

DOCKETED	
Docket Number:	18-IEPR-08
Project Title:	Energy Equity
TN #:	223811
Document Title:	NRDC Comments on CLIMB Action Plan
Description:	N/A
Filer:	System
Organization:	Natural Resources Defense Council
Submitter Role:	Public
Submission Date:	6/13/2018 4:42:32 PM
Docketed Date:	6/13/2018

Comment Received From: Isaac Sevier
Submitted On: 6/13/2018
Docket Number: 18-IEPR-08

NRDC Comments on CLIMB Action Plan

Additional submitted attachment is included below.

**BEFORE THE ENERGY COMMISSION OF THE STATE OF
CALIFORNIA**

Draft Staff Report “Clean Energy in Low-
Income Multifamily Buildings (CLIMB)
Action Plan”

18-IEPR-08
(Filed May 29, 2018)

**COMMENTS OF THE NATURAL RESOURCES DEFENSE COUNCIL ON THE
DRAFT STAFF REPORT “CLEAN ENERGY IN LOW-INCOME MULTIFAMILY
BUILDINGS (CLIMB) ACTION PLAN”**

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Submitted: June 13, 2018

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I. Introduction

The Natural Resources Defense Council (NRDC) respectfully submits these comments on the Energy Commission (CEC) Draft Staff Report *Clean Energy in Low-Income Multifamily Buildings (CLIMB) Action Plan* filed on May 29, 2018. It is encouraging that the Energy Commission has drafted this plan with the input of multiple agencies, convened a wide range of stakeholders at its May 30 workshop on the topic, and continues to seek feedback to strengthen and focus the CLIMB plan.

This intentional focus on the *low-income* multifamily (LIMF) sector comes at a critical time in California when 40% of Californians (5.1 million households) live at or below 200% of the Federal Poverty Level (the widely accepted benchmark for what constitutes “low-income”) and when almost 44% of low-income households live in rented, MF housing that is either naturally affordable or affordable through intentional government policies and programs. These households translate to nearly 7 million Californians that face difficulty covering the cost of housing and energy statewide.

Our comments focus on the urgent need to appropriately 1) set actions at the scale that is required to make a meaningful difference in the lives of Californians currently facing structural

barriers to accessing clean energy in the buildings in which they reside; 2) highlight the distinctions required in the Action Plan between various segments of the multifamily housing sector; and 3) encourage the Energy Commission to inform their recommended actions by addressing successful existing programs that achieve high levels of energy and water savings and greenhouse gas reductions, but face challenges to scaling to the need in California. Finally, we list numerous resources that may help to illuminate the multifaceted challenge that belies a seemingly simple target: multifamily buildings that house low-income Californians.

II. The Energy Commission should prioritize and refine the strategies listed in the Action Plan to focus on those enabling progress at scale.

The Energy Commission has presented a multi-level strategy to improve access to clean energy within the low-income multifamily building sector. These strategies must be targeted at the known barriers specific to the low-income portion of the multifamily building sector, and we encourage the Energy Commission to strengthen its recommendations to adequately address the scale of this challenge.

The S.B. 350 Barriers Study Part A, published by CEC in 2016, establishes a strong foundation for knowledge on the topic of low-income barriers to accessing clean energy. Chapter 4 from the Action Plan incorporates many, but not all, of these known barriers and we encourage the Energy Commission to focus on developing this chapter and to consider comments we submitted on the Barriers Study on May 30, 2017. We reiterate our specific recommendations to:

1. Provide guidance to streamline program enrollment and coordination processes,
2. Offer one-stop technical assistance to owners and renters, and
3. Develop consistent performance-based goals and metrics applied to all LIMF programs and implementation actions.

For more details about each of these high-level goals, we include the comments we submitted on the Barriers Study as Appendix I to this document.

We further recommend that the California Energy Commission provide recommendations on par to address the scale of the need. For example, we urge the CEC to recommend the following, among other bolder action steps:

1. Outline a 10 to 20-year public and private funding plan necessary to achieve the existing need. Given that there are approximately two million low-income rental households living in buildings with 5+ units, and a holistic retrofit requires \$3000-5000 to complete, the state is facing **an \$8 billion challenge**. At minimum, this will require funding a robust roadmap and funding plan, one that is similar to what California has invested in for the solar and storage sectors.
2. Create a centralized statewide program model and administration for low-income multifamily programs while allowing for regional and local implementation and variation.
3. Align benchmarking regulations with subsequent requirements to improve energy efficiency.

III. The low-income multifamily housing sector is distinct from the market-rate multifamily sector and requires unique attention due to the complexity of its ownership, financing, and regulation.

The affordable housing sector (both naturally occurring or regulated) faces barriers that are unique and may not be shared by the rest of the multifamily housing sector. Most notably, Californians with higher incomes participating in the rental market have more choices than low-income Californians, thus resulting in different incentives for the owners in the market. With

limited incomes, these Californians do not have the *means* to invest in upgrades nor the incentive to, *so it is of utmost importance to address the split-incentive problem appropriately without conflating all owners of multifamily properties as having the same incentives or target renters.*

See, for example: Ross, L., Jarrett, M., York, D. May 2016. Reaching More Residents: Opportunities for Increasing Participation in Multifamily Energy Efficiency Programs Report U1603. American Council for an Energy-Efficient Economy. <http://aceee.org/research-report/u1603>.

When considering solutions that will increase access to clean energy for low-income Californians, NRDC encourages the Commission to understand the diversity of housing types present. In California, 44% of all low-income households reside in multifamily buildings, however there is not a one-size-fits-all approach to all multifamily buildings due to their diversity of ownership (which represents different financial motivations); different sizes (e.g. duplexes vs. large buildings containing anywhere from five to hundreds of units); and the critical distinction between the uses of the word “affordable” when applied to low-income housing.

The use of the word “affordable” can mean different definitions depending on context. “Naturally affordable” (sometimes referred to as “market-rate affordable”) generally refers to housing stock that is low priced in the market, and in practice, often means lower quality physical or environmental conditions. The use of “affordable” without a modifier generally refers to housing regulated by federal and/or state policies which place restrictions on the amount charged for rent, sometimes tied to the property title or to the Federal Low-Income Housing Tax Credit (LIHTC). This use is sometimes described with terms like “deed-restricted” or “rent assisted” which have some policy nuance that these comments don’t attempt to address comprehensively. These attributes create two very different subsets of the housing stock, which

NRDC's presentation on May 30 covered in brief detail, and on which substantial literature exists.

Additionally, there are select areas which deserve further research and NRDC encourages the CEC and its sister state agencies to focus efforts on:

- *Treating the naturally affordable building stock.* As mentioned in Chapter 5, unifying what is already known about low-income multifamily building stock should be a priority, and that research should focus more specifically on the ownership, physical conditions, and amount of underinvestment in naturally affordable or market-rate affordable low-income multifamily buildings. These properties range from simply being outdated (without the latest in energy saving appliances and measures) to being severely neglected and in need of serious rehabilitation. The Department of Housing and Community Development published in February 2018 *California's Housing Future: Challenges and Opportunities*¹ which notes that older homes in the state “tend to have greater rehabilitation needs, as well as lower energy efficiency.”
- *Coordinating and leveraging existing resources.* As mentioned in Chapter 7, insufficient and unpredictable resources limit the transformative effect of low-income programs. NRDC recognizes that there are opportunities to leverage funding across federal and state programs, specifically with the goal of using all available funding to overcome the individual limitations of each funding source to comprehensively retrofit low-income multifamily housing. The Action Plan should prioritize understanding and enabling easy utilization of all available sources of funding for

¹ Department of Housing and Community Development. February 2018. *California's Housing Future: Challenges and Opportunities*. http://www.hcd.ca.gov/policy-research/plans-reports/docs/SHA_Final_Combined.pdf

building and energy retrofits, while expanding the view beyond typical energy efficiency and weatherization programs.

IV. The California Community Services and Development Low-Income Weatherization Program (LIWP) service track for multifamily buildings is a national model for excellent program design and delivery.

LIWP achieves deep energy savings of 44 percent and meaningful greenhouse gas reductions due, in part, to its holistic program design which focuses goals on greenhouse gas savings first rather than energy savings achievable within narrow cost constraints. However, the LIWP program is seriously constrained by limited funding that is up for reallocation by the Legislature on an annual basis via the greenhouse gas reduction fund. The program also has overwhelming demand despite a very limited marketing budget. Currently, over 300 affordable housing owners are subscribed to the waiting list. At the same time, other low-income efficiency programs, such as the Energy Savings Assistance program, generate approximately \$100 million in unspent funds annually and save an average of 4 percent per household. We urge the California Energy Commission via this Action Plan to propose solutions to scale LIWP. At minimum, we recommend the CEC make note of this major discrepancy in funding and program outcomes.

The American Council for an Energy-Efficient Economy recognizes LIWP as a model for combining rooftop solar and energy efficiency delivery successfully under one program.² LIWP achieves double the average energy savings of other low-income multifamily programs across

² Samarripas, S., York, D. May 2018. *Our Powers Combined: Energy Efficiency and Solar in Affordable Multifamily Buildings Report U1804*. American Council for an Energy-Efficient Economy. <http://aceee.org/research-report/u1804>

the 51 largest metropolitan areas in the United States.³ LIWP incorporates many of the best-practice recommendations of the Energy Efficiency for All *One-Stop Shops for the Multifamily Sector*⁴ which have been documented to overcome many of the barriers present to delivering programs to the low-income multifamily sector and include the split-incentive problem, mentioned in Chapter 6.

Progress towards the state's ambitious greenhouse gas goals will not be supported by this Action Plan focusing precious resources on the PUC's Common Resource Valuation Method or a literature review of EM&V reports. Instead, we urge the CEC to recognize the limits of using traditional total resource cost and EM&V methodologies, which fail to recognize the broad barriers faced by low-income Californians, as well as the broad benefits that accrue beyond energy resource planning, including housing affordability, health, economic development, and climate resiliency.

V. We recommend the CEC review the following resources to further improve the CLIMB Action Plan.

- Drehobl, A., Ross, L. April 2016. *Lifting the High Energy Burden in American's Largest Cities*. American Council for an Energy-Efficient Economy. <http://aceee.org/press/2016/04/report-energy-burden-low-income>
- Ross, L., Jarrett, M., York, D. May 2016. *Reaching More Residents: Opportunities for Increasing Participation in Multifamily Energy Efficiency Programs Report U1603*. American Council for an Energy-Efficient Economy. <http://aceee.org/research-report/u1603>
- Samarripas, S., York, D. May 2018. *Our Powers Combined: Energy Efficiency and Solar in Affordable Multifamily Buildings Report U1804*. American Council for an Energy-Efficient Economy. <http://aceee.org/research-report/u1804>

³ Drehobl, A., Ross, L. April 2016. *Lifting the High Energy Burden in American's Largest Cities*. American Council for an Energy-Efficient Economy. <http://aceee.org/press/2016/04/report-energy-burden-low-income>

⁴ *One-Stop Shops for the Multifamily Sector*. Energy Efficiency for All. <http://energyefficiencyforall.org/resources/one-stop-shops-multifamily-sector>

- Tomm, B., Rose, E., Hawkins, B., Conlon, B. September 2014. *Health and Household-Related Benefits Attributable to the Weatherization Assistance Program ORNL/TM-2014/345*. Oak Ridge National Laboratory.
https://weatherization.ornl.gov/Retrospectivepdfs/ORNL_TM-2014_345.pdf
- Cook et al. 2008. *A brief indicator of household energy security: associations with food security, child health, and child development in US infants and toddlers*. Pediatrics. <https://www.ncbi.nlm.nih.gov/pubmed/18829785>
- Affordable Housing Owner focus group on barriers to holistic retrofits – convened by Energy Efficiency for All in 2017. See Appendix II for summary.
- Energy Efficiency for All Publications:
 - One-stop shops for the multifamily sector. 2017.
<http://energyefficiencyforall.org/sites/default/files/EEFA%20OneStopShop%20Fact%20Sheet%20%282%29.pdf>.
 - Program Design Guide: Energy Efficiency Programs in Multifamily Affordable Housing. May 2015.
<http://www.energyefficiencyforall.org/sites/default/files/Full%20Program%20Design%20Guide.pdf>.

VI. Conclusion

The urgent need for focused and scalable actions for the lower-income multifamily sector cannot be understated. We urge the California Energy Commission to adopt the recommendations above to ensure the action plan appropriately outlines actions sufficient to meet the scale of the climate and affordable housing crises. We very much appreciate the opportunity to provide these comments.

Sincerely,

/s/ Isaac Sevier and Maria Stamas

Isaac Sevier

Maria Stamas

Appendix I: May 30, 2017 NRDC Comments on Barriers Study

May 30, 2017

California Energy Commission
1516 Ninth Street
Sacramento, CA 95814-5512

NATURAL RESOURCES DEFENSE COUNCIL COMMENTS ON THE CALIFORNIA ENERGY COMMISSION'S MAY 16, 2017 BARRIERS STUDY IMPLEMENTATION WORKSHOP

The Natural Resources Defense Council (NRDC) appreciates the opportunity to provide comments on the May 16, 2017 Implementation Workshop for the “Low-Income Barriers Study, Part A: Overcoming Barriers to Energy Efficiency and Renewables for Low-Income Customers and Small Business Contracting Opportunities in Disadvantaged Communities.”

We appreciate the California Energy Commission's continued efforts to address program barriers for low-income communities, and we provide these comments to offer specific implementation recommendations.

In summary, our recommendations are as follows:

- I. The Energy Commission and State Task Force should provide guidance to streamline program enrollment and coordination processes by:
 - A. Creating a statewide application and online portal,
 - B. Developing consistent low income eligibility requirements on a statewide level,
 - C. Ensuring that energy savings attribution and participant goals do not create perverse incentives to coordinate offerings, and
 - D. Providing longer program timelines of at least 3 to 5 years for low-income multifamily programs.

- II. California should offer tailored clean energy and water programs for low-income multifamily housing that offer one-stop technical assistance for owners and renters, by:
 - A. Ensuring accessible and meaningful mechanisms exist for owners and tenants to provide continual program feedback to implementers and governing bodies,
 - B. Leveraging and expanding the LIWP program and the Los Angeles Better Buildings Challenge's one-stop multifamily offerings for properties in Los Angeles, and

- C. Targeting multifamily programs to owners at common investment or “trigger” points.

- III. The Energy Commission, in coordination with relevant agencies, should (1) develop consistent performance-based goals and metrics, (2) incorporate robust non-energy benefits into societal cost effectiveness tests, and (3) emphasize energy and bill savings goals rather than solely the number of homes treated.

- I. **The Energy Commission and State Task Force should provide guidance to streamline program processes by:**
 - A. **Creating a statewide application and online portal,**
 - B. **Developing consistent low income eligibility requirements on a statewide level,**
 - C. **Ensuring that energy savings attribution or participant goals do not create perverse incentives to coordinate offerings, and**
 - D. **Providing longer program timelines of at least 3 to 5 years for low-income multifamily programs.**

The CEC barriers report recommends creating a statewide task force comprised of relevant agencies to align program eligibility requirements and reduce redundancies. Below we recommend some additional mechanisms that would help streamline and coordinate existing programs.

A. Create a statewide application and online portal.

We recommend that the task force oversee the creation of a statewide website and single application form to enable easy access to multiple programs. We also recommend that any website leverage existing online resources such as the Energy Upgrade California website and the ARRA created fund-finder for multifamily programs.

Lack of program integration and accessibility is one of the primary challenges highlighted in the CEC’s barriers study and greatly limits participation. A single online resource that provides easy access to relevant points of contact and that provides a simple electronic application form would help resolve this issue. The statewide application should be provided in several languages.

Example: The Low-Income Energy Affordability (LEAN) program in Massachusetts uses a website that provides access to a variety of resources and programs for low-income multifamily housing all in one place. It also provides a single online application. See <http://leanmultifamily.org/>.

B. Develop consistent low-income eligibility requirements on a statewide level.

The CEC barriers study emphasizes the need to address the inconsistencies in low-income program eligibility requirements and documents the wide range of definitions used for “low-income” programs.

We recommend the Energy Commission and/or State Task Force take a multi-pronged approach to aligning income eligibility. In the near-term, we recommend adopting a streamlined eligibility process that would enable residents and low-income property owners to submit their income information only once for all programs they are interested in participating in, and that they are qualified for. This information would be shared with relevant programs on the back-end. In the medium-term we recommend the Task Force explore allowing residents or low-income property owners interested in participating in multiple programs to use the most liberal low-income standard among the various programs. This would allow for easy program leveraging and streamlined administrative processes. In the longer term, we also recommend the Task Force

assess the implications of adopting a single standard income eligibility standard for low-income programs. Moving forward, each new program would follow this set of eligibility requirements.

Meanwhile, the Energy Commission could also determine how existing programs can best transition to the new set of eligibility requirements. We note that the latter two approaches would very likely require statutory changes.

The objective of consistent eligibility requirements is to simplify the application process, allow for easier participation in multiple programs, and cut down on administrative costs. In order to achieve these objectives, a well-designed transition will be key.

Example: For low-income multifamily properties, the Low-Income Energy Affordability Network (LEAN) one-stop program utilizes one income eligibility requirement, “at least 50% of the units are affordable to households making 60% or less of AMI.”

C. Ensure that energy savings attribution or participant goals do not create perverse incentives to coordinate offerings.

When there are multiple programs for a single sector that each have separate energy savings or participant goals, a dynamic of competition is often created that works against efforts to leverage program offerings, share information among administrators, or refer customers to an alternative program better suited to their needs. We recommend the State Task Force examine this issue as it identifies goals and metrics for adoption, and consider adopting *shared* sector-wide goals and/or adopting new goals that specifically measure how many properties or households leveraged more than one program and how many referrals a program administrator offered to outside resources.

D. Provide longer program timelines of at least 3 to 5 years for low-income multifamily programs.

Multifamily comprehensive retrofits take at least twenty-four months, and often longer, from planning to completion. However, existing programs operate on widely varying and short start-and-stop cycles, making it difficult to leverage multiple offerings.

We therefore recommend that the Statewide Task Force (1) adopt longer program cycles that recognize and support the complex nature of multifamily project design, development and implementation, (2) provide funding stability that enables property owners to begin planning for projects that are 2-3 years out and that align with planned tax credit rehabilitations, (3) provide mechanisms to allow for rollover of unspent funds from one cycle to be put towards projects completed in future cycles, and (4) provide mechanisms for owners to complete multi-phase upgrades over time.

- II. California should offer tailored clean energy and water programs for low-income multifamily housing that offer one-stop technical assistance for owners and renters, by:**
 - A. Ensuring accessible and meaningful mechanisms exist for owners and tenants to provide continual feedback on programs to implementers and governing bodies**
 - B. Leveraging and expanding the LIWP program and the Los Angeles Better Buildings Challenge’s one-stop multifamily offerings for properties in the Los Angeles region**
 - C. Targeting multifamily programs to owners at common investment or “trigger” points**

The CEC barriers study recommends establishing multiple regional one-stop shops as well as a statewide Multifamily Action Plan.⁵ We recommend the CEC take the following steps to establish these offerings:

- A. Ensure accessible and meaningful mechanisms exist for owners and tenants to provide continual feedback to program implementers and governing bodies.**

One example of such a mechanism would be a program implementer and utility working group, tasked with coordinating across utilities and the affordable housing community, similar to the example provided below.

Example: The Low-Income Energy Affordability Network (LEAN) and the Massachusetts utilities operate various low-income multifamily programs offered by the multiple gas and

⁵ California Energy Commission, “SB 350 Low-Income Barriers Study, Part A - Commission Final Report,” page 9, December 16, 2016. Recommendation states “...should establish a pilot program for multiple regional one-stop shops to provide technical assistance...”

electric companies of Massachusetts. Through its network, LEAN is able to coordinate several programs and funding sources to implement comprehensive energy saving measures on buildings of all kinds at no cost to the client. The program coordinates across utilities and the affordable housing community through an Advisory Committee. Additionally, a Best Practices Group, which includes the utility program administrators, meets regularly to help align the program incentives and requirements across the utilities and to consider how to incorporate new measures.

B. Ensure robust technical assistance exists for low-income multifamily properties, and leverage and expand the LIWP program for disadvantaged communities and the Los Angeles Better Buildings Challenge's one-stop multifamily offerings for properties in the Los Angeles region

The CEC barriers report recommends the creation of multiple pilot one-stop shops. For the multifamily sector, we recommend that CSD's LIWP multifamily program and Los Angeles' Better Building Challenge program⁶ be leveraged for at least two of these pilots. Below, we provide additional information on the types of services that would be provided as part of these one-stop shop offerings.

Owners of low-income properties are resource-constrained and often lack the expertise to navigate the numerous and constantly-changing energy and water programs available in California. Numerous models across the country have emerged that provide robust, yet flexible technical assistance and one-stop shop service. We recommend one-stop pilots for the low-income multifamily sector incorporate the below program elements:

Technical assistance includes a flexible menu of the following services: initial owner consultation; desktop project assessments; benchmarking; on-site property assessment; energy modeling, savings calculations, and scope development; owner scope negotiations; final scope agreements; assistance with performance specifications, contractor procurement, bid reviews, and submittal reviews; financing assistance; permitting assistance; incentive reservation processing; on-going and extensive project management assistance, including contractor, design team, and developer coordination; and on-going monitoring post-completion. Leading programs can accomplish various combinations of these services for owners for between \$50-100 per unit.

A one-stop-shop can further provide coordination across electricity, gas, and water programs. Because these utilities are often supplied by different entities, there is a risk that utilities may not encourage projects that aim at comprehensive savings. A one-stop-shop can assist owners in capturing savings across all fuels and water. A one-stop-shop also allows building owners to access integrated program services. Program experience shows that building owners benefit from access to people who can help navigate program offerings and provide project development and technical assistance, such as initial assessments, audits, and project support. The individuals in a one-stop-shop, such as the single point of contact (SPOC), can become trusted advisors to local building owners. The people in this function should be specialists and build relationships with local partners, such as lenders, contractors, and utility staff. A SPOC can assess entire portfolios

⁶ See <http://la-bbc.com/>.

to identify which programs can meet the needs of individual properties, discovering avenues to leverage multiple funding sources.

Example 1: The Association of Energy Affordability (AEA) serves as a SPOC for California's Low-Income Weatherization Program and provides robust technical assistance, which includes assisting with the coordination of leveraged rebates and incentives and the procurement of appropriate contractors among other services. The LIWP program overall is a one-stop shop program, and the first program in California to break down the silos of energy efficiency, solar PV, and solar thermal by providing all three offerings to property owners via the same program pathway and single implementation model.

Example 2: LEAN, described in the previous section, provides clients with a SPOC. The SPOC helps with a full range of services, including access to the WegoWise benchmarking tool, energy audits, assistance with the development and approval of a scope of work, obtainment of grant funding, project management, assigning a contractor to carry out the work, and quality assurance.

Additional one-stop multifamily programs exist in Chicago, Delaware, and New York.

C. Target multifamily programs to owners at common investment or “trigger” points

Targeting owners when they are likely to be undergoing property or equipment rehabs is critical for accomplishing comprehensive energy reduction projects. Building owners, especially those of deed-restricted affordable properties, have limited ability to refinance their properties and tend to make investments at key juncture points. It is critical to target owners ahead of these critical junctures to enable them to leverage available financing and program incentives to go deeper than they would without a program intervention.

The following situations are ideal for programmatic targeting and deep energy retrofits⁷:

- Affordable housing owners accessing or renewing low-income housing tax credits and undergoing resyndication
- End- (or near end) of-life roof, window or siding replacement
- End- (or near end) of-life HVAC, lighting or other major equipment replacement
- Upgrades to meet code
- New acquisition or refinancing
- Compliance with benchmarking requirements

It is also critically important that programs not be penalized for targeting owners at these major junctures through estimates of “free ridership” that reduce or zero out energy savings attributable to program administrators. We recommend the State Task Force consider adopting a new metric or program rule to ensure that owners targeted at these junctures adopt deeper property retrofits than they otherwise would

⁷ See Rocky Mountain Institute: <https://rmi.org/our-work/buildings/pathways-to-zero/deep-retrofit-tools-resources/deep-retrofit-case-studies/>.

without intervention while also providing certainty and incentives for program administrators to continue to target owners at these key times.

III. The Energy Commission in coordination with relevant agencies should (A) develop consistent performance-based goals and metrics, (B) incorporate robust non-energy benefits into societal cost effectiveness tests, and (C) emphasize energy and bill savings goals rather than solely the number of homes treated.

To implement the CEC’s recommendations to establish common metrics and collect and use data systematically across programs,⁸ we recommend the following:

A. Develop consistent performance-based goals and metrics.

We recommend consistent performance-based goals and metrics be adopted across programs. The following are examples of meaningful metrics that should be considered:

- Number of successfully completed projects.
- Percent of projects completed from initial intake, e.g. attrition rates
- Length of time from intake to successfully completed projects.
- Reasons and timeline of participant attrition.
- EUI reduction in treated properties.
- Average program expenditure per customer.
- Energy, greenhouse gas, and co-pollutant savings
- Bill savings
- Property type (single-family, multifamily, or mobile home)
- Customer demographics
- Energy burden (percentage of income spent on utility costs)
- Number of programs leveraged

B. Incorporate robust non-energy benefits into programs that use strict energy efficiency cost effectiveness tests and use a societal cost test.

We recommend programs using cost-effectiveness tests adopt a Societal Cost Test and incorporate the full range of non-energy or “co-benefits.” As part of the November 2016 Energy Savings Assistance Decision, the California Public Utilities Commission will be completing an updated non-energy benefits

⁸ California Energy Commission, “SB 350 Low-Income Barriers Study, Part A - Commission Final Report,” page 8, December 16, 2016. The recommendation referred to states “*The Legislature should require collaboration among all program delivery agencies to establish common metrics and collect and use data systematically across programs to increase the performance of these programs in low-income and disadvantaged communities, including requirements to . . .*”

study that can be leveraged for programs statewide. We also recommend ensuring that health and safety co-benefits be incorporated.

C. Emphasize energy and bill savings goals rather than solely the amount of homes treated.

We recommend programs adopt energy and bill savings goals in addition to participant targets. Experience with programs such as the Energy Savings Assistance program has demonstrated that if the sole programmatic goal is to reach as many homes as possible, a perverse incentive can result whereby minimal energy and bill savings are achieved for each household treated.

Additionally, we recommend that the Energy Commission also include an energy burden reduction goal and metric to track residents' bill savings. Research shows that low-income households disproportionately face high energy burdens,⁹ and steps need to be taken to address this inequity. Energy burden is the percentage of household income spent on home energy bills.¹⁰ This definition can inform the way in which the energy burden reduction metric is defined and how the goal is set.

Thank you for the opportunity to offer these comments on the implementation of the SB 350 Barriers report.

Sincerely,

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⁹ American Council for an Energy Efficient Economy, "Lifting the High Energy Burden in America's Largest Cities: How Energy Efficiency Can Improve Low-Income and Underserved Communities," April 20, 2016.

¹⁰ *Ibid.*

Appendix II: Key Findings and Recommendations from Energy Efficiency for All California Multifamily Property Owner Convening in February 2017

Key Findings:

- Ownership and capital stacks are highly complex, and highly varied across different properties, eras, and mortgage and capital support arrangements. There are many decision-makers (owners, investors, developers, asset managers, operators, plus legal, accounting, HUD) in each property. And owners of deed-restricted affordable housing are often not able to “keep” the savings; instead they are often returned to HUD or local and state lenders (in the case of tax incentives).
- Major upgrades and projects typically occur at financing events. For deed-restricted affordable properties, this often occurs when tax credit terms or long-term loans/mortgages expire. For market rate properties, major events correspond with financing events or when significant improvements are needed at the property (e.g. roof leaking, windows need replacing, etc.).
 - Owners have the greatest challenge undertaking upgrades outside of major refinancing events; however, the Low Income Weatherization Program has enabled several owners to undertake these “mid-cycle” retrofits. Different building departments/personnel are involved in “mid-cycle” retrofits vs. major event rehabs.
- Owners have had very positive experiences with the Low Income Weatherization program (LIWP), as well as the BAYREN and EUC programs, citing flexibility, higher incentives, and ability to address the whole building as major features (however, these programs have limited budgets and LIWP is only available in Disadvantaged Communities (DACs), which exclude majority of affordable housing properties). Only one owner has participated in the ESAP program. Owners cite several program design barriers to explain this, including cost of participation (e.g. need to complete 100+ individual applications for each tenant unit), lack of flexibility in choosing program measures, inability to choose contractors, and it's previous design of not serving common areas.

Top recommendations:

- Enough (savings) value is needed to be worth the transaction time and costs of navigating programs; (or alternatively, drastically simplified programs could be desirable with moderate savings values).
- Any improvements to be viable must be straightforward, not complex, but allow for flexibility to accommodate different types of properties and ownership structures.
- Trusted third-party technical assistance is highly valued and needed to access programs and develop project scopes. The greater the number of programs and level of complexity, the greater the need for technical assistance and support.

- Program cycles need to be extended; most MF programs are currently operating on a one-year cycle despite the fact that multi-family projects typically take a minimum of 18 months to complete and despite the rolling portfolio approach adopted in the general efficiency proceeding. Longer MF project timelines are also incompatible with “use it or lose it” budget planning.

Convening Notes organized as follows:

1. Owner operating constraints
2. Challenges undergoing green property improvements
3. Feedback on existing programs
4. Recommendations to facilitate comprehensive clean energy and water improvements

1. Owner Operating Constraints

Ownership and capital stacks are highly complex and highly varied across different properties, eras, and mortgage and capital support arrangements. There are many decision-makers (owners, investors, developers, asset managers, operators, plus legal, accounting, HUD) in each property.

Most owners have 15-year mortgages (some 25) with balloon capital remainders that need to be refinanced every 15 years. That constitutes a “major event”, requires new financing, and is the most likely time to undertake capital improvements and discretionary upgrades. “IF” there are enough discretionary (and affordable) funds “left” to do such things. It is harder to undertake discretionary or even burn-out improvement projects “out of cycle”.

For deed-restricted affordable housing, owners often do not get to “keep” the savings from a retrofit project. Instead, those savings often go to property reserve funds that typically go back to HUD unless HUD grants an exception. For tax credit-assisted properties, savings often go to state and local lenders, and sometimes some savings can also go to owner.

Owners/managers are pressed for time to keep these buildings afloat financially. Any EE/sustainability projects need to offer enough “real” cash flow benefits to the owner/manager to make the transaction effort and time worthwhile. Examples:

- One company with 30 properties (6,000 units) looked at solar PV potential under the MASH program. About ½ of it made “economic sense”, meaning a building will save about \$10K or more per year in electricity bills. (For 100 unit buildings, this means savings about \$100/unit/year, which is about an 8% savings on utility costs). But to do such transactions the property manager needs to touch base with “many” investor/management decision-makers involved with the properties. Property owner has

already expended over 25 hours to participate, and is also not assured of whether he will be eligible for funding at the end of the process, nor has the owner even begun to negotiate the program contract.

- another owner spent hundreds of hours working with a solar contractor on metering issues (under MASH program)
- Another non-profit owner reported that HUD mortgage terms and restrictions prevent the owner/manager from accessing and using any “saved” utility bill costs, requiring that any such savings be set aside in a property reserve account, and thus not adding to any discretionary cash flow of the manager. This entity also indicated that any “real cash flow” savings have to be “large enough” to get the attention of owner/managers, relative to competing demands on their time and use of discretionary funds (while trying to keep housing costs affordable, systems in good working order, ...)
- For one New Solar Home Partnership Program (new construction) project, the EE requirement required then to participate in 2 EE programs (Savings by Design for the community buildings, and a new constructions programs for the residential unit buildings), but these paid out only a few thousand \$ in incentives, yet took a lot of time and effort. This was the case, despite the fact the owner had qualified for tax credits, and complied with corresponding tax credit guidelines requiring the building to be 15% more efficient than current building code requirements.
- Self-Help Enterprises (Central Valley) has benchmarked all its properties and “knows the offenders”. Has an 11-item list of retrofit measures that make sense to do OUTSIDE major event times. LIWP measures and terms work well for them, and doesn’t require tapping out their property reserves. Using LIWP, they were able to do 11 EE retrofits, resulting in 49% electrical savings.
- For market-rate low-income housing eligible for LIWP: owners are required to sign a contract guaranteeing low rents for a period of years. One owner signed this form (after ~15 versions and multiple approvals), another owner declined to use the program due to the contract requirement, but indicated the property did not plan to raise rents as a result of a property upgrade.

Owners rely on third parties, such as Bright Power and Association for Energy Affordability to inform them of which programs will meet their needs.

In general properties can deliver at least 15% savings and sometimes the 25% minimum required by LIWP, with current program incentives.

2. Overall Challenges

- IOU programs are too prescriptive, with the exception of EUC-MF Upgrade programs – some requiring certain measures or excluding certain measures, some requiring that designated contractors procure the equipment and install the measures (when building owner/manager may have long-standing preferred contractors and/or want to have uniform brands and models of (high quality) equipment in all their properties for streamlined O&M).

- Program funds have short-timelines, frequently “use or lose” budgets within a single calendar year. These property owners need at least 18 months running room to pull off a project, and thus need funding commitment and program rules to be constant for that time or longer.
- Non-profit owners in particular (one exception) don’t have in-house technical expertise or familiarity across multiple, fragmented programs to know when, where, what to take advantage of possible program assistance. Most mentioned by name 2 organizations (AEA and BrightPower) they rely on for this external help (implying some other funds are paying those organizations). AEA promotes and supports programs funded by CSD as well as IOUs. BrightPower handles data collection and tracking, generates energy score card. Owners emphasized the importance of having neutral, trustworthy technical assistance as opposed to pitches from for-profit companies.
- Solar is a bit easier than EE because solar systems a) have 30% federal tax credit to attract investors and b) are metered and have predictable technical and financial performance. However, there can be missed opportunities during major rehab events if existing solar program funds are expended or don’t align with timing of the project. These owner/managers really need assurance that utility bills will decline and cash flow will materialize if they invest funds in EE.
- Water and Sewer bills are very high, and growing, and there can be substantial efficiency gains to be had. BUT, some water/wastewater agencies’ rates have a high portion of their charges collected in fixed charges, meaning that incremental bill savings may not be significant enough to warrant capital outlays in water saving measures. Also, MF sewer costs are not tied to consumption—even though they’re tied to consumption for industry, commercial, and single-family. And there are not many programs to help on reducing tenant unit water usage. (E.G., plumbing fixtures, behavior/education interventions). Programs need to be “free” or offer at least 50% subsidy to be worthwhile.
- Owners need easy way to get “whole building data” when contemplating comprehensive energy upgrades. Need to estimate and prove the savings to justify the project.
- Most owner/managers reluctant to touch improvements in tenant units where tenants pay bills unless costs are fully covered a) no way to recoup cash flow benefits, b) too hard to interact with tenants to arrange unit access for improvements and income certification (for ESA), c) no way to capture “asset value” increase for future re-financing. Thus “common area measures” are what is typically done. (Note, prior to November 2016 CPUC decision ESA program could install improvements only in units, not common areas.)
- CSD’s Cap & Trade funded MF program is limited to properties within the CalEnviroScreen DAC areas, which are largely rural, leaving out high proportion of the (urban) low-income properties these companies own.
 - This program also requires owners to sign agreements to limit rents charged long-term in exchange for incentives. This impacts the cash flow of the property and may make deal undoable. (Mercy Housing says only 6 of their 125 California properties meet DAC geographic eligibility.)
- Solar hot water project’s economics on initial \$ outlay (CSI solar thermal?) worked very well, but finding higher M&O costs than expected.
- “Geography challenge”: a) Cap and Trade DAC constraint and b) few programs are offered uniformly statewide, which does not align with owner portfolios of properties that are statewide and even nationwide.

- Without statewide technical assistance or single state program, owners are finding programs in part by luck—if a contractor happens to pitch a program at the right time and it aligns with financing cycles. Current program landscape hard to navigate.
- Existing programs are nearly impossible to combine/layer; issues with attribution of savings, program timelines, etc. make this largely not feasible.
- Very few programs available in POU territories. Owners have not had success with programs in Los Angeles in particular.
- When installing solar, owners have faced issues with structural integrity of roofing.
- Solar thermal and EV infrastructure improvements sometimes runs into parking issues and local gov. regulations.

3. Feedback on Existing Programs

- Most owners have participated in CSD’s Low Income Weatherization Program, (funded through the Greenhouse Gas Reduction Fund via Cap and Trade money), which has a focused multi-family building upgrade program. Another 6 have participated in MASH or water efficiency programs, 5 in CSI solar thermal (water heating) and Energy Upgrade California – MF (NOT low income focused) programs. Only one owner had participated in the ESA low income program via the IOUs, and the same for IOU MF EE Rebate program (“widget-based incentives”, versus the whole-building approach of EUC-MF, and not low income focused). None have participated in the Middle Income Direct Install program.

4. Recommendations

Key Recommendations

1. Provide enough (savings) value to be worth the transaction time and costs; (or alternatively, drastically simplify programs with moderate savings values).
2. Any improvements to be viable must be straightforward, not complex, but allow for flexibility to accommodate different types of properties and ownership structures.
3. Trusted third-party technical assistance is highly valued and needed to access programs and develop project scopes. The greater the number of programs and level of complexity, the greater the need for technical assistance and support.
4. Solutions that don’t require procuring numerous approvals from multiple investors/ gov. entities and dealing with subordination in loan structures are of particular value for mid-cycle improvements, e.g. on-bill refinancing, providing deep incentives (e.g. via LIWP), potentially performance contracting with ESCOs.

Additional Recommendations

- Access to external technical capacity and expertise to identify what to do and what program(s) to use. Knowledgeable, objective/independent technical assistance to sift

through program options, measures, best investment choices. Good communications on what is possible, and to understand the needs of this market segment.

- Flexibility to choose measures, products that can be undertaken, to ensure property can support ongoing operations and maintenance of measures, and that the measures comply with property SPECs, etc.
- Ability to choose own installers/contractors; a desire to manage for quality of installations and sensitivity to tenants.
- Owners urge most attention to be paid on how to help make improvements in between the “15-year major event” milestones, though acknowledge there may be a little more than can be done during major rehabs. (note: this may not be reflective of owners that have not participated in clean energy and water programs and were not in attendance at this meeting, who likely are missing opportunities at major rehab events as well).
- Continued funding for CSD’s LWP program, and expansion of eligibility beyond DACs (which exclude number of urban areas with multi-family housing).
- Simplifying program complexity; single application form.
- Incorporate co-benefits into program cost-effectiveness calculations for this sector.
- Funding trusted outreach organizations to reach tenants could be helpful, e.g. via Greenlining, CBE, or CBOs.
- Work to develop the contactor pool. In the San Joaquin Valley, there are fewer contractors installing more advanced energy efficiency measures, which frequently results in higher costs for the projects. It would be helpful if the State could assist in expanding the SJV contractor pool to make implementation easier and more affordable in every region of the State.
- Establish an Ombudsman: Energy efficiency and renewable projects can be confusing for housing developers/operators. Also, each IOU often has their own program and there are various programs for renewables. Having one point-of-contact through the State who knows all of the programs and can answer questions would be extremely helpful in facilitating utilization of the various programs. If the individual had the ability to intervene and facilitate solutions that would be even better. For example, Self-Help Enterprises had two sites under concurrent review for NSHP, and were getting two different answers to the same questions. Having an individual to intervene, work with the program, and facilitate solutions for housing developers/operators would be greatly appreciated.

Recommendations on Source of Capital/Finance Structure

- “Deep incentives’ like those offered via LWP and MASH. For IOU programs, need to base incentives on savings measured from “existing conditions”, not incremental savings over a code-minimum solution.
- Don’t reinvent the wheel, put more money into successful programs.
- Low-cost capital, e.g. via tax-exempt green bonds, dedicated for use on affordable housing, would be helpful.

- Capital accessed off-balance sheet, e.g. as a service lease or performance contract is useful. Mercy Housing trying to green 100 of their 125 Calif. Properties, via a shared-savings performance contract.
- On Bill Financing (utility-originated, using ratepayer funds as capital, and non-capital property repayment agreement) is attractive.
- [But solar leasing programs which are capital leases are hard because requires the complicated “stack” of owners investors to sign off, and places a property lien.]
- A solar “lease-to-own” payment arrangement is attractive to Related (company name). Such a solar asset (once it’s “owned”, helps get a long-term mortgage supported by the performance record of the system’s output, creating asset value.
- Some early incentive payments to cover project development costs and technical assistance. These owners/managers do not have cash flow to pay for this and wait for incentives post-completion.
- creating property financing structures/rates (in coordination with the welfare property tax exemption) to incentivize for-profit firms to execute on a deeper set of energy and water efficiency measures while creating new and/or preserving existing affordable housing units in larger mix-income (“inclusive”) existing multifamily communities.