Southern California
REGIONAL ENERGY NETWORK

SoCalREN's Community-Based Design Collaborative

Meeting 2
February 25, 2025

Agenda and Meeting Objectives

Welcome & Recap From Last Meeting	10:30 to 10:45
Energy Efficiency 101 Continued	10:45 to 11:00
Program Examples	11:00 to 11:30
Break	11:30 to 11:35
Discussion	11:35 to 12:30

Recap of January Meeting - Community input

Barriers to Community Engagement in Energy Programs

- Programs don't take into account upfront repairs needed to consider decarbonization strategies
- Upfront cost of energy programs is too high
- Accessibility to energy-efficient appliances
- Trust in programs to meet the needs of communities
- Broader local infrastructure not ready to decarbonize (e.g. rural)

Recap of January Meeting - Energy Efficiency 101

Energy efficiency (EE)

- Means using less energy to perform the same task
- Reduces energy waste, negative impacts from greenhouse gas (GHG) emissions and improves grid reliability

Energy efficiency measures in buildings

- Retrofits, appliance standards, and energy management systems

California snapshot

- CA leads the U.S. in energy efficiency policies and investments[1]
- 100% clean electricity by 2045, aggressive building decarbonization[2]
- Energy efficiency programs are key to reducing grid demand and emissions

1. https://database.aceee.org/state/california
2. https://www.energy.ca.gov/sb100

Recap of January Meeting - Energy Efficiency 101

Key players

- Government: California Energy Commission (CEC), California Public Utilities Commission (CPUC)
- Utilities: PG&E, SCE, SDG&E, Community Choice Aggregators (CCAs)
- Regional energy networks (RENs)

Environmental justice lens

- Building collaboration from the ground up and inverting the energy-project decision-making process as it currently stands advances the vision of making equity real
- Emphasis on equitable access to strategies that ease energy burdens

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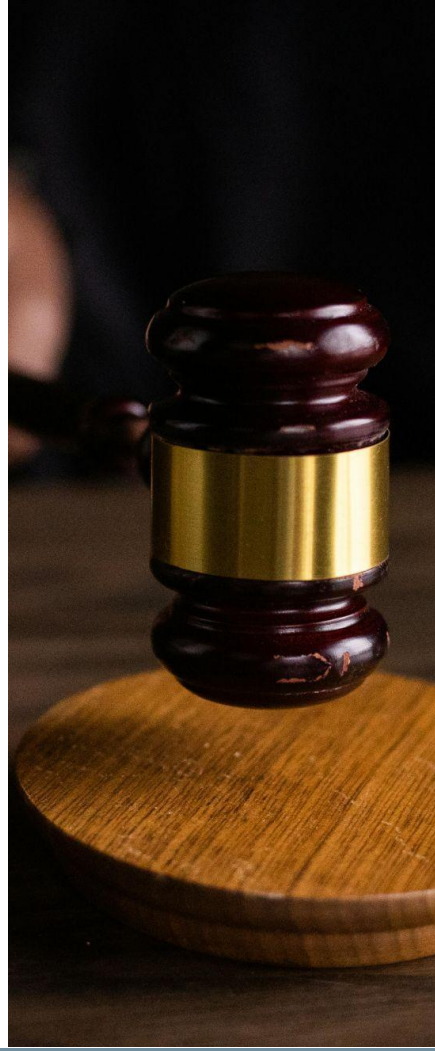
Energy Efficiency Continued

California uses more energy than any other state except Texas. However, energy efficiency efforts have helped make California's per capita energy use the fourth lowest in the nation.

Policy Drives California Energy Efficiency

- **AB 802**: Building Benchmarking, Data Access/Disclosure, and EE Incentives and Baselines
- **AB 793**: Data Access and Access Adoption Incentives to be Provided by Utilities
- **SB 350**: Clean Energy and Pollution Reduction Act of 2015
- **California's Long-Term Energy Efficiency Strategic Plan**
- **AB 758**: Existing Buildings, and Programming and Resource Requirements of the CEC and CPUC
- **SB 375**: Sustainable Communities and Climate Protection Act of 2008
- **SB 535**: Greenhouse Gas-Reduction Investments to Benefit Disadvantaged Communities
- **Senate Bill 97**: California Environmental Quality Act Guideline Amendments of 2007
- **Assembly Bill 32**: California Global Warming Solutions Act of 2006
- **AB 2021**: Energy Efficiency and Demand Response Opportunity Identification by Public Utilities and the CEC
- **Executive Order S-3-05**
- **AB 117**: Permitting Consumer Choice Aggregation
- **SB 1078** and **Renewable Portfolio Standards**
- **SB 1771**: CEC's State GHG Inventorying and the California Climate Action Registry



Energy Efficiency vs. DERs

Topics covered

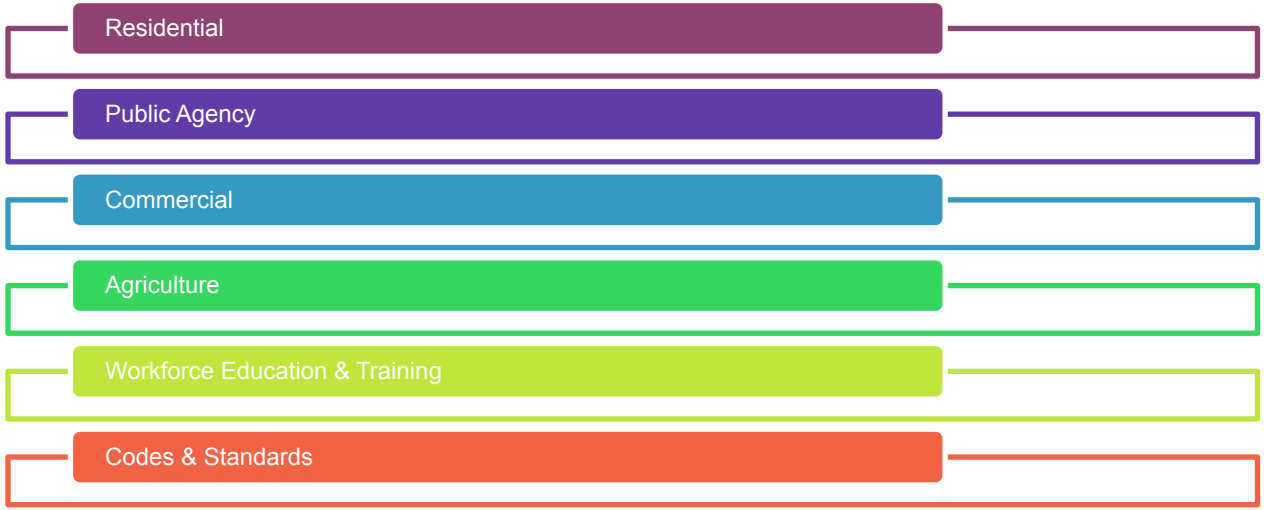
- Energy efficiency vs. distributed energy resources

Distributed energy resources (DER) refers to a diverse category of **devices and technologies that interface with the electricity system** at the distribution level, either directly connected to a distribution utility's wires or on an end-use customer's premises behind the utility meter.

Examples include distributed generation and storage, electric vehicles and charging stations, grid-interactive buildings and microgrids, as well as more traditional demand response or load flexibility resources and energy efficiency strategies.

EE Market Segments

EE programs are broken up into market segments or categories of programs. EE can support the following segments:



How is Energy Efficiency Savings Claimed?

Normalized metered energy consumption (NMEC)

- ✔ NMEC provides **quantifiable and statistically significant reporting of energy usage and energy savings due to an intervention and savings experienced on meter,** such as an energy efficiency project.

Deemed & Custom

- ✔ In energy efficiency**, "deemed measures" (averaging savings)** refer to **pre-determined, standardized energy savings values** applied to energy efficiency upgrades. These don't require pre-approval on projects or program incentives.

- ✔ "**Customized measures"** require individual calculations to estimate energy savings based on the unique characteristics of a building or project, rather than relying on standard values; essentially, deemed measures are "off-the-shelf" savings estimates, while **customized measures are tailored to specific situations**.

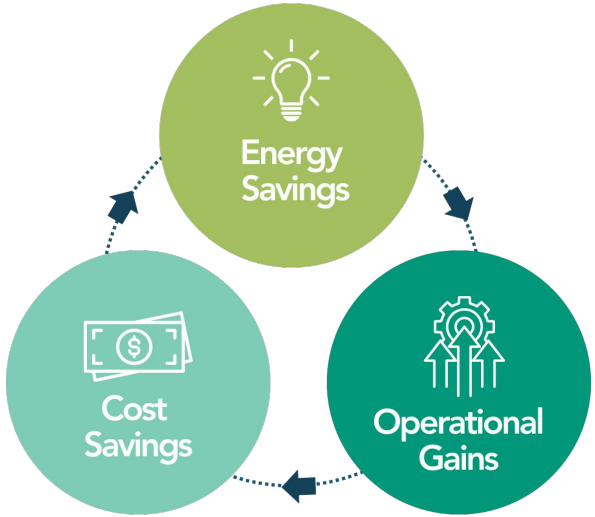
Source: California Public Utilities Commission Custom Projects Review Guidance Documents and Ex Ante Review.

Types of EE Incentives and Rebates

Rebates
Traditionally a top-down approach, rebates offer financial incentives after the sale of a product.

Incentives
Based on a fixed nominal value or % based; they are typically offered post an installation of an upgrade

Realized Benefits



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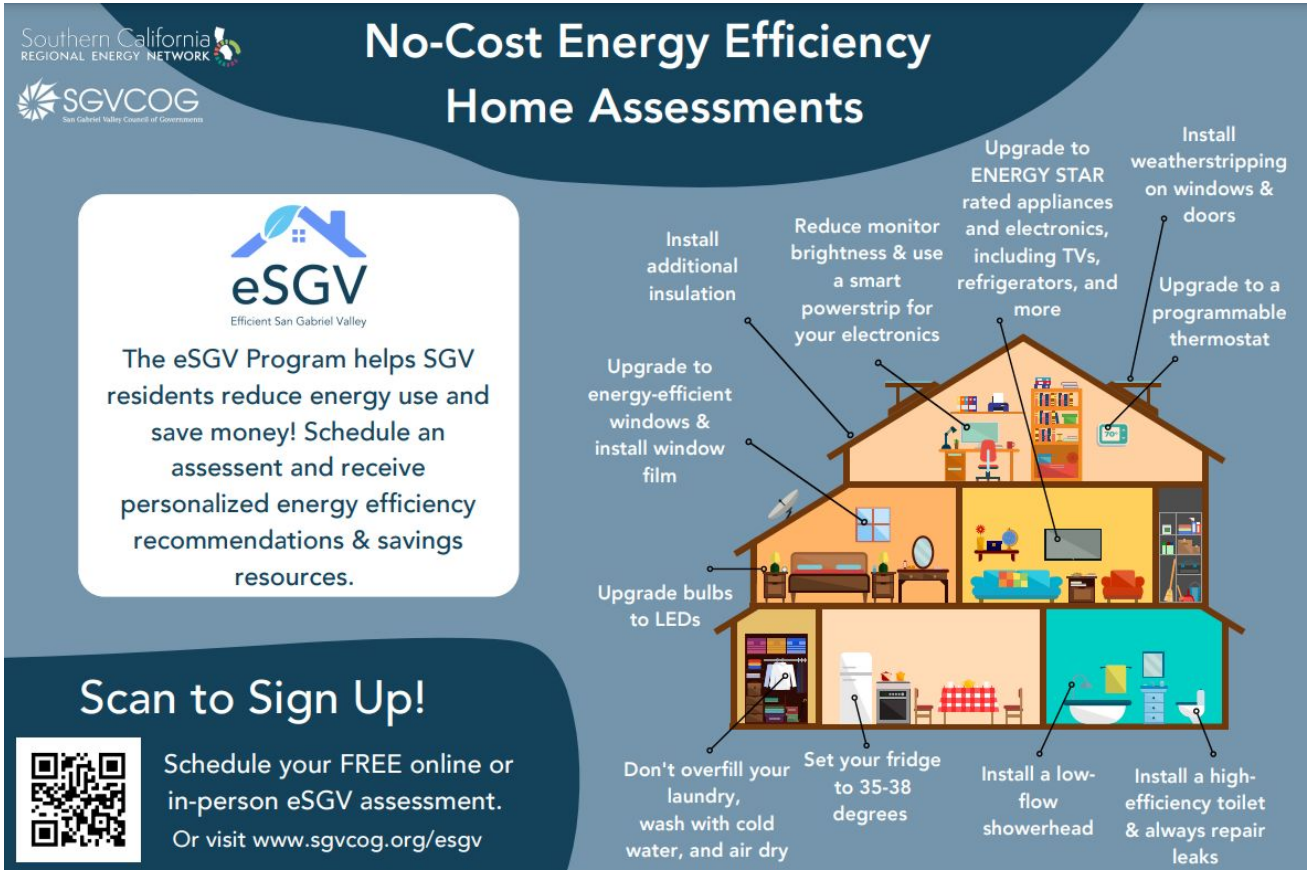
Program Examples

Example: Efficient San Gabriel Valley (eSGV)



Example: Kits for Kids

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Break

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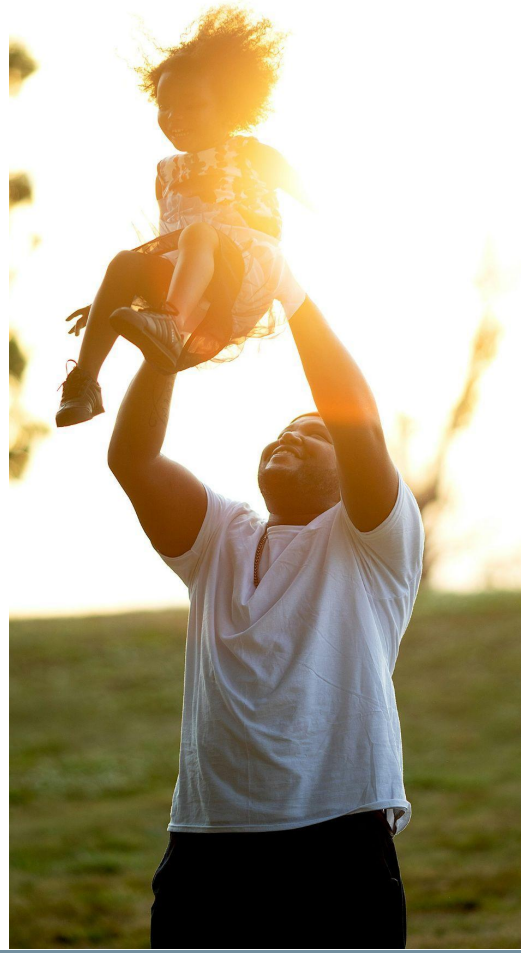
Group Discussion

Impact

- How would you measure the success of programs in your communities?
- What additional benefits (outside of energy savings) would make these programs more impactful for your community?
- How should these programs address barriers to engagement?
- Is there a program that already exists? Is it not meeting market needs?

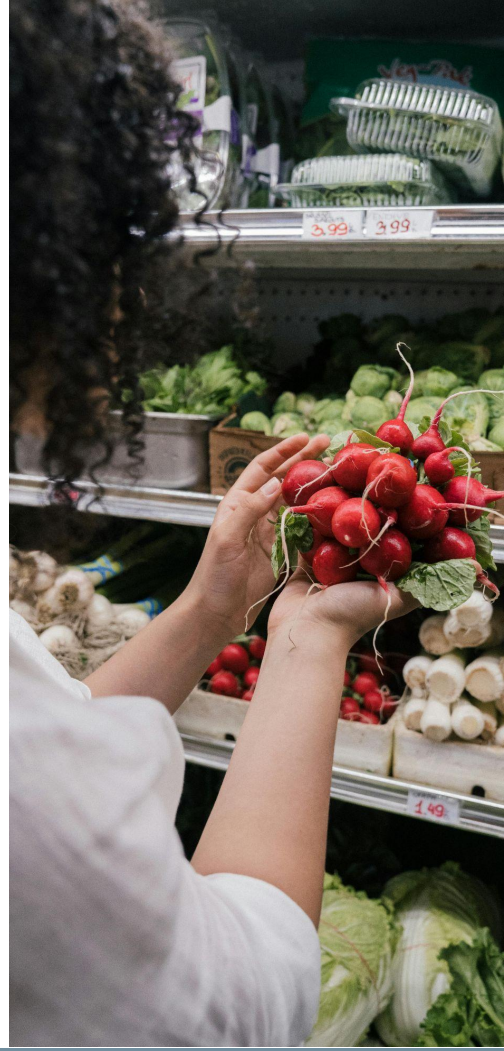
Equity

- What equity considerations should be prioritized when designing programs?
- What metrics should be used to measure equity?
- How can these programs better align with community needs?



Energy Savings

- How important are energy savings as a metric for program initiative proposals?
- How does energy burden affect your communities? (Income spent on energy bills)
    - What are the consequences?



Next Meeting

Location: Virtual

Goal: Discuss and ensure adherence to the Environmental & Social Justice Action Plan and develop plan for gathering program initiatives.