CALIFORNIA ENERGY CODES & STANDARDS
A STATEWIDE UTILITY PROGRAM

# Process & Decision Guide: 2025 Existing Single Family Model Reach Code

**Prepared for:**
Kelly Cunningham, Codes and Standards Program, Pacific Gas and Electric

**Revision: 1.0**
Last modified: 2025/06/23

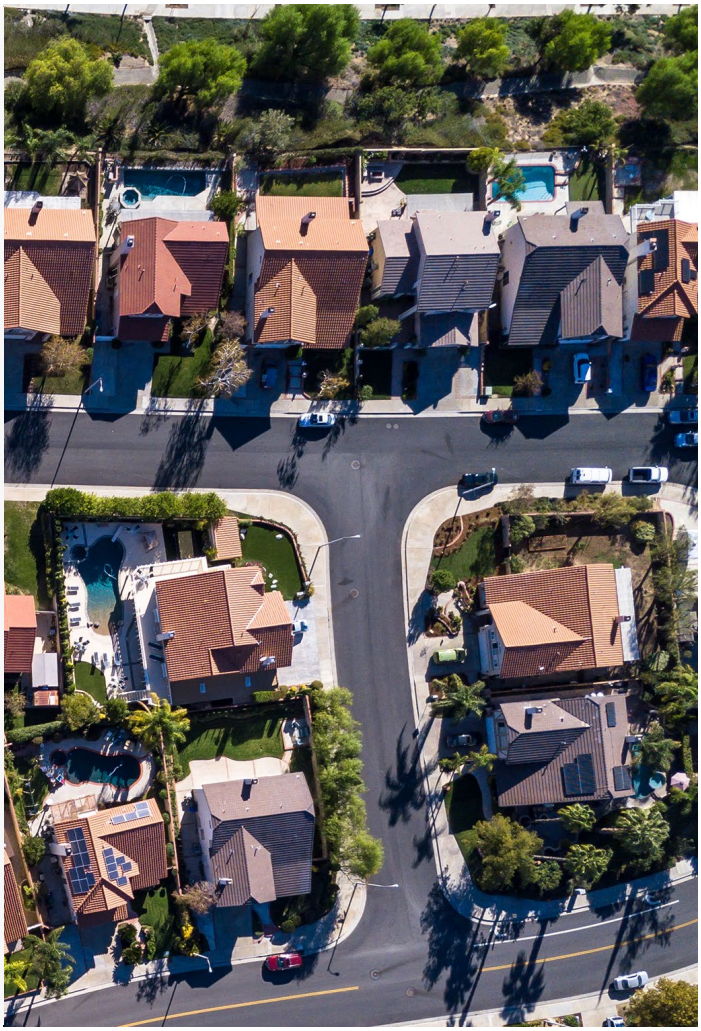
SDGE™ SOUTHERN CALIFORNIA EDISON® Energy for What's Ahead® Pacific Gas and Electric Company®

## Legal Notice

This report was prepared by Pacific Gas and Electric Company and funded by the California utility customers under the auspices of the California Public Utilities Commission.



Neither PG&E nor any of its employees makes any warranty, express or implied; or assumes any legal liability or responsibility for the accuracy, completeness or usefulness of any data, information, method, product, policy or process disclosed in this document; or represents that its use will not infringe any privately-owned rights including, but not limited to, patents, trademarks or copyrights.



### Table 1: Summary of Revisions

| Date | Description | Reference (page or section) |
|---|---|---|
| **06/23/2025** | Original Release | N/A |

# Table of Contents



## List of Tables



## List of Figures

# Introduction

This document is intended to support local jurisdiction staff developing a local reach code for existing single-family homes. It consists of a Process Guide that outlines the adoption process and lists the steps that must be completed in each stage, and a Decision Guide that provides additional information about typical questions that must be answered during Policy Development. The scope requires that all single family buildings that undergo certain improvements include a set of energy efficiency, renewable energy and/or electrification measures that meet a specified energy-savings target. It also requires electric-readiness and cool roofs for certain project scopes. This set of policies can be expanded to include AC to heat pump replacements (see supporting documents).

Model language and the companion materials listed below are available at LocalEnergyCodes.com and BayAreaReachCodes.org.

- Model Ordinance Language
- Slide Deck
- FAQs
- Application Checklist
- Air Sealing Checklist
- Exceptions Form and Guidance
- State Submittal Guidance

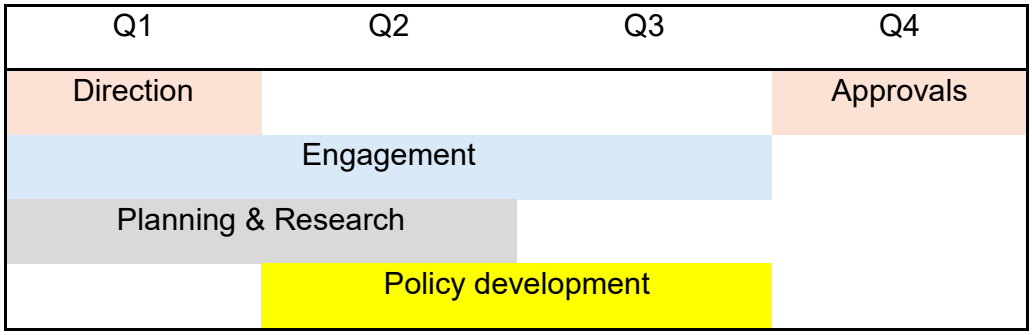
Visit the Cost Effectiveness Explorer to develop a policy for a specific climate zone. The Explorer is a free policy development tool created by the Local Energy Codes program to help jurisdiction staff effectively use the results from program analyses to easily develop energy efficiency and decarbonization policies.

All of the resources provided by the program are published in a non-branded, editable format with the intention of providing a starting point, from which staff may create jurisdiction-specific materials.

# 1 Process Guide

The process may vary by local preference and may take at least 12 months to complete. A generic timeline and narrative of the major elements are provided to help get the process started. Program staff are available to assist at any stage in the process.

**Figure 1. Generic Timeline. See Attachment 3 for more details.**




## 1.1 Direction & Approvals

These activities typically bookend the adoption process, beginning with an official policy document or statement from the governing body (council or board) and ending with approval from the California Energy Commission.

It's good to start from an existing policy document or statement, such as a strategy or measure from a climate action plan (CAP) or a statement from the housing element of the general plan. If such a policy does not exist, or if the existing policy needs to be updated, consider updating it or creating a new policy. It may also be helpful to get an acknowledgment from the governing body in the form of a resolution stating the intent to pursue the reach code. Consider requesting the initiative be included in the formal workplan for your division.

An ordinance requires two readings for adoption, and the second reading must not include any changes from the first reading, so it's important to be sure everything is in order. Some jurisdictions might require the ordinance be presented to specific committees or commissions such as the planning commission before introducing it at a Council or Board meeting. The ordinance must be accompanied by certain findings, including a California Environmental Quality Act (CEQA) declaration. See the model ordinance for details.

A FlexPath ordinance amends the Energy Code (Title 24, Part 6) and will need approval at a business meeting of the California Energy Commission (CEC) (see separate instructions). Using submission templates, submit the package to the CEC and the California Building Standards Commission (CBSC). File the CEQA declaration with the Governor's Office of Policy and Research (OPR) clearinghouse. Note that all documents that will be posted to the CEC or BSC website must meet accessibility requirements.

### 1.1.1 Key Points

- Start from an existing policy statement, if possible
- Deliver a finished product for adoption
- Obtain CEC approval
- File the CEC-approved ordinance with the CBSC

## 1.2 Engagement

Engaging internal and external stakeholders is a critical component to successfully adopting and effectively implementing an ordinance. Begin early and engage both supportive stakeholders as well as those who may be opposed or have reservations to provide a wider perspective. Note that the process is often iterative and may involve negotiating a compromise between stakeholders with conflicting concerns.

### 1.2.1 Staff Team

It is important to assemble a team of internal stakeholders as early as possible that are critical to success of the initiative. Ideally, the team could include the building official (or their) and staff that deal with housing policy, communications, community relations, and information technology (i.e., on-line permitting). It may be appropriate to invite counsel as well. This group may also include consultants and experts from universities, research institutions, the local utility, and the local CCA.

- Adopt a schedule; consider how the reach code aligns with other code adoption processes.
- Get agreement on the scope of the reach code. The model ordinance includes requirements to install energy measures as well as electric readiness and cool roof requirements. They are independent of each other, but they all may come into play during remodels and renovations.
- Ask the staff team to articulate their concerns and ideas.
- Be sensitive to existing procedures, workflows and potential bottlenecks.
- Be sure to define expectations and establish regular check-ins.

### 1.2.2 External Stakeholders

Well-planned community outreach and engagement will result in a smoother adoption process, a better policy and more thorough implementation. While community outreach is not required by the CEC, it provides an opportunity to enhance the reach code requirements and language. Confirm outreach needs, requirements and expectations with city council, relevant commissions and other city staff

- Prepare an outreach plan including:
    - Goals
    - Timeline

    - Alignment with governing board expectations and requirements
- Identify critical external stakeholders (e.g., homeowners, contractors, architects, neighborhood associations, tenant groups, real estate professionals, advocacy groups)
- Consider forming an external advisory group; invite experts on equity related issues in the community
- Identify key messages
- Identify potential points of conflict (compliance cost vs. project valuation, etc.)
- Prepare a set of questions to solicit input
- Develop a set of slides and collateral materials
- Identify events and venues for presentations; offer virtual options as well as evening or weekend options for events to facilitate participation by more community members
- Identify and develop methods for soliciting feedback (e.g., surveys, comment forms) in different venues
- Publish information and resources to web site or newsletter

### 1.2.3 Sample Questions for Community Engagement

- Are the proposed requirements clear?
- Are they fair and reasonable?
- Are there circumstances that should be given special consideration?
- How might you, as a homeowner, comply?
- If you own rental homes in the community, are there different issues that should be considered in comparison to owner-occupied properties?
- If you are a renter, what are your concerns?
- Are there other opportunities for GHG reductions that should be considered?

### 1.2.4 Elected Officials and Commissions

- Consider workshops for the governing board and/or appropriate committees and commissions
- Identify critical issues and proposed solutions
- Prepare slide deck
- Invite guest speakers as appropriate

### 1.2.5 Key Points

- Engage key staff early
- Articulate rationale and requirements to all stakeholders
- Maintain a record of input
- Be transparent; avoid surprises

## 1.3 Planning and Research

There are several activities that need to occur before refining specific elements of the policy. These include understanding how the building code is codified and administered, the nature of the existing building stock and building permit activity, what incentives and other requirements may already exist in the area and getting insights from other communities that have adopted or are considering such a reach code.

- Review the model language to become familiar with the basics of the ordinance.
- Identify which section of the municipal code the ordinance should amend. You may use prior ordinances, and staff reports to understand the structure of the documents and local process for building code amendments.
- Understand the current building permit application, approval and inspection processes and obtain input from building department staff to anticipate how the proposed ordinance would mesh with these.
- Gather data on the characteristics of the existing building stock. If the information is readily available, categorize the housing stock data by vintage corresponding to the vintages used in the cost effectiveness study.
- Gather permit application data for additions and alterations to single family homes in the last several years (which includes duplexes and townhomes), including project scope, valuation, type of permit, ADU conversions, etc.
- Identify “typical” projects that could be used to simulate costs and savings impacts.
- Find out what incentives may already be available in the community, such as federal tax credits, utility and CCA incentives, and any local or regional programs. Inquire whether the city or county could offer any additional incentives.
- Investigate regional requirements, including local air district mandates, coastal community requirements and other regionally specific regulations.
- Consult with jurisdictions that have adopted a similar ordinance. Consult with nearby jurisdictions that are considering a similar policy to determine opportunities to coordinate. If possible, try to maintain consistency across contiguous jurisdictions.
- Determine appropriate exemptions for cost thresholds, technical feasibility, etc.

### 1.3.1 Key Points

- Develop the specific features of the ordinance based on local data and processes
- Learn from the experience of others

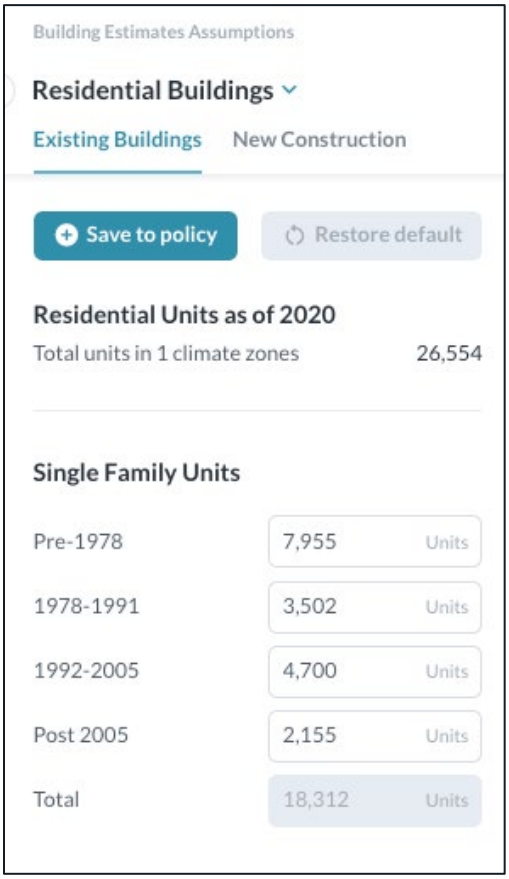
## 1.4 Policy Development

Although model ordinance language is provided, the specifics are highly dependent upon the climate zone and local objectives. Customize the policy by analyzing the data and initial input to propose triggers, requirements and exceptions. Use the model ordinance and the Decision Guide section below to evaluate the impacts of various approaches and develop your recommendations.

A great place to start is the Cost Effectiveness Explorer. This tool presents the results of the cost-effectiveness studies specific to each jurisdiction including energy savings, emissions reductions and cost estimates for each measure. You can also use the Explorer to determine the subsidy or incentive required to make a measure cost-effective (or to result in a simple payback of five years) on an individual basis and city- or county-wide.

The Explorer is designed to facilitate development of a FlexPath ordinance, allowing the user to easily view the FlexPath score for each measure, and to easily identify measure packages that could meet various targets. The Explorer also calculates an estimate of the building-level energy savings and emissions reductions for each measure as well as city-wide impacts of the measure and overall policy. The Explorer contains estimates of existing housing stock by vintage which can be edited to better reflect actual data if available. In addition, you may edit other assumptions to test various implementation scenarios, including the duration of the policy and the penetration rate, or number of homes that will be subject to the policy requirements each year, and other parameters.

**Figure 2. Housing Stock Assumptions**



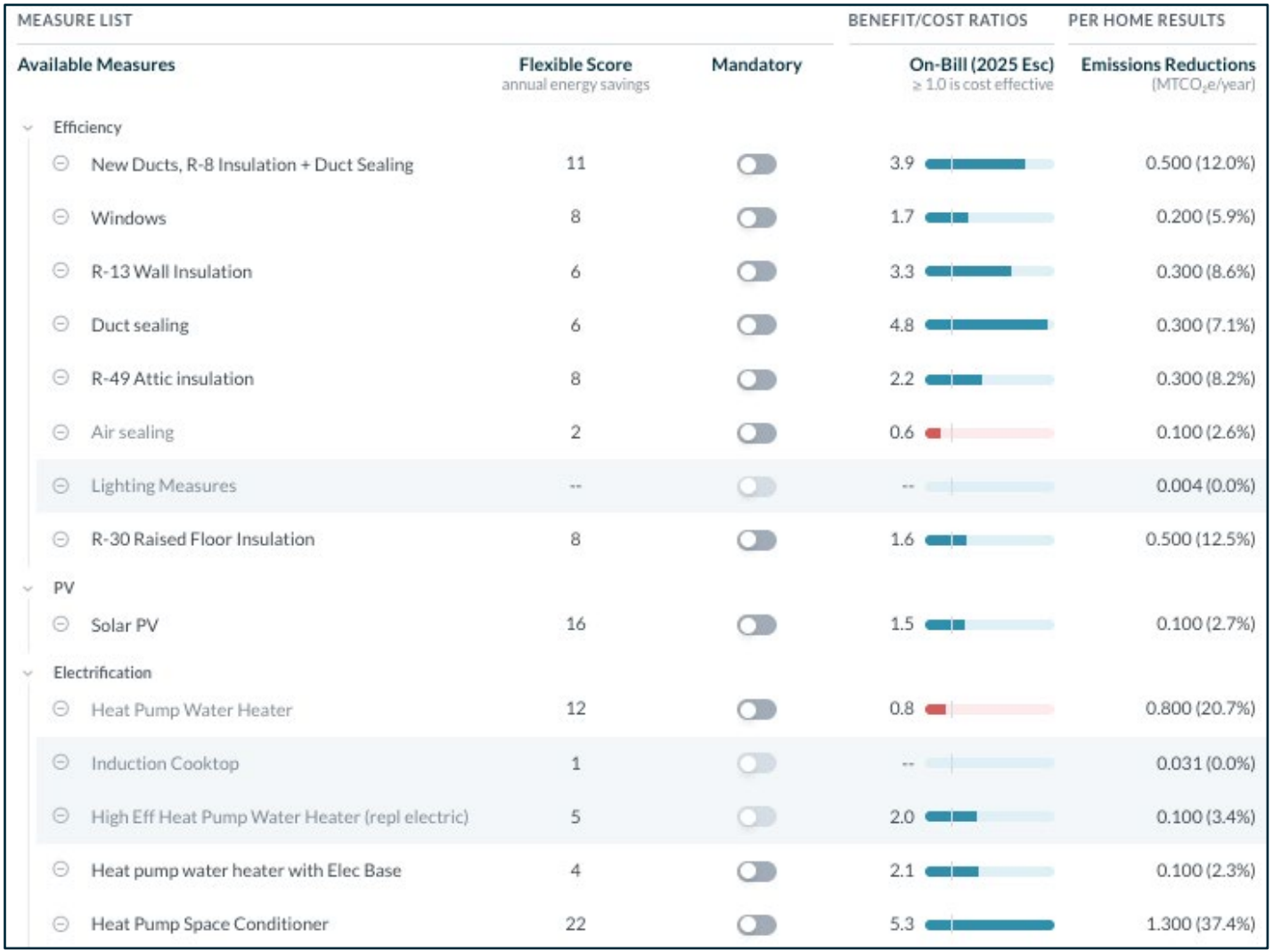

- Begin by creating a draft policy and exploring the range of requirements and the assumptions on housing stock and permit activity. The Explorer has all the

information from the cost effectiveness study that supports the FlexPath as shown in Figure 3 (as well as the other program studies).
- Review and update the housing stock data in the Explorer if more accurate local data is available, as shown in Figure 2. The housing stock data is used to project city-wide impacts.
- Review and if necessary, update the penetration rate assumption in the Explorer, which defaults to 5% per year. The actual penetration rate will depend upon the trigger, exceptions, and local remodeling activities. If a low trigger is established, more homes will be affected.
- Identify and document the options for specific ordinance features. The options are more fully discussed in the Decision Guide table. These include bundling vintages, setting target values, including electric readiness requirements, as well as determining triggers and exceptions. As you work through the choices, document the results of different scenarios such as those described in the next bullet to support your recommendations.
- Use the Explorer to create scenarios and assess their impact relative to the CAP goals. Use specific projects if data are available and examine the impacts of the proposed requirements. Consider homeowner capital costs, utility bill impacts and GHG reductions. Adjust the target scores to find an appropriate balance.
- Document these exercises for inclusion in outreach materials. Revise requirements as appropriate following community input.
- Create a narrative summary of the proposed policy, input received, and the rationale for each component.
- Prepare a draft ordinance (with required findings) and circulate iterations to the internal team.
- Develop a final draft of the ordinance and a staff report for the governing board.
- Prepare a CEQA determination.
- Prepare and deliver a presentation to the governing board.
- Prepare implementation materials (application forms, checklists, FAQs, exception forms, etc.).
- File the CEQA determination.

## Key Points

- Use local data to inform the policy features
- Develop and compare scenarios to optimize the approach and document the rationale for the requirements
- Use the Decision Guide below to work through the details of the ordinance
- Prepare collateral materials to clearly communicate the rationale and requirements.

**Figure 3. Cost Effectiveness Explorer FlexPath Measures (example)**



| MEASURE LIST | | | BENEFIT/COST RATIOS | PER HOME RESULTS |
|---|---|---|---|---|
| **Available Measures** | **Flexible Score** annual energy savings | **Mandatory** | **On-Bill (2025 Esc)** ≥ 1.0 is cost effective | **Emissions Reductions** ($MTCO_2e$/year) |
| Efficiency | | | | |
| New Ducts, R-8 Insulation + Duct Sealing | 11 | | 3.9 | 0.500 (12.0%) |
| Windows | 8 | | 1.7 | 0.200 (5.9%) |
| R-13 Wall Insulation | 6 | | 3.3 | 0.300 (8.6%) |
| Duct sealing | 6 | | 4.8 | 0.300 (7.1%) |
| R-49 Attic insulation | 8 | | 2.2 | 0.300 (8.2%) |
| Air sealing | 2 | | 0.6 | 0.100 (2.6%) |
| Lighting Measures | -- | | -- | 0.004 (0.0%) |
| R-30 Raised Floor Insulation | 8 | | 1.6 | 0.500 (12.5%) |
| PV | | | | |
| Solar PV | 16 | | 1.5 | 0.100 (2.7%) |
| Electrification | | | | |
| Heat Pump Water Heater | 12 | | 0.8 | 0.800 (20.7%) |
| Induction Cooktop | 1 | | -- | 0.031 (0.0%) |
| High Eff Heat Pump Water Heater (repl electric) | 5 | | 2.0 | 0.100 (3.4%) |
| Heat pump water heater with Elec Base | 4 | | 2.1 | 0.100 (2.3%) |
| Heat Pump Space Conditioner | 22 | | 5.3 | 1.300 (37.4%) |

# 2 Decision Guide

The tables below are intended to be used in conjunction with the model ordinance and the Cost Effectiveness Explorer to guide the development of a reach code.

**Figure 4. Focus Area Descriptions**

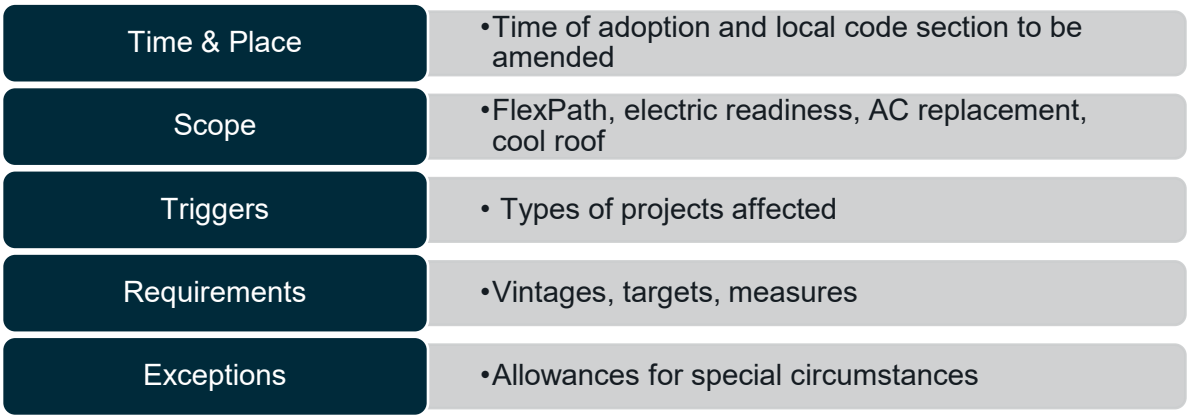



**Table 2. Decision Guide**

| Focus Area | Decision Description |
|---|---|
| **Time & Place** | Determine when the amendment to the building code can and should occur. Work backwards from that time to establish a timeline and schedule.<br>Identify the section(s) of local code to be amended/added. |
| **Scope** | Define the scope of the reach code.<br>• FlexPath for certain additions and alterations<br>• FlexPath for AC replacements<br>• Electric readiness for certain project scopes<br>• Higher cool roof standard for reroofs |
| **Triggers** | Define the events that trigger the requirements. Evaluate the number of homes impacted and estimated impacts that would result from various proposed definitions based on historic permit data.<br><br>**FlexPath.** The term “Covered Single Family Project” is suggested here to avoid potential conflict with other terms that might be in use in the local lexicon. The term and definition are at the discretion of the local jurisdiction. Building/permitting staff should be consulted in this process. Some possible definitions are provided in Attachment 1. Consider the questions below when developing recommendations.<br>• Are there any existing definitions in use at the jurisdiction that could be used or modified for this purpose?<br>• Who will be making the determination whether a particular project is covered or not (e.g., permit tech, plans examiner)? What information will that person need?<br>• Should the trigger be based on project valuation, project scope, or a combination of valuation and scope? |

| Focus Area | Decision Description |
|---|---|
| | • If using project scope, should it be based on floor area, extent of work involved, or a combination of both?<br>• If using floor area, does there need to be more specificity to define the floor area being altered? E.G., *any construction or renovation with a work area that includes a portion or portions of a building consisting of all reconfigured spaces as indicated on the construction documents. Work area excludes other portions of the building where incidental work entailed by the intended work must be performed and portions of the building where work not initially intended by the owner is specifically required by this code.*<br>• Based on historic permit data, how many projects would be affected?<br>• Does the ordinance need to account for serial permits, i.e., a single project that has a series of permits over the course of its execution. If so, consider language such as: *The scope or valuation shall include the sum of all addition or alteration permits issued within the past three years, except that additions or alterations made prior to the initial adoption of this ordinance shall not be counted.*<br>• Should the policy include different tiers, i.e., higher target scores for more extensive scopes?<br>• Should it specifically include air conditioner replacements (possibly with a lower target score) and additions as a trigger? This could enable a combination AC to heat pump and FlexPath ordinance.<br>• What types of buildings and project scopes should be exempted (see exceptions in the model ordinance)? Should these exceptions be embedded in the definition or listed separately as exceptions?<br>• If the jurisdiction has already amended the definition of "Newly Constructed Building", the definition of a Covered Project should exclude such projects or there should be an exception.<br>• Under the State Code, the term "Single Family" includes duplexes and townhomes. Is this definition consistent with the jurisdiction's definition?<br>• Is a separate AC replacement ordinance (or other relevant reach code) on the books or under consideration? How would the ordinances mesh?<br><br>**Electric Readiness**. Is the language in the electric readiness section of the model ordinance appropriate and reasonable? Does it represent projects with good opportunities for electric readiness? |
| **Requirements: FlexPath** | **Establish Vintages.** Separate target scores can be applied to the three vintages - Pre 1978, 1978-1991, 1992-2010. Should all three be maintained or should they be consolidated into one or two categories (e.g., pre-1978, 1978-2010)? The most robust approach would include all three vintage categories. Consolidation may be simpler to implement but may result in less savings (the target score should not exceed the maximum for the newest vintage).<br>Consult the Cost Effectiveness Explorer or other data sources for estimates of existing stock by vintage. (Note, the Explorer uses 2005 as the cutoff for the latest vintage because this date corresponds to statewide building stock data that is used for projections. The cost effectiveness study includes homes built before 2011.)<br><br>**Measures Required by State Code.** The default model code does **not** allow credit for measures that are required under the State Energy Code for a |

| Focus Area | Decision Description |
|---|---|
| | particular project. In other words, determine whether to allow credit for measures used to comply with the state code. Consider this decision including the potential savings impacts when determining the target score. One option may be to limit the reduction to the target score.<br><br>**Target Score.** Use the Cost Effectiveness Explorer to consider several levels of requirements and determine the target score for each vintage. Review and evaluate several packages of measures that meet the proposed target to ensure the requirements are reasonable, including the estimated costs. (The Explorer includes estimated measure costs.) See sample at Attachment 2.<br><br>**Mandatory Measures.** Certain measures may be designated as mandatory (reduce the target score accordingly). These measures may be designated as mandatory because they provide energy savings with minimal or no incremental cost. Outdoor lighting is mandatory by default.<br><br>**Solar PV.** Solar has a high point value under FlexPath and in some cases may be enough or almost enough to satisfy the requirements. There is an option to raise the bar by also requiring certain electric readiness measures to claim the PV credit. The rationale is that the PV installation will require some work in the electric panel, and this may be a good opportunity to prepare for conversion. Decide whether to propose including this option and if so, how many electric-readiness options will be required. |
| **Requirements: Electric Readiness and Cool Roofs** | **Electric Readiness & Appliances.** Decide whether electric readiness should be required for certain project scopes. (Note, electric readiness is not an energy-savings measure and does not require findings of cost-effectiveness.) Are the trigger events and requirements appropriate?<br><br>Consider whether readiness is needed for electric clothes dryers in particular. There are heat pump models on the market that will operate on a 120 volt/15 amp circuit and others that will operate on a 120v/20 amp circuit. If there is a concern that these lower power models will not serve the needs of a larger, multi-bedroom home, the 240 volt readiness option may be worth considering. However, the existence of the more powerful circuit could discourage the use of smaller models that have less coincident demand.<br><br>**Panel Upgrades.** Decide whether you want to discourage unnecessary panel upgrades. While panel upgrades may, in certain circumstances, be necessary for electrification, there are often more economical solutions that can also reduce coincident demand. The proposed requirements would only permit panel upgrades if load controllers or low-power electric appliances are considered in load calculations.<br><br>**Cool Roof.** (This measure only applies to steep-sloped roofs in Climate Zones 6-15). Cool roofs are already required under the Energy Code in Climate Zones 4 and 8-15 when replacing 50% or more in the existing roof. This reach code measure would increase the requirement from a minimum aged solar reflectance of 0.20 to 0.25 and extend the requirement to certain vintages in Climate Zones 6 and 7. The applicability of this measure is limited because it may increase energy consumption in certain cases. |

| Focus Area | Decision Description |
|---|---|
| **Exceptions** | The model ordinance includes a set of standard and optional exceptions. These may be modified to suit local needs. Consideration should be given to the issues below.<br>• Review the standard exceptions and consult with the building/permitting staff regarding how these will be administered (see sample Exceptions Checklist).<br>• Are there exceptions for Covered Single Family Projects that need to be added or are they addressed in the definition?<br>• There are two sample versions of exceptions for technical and economic infeasibility that authorize the building official to modify the requirements. Review the language with your building official to ensure it meets enforcement requirements and is consistent with other definitions in use. A guidance document is available that includes objective standards for a reduction in the target score if certain measures that were used to determine the cost-effective target score are unavailable (e.g., homes with a ductless heating system).<br>• Decide which, if any, of the other exceptions (or any others) should be included, such as:<br>  • Projects that would not otherwise be “Covered” except for the inclusion of certain elements, such as EV charging, or energy storage.<br>  • Projects related to medical necessity, seismic retrofitting, or repairs.<br>  • A separate consideration of cost burden for income-qualified homeowners.<br>  • An exception for historic significance.<br>  • Anything else? |

# 3 Attachments

## 3.1 Attachment 1: Triggers

Consult with the building and permitting staff to determine the definition of a “Covered Single Family Project”. The term refers to projects that are subject to the FlexPath Target requirement for single family remodels. Electric-readiness and cool roof requirements may be triggered for other specific project scopes.

The term “Covered Single Family Project” has been suggested here to avoid potential conflict with other terms that might be in use in the local lexicon.

See the table above for considerations related to developing the definition.

### 3.1.1 Sample Definitions

**COVERED SINGLE FAMILY PROJECT** shall mean any project in a Single Family residential building originally permitted for construction before 2011…

**Option 1**

> … that meets any of the following criteria:
>
> 1. Any change to an existing building that increases conditioned floor area by [XX] [specify value] or more square feet in a one-year period
>
> 2. Any project that includes an addition or alteration whose altered components cover [ZZ] [specify value] square feet or greater in a one-year period.
>
> 3. Installation or replacement of an air conditioner.

**Option 2**

> … that requires an electrical permit, a mechanical permit and a plumbing permit, with the exception of projects with a total valuation of less than $XX,XXX [specify value], or includes installation or replacement of an air conditioner.

**Option 3**

> … that includes an addition, of any size or value, or alteration of such a structure with a building permit valuation of $25,000 [or other value] or higher or includes installation or replacement of an air conditioner.

**Option 4**

> … with a building permit valuation of $25,000 [or other value] or higher and that includes any of the following: 1. Any additions, or any change, rearrangement or addition, other than a repair, of the structural elements of an existing building including foundations, footing, sub-floors, lintels, beams, columns, girders, slabs,

roof trusses, staircases, load bearing walls, door frames, window frames, or any other part of the building that resists force or moment. 2. Change or rearrangement of the plan configuration of walls and full-height partitions of an existing building. 3. Modification of the electrical system, heating or cooling equipment or gas plumbing.

**Option 5** *[If using this definition, consider including the optional exception capping the expenditure at 20% (or some other value)]*

…that includes an addition, alteration, or remodel or the alteration to such a structure that affects a floor area which exceeds twenty percent (20%) [or other value] of the existing floor area of the structure, or has a combined valuation of $25,000 [or other value] or more or includes installation or replacement of an air conditioner. When any changes are made in the building, such as walls, columns, beams or girders, floor or ceiling joists and coverings (subfloor and drywall), roof rafters, roof diaphragms, foundations, piles or retaining walls or similar components, the floor area of all rooms affected by such changes shall be included in computing floor areas for purposes of applying this definition. This definition does not apply to project scopes that are solely limited to any of the following: the replacement and upgrading of residential roof coverings, exterior wall finishes and/or floor finishes; alterations that are limited to adding no more than 75 square feet of fenestration; alterations limited to adding no more than 16 square feet of skylight area with a maximum U-factor of 0.55 and a maximum SHGC of 0.30; alterations that are limited to providing access for persons with disabilities; and additions of 300 [or other amount] square feet or less.

# 3.2 Attachment 2: Compliance Table

**Figure 5. Cost Effectiveness Explorer Compliance Options, Example**

| | Pre-1978 | 1978-1991 | 1992-2005 |
|---|---|---|---|
| Max Cost-Effective Score On-Bill (2025) | 57 | 41 | 20 |
| Max Possible Score | 57 | 41 | 20 |
| Target Score | 25 | 20 | 10 |

Target Scores

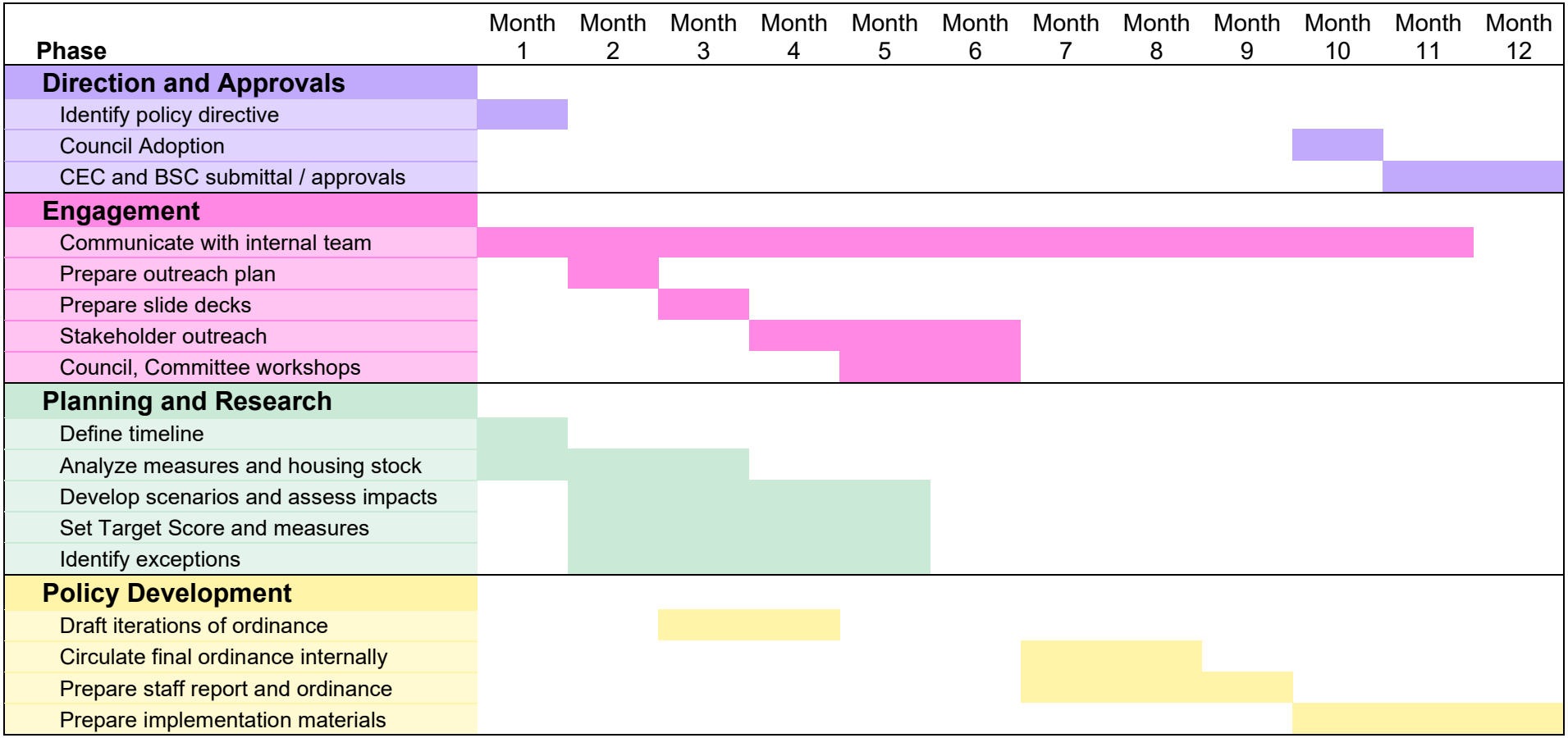
*Measure Score Table*
*scores reflect energy savings*

| | Pre-1978 | 1978-1991 | 1992-2005 |
|---|---|---|---|
| **Efficiency** | | | |
| New Ducts, R-8 Insulation + Duct Sealing | 11 | 8 | 3 |
| New Ducts, R-6 Insulation + Duct Sealing | -- | 8 | 3 |
| Radiant Barrier Under Roof (when re-roofing) | -- | 2 | 1 |
| R-38 Attic insulation | -- | 3 | 1 |
| R-19 Raised Floor Insulation | -- | 6 | |
| Water Heating Package | -- | 1 | 1 |
| Windows | 8 | 6 | 3 |
| R-13 Wall Insulation | 6 | -- | -- |
| Duct sealing | 6 | 5 | 1 |
| R-49 Attic insulation | 8 | 4 | 1 |
| Air sealing | 2 | 1 | 1 |
| R-30 Raised Floor Insulation | 8 | 7 | -- |
| **Electrification** | | | |
| Heat Pump Water Heater | 12 | 12 | 12 |
| Induction Cooktop | 1 | 1 | 1 |
| High Eff Heat Pump Water Heater (repl electric) | 5 | 5 | 5 |
| Heat pump water heater with Elec Base | 4 | 4 | 4 |
| Heat Pump Space Conditioner | 22 | 17 | 14 |
| Dual fuel heat pump space conditioner | -- | 15 | 13 |
| Heat Pump Clothes Dryer | 1 | 1 | 1 |
| High Eff Heat Pump Space Conditioner | 24 | 19 | 15 |
| High Eff Heat Pump Water Heater | 13 | 13 | 13 |
| **PV** | | | |
| Solar PV | 16 | 16 | 16 |

Measure Values

## 3.3 Attachment 3: Timeline

**Figure 6. Detailed Timeline**



## 3.4 Attachment 4: Building Stock Analysis

Forthcoming in next version. This section will provide a sample building stock data and summary to demonstrate how to use building stock data to determine which building types will be most impacted by a FlexPath ordinance based on building type and vintage.

## 3.5 Attachment 5: Permit Analysis

Forthcoming in next version. This section will provide a permit data sample to demonstrate how to use permit data to determine appropriate triggers, expected and applicable projects and exceptions based on permit types.

# Get In Touch

The adoption of reach codes can differentiate jurisdictions as efficiency leaders and help accelerate the adoption of new equipment, technologies, code compliance, and energy savings strategies.

As part of the Statewide Codes & Standards Program, the Reach Codes Subprogram is a resource available to any local jurisdiction located throughout the state of California.

Our experts develop robust toolkits as well as provide specific technical assistance to local jurisdictions (cities and counties) considering adopting energy reach codes. These include cost-effectiveness research and analysis, model ordinance language and other code development and implementation tools, and specific technical assistance throughout the code adoption process.

If you are interested in finding out more about local energy reach codes, the Reach Codes Team stands ready to assist jurisdictions at any stage of a reach code project.

## Visit

LocalEnergyCodes.com to access our resources and sign up for newsletters

## Contact

info@localenergycodes.com for no-charge assistance from expert Reach Code advisors

## Explore

The Cost-Effectiveness Explorer is a free resource to help California local governments and stakeholders develop energy policies for buildings.

## Follow

us on Linkedin

**Revision: 1.0**
Last modified: 2025/06/23