

## California Energy Commission IIJA | IRA Update

Gabriel D. Taylor, P.E.

Senior Engineer

December 14, 2022



- California Context
- Infrastructure Investment and Jobs Act (IIJA)
  - Bipartisan Infrastructure Law (BIL)
- Inflation Reduction Act (IRA)
- CEC Contacts & Timeline



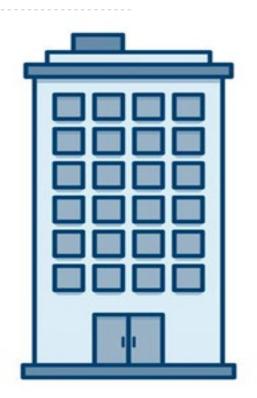
## **Focus on Existing Buildings and Equity**

## In California...

- 5 million low-income households
- 10 million people living in a disadvantaged communities
- Billions of dollars needed to reduce GHG emissions by 2030
- Focus on Equity consistent with U.S. DOE Justice40
- 6 million heat pumps by 2030



Residential Units 13.7 million Annual Electricity Consumption 93,522 GWh Annual Gas Consumption 4,562 MM therm



Commercial Space 7,392 million sq. ft. Annual Electricity Consumption 105,174 GWh Annual Gas Consumption 2,130 MM therm



Carbon-free economy by 2045	100% renewable and carbon-free electricity by 2045	Reduce GHG emissions 40% below 1990 by 2030
Double energy efficiency savings by 2030	Equitable low- carbon solutions for low-income and disadvantaged communities	Electrify transportation and decarbonize fuels



Program	Focus	Time Frame	Funding
Building Initiative for Low- Emissions Development	Incentives to build all-electric low-income multi- family buildings; Gas territories only	Active	\$60 million
California Electric Home Program	Incentives to build all-electric and/or provide energy storage systems in new homes	2023	\$58 million
Equitable Building Decarbonization Program	Direct install decarbonization program and an incentive program to advance the adoption of low-carbon technologies	2023	\$922 million
Electric Program Incentive Program	Research and development program. Address barriers to building decarbonization and support equitable distribution of clean energy solutions	Active	\$75 million over 2021- 25
Gas Research and Development	Fund projects to catalyze change and accelerate achievement of energy goals. Recent focus on gas cooking and indoor air implications and equitable gas line pruning	Active	\$80 million to date



- Multiplies state funds to meet clean energy goals
- Prioritizes most impacted communities
- Strong statewide public process





#### **SEP State Award**

State Energy Program State Award (40109)

#### **SEP RLF**

State Energy Program Revolving Loan Fund (40502)

#### EECBG

Energy Efficiency and Conservation Block Grants (40552)

#### RECI

Resilient and Efficient Codes Implementation (40511)



- Formula Funds
  - $_{\odot}$  \$31M over 5 years
- Anticipated Use:
  - Support State Energy Office Operations
    - Building Energy Code (Title 24)
    - Energy & Water Appliance Standards
    - Flexible Demand Appliance Standards
    - Standards Compliance
- Application due: Submitted (December 5)
  Awards February 2023





## Formula Funds

 $_{\odot}$  \$6.6M to CA for financing capitalization grants

## Anticipated Use:

- Energy efficiency building audits
- Building upgrades based on those audits
- Application due: April 2023



## Energy Efficiency Conservation Block Grant (EECBG) (IIJA 40552)

- Formula Funds  $\circ$  \$4.5M to CA
  - \$4.5M to CA
- Anticipated Use: Local Government & Tribes Planning
  - Potentially combine with ARRA 2009 funds for Local | Tribal Government Challenge for planning and building upgrades
- Application due: April 2023





## **Resilient and Efficient Codes Implementation (RECI) (IIJA 40511)**

#### Competitive Funds

 $\circ$  \$225M <u>nationally</u> over 5 years

#### Purpose

 Enable sustained, costeffective, implementation of updated building energy codes
 Competitive solicitation

#### Proposed Use

 Local code tech support
 Compliance tools
 Compliance modeling innovation





## **Resilient and Efficient Codes Implementation (RECI) (IIJA 40511)**

- FOA Areas of Interest:
  - Partnerships
  - $\circ~$  State and local code adoption
  - $\circ$  Workforce development
  - Implementation and compliance
  - Innovative approaches
  - Equity & environmental justice
- Expected application: Imminent





#### **HOME Rebates**

Home Energy Performance-based, Whole House Rebates

**HEEHRA** 

High Efficiency Electric Home Rebate Allocation

**HEE Contractor Training** 

Home Energy Efficiency Contractor Training

## Home Energy Performance-Based, Whole-House Rebate Allocation (HOME Rebates)

## Formula Funds

 \$292 million to California
 a.k.a., Home-Owner Managing Energy Savings (HOMES)

- Request for Information: 2023 Q1
- Application Due: 2023 Q2



## Home Energy Performance-Based, Whole-House Rebate Allocation (HOME Rebates)

## Rebates for whole-house energy savings retrofits

- o CEC to develop & implement plan, within federal rules
  - Strong public process / outreach
- $\,\circ\,$  Double rebates for low- and moderate-income
- Both single and multifamily homes

## Single Family and Multifamily Funding

- Based on modeled or measured energy savings
- Approximately \$2k 4k per unit, depending on savings
  - Limited to 50% project cost

# High Efficiency Electric Home Rebate Allocation (HEEHRA)

- Formula Funds \$290 million to California
- Request for Information: 2023 Q1
- Application Due: 2023 Q2



# High Efficiency Electric Home Rebate Allocation (HEEHRA)

#### Point-of-sale rebates for qualified electrification projects

- Coordination with vendors for point-of-sale rebates
- Data system to ensure no double dipping

#### Rebates up to \$14,000 per household...

- $\circ$  \$8,000 for space conditioning heat pumps
- o \$1,750 for heat pump water heaters
- \$840 for electric stove, range, oven, or heat pump clothes dryer.
- $\circ$  \$4,000 for panel upgrade
- $\circ$  \$1600 for insulation, sealant, ventilation
- $_{\odot}$  \$2500 for electric wiring
- $\circ$  Up to \$500 for the installer



HOME Rebates (Home Energy Performance-Based, Whole-House Rebate Allocation)	HEEHRA (High Efficiency Electric Home Rebate Allocation)	Total California Allocation
\$292 M	<b>\$</b> 290 M	= \$ 582 M



### Formula Funds

- o \$200 million nationally
- Anticipated Use:
  - Collect data on cost of training contractors
  - Testing and Certification to support HOMES & HEEHRA
  - Coordinate with non-profit to implement training
- Application due: TBD



Date	Activity
Ongoing	Data gathering, outreach, & local coordination
2023 Q1	U.S. DOE Request for Information (RFI)
2023 Q1-3	CEC Workshops & Program Development
2023 Q2	First funding to States & Tribes
2024	Programs Launch – Funds to Public





#### Gabriel D. Taylor, P.E.

gabriel.taylor@energy.ca.gov

#### **California Equitable Building Decarbonization Program**

www.energy.ca.gov/programs-and-topics/programs/equitable-buildingdecarbonization-program



- 1. Infrastructure Investment and Jobs Act <u>https://www.congress.gov/bill/117th-congress/house-bill/3684/text</u>
- 2. Resilient and Efficient Codes Implementation <u>https://www.energycodes.gov/RECI</u>
- 3. State And Tribe Allocations For Home Energy Rebate Program <u>https://www.energy.gov/articles/biden-harris-administration-announces-state-and-tribe-allocations-home-energy-rebate</u>
- 4. Webinar to Solicit Input on the Resilient and Efficient Codes Implementation (RECI) Federal Funding Opportunity <u>https://www.energy.ca.gov/event/webinar/2022-10/webinar-solicit-input-resilient-and-efficient-codes-implementation-reci</u>