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## **Building Decarbonization Proceeding:**

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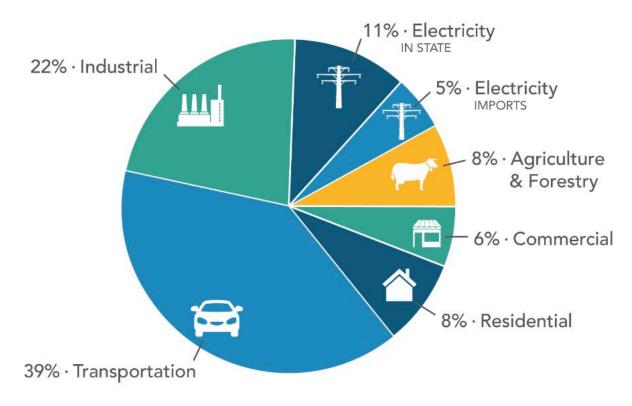
### **Presentation Roadmap**

- Where are we on the building sector's emissions?
- Building Decarbonization (BD) Proceeding Overview
  - Phase 1: BD Pilots
  - Phase 2: Addressing wildfires
  - Phase 3: Supporting Title 20 and Title 24
  - Phase 4: BD Policy Framework

#### Ask for DACAG:

- Provide informal feedback on the proceeding and Phase 4 purpose.
- Consider submitting a letter to Commissioner Houck's office and the BD team with more formal feedback on this presentation and the Phase 4 purpose.

#### Building Sector = 14% of Greenhouse Gas Emissions



381.3 MMT CO<sub>2</sub>e 2021 TOTAL CA EMISSIONS

Source: CARB's 2023 GHG inventory

## **Building Decarbonization Proceeding Overview**

• In January 2019, the CPUC opened a Building Decarbonization proceeding (R.19-01-011) to directly explore "how the Commission could more effectively support GHG emissions reductions in buildings" in response to SB 1477 and assist in reducing the state's greenhouse gas emissions by 2030.

#### Original Proceeding Scope:

- Phase 1 Establishment of TECH and BUILD pilot programs
- Phase 2 Potential pilot programs to address new construction in areas damaged by wildfires
- Phase 3 Adoption of measures to support Title 20 and Title 24
- Phase 4 Establishing a Building Decarbonization policy framework

#### Phase 1: BD Pilots – TECH and BUILD

Decision (D.) 20-03-027 established TECH and BUILD:

- I. Technology and Equipment for Clean Heating (TECH) Initiative – accelerate market development and adoption of building decarbonization technologies.
  - TECH is implemented by a third-party implementer under a contract held by SCE with oversight from the CPUC.
  - <u>techcleanca.org</u> webpage for reporting contractors.
  - <u>switchison.org</u> webpage for customers.





#### Phase 1: BD Pilots – TECH and BUILD

Decision (D.) 20-03-027 established TECH and BUILD:

- II. Building Initiative for Low-Emissions Development (BUILD) Program – deploy near-zero emission building technologies in the largest number of new residential housing units possible.
  - BUILD is implemented by the California Energy Commission with oversight from the CPUC.
  - BUILD webpage.



## Phase 1: TECH Equity Update

#### **TECH Equity Areas:**

- 1. Single- & Multi-Family Incentives
  - Increase market demand for heat pump space and water heaters by helping offset the cost of the appliance
- 2. Quick Start Grants
  - Identify and fund innovative projects that aim at increasing heat pump adoption while supporting equity communities.
- 3. Workforce Education & Training
  - Support the growing workforce that will be needed to install these electric-only appliances.
- 4. Financial Support
  - Seek alternative ways of funding the adoption of HPWHs and HP HVACs
- 5. Low-Income Integration Pilots
  - Support existing low-income programs

## Phase 1: TECH Single- & Multi-Family Incentives in DAC Regions

Channel	Installations	Spend
Multi-Family	3,424	\$3,939,000
Single-Family	1,434	\$3,511,713

Installations and spend are from December 2021 through December 2023.

#### Phase 1: TECH Quick Start Grants

Organization	Description	Year
Diversity Coalition San Luis Obispo County	Equity-focused education and outreach campaign in San Luis Obispo County.	2022/23
City of Sacramento and SMUD	Anti-displacement and home rehabilitation program.	2022/23
350 Bay Area	Improve human health and reduce natural gas use in a low-income urban area.	2022/23
Goodwill Southern California	Pilot will provide workforce placement and preparation services.	2022/23
Bright Power	Guide an affordable property owner through the utility allowance process and heat pump installation at a multifamily property.	2022/23

#### Phase 1: TECH Workforce Education

Heat Pump Water Heater Learn & Earn
 Participating contractors may receive free HPWH units by taking extensive training from TECH and manufacturer partners. 12% of these units have gone to DAC areas.

#### Technology Equipment Donations

TECH donates heat pump units to trade schools and colleges to learn on the newest equipment, including the Cypress Mandala Training Center in Oakland and Fresno City College.

#### Local Training

57% of TECH trainings have been conducted in high unemployment areas and 60% of the attendees reside in high unemployment areas.

## Phase 1: TECH Financial Support

- IUI (Inclusive Utility Investment) Pilot
  - Partnership with Silicon Valley Clean Energy to provide technical assistance and ongoing support, including up to \$3 million for risk management, to support design and launch of a <u>pilot IUI program</u>. TECH is also working with PG&E and SCE lay the foundation for scaling. IUI will <u>make financing EE improvements</u> <u>easier for low-income customers</u>.
- California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA)
  - TECH contributes funds for projects related to heat pump space and/or water heating installations being financed through the California Hub for Energy Efficiency Financing (CHEEF). 17% of the funded installations to date have been in DAC communities.

## Phase 1: TECH Low-Income Integration Pilots

Supported Program	Region	Installations	Spend
SJV DAC Pilot	PG&E/SCE	88	\$457,944
SCE ESA BE Pilot	SCE	12	\$10,341
SCE ESA Main	SCE	28	\$21,618
PG&E ESA Main	PG&E	3	\$3,482

## Phase 1: TECH Low-Income Integration Pilots

- San Joaquin Valley (SJV) DAC Pilot
  - TECH provided additional funds for remediation measures in the SJV Pilots.
  - Homes were limited to a \$5k remediation cap via the Pilot.
  - TECH funds helped ensure that homes that needed remediation measures exceeding this cap could also participate in the SJV pilot.



## Phase 1: BUILD Equity Update

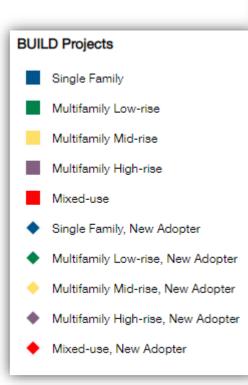
 BUILD has a budget of \$80 million budget of which 100% will be for low-income housing.

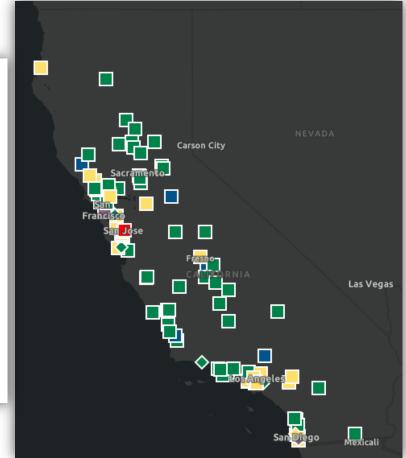
#### **Multi-family Buildings:**

- Most BUILD Program participants are constructing multi-family buildings.
- The low-income requirements for a multifamily building are a building of at least two rental housing units that is operated to provide deed-restricted low-income housing and meets one or more of the following conditions:
  - The property is in a <u>disadvantaged community</u> as defined under Section 39711 of the Health and Safety Code;
  - The property is in a <u>low-income community</u>, defined as a census tract or equivalent geographic area defined by the US Census Bureau in which at least 50 percent of households have an income less than 60 percent of the area median gross income;
  - At least <u>80 percent of the households</u> living in the building have <u>incomes at or below</u>
     <u>60 percent of the area median income</u>.

## Phase 1: BUILD Equity Update

- The CEC's GIS webpage shows:
  - 107 projects in development
  - 7 are in completion
- If funds reserved for low-income res housing are unspent after 2 years, the BUILD program administrator may consult with the DACAG or Low-Income Oversight Board to address barriers (D.20-03-027, pg. 58)





## Phase 2: Incentive Layering, Wildfires, and Baselines

#### D.21-11-002 established the following:

- I. Adopted guiding principles for the layering of incentives when multiple programs fund the same equipment.
- II. Established a new Wildfire and Natural Disaster Resiliency Rebuild (WNDRR) program to provide financial incentives to help victims of wildfires and natural disasters rebuild all electric properties.
- III. Provided guidance on data sharing.
- IV. Directed California's three large electric IOUs to study energy bill impacts that result from switching from gas water heaters to electric heat pump water heaters, and to propose rate adjustments in a new Rate Design Window application if their study reflected a net energy bill increase
- V. Directed the three large electric IOUs to prospectively collect data on fuels used to power various appliances, including propane.

### Phase 2: WNDRR Update

Program is expected to launch in Q1 2024. Higher incentives will be provided to equity customers whose impacted households are located in:

- 1. A disadvantaged community;
- 2. A low-income community, defined as a census tract or equivalent geographic area defined by the US Census Bureau in which at least 50 percent of households have an income less than 60 percent of the area median gross income;
- 3. Low-income residential housing, meaning either of the following:
  - I. A multi-family residential building of at least two rental housing units that is operated to provide deed-restricted low-income residential housing, or
  - An individual low-income residence.

## Phase 3: Supporting Title 20 and Title 24

- I. Big Picture Goal: Encourage builders to take concrete steps now that will help the building industry more easily move to decarbonize in the future
- II. Phase 3A: D.22-09-026 eliminated gas line extension subsidies for all customers in new construction. Resolution G-3598 requires that gas IOUs utilize actual costs instead of estimates for new building projects upon completion.
- III. Phase 3B: D.23-12-037 eliminated electric line extension subsidies for mixed-fuel new construction with the intention of fully disincentivizing the use of gas. Subsidies for all-electric new construction continue.
- IV. Possible Future Options: The Commission may consider treatment of costs associated with electric distribution system upgrades triggered by residential and/or non-residential building decarbonization projects, consistent with existing tariff rules, Pub. Util. Code §783, and any other relevant regulations or state statutes.

## Phase 4: Establishing a Building Decarbonization Policy Framework

In the original OIR opening R.19-01-011, the Commission outlined the purpose of Phase 4 as follows:

• This category of activity involves the development of a coherent and comprehensive set of Commission rules, policies, and procedures to accelerate the reduction of GHG from buildings. The Commission will draw on lessons learned from the smaller-scale programs authorized by SB 1477 and other activities to shape up a large-scale approach to decarbonizing buildings (emphasis added). This area may involve rules for programs already funded through electricity and natural gas rates, and/or the development of new initiatives to support building decarbonization policy.

Staff will be working in 2024 to develop a post-pilot framework for how the Commission can learn from past efforts to best support building decarbonization efforts moving forward.

#### Questions/Comments/Concerns:

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