Introducing: BUILD
Virtual Housekeeping

- Webinar recording will be shared
- Q&A will be conducted at the end of the presentation
Agenda

Introductions
BUILD Overview
BUILD Incentives
Example BUILD Projects
Program Co-Leveraging
Get Started Today
Resources
Questions
Introductions
Presenters

Brandon Faris
Project Manager
TRC Companies

Brianna Moncada
Sustainable Housing Program Manager
California Housing Partnership
BUILD
Overview
BUILD
The Building Initiative for Low-Emissions Development (BUILD) Program
BUILD is a residential building decarbonization program that provides incentives and technical assistance to support the adoption of advanced building design and all-electric technologies in new, low-income homes.

BUILD makes clean energy technologies accessible to affordable housing developments to benefit low-income Californians.
Why Participate in BUILD?

• Receive up to $2,000,000 in incentives to reduce construction costs
• Receive up to 300 hours of no-cost technical assistance to overcome design or construction barriers, and to complete an incentive application
• Reduce long-term utility costs for both you and your residents
• Build your in-house capacity for all-electric design and construction
• Prepare for current and future state and local building electrification policies
• Layer funds with other programs and incentives
• Eliminate costs for gas infrastructure
Who Is Eligible?

Building owners or developers of low-income housing with:

- 5 YEARS of development experience
- ≥1 COMPLETED low-income project
What Projects Are Eligible?

• Low-income residential housing (single-family and multifamily) with income restrictions varying depending on project location and type of housing
• All-electric and no hookups to the gas distribution grid
• Demonstrate modeled resident utility cost savings
• Project located in one of four IOU gas service territories:
  − Southern California Gas
  − Pacific Gas & Electric
  − San Diego Gas & Electric
  − Southwest Gas Corporation

All energy models submitted for BUILD must be completed by a Certified Energy Analyst.
Low-Income Residential Housing Income Limit Requirements

**SINGLE-FAMILY LOW-INCOME REQUIREMENTS**

- Low-income residence, sold at an affordable housing cost to a lower-income household that is subject to a resale restriction or equity-sharing agreement for which the homeowner does not receive a greater share of equity.

**MULTIFAMILY LOW-INCOME REQUIREMENTS**

*Must meet one or more of the following conditions:*

- The property is in a disadvantaged community (DAC) and is consistent with the income requirements of the affordable multifamily financing source.
- The property is in a low-income community in which at least 50 percent of households have an income less than 60 percent of the area median income and is consistent with the income requirements of the affordable multifamily financing source.
- At least 80 percent of the households living in the building have incomes at or below 60 percent of the area median income.
ELIGIBLE RESIDENTIAL BUILDINGS
• Newly constructed buildings
• Existing buildings repurposed for housing
• Building additions or renovations where 50% or more of the exterior weight bearing walls are removed or demolished

ELIGIBLE BUILDING TYPES
• Single-family homes
• Duplexes/triplexes/quadplexes
• Multifamily apartments
• Condominiums
• Dormitories
• Residence hotels
• Assisted living facilities
• Homeless/transitional housing
• Farmworker housing
• Mixed-use buildings
New Adopter Design Award

The BUILD program provides a design award up to $100,000 to defray direct design costs to eligible applicants who are constructing their first:

• all-electric,
• low-income, and
• multifamily building (10+ units)
Free Technical Assistance Services

• Educational resources on all-electric building design and technologies
• Support throughout all development phases (including building design, construction, installing near-zero emission technologies) and information on local building permits
• Assistance with submission of BUILD Incentive Application package and participation support
BUILD
Incentives
Incentives

BUILD provides robust incentives consisting of four components:

- **BASE GHG INCENTIVE**: Based on GHG emissions avoided
- **BUILDING EFFICIENCY**: Modeled Resident Utility Costs
  - Based on a percentage above Code
- **INCREMENTAL PV**: Modeled Resident Utility Costs
  - Based on a flat rate of PV above Code
- **KICKER INCENTIVE**: For additional GHG reduction technologies

**TOTAL INCENTIVE**

**$1,700**
Per Bedroom
average minimum greenhouse gas incentive

**$2,000,000**
Program Cap per applicant
How Incentives are Calculated

**BASE GHG INCENTIVE**

A flat rate of $150/metric ton (MT) of total annual avoided GHG emissions, multiplied by the 30-year effective life of the building.

**BUILDING EFFICIENCY**

Eligible for up to $1,000 per bedroom. Based on a sliding scale of the compliance margin from 0% to 10%.

**INCREMENTAL PV**

$1.30/watt (W) for single-family and low-rise multifamily*

$3.00/watt (W) for mid-rise and high-rise multifamily*

*The program will not offer incentives for PV required by the Energy Code, or for PV installation beyond what is needed to address the modeled resident utility costs requirement for the project.
Kicker Incentives

GRID FLEXIBILITY
$50/ smart thermostat and $500/JA13-compliant HPWH

GWP REFRIGERANTS <750
$500/lb of refrigerant

GWP REFRIGERANTS <150
$1,500/lb of refrigerant

INDUCTION COOKTOP
$300/ induction cooktop unit

HEAT PUMP CLOTHES DRYER
$150/ heat pump clothes dryer

ON-SITE ENERGY STORAGE
$250/kWh storage capacity

ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE)
$200/ EVSE (single family) and $300/ EVSE (multifamily) or $1000/ EVSE (Bi-Directional)

SMART ELECTRIC VEHICLE SUPPLY EQUIPMENT
$500/ EVSE (single family) and $600/ EVSE (multifamily)
Modeled Utility Cost Savings

BUILD requires the design must result in a 5% modeled resident utility cost savings

- Utility cost savings will vary by climate and utility territory

Considerations:

- Improving building envelope
- High-performance equipment efficiencies
- Allocating additional solar PV to the residents

The Technical Assistance team is here to support your development in meeting this requirement.
Program Participation Roadmap

Optional Steps

Technical Assistance (TA) Application
Not required before submitting reservation

Design Reservation Application
Design Phase
New Adopter Design Award (if eligible)

Construction Reservation Application
Construction Phase
25% base GHG incentive (Building permits approved)

1st Construction Progress Payment
+50% (75% total) base GHG incentive (Foundation poured)

2nd Construction Progress Payment

Project Completion Payment
Remainder of incentive paid out at TCO* or CO*

Technical Assistance (TA) available throughout

*Temporary Certificate of Occupancy (TCO) // *Certificate of Occupancy (CO)
Example BUILD Projects
Example High-rise Multifamily

**PROJECT DESCRIPTION**
- Total sqft: 68,525
- # of buildings: 1
- # of stories: 4
- # of units: 100
- # of bedrooms: 119
- % above code: 8.7%

**KICKERS**
- # of Smart Thermostats: 119

- GHG Base Incentive (Over 30 Years):
  71 MT * $150/MT = $10,650/Year * 30/Years = $319,500

- Increased Building Efficiency Incentive (up to $1,000/bedroom):
  8.7% = $870 * 119 bedrooms = $103,530

- Incremental PV Incentive ($3 per watt)*:
  5.75 kW DC * $3.00/W = $17,250

- **Total Kicker Incentive:**
  119 Smart Thermostats * $50/unit = $5,950

- **Total BUILD Incentive:**
  $446,230 / $3,750 per bedroom

*Minimum PV system size allocated to tenants to meet requirements
Example High-rise Multifamily Incentives

- Base GHG Incentive: +$319,493
- Building Efficiency Incentive: +$103,530
- Incremental PV Incentive: +$17,250
- Total Kicker Incentive: +$5,950

Total Incentive: $446,230 / $3,750 per bedroom
**Example Low-rise Multifamily**

**PROJECT DESCRIPTION**
- Total sqft: 51,802
- Total # of buildings: 7
- Total # of stories: 2/3
- Total # of units: 72
- Total # of bedrooms: 106
- Average % above code: 8.3%

**KICKERS**
- None

**Total GHG Base Incentive (Over 30 Years):**
  42.22 MT * $150/MT = $6,333/Year * 30/Years = $189,990

**Increased Building Efficiency Incentive (up to $1,000/bedroom):**
- 8.3% = $830 * 106 bedrooms = $87,980

**Incremental PV Incentive ($1.30 per watt)*:**
- 1.29 kW DC * $1.30/W = $1,676

**Total Kicker Incentive:**
- No Kicker elected = $0

**Total BUILD Incentive:**
- $279,646 for all buildings / $2,638 per bedroom

*Minimum PV system size allocated to tenants to meet requirements
Example Low-rise Multifamily Incentives

Total Base GHG Incentive: $189,990
Total Building Efficiency Incentive: $87,980
Total Incremental PV Incentive: $1,676
Total Kicker Incentive: $0

Total Incentive (All Buildings)*: $279,646 / $2,638 per bedroom

*Incentives presented based on an average of all buildings
Program Co-Leveraging
Co-leveraging Opportunities

<table>
<thead>
<tr>
<th>RESIDENTIAL BUILDINGS</th>
<th>AFFORDABLE HOUSING, PUBLIC FUNDING PROGRAMS</th>
<th>CLEAN ENERGY PROGRAMS BY STATE AND UTILITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-family to quadplex homes</td>
<td>TBD</td>
<td>CAEATFA, CA Energy-Smart Homes, and other programs where eligible</td>
</tr>
<tr>
<td>Multifamily Apartments</td>
<td>TCAC, CDLAC, HCD, CalHFA, HUD, USDA, and local programs</td>
<td>CEDA, CA Energy-Smart Homes, and other programs where eligible</td>
</tr>
</tbody>
</table>

- For some co-leveraging opportunities program eligibility will depend on the residential building type, whether the BUILD project is a new construction, substantial renovation, reuse development, and where the project is located.
- BUILD cannot layer with any cap-and-trade programs for the same equipment /design elements (e.g., Solar PV).
# Layering Example (Low-rise Multifamily)

<table>
<thead>
<tr>
<th>Incentive Type</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total GHG Base Incentive</td>
<td>$189,990</td>
</tr>
<tr>
<td>Increased Building Efficiency Incentive</td>
<td>$87,980</td>
</tr>
<tr>
<td>Incremental PV Incentive</td>
<td>$1,676</td>
</tr>
<tr>
<td>Total Kicker Incentive</td>
<td>$0</td>
</tr>
<tr>
<td>Total BUILD Incentive</td>
<td>$279,646</td>
</tr>
<tr>
<td>Total Unit Incentive*</td>
<td>$129,600</td>
</tr>
<tr>
<td>Average Efficiency EDR Incentive</td>
<td>$5,480.00</td>
</tr>
<tr>
<td>Total Energy Smart Homes Incentive</td>
<td>$135,080.00</td>
</tr>
<tr>
<td><strong>Total Layered Incentives</strong></td>
<td><strong>$414,726.00</strong></td>
</tr>
</tbody>
</table>

*CA Energy Smart homes estimate assumes project will complete construction in 2023*
Get Started Today
Building Initiative for Low-Emissions Development Program | California Energy Commission

The Building Initiative for Low-Emissions Development (BUILD) Program is designed to provide technical assistance and incentives for new all-electric low-income residential buildings that reduce GHG emissions.
Technical Assistance Application

Technical assistance is highly recommended. Application assistance is included!
**BUILD Incentive Documents**

**Design Application**
- Attestation
- Supplemental Application Narrative
- Energy Model/Simple Calculator
- CF1R-PRF-01E/NRCC-PRF-01-E
- Payee Data Record (STD204)
- CalEnviroScreen 3.0 Score for DAC
- (If Eligible for New Adopter Design Award) paid invoice also required

**Construction Application**
- (Updated) Attestation
- (Updated) Supplemental Application Narrative
- Energy Model
- CF1R-PRF-01E/NRCC-PRF-01-E
- Payee Data Record (STD204)
- CalEnviroScreen 3.0 Score for DAC
- Approved building permit
- Evidence of affordable housing financing source

**Project Completion**
- TCO or CO
- Recorded deed restriction or regulatory agreement
- Demonstration of Modeled Resident Utility Cost Savings
- Final Energy Model
- Completed CF2R, CF3R or NRCI, and NRCV
- Additional project-specific documentation
Resources
Program Guidelines

Visit www.energy.ca.gov/programs-and-topics/programs/building-initiative-low-emissions-development-program to review BUILD Program Guidelines for full details on program eligibility and requirements.

BUILD is administered by the California Energy Commission in collaboration with the California Public Utilities Commission. It is authorized by Senate Bill 1477 (2018, Stern) and funded by the four California gas corporations apportioned according to each gas corporation’s percentage share of allocated Cap-and-Trade Program allowances. Reservations are approved on a first come, first served basis, and regional funding availability is based on the utilities’ contribution to the program.
Apply Today

FREE TECHNICAL ASSISTANCE:
https://www.tfaforms.com/4945354

FOR MORE INFORMATION, VISIT:
http://www.energy.ca.gov/programs-and-topics/programs/
building-initiative-low-emissions-development-program
Thank you.

Any questions?