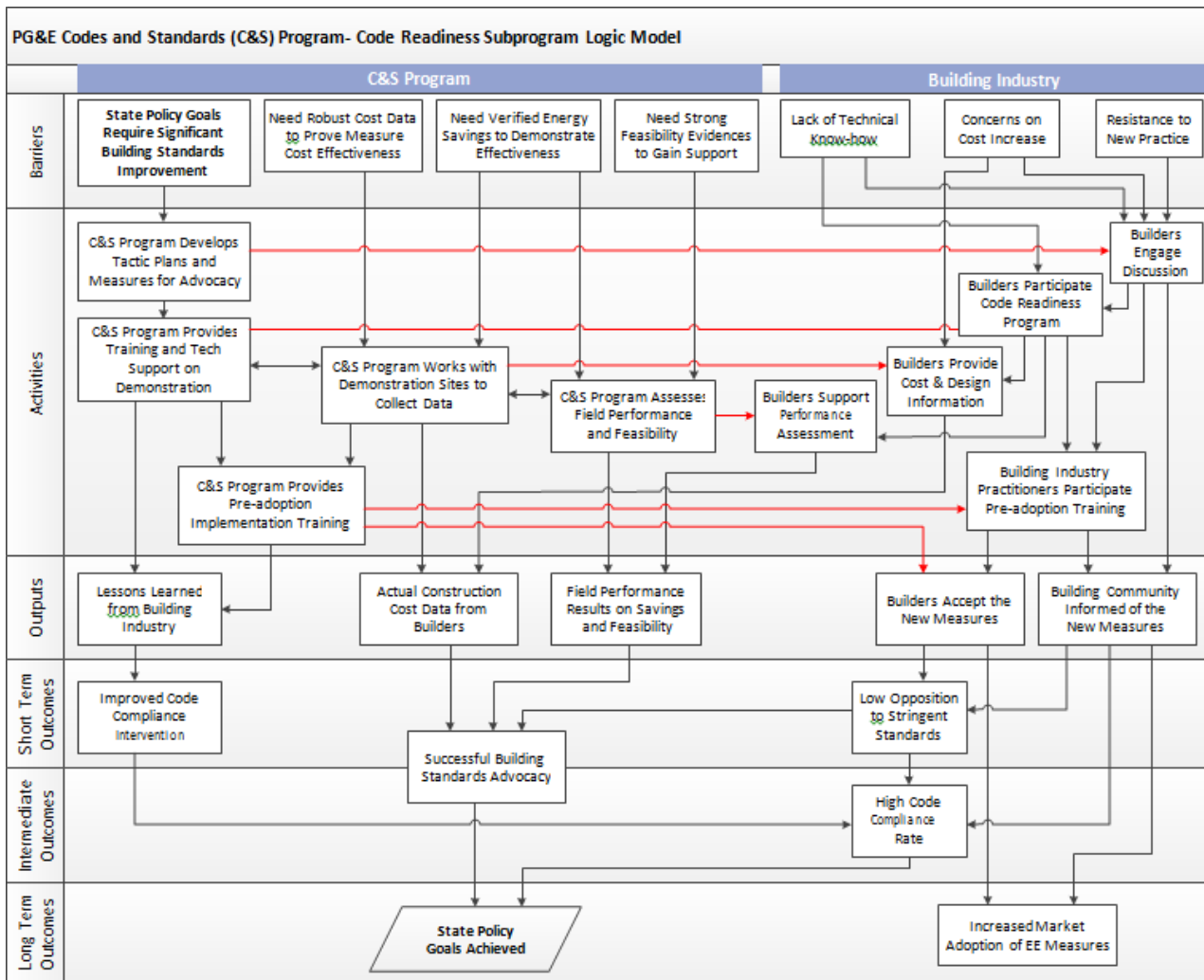
Disadvantaged Worker Plan

Not applicable

Supporting Documents:

Program Theory and Program Logic Model:

The Code Readiness Subprogram seeks to enhance PG&E's efforts to achieve state policy goals by implementing project level activities that enhance C&S advocacy and increase market feasibility of the subprogram measures through targeted data collection, customer inducements, and knowledge transfer to builders and other market actors.



Process Flow Chart:

Not applicable

Incentive Tables, Workpapers, Software Tools:

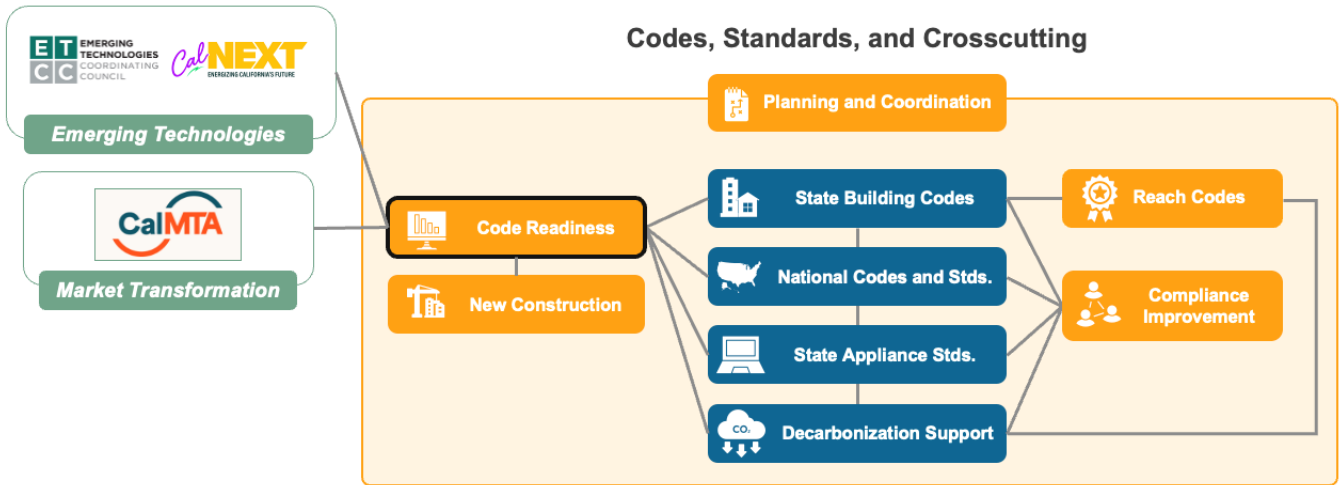
Not applicable

Quantitative Program Targets:

It is expected that the subprogram will complete five research projects to support C&S advocacy in 2025. Specific performance metrics for this subprogram will be developed in conjunction with CPUC guidance in D.15-10-028 and PG&E’s approved Business Plans.

Diagram of Program:

Please see the linkages between the subprogram below.



Evaluation, Measurement, & Verification (EM&V):

Not applicable

Normalized Metered Energy Consumption (NMEC):

Not applicable