

Affordable Housing Building Decarbonization Summit II Findings

A convening of the GREEN Network of the California Housing Partnership



MARCH 2022

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CALIFORNIA HOUSING PARTNERSHIP

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The State created the California Housing Partnership (the Partnership) in 1988 as a private nonprofit organization with a public mission: to help preserve and expand California's supply of affordable homes and to provide leadership on affordable housing policy and resource issues. The California Housing Partnership is unique in combining on-the-ground technical assistance with applied research and policy leadership at the state and national level to increase the supply of affordable homes. Since 1988, the Partnership has helped more than a hundred California nonprofit and government housing agencies leverage \$25 billion in public and private financing, resulting in the creation or preservation of more than 75,000 homes affordable to low-income Californians.

The Partnership's Sustainable Housing team works directly with nonprofit affordable housing providers and public housing authorities to help them evaluate and finance clean energy and water improvements. This involves educating owners about the programs and opportunities for incentives available to them, as well as developing innovative demonstration projects to explore new technologies, financing tools, and business models for affordable rental homes. The Partnership's Sustainable Housing team is leading efforts to ensure that nonprofit affordable housing providers and residents are able to participate in California's path towards equitable decarbonization.

About the Summit

The Affordable Housing Building Decarbonization Summit II was hosted in October 2021 as a follow-up to the first summit hosted by the California Housing Partnership in October 2020 and summarized in a publication titled "Prioritizing California's Affordable Housing in the Transition Towards Equitable Building Decarbonization | Summit Report 2021" (<https://chpc.net/resources/ah-building-decarb-report-2021/>).



Summit Host

California Housing Partnership

Funding and Support

Wells Fargo Foundation

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Summit Overview & Participation

The California Housing Partnership (the Partnership), with grant support from the Wells Fargo Foundation, organized the second Affordable Housing Building Decarbonization Summit (Summit II) in the fall of 2021.

Scheduled on three consecutive mornings (October 12-14, 2021), Summit II provided forums for project managers, asset managers, and sustainability managers in working in affordable housing development and management in California to discuss the practical challenges and public policy implications of electrifying new and existing affordable housing buildings, as the state looks to multifamily properties to electrify as part of its climate goals.

The first session each morning was open to the general public. This was followed by stakeholder working group discussions with nonprofit and government affordable housing owners/operators and affordable housing advocacy organization invested in this topic. After opening remarks and presentations, participants were able to interact in breakout room discussions on specific topics.

An online portal was provided to attendees to share additional resources:

<https://chpc.net/decarbonization-summit-portal/>

Key Presenters

HOUSING PROVIDERS

Abode Communities
Community HousingWorks
EAH Housing
First Community Housing
MidPen Housing
Mutual Housing California
Rural Communities Housing Development Corp.
Self-Help Enterprises

OTHER PARTNERS

Association for Energy Affordability
California Housing Partnership
David Baker Architects
Rocky Mountain Institute

Key Participants

HOUSING PROVIDERS

BRIDGE Housing
CHISPA
Clifford Beers Housing
Eden Housing
Fresno Housing Authority
Housing Authority of City of Buenaventura
Little Tokyo Service Center
Mercy Housing
Oakland Housing Authority
Santa Ana Housing Authority
Visionary Home Builders

OTHER PARTNERS

California Energy Commission
City of Berkeley
Liberty Hill Foundation
National Resource Defense Council

Summit Schedule

TUESDAY, October 12, 2021

9:00 AM – 10:25 AM (Public session)

Challenges and Key Takeaways: Prioritizing California's Affordable Housing in the Transition Towards Equitable Building Decarbonization, Report Review

- (Moderator) Srinidhi Sampath Kumar, Sustainable Housing Policy and Program Manager, California Housing Partnership
- Amélie Besson, Design and Construction Sustainability Manager, MidPen Housing
- Ava Kuo, Associate Director of Housing Development, First Community Housing
- Betsy McGovern-Garcia, Director of Real Estate Development, Self-Help Enterprises
- Bryan Dove, Director of Asset Management, Mutual Housing California
- Mary Jane Jagodzinski, Senior Vice President of Housing and Real Estate Development, Community HousingWorks

TUESDAY, October 12, 2021

10:30 AM – 12:00 PM (Housing providers only)

The Future of Title 24 and Electrification Standards for Existing Buildings

- Noel Toro, Project Manager, Abode Communities

WEDNESDAY, October 13, 2021

9:00 AM – 10:25 AM (Public session)

Facilitating Electrification through Utility Allowances

- Meena Venkatraman, Sustainable Housing Fellow, California Housing Partnership
- Daniel McIntire, Chief Operations Officer, Rural Communities Housing Development Corporation

WEDNESDAY, October 13, 2021

10:30 AM – 12:00 PM (Housing providers only)

Phasing Out Gas Appliance Rebates and Incentives

- Srinidhi Sampath Kumar, Sustainable Housing Policy and Program Manager, California Housing Partnership
- Rachael Diaz, Sustainable Housing Program Associate, California Housing Partnership
- Michael Claproth, Sustainable Housing Program Associate, California Housing Partnership
- Amy Egerter, Manager, RMI

THURSDAY, October 14, 2021

9:00 AM – 10:25 AM (Public session)

Reaping Resiliency Benefits through Solar, Net Metering, Storage and Cooling

- Erin Feeney, Associate, David Baker Architects
- Mary Murtagh, Executive Chairperson, EAH Housing
- Michael Rush, Operations, EAH Housing

THURSDAY, October 14, 2021

10:30 AM – 12:00 PM (Housing providers only)

State Affordable Housing Funding Programs Regulations and Electrification

- Amy Dryden, Director of Strategic Innovation, Association for Energy Affordability, Inc.
- Mark Stivers, Director of Legislative and Regulatory Advocacy, California Housing Partnership

1. Challenges and Key Findings: Prioritizing California's Affordable Housing in the Transition Towards Equitable Building Decarbonization

KEY CHALLENGES

The second Building Decarbonization Summit (Summit II) focused on the associated policy recommendations developed after barriers to decarbonization for multifamily affordable housing providers in California were categorized by participants of Summit I into a list of key challenges. After Summit I, the following five challenges were identified as the primary barriers to equitably decarbonizing new and existing affordable rental housing:

- 1. Increased Complexity and Cost of Technologies:** Providers pointed to the increased costs and design challenges of installing electrification technologies, including central domestic hot water heating (DHWH) systems, electric vehicle (EV) charging infrastructure, and battery storage.
- 2. Limited Workforce Capacity and Availability:** Providers pointed out the difficulty of finding external contractors and internal staff knowledgeable and experienced with the procurement, installation, and maintenance of these new technologies.
- 3. Cost Impacts and Financial Feasibility Implications:** Providers agreed that for new construction, initial equipment and installation costs are now comparable to gas infrastructure in the majority of situations (excluding the installation of EV charging infrastructure and upgrading or adding transformers). For existing buildings, however, they are concerned about high procurement and installation costs for new electric equipment and higher operating costs because of added electrical loads. Higher operating costs could lead to reduced net operating income and therefore less leveraged debt, thus reducing competitiveness for tax-exempt bond finance and Low-Income Housing Tax Credits (LIHTC/"Housing Credits"). Time Of Use rates and more expensive electric rates also add uncertainty about long-term operating costs in new construction and resident utility bills and operating costs in existing buildings.
- 4. Exacerbated Split Incentives:** Providers noted the financial difficulties posed by paying for all-electric upgrades to existing buildings while being unable to recuperate costs through adjusted rents. Uncertainty around the future of electricity rates, solar tariffs, utility allowances, and program restrictions exacerbate this issue in existing buildings.
- 5. Misaligned Energy and Housing Programs:** Providers noted a need for more energy-specific financial incentives to electrify new and existing buildings that align with existing affordable housing programs for simpler and streamlined participation. Arduous application processes and barriers to leveraging funds from multiple electrification programs are also barriers to comprehensively electrifying the building stock. Some new and existing electrification incentive programs fail to align their rules with the timelines and structures of the LIHTC program.

KEY RECOMMENDATIONS

The following policy recommendations were discussed with Summit II participants in sessions that took place across the three consecutive days in October 2021.

Fund Technical Assistance (TA)

State agencies and cities with local reach codes should coordinate with local Community Choice Aggregators (CCAs) and investor-owned utilities (IOUs) to provide funding for comprehensive TA to help nonprofit controlled affordable rental housing providers navigate the challenges of converting existing buildings to become all-electric, as they are more challenging to decarbonize. The TA should be flexible and tailored to meet the sector's specific needs, including navigating Title 24 (T24) challenges, assessing and adjusting Utility Allowances (UA), and building design concerns.

Build Staff Capacity through Training

Policymakers overlook asset and property management staff as a critical workforce in making the transition to a decarbonized economy. These staff need help learning about newer technologies to enable informed decision-making and must be trained to monitor, maintain and fix any issues. This targeted curriculum should be part of the state and cities' decarbonization initiatives in coordination with the utilities and community college system, tailored specifically to meet the nonprofit affordable housing sector's needs.

Create Flexibility through Interim Exemptions

If the California Energy Commission (CEC) is going to pass an all-electric T24 for 2022 and cities with all-electric reach codes, it must provide rent-restricted affordable housing providers with exemption flexibility through 2025 to avoid making affordable housing properties financially infeasible

or forcing a reduction in the number of affordable homes they can build.

Offset Higher Costs within State Housing Programs

If the state is serious about its decarbonization goals, it must work with the Treasurer's office to make sure the Tax Credit Allocation Committee (TCAC) and the California Debt Limit Allocation Committee (CDLAC) better account for the carbon reduction, improved resident health, and better indoor air quality in their competitive processes and push to contain costs. To make electrification a more feasible goal for projects funded by these agencies, TCAC should award a threshold basis boost to all-electric construction developments. CDLAC must modify its tiebreaker to give adequate weight to "public benefit efficiency," which includes fuel-switching measures for existing buildings and all-electric new construction. Alternatively, these agencies could recognize electrification benefits within their program rules while excluding clean energy costs and program incentives from development budgets and cost containment measures.

Increase Electrification Incentive Payments

The state should explicitly allocate more funding to incentivize decarbonize in both new and existing affordable housing. It should also ensure these programs can be co-leveraged and flexible and aligned with each other and with state housing finance agency competitive requirements and timelines. Utility programs should combine TA and incentives so providers do not pay more upfront or in year one of operating costs through incentives and rate design.

Technical Assistance



Workforce

**Tenant Protections/
Bill Savings**



Cost

Programs & Incentives

Insights from Attendees

- A **centralized information hub for technical assistance** continues to be a priority for teams with knowledge gaps.
- Addressing **workforce capacity issues** requires ensuring high job quality, sustainable wages, and developing relationships with local workforce.
- Clean energy programs should **emphasize lowering operating costs and tenant utility bills** to help make the financial case for decarbonization.
- There are still **many barriers to electrifying existing buildings**, as compared with electrifying new construction.



2. The Future of Title 24 and Electrification Standards for Existing Buildings

Understanding Impact of Current and Future T24 Standards

TCAC and CDLAC impacts under Title 24

- 3-5 sustainable building method points are awarded to projects
- There is a 4% increase in threshold basis limits for new construction that is at least 5 points more efficient than 2019 T24 standards

Title 24 2022 Update

- The CEC will mandate rooftop solar, storage, and electric heat pump space heating under a prescriptive approach beginning in 2023

Title 24 2025 Update

- The CEC is considering all-electric new construction standards for 2025

Impacts of Local Reach Codes and Other Efforts

- 50 cities in California have passed all or near-all-electric reach codes (eight in the past year).
- The City of Los Angeles, which houses approximately 1/8th of California's affordable rental homes, is considering a building decarbonization ordinance for new and existing buildings.
- The California Air Resources Board (CARB) is considering a zero-emission standard for appliances beginning in 2030.
- Regional air quality management districts (AQMDs) are considering NOx regulations to essentially ban the sale of natural gas appliances.

Insights from Attendees

- There is a **broad range of experience, internal capacity, and knowledge** around building decarbonization among affordable housing providers, though Southern California providers are much less experienced on the issue.
- **Interim exemptions are needed** for properties without capacity/space for electrification technology, historical buildings, and where costs for tenants will rise significantly.
- **Alignment between decarbonization mandates and affordable housing programs** is vital so as not to put affordable housing at a disadvantage.
- **Different timelines** for decarbonizing new construction versus existing buildings are necessary.

3. Facilitating Electrification through Utility Allowances

Understanding Utility Allowances

- Utility Allowances (UAs) are often set **higher than residents' actual utility bills**.
- Split Incentive: Even if providers want to install energy efficient or renewable technologies, they are **unable to recover the savings** from those upgrades.
- Ideally UAs can be **lowered to reflect electrification upgrades**, reducing the split incentive without adversely affecting residents.
- **Common UA calculation methods** used in California: 1) local public housing authority (PHA) schedules, 2) California Utility Allowance Calculator (CUAC).

CHALLENGES

- Both methods lacking newer electrification technologies
- Inconsistency between technologies included in both methods
- Many PHA schedules do not include air conditioning, despite increased need for cooling
- Lack of transparency and accountability in PHA UA process
- Restrictions on CUAC eligibility

RECOMMENDATIONS

- Require PHAs and CUAC to incorporate these technologies
- Same technologies should be accounted for in each method
- Expand the adoption of air conditioning allowances
- PHAs should publish UA calculation method online
- Expand CUAC usage for different types of housing finance funding

Please review *Facilitating Building Decarbonization through Utility Allowances*, a 2022 report from the California Housing Partnership, for additional details:

<https://chpc.net/resources/facilitating-building-decarbonization-through-utility-allowances/>

Insights from Attendees

- Providing allowances would help **alleviate the cost barriers for newer electrification technologies**, including heat pump space heaters, heat pump water heaters, and battery storage.
- UA methods should be updated to reflect broader changes across California, including the transition to **Time of Use (TOU) rates** and the **increased frequency of heat waves**.
- Increasing **education and awareness about UA options** would help providers adopt more accurate allowances.
- **Align layers of UA regulations** from state, county, city, and funding sources.



4. Facilitating Electrification through Utility Allowances

Program Name	Building Type	Program Focus	Service Area	Available Funding
Building Initiatives for Low Emissions Development (BUILD)	New Construction	Water, Space Heating, and Cooling	IOU service territories	\$60M
Solar on Multifamily Affordable Housing (SOMAH)	Existing Buildings/Rehabs	Solar Photovoltaics (PV)	IOU service territories	\$300M
Low-Income Weatherization Program (LIWP)	Existing Buildings/Rehabs	Energy Efficiency and Solar PV	Statewide	Waitlist
Self Generation Incentive Program (SGIP)	New and Existing Buildings	Battery Storage, Fuel Cells, and Wind Turbines	IOU service territories	Waitlist

Insights from Attendees

- Funding programs that have a more **holistic integration of incentives** for electrification are preferred for the phasing out of gas infrastructure from affordable housing.
- Absent a fully integrated option, **funding program alignment is necessary** to allow for layering of resources.
- **Covering upfront costs** of electrification retrofits remains a barrier for affordable housing providers.

5. Resiliency in Affordable Housing: Solar, Storage, and Cooling

Priorities

- Cost considerations and funding gaps
- Understand impacts of not funding gas appliances in future retrofits or new construction
- Charting a path toward a gas phase out
- Electrification-readiness programs and demand aggregation

Insights from Attendees

- **Long-term operation and maintenance costs** are often overlooked when discussing electrification and storage financing.
- Battery storage and other resiliency measures are relatively newer technologies, and **providers need more education and technical assistance** to become knowledgeable.
- **Motivating factors** to install resiliency measures include tenant and common area financial savings, natural disaster response, and battling climate change.

6. State Affordable Housing Funding Program Regulations and Electrification

Priorities

- Concerns that electrification mandates would negatively impact ability to remain competitive for tax credit funding

Discussion on the Partnership's TCAC/CDLAC proposals

- Add to the TCAC threshold basis limits an increase for projects that commit to decarbonization. The threshold basis limits affect how many credits a project can receive, a project's "high cost test" calculation, and the project's CDLAC point score.
- Acknowledge in the pending benefit efficiency tiebreaker proposed for CDLAC in 2022 and beyond the additional costs of decarbonization. The proposed tiebreaker is a ratio of public benefits to public resources and/or project cost. The tiebreaker should acknowledge added costs in a way that is relatively neutral, neither rewarding decarbonization too much such that people are effectively required to choose it regardless of cost nor penalizing developers who choose or happen to have a local reach code requirement.

Insights from Attendees

- **Mixed opinions**, based on multiple factors related to electrification, on whether decarbonization measures should be treated as "neutral"
- **Need for a network of practitioners** to share best practices and discuss challenges related to the decarb process across regions and housing types
- Support for creating a **one stop shop** for all major affordable housing funding plus clean energy programs in the state

Future Considerations

Considerations for future building decarbonization summits for California multifamily affordable housing providers.

CHALLENGES

- The sustainability field is not diverse
- Some attendees are newer to the decarb topic while others want advanced discussions
- Expand participation, especially by Southern CA housing providers
- Non-housing providers sometimes lack a way to participate in the conversations
- Need more advance notice for consecutive-day events

RECOMMENDATIONS

- Identify and engage diverse panelists early in the year and grow the GREEN Network
- Mark sessions beginner, intermediate, and advanced levels to manage expectations
- Offer in-person and virtual options or focus a convening in Los Angeles
- Keep some sessions open beyond housing providers to draw diverse perspectives
- Provide 3-month advance notice and enhance outreach



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