Ann Sewill, General Manager
Tricia Keane, Executive Officer

Daniel Huynh, Assistant General Manager
Anna E. Ortega, Assistant General Manager
Luz C. Santiago, Assistant General Manager

City of Los Angeles

Eric Garcetti, Mayor

LOS ANGELES HOUSING DEPARTMENT
1200 West 7th Street, 9th Floor
Los Angeles, CA 90017
Tel: 213.808.8808

housing.lacity.org

October 3, 2022

Council File: 21-1463
Council Districts: City Wide
Contact Persons:
Ann Sewill (213) 808-8808
Nancy Twum-Akwaboah (213) 808-8440
Jackie Cornejo (213) 928-9050

The Honorable City Council
City of Los Angeles
Room 480, City Hall
200 North Spring Street
Los Angeles, CA 90012

COUNCIL TRANSMITTAL: REPORT RELATIVE TO IMPLEMENTATION OF CARBON EMISSION ELIMINATION STRATEGIES IN NEW AND EXISTING BUILDINGS IN ACCORDANCE WITH ENERGY AND HOUSING JUSTICE PRINCIPLES AND RELATED MATTERS (C.F. NO. 21-1463)

SUMMARY

On March 9, 2022, the City Council adopted a Motion (Koretz, Krekorian, Raman, C.F. No. 21-1463) that instructed the Climate Emergency Mobilization Office (CEMO), Department of Building and Safety (LADBS), Housing Department (LAHD) and Department of Water and Power (LADWP) to participate in CEMO-led Climate Assemblies and assist in informing the City's building decarbonization efforts to 1) ensure that strategies protect renters; 2) ensure that carbon-based investments result in energy efficiency improvements in historically-excluded communities; 3) create family-supporting jobs with targeted local hiring to ensure a just transition for workers from impacted industries and historically excluded communities; and 4) inform the City the needs and priorities of local communities and experts, by leveraging local networks and expertise to ensure equitable and effective adoption. This report outlines the following: key themes and findings from the LAHD's stakeholder engagement, which were facilitated with the assistance of sustainable development firm, Arup; local, state and federal regulations relevant to the City's development of future building decarbonization programs for existing and new residential buildings; as well as estimates of the costs to tenants and property owners to retrofit existing buildings. LAHD proposes recommendations for the City Council and Mayor consider as part of developing a citywide decarbonization program for new and existing residential buildings.

BACKGROUND

Building decarbonization is a framework for reducing greenhouse gas (GHG) emissions associated with buildings. Strategies may include using clean energy generated onsite and from the electricity system, making buildings and appliances more energy-efficient, and reducing onsite use and leakage of natural gas and hydrofluorocarbon (HFC) refrigerants (California Energy Commission). The state's goals for carbon neutrality in buildings are to reduce GHG emissions from existing buildings, as they make up approximately 25% of the state's GHG emissions, and ensure new housing addresses the twin challenges of mitigating climate change and housing affordability.

There are direct and indirect examples of building decarbonization strategies. Examples of processes for direct building decarbonization are the removal and replacement of equipment that combusts fossil fuels (e.g., natural gas, oil, propane) with all-electric equivalents. In multifamily apartments, this commonly includes equipment and appliances like furnaces, gas-fired hot water heaters, and gas stoves. Indirect processes for decarbonization can include energy efficiency and improvements to indoor air quality such as weatherization, or updating heating and cooling (i.e. HVAC) that help minimize emissions that come from the generation of electricity used. The outreach discussions held by LAHD focused on converting existing apartment buildings from gas and electric utilities to all-electric, and on requiring all-electric on all newly constructed buildings.

The City Council motion directed departments to (1) meet with stakeholders concerning a change in codes from dual fuels to all electric buildings in new buildings; (2) assess impacts of capital cost for new construction and retrofit, and impacts of changes in operating costs for tenants and property owners; and (3) identify any funding sources available to cover these costs. LAHD's report is to focus on existing and new residential dwellings, which include single-family homes and multifamily residential developments.

LAHD'S INITIAL STAKEHOLDER OUTREACH AND RESEARCH

Stakeholder Engagement
Arup, a global engineering firm with experience in infrastructure and architectural development services, was contracted through the American Cities Climate Challenge to assist LAHD with the stakeholder engagement process during the month of June 2022. Prior to the stakeholder engagement process, Arup conducted its own research on pathways to building decarbonization in Los Angeles and has collaborated with the Climate Emergency Mobilization Office (CEMO) as it conducted its own Community Assemblies over the past year.

Arup was secured to assist LAHD in conducting an engagement process with multifamily residential buildings stakeholders including apartment owners, affordable housing owners, tenant advocates, and the housing development industry and report back with recommendations for meeting zero carbon buildings goals.

LAHD staff and Arup developed a robust stakeholder list, and approved presentations. Arup contacted 88 organizations to arrange the listening sessions, where 11 meetings were held with a total of 91 participants. All meetings were conducted virtually. LAHD understands various participants were missing from its stakeholder engagement sessions during its process. For example, many other apartment owners, representatives from the market rate development community, the Minority Landlord Association, the Mom & Pop Owners Association, Biz Fed, and the Central City Association were not in attendance at any of the sessions. For future rounds of stakeholder engagement, LAHD will work to include these groups to gather further feedback. See Appendix 1 for the stakeholder presentation and full report prepared for LAHD by Arup.

Summary of Stakeholders' Feedback

As indicated in the Arup report, stakeholders expressed a range of concerns and considerations around the potential implications of a proposed building decarbonization ordinance for residential dwellings. It should be noted that every group generally expressed support for building decarbonization, and no stakeholders objected to the assumption that decarbonization was necessary. The strongest concerns centered around electrification, as opposed to energy efficiency. Concerns typically focused on the potential timing, costs of retrofit, rent increases and implementation cost increases that may result from requiring electrification in existing buildings at this time. Stakeholders noted that operating costs had increased significantly in the past five years due to City trash collection changes, water bill and insurance increases. Other comments focused on the need to recover from the COVID-19 pandemic costs to renters and owners, how tenants and owners will be able to absorb upfront costs associated with decarbonization, the technical assistance needed for managing infrastructure upgrades, and whether the City and other governing agencies are able to predictably manage permits and to provide financial support as part of implementation. In general, stakeholders suggested that full electrification will be easy and cost efficient to implement in new construction, but that there were major concerns around cost and feasibility for existing building retrofits and conversions.

As instructed, other City departments have also held discussions with stakeholders which happened concurrently to LAHD's, so LAHD did not share ideas that arose from those such as LADBS' discussions of requiring greywater systems in new construction all-electric buildings, with LAHD stakeholders. Adding this requirement may or may not change the stakeholders' belief that the cost of newly constructing an all-electric building is not significantly different from the cost of a gas and electric building.

Developers also had questions about costs related to LADWP electrical transformers and changes that may be required to manage larger electrical loads that could increase costs that would be charged to developers. This would need to be addressed in more detail.

Recommendations from Stakeholders

Stakeholders shared many recommendations about what they think would make an ordinance successful, Arup has supplemented these recommendations using their own experience and research in the field. The themes of the recommendations are focused on the following:

- Continued stakeholder engagement to inform ordinance development
- That the City focus first on implementing the new construction ordinance, as the cost differences at initial construction are minimal
- Ordinance inclusions such as tenant projections, a phased implementation approach and flexibility in phasing implementation approaches
- Strengthening and enforcing tenant projections to prevent the most vulnerable tenants from absorbing most of the upfront costs of decarbonization, and the need for more prescriptive requirements to prevent tenant harassment and displacement
- Clear technical requirements to eliminate uncertainty with updated codes, standards and infrastructure needs as property owners conduct improvements
- Clear alignment, coordinating and staff capacity among city departments to assist with both new and existing buildings, considering the magnitude of the scale for a city the size of Los Angeles that includes education, training and technical assistance

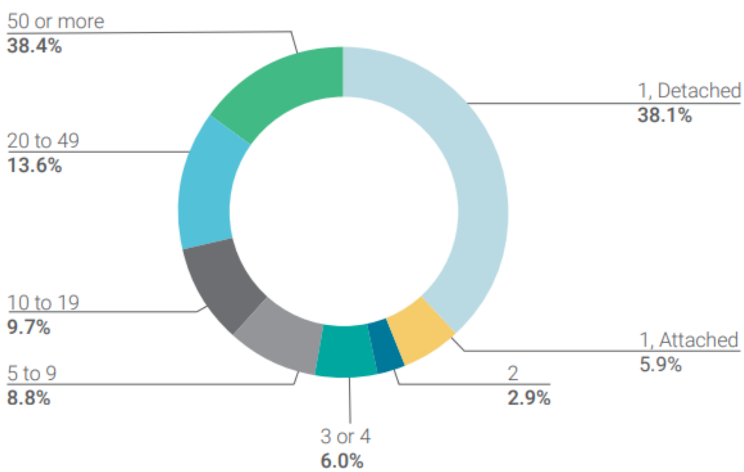
- Recommendations that the City start electrification retrofits with a voluntary pilot program that can service as a model or case study for a citywide effort
- Concerns about the lack of available financial incentives and guidance on funding sources and programs owners can tap into for up front capital costs

OVERVIEW OF LOS ANGELES' CURRENT HOUSING STOCK

The vast majority of households in the City live in rental housing. About 868,282 households (approximately 63%) in the City rent their housing units, while approximately 505,582 households (approximately 37%) own their homes. (American Community Survey, 2019)

Single-family dwelling units are the most common type of housing in the City. There are approximately 565,000 detached single-family dwelling units in the City, accounting for approximately 38% of the housing stock. The remainder is multifamily residential housing (62%). One-third of the City's housing stock includes units in low-density, attached multifamily developments with fewer than 20 units per building. Approximately 28% of the housing stock includes units in larger multifamily housing, more than 20 units per building. (American Community Survey, 2019) Nearly half of the City's housing stock was built prior to 1960 and is now over sixty years old. Approximately one in five housing units (20%) were built before 1939. (See Figure 1)

Figure 1: Total Units in Structure by Size of Structure



Source: US Census Bureau ; American Community Survey; 2018 ACS 5-Year Estimates,Table B11001

Affordable housing and other restricted units

There are over 56,572 units covering 1,420 properties that are subject to affordability restrictions across approximately 19 different programs by LAHD, which include multifamily housing financing programs funded by local, state and federal sources.

Most federal and state affordable housing programs set maximum income limits for eligibility to live in a publicly financed project and maximum rents that may be charged to tenants based on their incomes. Income levels drive rent in affordable projects. Furthermore, an owner of an affordable project must adhere to the rent restrictions outlined in the project's

Regulatory Agreement, usually for 55 years. Unlike market rate projects, owners of affordable projects cannot increase rents in order to recover costs associated with capital improvements.

Rent Stabilized Units

There are over 640,000 rental units in the City that are regulated by the Rent Stabilization Ordinance (RSO), which limits rent increases, protects tenants from arbitrary eviction, and requires that evicted tenants receive relocation assistance. The RSO covers most multifamily rental properties constructed on or before October 1, 1978. As shown in Figure 2, the older core of the City (including the Wilshire, Hollywood, and South Los Angeles areas) have the most RSO units in the City.

Figure 2: Top Ten Community Plan Areas with RSO Units

Community Plan Area	Total RSO units
Wilshire	87,415
Hollywood	68,359
South Los Angeles	50,739
West Adams/Baldwin Hills/Leimert	42,218
Southeast Los Angeles	37,251
Northeast Los Angeles	33,238
Van Nuys/N. Sherman Oaks	29,133
Westlake	28,624
North Hollywood/Valley Village	25,917
Palms/Mar Vista/Del Rey	25,837

Source: Los Angeles Housing Department

LOCAL, STATE AND FEDERAL REGULATIONS AND POLICIES GOVERNING LA'S AFFORDABLE RENTAL HOUSING

The City's Rent Stabilization Ordinance (RSO)

Existing properties built prior to 1978 (with few exceptions) are subject to the City's RSO protections against tenant displacement. If in the process of performing renovation work the unit is rendered temporarily uninhabitable, the RSO allows for temporary tenant relocation under a Tenant Habitability Program (THP) with a tenant option to return to their unit after completion of the work. The cost of temporary tenant relocation is paid by the landlord. If a tenant chooses to return to their unit, the rent amount remains the same but may be subject to a future adjustment if the Housing Department approves a cost recovery application submission by the landlord. However, if the work is projected to exceed 30 days, the THP provides the tenant the option to elect for a permanent move out in exchange for relocation assistance. The relocation assistance amounts are set by the RSO. If a tenant chooses to voluntarily vacate the unit, the initial rent for the subsequent tenant can be set at market rate. (See Attachment 1)

Electrification in an existing building will have a significant impact on a unit's habitability, specifically pertaining to the following (713.02.04 THP Regulations):

1. Construction noise
2. Utility interruption
3. Exposure to toxic or hazardous materials
4. Interruption of fire safety systems

The scope of the electrical work required to electrify an existing building is invasive possibly making units uninhabitable for the residents during a project. The electrical service will be disconnected for the removal during the installation and testing of the new electrical components. Additionally, the nature of work required would necessitate walls and ceilings be disturbed, thus requiring all work performed in all pre-1978 structures to have a Lead Safe certification and may require construction debris to be disposed of as toxic waste. The full electrification of a building would also require gas fired furnaces/heaters to be replaced. Many of these aged buildings have venting/ductwork that contains asbestos, thus requiring specialized companies to remediate and dispose of asbestos containing materials.

The related work to electrify an existing building may ultimately require building residents to be temporarily relocated. Based on the length of time of the predicted relocation, residents would be relocated between a 2 and 5-mile radius of their current home. Shorter term relocations require the THP to detail required reasonable compensation for relocations that deprive residents of essential and or previously available housing services, such as cooking facilities, laundry facilities, and pet accommodations. (714.01.4 THP Regulations) Longer term relocation, greater than 30 days, require comparability to the original unit and also trigger residents' rights to request permanent relocation benefits (currently up to $23,000) per unit.

Table 1 shows the impact and importance of the THP program to a retrofit program during the planning phase of electrification. By the current standards, the THP process adds approximately 90-120 days to a projected start date. LAHD defines the above as the soft costs for both the owner, contractor and department as it relates to time. The additional costs of temporary comparable housing would be part of the total costs.

Below are preliminary cost estimates from current commercial electricians and review of THP work. Further research and studies regarding cost analysis is required.

Table 1 – Estimated Costs Associated with Electrical Retrofitting of Existing Buildings

Per unit cost							
Meter/Service	Circuit for stove	Circuit for Water Heater	Circuity for Heat pump	Circuit for Dryer	Additional misc. work. (Code upgrades, subpanel upgrades)	**Total**	
$2,500.00	$2,500.00	$2,500.00	$2,500.00	$2,500.00	$3,000.00	$16,000.00	
Per unit cost							
Stove	Heat Pump	Electric Water Heater	Dryer	Building water heater/Boiler		**Total**	
$1,000.00	$4,000.00	$1,000.00	$500.00	Variable		$6,500.00	
						Estimated total per unit.	**$22,500**

Calculated across the RSO inventory of approximately 640,000 units, the total retrofit cost would be estimated at **$14.6 billion**. Depending on building age and condition there could be additional costs for asbestos or lead removal, tenant relocation or LADWP charges.

With respect to condominiums, eviction protections exist for those subject to the RSO. However, most do not have rent increase regulations under City or state law. Specifically, any tenancy in a condominium that initiated after December 31, 1995 is exempt from RSO rent regulation. Further, the majority of condominiums are owned by individual owners and not corporations, which excludes them from AB 1482 rent regulations. Therefore, cost recovery for condominiums would likely occur via unregulated rent increases, which may likely result in tenant displacement.

Cost Recovery Programs

Under the existing RSO provisions, landlords are allowed a reasonable return on the cost of improvements approved by the Housing Department, while protecting tenants from excessive rent increases. There are currently three cost recovery programs available for building decarbonization improvements that would enable landlords to recover the cost of improvements to existing rental properties: 1) Primary Renovation, 2) Rehabilitation Work and 3) Capital Improvement. All programs are based on actual costs of the work and have a capped maximum amount that may be passed through to tenants. A total of 100% cost recovery is allowed under the Primary Renovation Work Program as a permanent 10% rent increase; 100% cost recovery is allowed under the Rehabilitation Work Program as a temporary surcharge capped at $75; and 50% cost recovery is allowed under the Capital Improvement Work as a temporary surcharge capped at $55 per month. (See Attachment 2).

The monthly cost to amortize the estimated $22,500 per unit retrofit cost over a fifteen-year period would be $196, and over a thirty-year period would be $142. If a mandatory retrofit program is enacted the City Council and Mayor may wish to use one of the existing cost recovery programs or create a new one. From the menu of existing programs, the allowed monthly rent adjustment would range from $38 per month to a permanent 10% rent increase for tenants. (See Table 2)

Table 2 – Estimated Monthly Surcharges Passed to Tenants Based on existing LAHD Cost Recovery Programs

Cost Recovery Programs	Total Cost of Work	Maximum Cost Recovery Possible	Monthly Surcharge	Payment Period in Months
Capital Improvement 50% recovery at $55/month temporary surcharge	$22,500	$11,250	$55	205 months
Primary Renovation 100% recovery at10% permanent rent increase	$22,500	$22,500	10% of rent varies depending on rent amount per unit	Permanent
Rehabilization Work 100% recovery at $75/month temporary surcharge	$22,500	$22,500	$75	300 months
Seismic Retrofit Work 50% recovery at $38/month temporary surcharge	$22,500	$11,250	$38	296 monhts

POLICIES AND REGULATIONS IMPACTING NEW AND EXISTING DEED-RESTRICTED AFFORDABLE HOUSING STOCK

State and federally funded affordable housing programs such as HOME, CDBG, and AHSC have regulations that impact the ability of affordable housing providers to attain cost recovery for building retrofits based upon affordable rent limits for deed-restricted properties. As part of receiving funding from local, state or federal sources, owners of affordable projects record regulatory agreements against their properties which restricts rents at their properties. Generally, affordable projects have lower rents and generate less revenue than market rate projects. In addition, rents in affordable projects increase at a lower rate than market rate projects because they are tied to increases in the area median income. Also, operating expenses can be higher in affordable projects as a result of tenant services that affordable property owners make available to their tenants. Affordable projects also have restricted project operating and replacement reserves which limits the amount of funds that an owner can accumulate for capital improvements. Unlike market rate projects, owners of affordable projects cannot increase rent on their tenants in order to recover costs associated with capital improvements.

It is common in affordable housing to have individual meters for gas and electricity, so that tenants are responsible for paying utility costs in addition to their rent. When utility costs are not included in the tenant's rent, federal regulations permit the use of utility allowances which are to be deducted from a tenant's monthly rent. In Los Angeles, utility allowances for multifamily residential housing are determined by the Housing Authority of the City of Los Angeles (HACLA). Depending on the unit sizes the HACLA utility allowances tables would indicate that the utility costs for tenants would be higher in all-electric buildings.

Table 3 - Total Allowances for Gas and Electric Utilities per HACLA's Utility Allowance Table, 2021

NUMBER OF BEDROOMS	SRO	0	1	2	3	4
Total for Gas Utilities	12	20	29	36	44	57
Total for Electric Utilities	14	22	31	40	48	61

State Law Regulations Under AB 1482

State law regulations apply to units exempt from the City's RSO that were built more than 15 years ago, with some exceptions. Single-family dwellings and condominiums may be exempt from state law if there is no corporate ownership entity, provided that tenant notification requirements are met. Additionally, affordable housing subject to a recorded document is exempt from state law.

Tenant Protections

Residential rental units subject to AB 1482 have tenancy displacement protections. State law requires a just cause reason to terminate a tenancy. However, substantial remodel is one of the permitted reasons for eviction if the work takes at least 30 days and requires the tenant to vacate while the work is being done. The tenant would be eligible for relocation assistance in the amount of one month's rent. The rental rate on a subsequent tenancy can be set at market rate. Whereas, if the tenancy is not terminated due to the retrofit work, then the maximum increase within a 12-month period is 5% plus inflation, as measured by the Consumer Price Index (CPI), or 10%, whichever is lower.

AVAILABLE STATE AND FEDERAL FUNDING FOR DECARBONIZATION COSTS TO NEW AND EXISTING RESIDENTIAL HOUSING

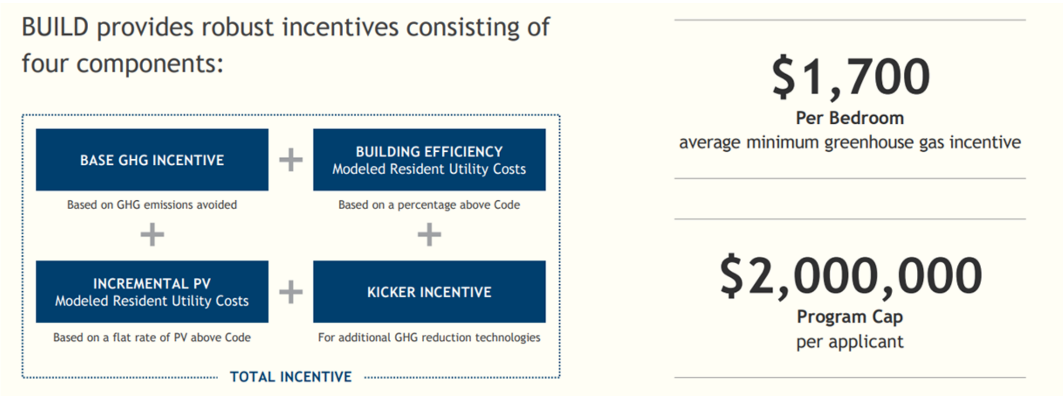
As mentioned, LAHD estimates it would cost approximately $22,500 per unit or at least $14 billion to retrofit existing multifamily properties under a proposed building decarbonization program. From stakeholder meetings we heard that neither market rate nor affordable housing projects have the cash available to take on these retrofits without additional loans or public assistance. A scan of other cities and public programs identified two available for some of the work of decarbonization, but none with the capacity to support the City's housing stock.

In September 2018, Governor Brown signed two bills into law related to reducing greenhouse gas emissions from buildings, SB 1477 (Stern) and AB 3232 (Friedman). SB 1477 calls on the California Public Utilities Commission (CPUC) to develop, in consultation with the California Energy Commission (CEC), two programs (BUILD and TECH) aimed at reducing greenhouse gas emissions associated with buildings. Approximately $200 million from the GGRF over a four-year period was allocated in the state budget in 2020 to assist developers in adopting decarbonization strategies for new and existing buildings. The Building Initiative for Low-Emissions Development (BUILD) Program, administered by the CEC, is to provide incentives for the deployment of near-zero-emission building technologies in new low-income residential housing, and the Technology and Equipment for Clean Heating (TECH) Initiative, is administered locally by Southern California Gas Company. AB 3232 calls on the Energy Commission to, by 2021, develop an assessment of the feasibility of reducing the greenhouse gas emissions of California's buildings 40 percent below 1990 levels by 2030, working in consultation with the CPUC and other state agencies.

BUILD Program

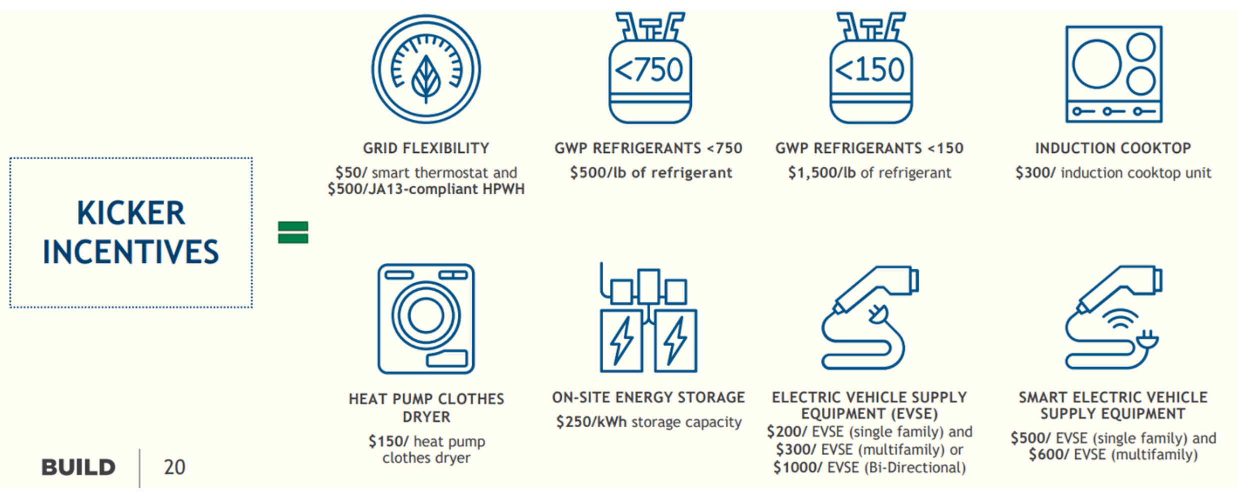
The BUILD Program is available for affordable housing developers with existing or new projects in four gas territories which include Southern California Gas, Pacific Gas & Electric (PG&E), San Diego Gas & Electric and Southwest Gas Corporation. Participants receive up to $2,000,000 in incentives towards construction costs and receive up to 300 hours of no-cost technical assistance, as well as $100,000 to defray direct design costs to eligible applicants who are constructing their first project, among other benefits towards electrification of single-family dwellings or multifamily residential housing for lower-income households in disadvantaged communities. The City would have to determine how much funding is available from the state to support local developers pursuing this incentive program.

Figure 3: Incentives for Affordable Housing Developers under BUILD program



Source: CA Energy Commission

Figure 4: Qualifying Appliances and Equipment for BUILD Program Incentives



Source: CA Energy Commission

TECH Program

The TECH Program offers substantial incentives directly to contractors to support the installation of heat pump technologies in existing single-family and multifamily buildings within the four gas territories in the state. In January 2019, the CPUC instituted a new rulemaking on building decarbonization (R.19-01-011). The proposed scope of the rulemaking includes: 1) implementing SB 1477; 2) potential pilot programs to address new construction in areas damaged by wildfires;

3) coordinating CPUC policies with Title 24 Building Energy Efficiency Standards and Title 20 Appliance Efficiency Standards developed at the Energy Commission; and 4) establishing a building decarbonization policy framework. The California Building Decarbonization Assessment was approved by the CEC and published in August 2021. It provides a framework to tackle the challenges in developing a path toward reducing greenhouse gas emissions associated with buildings. Approximately 40 percent of initiative benefits are targeted towards low-income and disadvantaged communities, per SB 1477. The program has been temporarily suspended due to high demand.

Cities in California that have Adopted Building Decarbonization Ordinances
As of July 2022, the Sierra Club has identified close to 60 jurisdictions in California that have adopted building codes or are proposing programs to reduce their reliance on natural gas and transition to electrification of all new buildings. These jurisdictions include the City of San Diego, City of San Jose, City of Berkeley, City of Santa Monica, San Mateo County, Santa Clara County, and Contra Costa County.

In our initial assessment of local policies and programs, three approaches are commonly adopted– electric preferred, all electric and natural gas bans. The most common approach is to adopt an Energy Commission approved “Reach Code,” or electrical preferred, that allows mixed fuel buildings to be constructed under certain conditions. For example, they may be required to meet a higher efficiency standard, and/or may be required to provide adequate electrical capacity and pre-wiring to facilitate future conversion to electricity for water heating, space conditioning, cooking, and clothes drying, and/or to provide wiring for electric vehicle (EV) chargers. For all electric, adopted Reach Codes may require buildings to be constructed that meet all energy needs using electricity, and include exceptions that allow mixed fuel in some limited cases. Rather than require electricity, some jurisdictions are taking the approach to ban natural gas hook ups in new construction. This approach uses local ordinances rather than reach codes.

With the exception of the City of Berkeley, our initial review of programs across the state concluded that jurisdictions are prioritizing electrification of all new buildings first. The City of Berkeley, which has approximately 29,000 rental units, as of November 21, 2021 released its timeline for existing buildings in a three-phase approach through 2045.

Bay Area cities like the City of Berkeley and the City of San Jose, offer financial assistance programs for properties. Resources such as the TECH Initiative Program and the Bay Area Regional Network (BayREN) offer the Single-family Energy Efficiency Rebate Program and the Bay Area Multifamily Building Enhancements (BAMBE) to qualifying existing single-family and multifamily buildings. In addition, partnership development has also resulted in funding resources for electrification. The 3C-REN (Tri-County Regional Energy Network) is a partnership between the counties of San Luis Obispo, Santa Barbara and Ventura which offers different forms of support, which includes funding assistance. The financial incentives provided by this consortium supports developers in the successful processing of permits for all electric buildings, as well as advocacy with external partners to possibly attain additional financial incentives.

The available financial support from the public utilities and environmental sectors has focused on incentives and technical assistance, and has not covered the costs of retrofits or new construction. Those costs are typically borne by the property owners and home purchasers or tenants.

CONCLUSION

After assessing local, state and federal regulations, conducting preliminary retrofit cost estimates, and holding various stakeholder sessions to receive input on a new City building decarbonization policy, there was a consensus among stakeholders that the City should pursue a multi-phased approach that requires the electrification of all new residential properties first, with a longer timeframe for existing residential properties, which could include a pilot voluntary retrofit program, as well as programs to require retrofits when single-family units are sold or when permits for significant remodeling work are issued.

A proposed building decarbonization program should be tailored to meet citywide climate goals but must also address the unique needs based on building type, age, condition, and neighborhood, coupled with the very real impacts property owners and tenants have faced for the last two years during the COVID-19 pandemic. These policy goals and priorities are important to establish, in order to guide future analysis and ordinance development. The report's summary of stakeholder feedback and analysis of the regulatory environment above reflect the goals of promoting more sustainable affordable housing development and retrofitting as much of our existing housing stock as possible, while minimizing the displacement of existing residents.

RECOMMENDATIONS

It is recommended that the City Council, subject to the approval of the Mayor:

1. DIRECT LAHD, LADBS, LADWP, CEMO, and others as applicable to share lessons learned from the implementation of a decarbonization program for new residential and commercial buildings (C.F 22-0151) to determine cost effective approaches to develop a program to retrofit existing residential buildings;
2. DIRECT LAHD to continue to collaborate with other City departments including CEMO, LADBS, and LADWP to work with stakeholders including tenant groups, apartment owners and business groups, labor, and environmental groups to develop a fair, reasonable, and effective plan to finance the conversion of residential buildings in the City to lower carbon emissions utility combinations;
3. DIRECT LAHD and LADBS to report back to City Council and Mayor after the implementation of the decarbonization of new residential and commercial buildings ordinance (C.F. 22-0151) with recommendations concerning the phasing of the retrofit of residential buildings to comply with the City's decarbonization goals, with guidelines related to phasing in compliance requirements for varying types of buildings such as single-family dwelling units, large or small multifamily building, and for requirements connecting retrofit to events such as sale of homes, or securing of permits for other renovation work. These recommendations shall be developed with stakeholder groups; and
4. DIRECT LAHD AND CEMO to continue working with the state and federal government to secure adequate funding to incentivize retrofit and relieve the financial burdens on apartment owners and tenants.

FISCAL IMPACT

There is no fiscal impact to the General Fund.

Approved By:

ANN SEWILL
General Manager
Los Angeles Housing Department

ATTACHMENTS:

Appendix A : Arup Stakeholder Outreach Report
Attachment 1: Cost Recovery Programs and Rent Increase Regulations by Unit Type
Attachment 2: Existing RSO Cost Recovery Programs:

ARUP

LAHD Affordable Housing Decarbonization Stakeholder Engagement

Report for LAHD

August 17, 2022

Contents

Appendix

The appendix includes framing slides Arup shared during sessions and materials (e.g., reports, notes, other documents) shared with us either during sessions or to the email address created for this engagement.

1. Introduction

This report summarizes concerns, considerations, and recommendations heard from affordable housing stakeholders during listening sessions in May and June of 2022. This stakeholder engagement process was in response to a motion under C.F. 21-1463 (Koretz, Krekorian, Raman) and stakeholders engaged included providers, developers, asset managers, and advocacy groups across different segments of the affordable housing sector. This report is written by Arup for the Los Angeles Housing Department (LAHD). Arup’s consultant services were secured to support LAHD in conducting listening sessions with stakeholders.

1.1 Glossary

- **Affordable housing** – throughout this report, “affordable housing” includes subsidized housing, public housing, rent-restricted housing, and supportive housing, operated by both non-profit and private owners.
- **Housing developers and asset managers** – used to refer to owners, operators, developers and/or asset managers, noting that some stakeholders fall into multiple of these categories.

1.2 Context

1.2.1 What is building decarbonization?

The City of Los Angeles has targeted carbon neutrality across all sectors by 2050. Given that buildings contribute 43%[1] of the city's greenhouse gas emissions, achieving climate action goals means making significant changes to the ways new and existing buildings use energy. These changes fall into three categories:

Clean energy   Energy efficiency   Building electrification

1. **Clean energy** – i.e., generating energy from clean and renewable sources such as solar and wind and not from fossil fuels, including distributed resources like rooftop solar on buildings.
2. **Energy efficiency** – i.e., passive building design and more efficient active systems to limit the overall and peak energy demand. Energy efficiency includes strategies like natural ventilation, daylighting, high-performing building envelopes (walls, windows, roofs), and installing more efficient equipment (HVAC, lighting, etc.)
3. **Building electrification** – i.e., replacing equipment that requires fossil fuels like natural gas (e.g., space heating, water heating, and cooking) with all-electric equipment.

This transition is imperative on a societal level to slow the rate of climate change. However, implementing significant changes in existing buildings can be disruptive to owners and households due to costs or other

[1] L.A. Sustainability Plan 2019 https://plan.lamayor.org/sites/default/files/pLAn_2019_final.pdf

unintended consequences. Requirements for new buildings can have a different set of impacts, for example, on design choices, construction and permitting processes, and operations.

1.2.2 May and June 2022 Stakeholder Engagement

Background

In March of 2022, Los Angeles City Council adopted a motion (under Council File 21-1463) directing the Climate Emergency Mobilization Office (CEMO), the Los Angeles Department of Building and Safety (LADBS), and the Los Angeles Housing Department (LAHD) to engage with key stakeholders and report back in the summer with recommendations that could inform the development of decarbonization policies or related actions for new and existing buildings.

Purpose

This report summarizes LAHD's engagement with stakeholders as directed by City Council. The intention of this stakeholder engagement is to identify complexities, barriers, and considerations faced by the housing sector, especially multifamily affordable housing before ordinances for new and existing buildings are developed by the City.

Method

Arup was engaged through the American Cities Climate Challenge to support LAHD in conducting listening sessions with stakeholders from across the affordable housing sector. Arup provided scheduling, facilitation and technical expertise.

Beginning with stakeholder contact lists provided by LAHD and supplemented with Arup contacts, Arup contacted 88 organizations to arrange listening sessions. Where possible, Arup attended pre-scheduled meetings organized by various coalitions and organizations to reach the widest number of participants while minimizing the time burden on those organizations (by avoiding introducing new meetings to their calendars). When existing sessions were not available during the outreach timeframe, new meetings were scheduled. In total, 11 meetings were held in the 6-week period, with a total of 91 participants. A full list of stakeholders contacted and meeting participants is provided in the Appendix. All meetings were led by the Arup facilitation team and attended by multiple LAHD personnel.

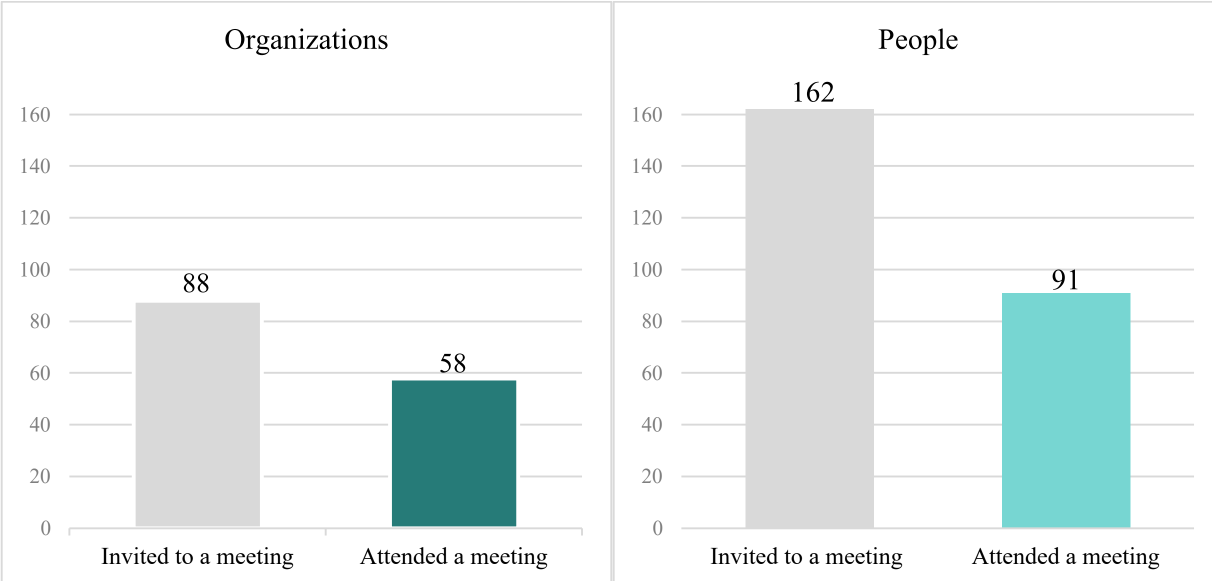


Figure 1 Count of organizations (left) and individuals (right) that were invited to a meeting and attended

These meetings were held virtually and leveraged a variety of tools (Zoom chat, verbal discussion, Mentimeter input). This process was not intended to be an exhaustive or scientific study but rather a key exploratory stage to inform policy development and identify where further information and conversations are required.

Stakeholders

Outreach for this process targeted stakeholders from the housing sector, including owners, property managers, community-based advocates, developers, and others. Particular attention was made to engage stakeholders living in and associated with affordable housing, including new, existing, regulated, and naturally occurring affordable housing.

In reviewing stakeholder feedback, the following groupings of affiliation types emerged and are used throughout this report:

Table 1 Types of Stakeholders

Stakeholder category used	Types of organizations included
Affordable housing developers, asset managers, and affiliates (noted as "housing developers and asset managers")	• Owners, housing directors, asset managers, and developers of regulated affordable housing • Owners, asset managers, and developers that work with both market rate housing and affordable housing • Public housing providers • Community land trust operators • Conveners or coalitions of non-profit affordable housing • Real estate investment trusts • Legal advisors within multifamily real estate • Engineers and consultants within multifamily real estate • Apartment associations
Tenant protection and environmental justice groups (noted as "tenant protection and EJ groups")	• Tenant rights groups • Social, economic, and environmental justice (EJ) groups • Public health organizations • Remediation organizations • Environmental justice and tenant protections government agencies • Labor and workforce advocacy[2]

Limitations

This report summarizes what we heard through this process. Due to the short timeline of this effort, there was no opportunity to circle back with participants and verify takeaways. Please refer to the Appendix for all material shared with us from stakeholders outside of these meetings.

1.3 Overview of what we heard

Stakeholders expressed a range of concerns and considerations around the potential implications of a building decarbonization ordinance. It should be noted that every group expressed support for building decarbonization generally, and no stakeholders objected to the assumption that decarbonization was necessary. Concerns typically focused on the potential timing, cost, and implementation impacts that may result from requiring decarbonization (and particularly electrification) at this time.

Stakeholders acknowledged several benefits of decarbonization, in particular:

[2] Note that this particular engagement effort did not include building trade labor groups

- **The potential for improved energy efficiency and reduced operating costs** for both owners and tenants – Most stakeholders expressed broad support for energy efficiency, and many owners stated they regularly look for opportunities and programs to support efficiency measures in their buildings.
- **Air quality and thermal comfort** – For example, some building owners highlighted how these enhancements improved marketability of their properties. Other owner groups mentioned how adding AC would help the quality of life in units that did not previously have cooling capacity.
- **Safety features of electric stoves** – Multiple supportive housing providers shared that they already have started to provide electric stoves due to automatic shut-off features and have seen a reduction in unit fires as a result.

Stakeholders expressed a variety of concerns, which included:

- **Financial concerns,** like:
  - How decarbonization might fit into the context of competing financial demands (e.g., deferred maintenance, increasing electricity rates, inflation) and challenges resulting from the Covid-19 pandemic
  - How projects might be financed
  - Who should bear initial up-front costs
  - Whether those costs could be passed down to tenants
  - How to manage the costs of decarbonization considering limited cash flows for owners generated due to (1) rent stabilization and (2) the rent freeze put in place during the pandemic
  - Whether the product market (appliance prices and supply chain) and local workforce are ready to support the transition
- **Social concerns,** like the worry that rent increases (e.g., due to passing on first costs), major rehabilitation, and/or wrongful evictions will trigger displacement of at-risk tenants.
- **Technical concerns**, such as challenges related to electrical upgrades or space for equipment.
- **Implementation process concerns**, including capacity of governing agencies to provide permits predictably and expediently without triggering delays that could impact financing schedule requirements. Additionally, concerns around provider staff capacity to research and support project implementation (both construction and financing).
- **Stakeholder engagement concerns** around who would be able to provide input and review potential ordinances and supporting programs, as well as how buy-in from residents will be accomplished.

In general, stakeholders suggested that full decarbonization will be much easier to implement in new construction, with major concerns around cost and feasibility focused on existing building retrofits and conversions. The strongest concerns centered around electrification, as opposed to energy efficiency.

1.4 Factors faced by the affordable housing sector

Both tenants' groups and owners/operators shared that the pandemic has been extremely challenging for the affordable housing sector. Loss of employment, wages, and in some cases family members has put a disproportionate strain on low-income households. Renter protections and eviction moratoriums have kept people housed but constrained operator cashflows and resulted in a backlog of deferred maintenance.

Tenant advocacy groups expressed strong support for pandemic-related renter protections as key measures to keep low-income populations housed. Developers and asset managers were split on this issue: some non-profit mission-driven providers also expressed strong support for renter protections and stressed the need for additional protections in any potential decarbonization requirements. Private market owners/developers expressed strong opposition to these measures as they have a direct impact on their capacity to meet rising operating costs. According to associations of multifamily housing owners/managers, some small property owners' members have sold their buildings already due to their inability to collect revenue to cover operating costs.

High inflation rates are also a key concern for owners and operators. Inflation and supply chain issues have raised prices across the board, both in new construction and in operating/maintaining existing assets. New developments are plagued in particular by the cost of building materials, labor, and delays triggered by supply chain issues. Asset managers also highlighted the rise in electricity rates making day-to-day operations more expensive, especially as time at home has increased for many tenants since the onset of the pandemic.

While these challenges are relevant across the residential building sector, they are more complex in the affordable housing sector. Subsidized or public affordable housing projects are generally financed through multiple sources and each funding source has specific timelines, requirements and restrictions. The complex funding arrangements required to make projects successful may limit the ability of owners and operators to accept additional risk, tolerate delays, take on additional debt, or even in some cases keep grants. In addition, the populations served by this sector are highly vulnerable to rent increases and displacement.

2. Key concerns

The following section summarizes key concerns across stakeholder groups about a decarbonization ordinance.

2.1 High upfront costs

The high upfront cost of building decarbonization was the most loudly and consistently voiced concern by all stakeholder groups, particularly regarding existing buildings, and included:

- **Purchase of new equipment** — some stakeholders highlighted the same concern of requirements outpacing the market, leading to higher upfront costs for earlier adopters.
- **Installation of new equipment** — one stakeholder cited their experience with the Existing Building Energy and Water Efficiency (EBEWE) ordinance requiring a licensed professional for air conditioning installation and suggested the cost associated with bringing that expertise on board could be $6,000 - $13,000. Stakeholders also highlighted concerns about labor availability for installation.
- **Electrical system and infrastructure upgrades** — Asset managers described that their older buildings (pre-2000) may have 60-amp panels and upgrades to all-electric appliances would mean replacing individual apartment electric panels, replacing or adding electrical panels, upgrading house panels, and replacing or adding new service from the house panel to the street. Several developers and asset managers shared stories of transformer requirements triggered by electrification adding substantial cost to projects. Supportive housing providers described that in their experience of converting 50+ year-old hotels and motels, all needed new transformers due to the new electrical capacity. Another stakeholder cited a project experience of the electrical service connection unexpectedly requiring running wires down the street and around the corner, adding cost on top of delays.
- **Full retrofit costs** — code compliance requirements triggered by retrofits, including measures to address asbestos or lead abatement or ADA compliance, could cause additional project costs and may also result in tenant relocation costs. Several owners and operators shared that they have been unable to conduct energy improvements because incentive programs do not cover total project costs associated with code issues.
- **Tenant relocation costs** — tenant protection and environmental justice groups and non-profit developers and asset managers expressed concerns that some types of retrofits could trigger temporary tenant relocation that could be highly disruptive to their lives, like making accessing work more difficult. In addition, supportive housing providers noted that their tenants cannot be relocated without causing harm or risking displacement. Some developers and asset managers also stressed a significant cost associated with relocation. Tenant protection and environmental justice groups shared that relocation stipends received by tenants were not sufficient to afford other rental properties in LA.
- **Administrative planning costs** — all developers and asset managers flagged a lack of staff capacity, and that staff bandwidth has worsened due to the Covid-19 pandemic. Analyzing the feasibility of different interventions, coordinating consultants and other retrofit needs, and identifying and applying to programs may require significant staff time or hiring outside help. Some highlighted the price tags of

pre-work like CEQA waivers and feasibility studies required by grant applications. Other developers and asset managers stressed that the paperwork requirements and delays associated with the seismic retrofit ordinance has been extremely cumbersome and worried decarbonization would be a similar but worse experience.

2.2 Downstream risks of added costs

Stakeholder groups varied in what downstream risks of costs they were worried about:

- **Displacement due to rent increases** – Tenant protection groups brought up an acute concern that an ordinance would lead to passing first costs to tenants via increased rent, which could trigger subsequent displacement, particularly in naturally-occurring affordable housing and rental units covered by the Rent Stabilization Ordinance (RSO). Even small cost increases can be significant given the number of households that are already rent- and/or utility-burdened. This concern was shared by non-profit housing developers and asset managers.

- **More wrongful evictions –** Tenant advocate groups raised a worry that cost increases associated with decarbonization requirements would incentivize wrongful evictions in buildings subject to the RSO but not run by mission-driven non-profit owners. They shared stories of landlords intentionally delaying regular maintenance and engaging in other illegal harassment practices, including illegally serving eviction notices, to force tenants out so that rents could be increased for new tenants. Stakeholders expressed concern that a decarbonization ordinance that does not include aggressive enforcement and expansion of rental protections and strict penalties for violations may provide additional cover for these illegal practices.

- **Keeping housing comfortable** – Asset managers offering subsidized housing raised concerns over being unable to maintain the quality of housing they want to provide, describing limited reserves and backlogs of maintenance. Several said they expected this challenge to grow as climate impacts, particularly extreme heat, put greater strain on residents. Some stakeholders shared they are in the process of installing air conditioning in buildings that did not previously have it to protect occupant health.

- **Small providers leaving the market** – Some developers and asset managers described a concern that the restriction would make Los Angeles a more difficult city to operate in, especially for smaller asset managers and owners, and some might exit the market.

2.3 Concerns about uncertainty and lack of City coordination

Most developers and asset managers who have not built or retrofitted properties to be all-electric are unclear about costs and if electrification will increase operating costs overall. While property owners seem to understand that there may be energy efficiency gains in upgrading equipment (e.g., old gas furnaces to heat pumps), electricity rates are well known to be higher than gas rates. For many property owners, there are financial barriers at multiple stages of adoption and limited readily available information to help forecast costs and enable planning. Many stakeholders had questions and concerns about how total utility costs would change as a result of electrification.

All developers and asset managers stressed concerns about City staff capacity and coordination across departments. Many cited examples of experiencing delays and how the risk of delays have swayed decision-making.

2.4 Increased costs for new development

Stakeholders developing new properties flagged concerns about increased costs for all-electric construction due to the following:

- **Less familiarity** with all-electric technologies

- **Staff time** to ensure compliance with new regulations or implementation of available incentive programs
- **Supply chain issues** resulting in limited availability of systems or delays in procurement
- **Concerns about maintenance** of new technologies over time – one asset manager cited the complexity of monitoring and managing a solar array required that they hire a 3rd party vendor, which meant passing over a piece of the financial benefit. Another provider shared how it is harder to anticipate maintenance needs of technology they have not used before, citing a current poor experience maintaining on-demand water heaters. The provider shared that energy efficiency programs helped get the systems in-place but now that they're 10-15 years down the line and running into issues, there's no place to turn for support.
- **Delays in planning/construction process** due to increased requirements or approvals from LADWP. Several developers shared that they had to cut solar out of their projects because they could not get clarity on infrastructure requirements from LADWP. Non-profit developers described hard and fast end-of-year requirements for funding that limit their tolerance for delays. They voiced a fear of losing grant funding if coordination with LADWP is slow. One provider shared that this uncertainty of the coordination process with the utility was so great that it discouraged them from building all-electric or installing solar now, despite interest.
- **Disincentives to develop housing in LA -** Some developers expressed concerns that additional requirements will increase the cost per unit, resulting in fewer affordable units being built per project. Other developers suggested the compounding requirements would drive up already high developing costs in Los Angeles, pushing businesses out of the city.

2.5 Physical constraints within existing buildings

Stakeholders unanimously agreed that the greatest challenges lie in existing buildings due to the complexity and constraints of existing conditions. Older buildings may be limited in terms of envelope, orientation, and space. Stakeholders shared these limitations can be especially present in older buildings that are being converted to affordable housing, such as those acquired through Project Roomkey, which may require new insulation, windows, roof and other systems upgrades simply to meet code and serve a residential use. Owners highlighted that these costs increase the cost of housing development per unit, making deals harder to finance.

The following space constraint examples were shared by stakeholders:

- **Often, no space onsite for new transformers** – difficulty accommodating new transformers due to limited available space and placement and setback requirements. One described a 7-story property downtown that they would like to convert to all-electric but don't think they can make the transformer fit on the site due to size and placement restrictions (e.g., setbacks, open to the sky, special permission if placed somewhere people will drive over).
- **Sometimes, not enough roof space for solar** – this was described for garden-style apartments as well as taller complexes with relatively small roof area already crowded with mechanical equipment.
- **Can be hard to fit new (all-electric) equipment -** for example, one provider described how replacing a gas domestic hot water heater with an air-source heat pump in their buildings would require adding new intake air ducting to each water heater closet. The provider also explained that replacing their gas-fired centralized domestic hot water system with an electric system (air-source heat pump) would require a substantially larger footprint. Given building space constraints and limited free ground space, the only available placement would be rooftop, meaning the equipment transition would both trigger structural upgrades and disrupt the potential for adding rooftop solar.

2.6 Limited staff experience and capacity

Stakeholders stressed that existing buildings need to be looked at differently, partly because service providers and property managers are already overstretched in capacity. This makes coordinating retrofits difficult, both in terms of pursuing incentives and in overseeing implementation. Stakeholders expressed a need for the operations team, property manager, and finance staff to be trained on how to work with the new equipment and track decarbonization funding opportunities. While some large investment firms have resources to train staff, most nonprofits and mom-and-pop owners do not have the same capacity.

2.7 Concerns about grid capacity

Every stakeholder group raised a concern about the grid reliability if more buildings become all-electric. Developers, asset managers, and advocates shared fears that electrification may lead to increased power outages due to demand outgrowing capacity. Stories were shared of people seeing or hearing about transformers exploding (implying a fear of increasing instances in the future). One provider described they have been limited in installing 10 or less EV chargers in their apartment communities because of the limited total available power from the street. Tenant advocate groups stressed the equity implications of power outages and one stakeholder described how an extended loss of refrigeration could spoil a week's worth of a family's groceries with no spare budget to replace them. Stakeholders have asked for more information about grid capacity and stressed prioritizing grid capacity stability before any mandate comes into effect.

2.8 Concerns about the timing of an ordinance

For new affordable housing development, the timing is critical to make the financing work. Planning for building decarbonization early on to ensure that suitable systems and experts are in place can help building managers and organizations align implementation with their existing project plans and timelines of other efforts with strict action periods. One public housing provider stressed that their current priorities in the context of Covid-19 are focused on basic human needs and mental health, and sensitive education and outreach will be needed for the buy-in of residents.

2.9 Concerns about bringing tenants on board

Stakeholders also flagged a need for sensitivity around renters who, managing through ongoing Covid-19 impacts, are in "survival mode." The retrofit process can be disruptive to tenants, but the equipment change that has a higher day-to-day impact on occupants is a transition from gas to electric cooking. Stakeholders flagged that education around benefits would be essential to helping residents move through the potential inconvenience of the update.

3. Recommendations & Opportunities

Stakeholders shared many recommendations about what they think would make an ordinance successful. These recommendations are synthesized below. Arup has supplemented these recommendations with additional detail based on our research and understanding of the issues. Which stakeholder groups[3] voiced which recommendations are indicated in parenthesis.

3.1 Continued stakeholder engagement

Continued stakeholder engagement, particularly with the affordable housing sector, to inform ordinance development, that is a:

- **Iterative process -** Stakeholders requested an iterative process during ordinance development with more clarity around what process and requirements would look like to help them plan ahead. This might include tenant listening sessions, demonstration of health benefits, and collaborative processes to define metrics, costs, impacts, and technical requirements. (All stakeholders)
- **Transparent process** – Consider providing a clear timeline ordinance development process that includes stakeholder engagement opportunities. (Arup recommendation)

3.2 Ordinance inclusions

It was recommended that any ordinance include:

- **Tenant protections** including limits on first costs passed to tenants and eviction protections (tenant advocate groups, some housing developers and asset managers). Note: providers were split on this question. Non-profit/mission-mission driven developers and asset managers advocated for increased tenant protections. Others argued generally that all tenant protections such as rent increase and eviction moratoriums should be removed.
- **Phased implementation approach** with a long-time horizon that allows market time to prepare and respond (all stakeholder groups) and allows owners to implement retrofits at the end of equipment life (housing developers and asset managers).
- **Flexibility** in the phasing of implementation within buildings and across portfolios to allow owners to tackle easier buildings and strategies first (housing developers and asset managers).
- **Language to link decarbonization and affordable housing preservation** within the ordinance as core goals (Arup recommendation).

3.3 Tenant protections

- **Strengthen, enforce, and expand existing tenant protections** to prevent first costs from being passed to tenants and decarbonization from triggering cost increases, harassment or displacement (tenant protection and environmental justice groups, non-profit housing developers and asset managers). Note: private owners advocated for lessening of existing tenant protections and immediate ending of eviction moratoriums in order to lessen constraints on cash flow.
- **Consider improvements to City's Tenant Habitability Plan (THP) process** – both tenant protection and environmental justice groups and private owners called for improving Tenant Habitability Plan requirements with two largely opposing critiques. Tenant protection and environmental justice groups described the need for more prescriptive requirements to prevent tenant harassment and displacement

---

[3] Refer to Table 1 for detail on what types of stakeholders the shorthand language in the parenthesis describes

(see SAJE memo in the Appendix for more detailed recommendations). Private developers and asset managers stressed the current process is time and financially burdensome and already an obstacle to retrofits.

3.4 Clear technical requirements

- **Clear technical requirements**, including updated codes, standards, and permitting and infrastructure requirements to eliminate uncertainty in the design, permitting, and construction process (housing developers and asset managers).
- **If possible, flexibility around transformer requirements** – e.g., in addition to clarity around transformer requirements, cost-sharing of new transformers and flexibility in placement and permitting processes (housing developers and asset managers). Collaborate with developers to explore the potential of community microgrids as one way to approach space constraints (housing developers and asset managers).

3.5 Clear alignment, coordination and staff capacity among City departments and LADWP

- **Clear alignment and coordination among City departments and with LADWP** to clearly communicate requirements, facilitate approvals and avoid delays (housing developers and asset managers)
- **"Concierge" staff** dedicated to serving as a "help desk" to support planning and permitting from start to finish and support coordination across City Departments (housing developers and asset managers).
- **Dedicated City staff role –** Some stakeholders recommended introducing a point person(s) with sufficient remit to coordinate across departments, make decisions, and liaison with the affordable housing development community (housing developers and asset managers). This recommendation was in response to concerns about delays and uncertainty. A part of this role or an additional role dedicated to affordable housing retrofits (i.e., existing building focused) also seems valuable (Arup recommendation).
- **Assigned LADWP project manager** in the first phase of mandate implementation to help developers move through the system quickly (housing developers and asset managers)

3.6 Pilot program

- **A voluntary pilot program** with incentives for early adopters while the City builds capacity and streamlines processes (housing developers and asset managers). As noted in 3.5, one stakeholder suggested a dedicated DWP project manager that could help the project move quickly would be an attractive incentive for developers (housing developers and asset managers).
- **Data from pilot projects -** Leverage pilot projects to obtain empirical data and case studies and use findings to improve implementation processes and programs (Arup recommendation)
- **Deploy a "retrofit accelerator" –** Provide a fully-funded and staffed "retrofit accelerator" to serve as a one-stop-shop for technical, financial and administrative support. See the New York City Retrofit Accelerator as a model[4] (Arup recommendation)

---

[4] New York City Retrofit Accelerator, https://www1.nyc.gov/site/sustainability/our-programs/retrofit-accelerator.page

3.7 Financial incentives

Financial incentivizes that:

- **Prioritize** non-profit, mission-driven and mom and pop affordable housing providers (tenant protection and environmental justice groups and non-profit housing developers and asset managers). Note that private housing developers and asset managers advocated for broad assistance instead of targeted assistance.
- **Provide flexible funding** that can cover the full cost of projects, including planning, code updates, remediation needs, electrical upgrades, etc. (housing developers and asset managers). One public housing stakeholder used an example of state electric vehicle funding: while there are funding opportunities for electric vehicles (EVs), there are none to support the needed electrical infrastructure upgrade to install them at their housing sites. Loosen public lending restrictions on reserve accounts that restrict owners to only use funds for replacing systems, not adding systems (e.g., solar) (housing developers and asset managers).
- **Are straightforward to apply for -** Offer incentives that can be accessed through streamlined application processes to minimize administrative burden (housing developers and asset managers).
- **Include up-front capital** for those with limited access to capital to support project initiation (i.e., as opposed to rebates) (housing developers and asset managers). Stakeholders recommended that this includes direct financial support for the purchase and installation.
- **Are linked to commitments to providing affordable units -** e.g., via the creation of new covenants or extending existing covenants (Arup recommendation).
- **Include financing tools** that are designed to work with affordable housing financial and legal constraints and requirements and provide favorable loan rates and terms (housing developers and asset managers).
- **Include low-income discounts on utility bills** to help offset up-front costs that are passed to low-income tenants (housing developers and asset managers).
- **Guidance on funding sources and programs** – For example, one provider described being approached by companies offering solar programs but that it is overly time-intensive to investigate what is legitimate and well-suited for their properties. He suggested a collated list or resource of what programs are available, for what uses, and with what eligibility requirements would be extremely helpful (housing developers and asset managers).

3.8 Coordination and clarity around grid capacity

Coordination with LADWP to ensure grid capacity as building electrification goes into place (all stakeholder groups) and clarity around capacity and requirements, including:

- **Grid-scale –** Equip all City staff with information to communicate the timeline for grid upgrades and reassure stakeholders about capacity, reliability, and decarbonization efforts to respond to concerns voiced by all stakeholders (Arup recommendation).
- **Neighborhood-scale -** Clear communication from LADWP regarding neighborhood-scale grid capacity, requirements, and planned upgrades to ensure capacity and limit the amount individual developers are financially responsible for (housing developers and asset managers).
- **Requirements -** Clear communication of expectations regarding transformers and other infrastructure requirements for developers (housing developers and asset managers).

- **Start neighborhood-scale pilot implementation program** to boost implementation in disadvantaged communities that have existing electrical capacity and aging natural gas infrastructure to boost both decarbonization and community resilience (Arup recommendation).

3.9 Education and training programs

Education and training programs to raise awareness and capability across stakeholder groups:

- **For building owners** to raise awareness of decarbonization requirements, benefits, and technologies, including toolkits for planning and implementation (housing developers and asset managers).
- **For contractors** to introduce new technologies, support communication with customers, introduce incentive programs for owners and residents, and provide mid-stream incentives for equipment (Arup recommendation).
- **For tenants** to raise awareness of decarbonization benefits (housing developers and asset managers) and educate tenants about their rights throughout decarbonization retrofits (tenant protection and environmental justice groups).

3.10 Technical assistance

Technical assistance for housing providers across design, construction, and navigating funding/program options (housing developers and asset managers).

3.11 Market coordination

While some energy efficient and electric systems and equipment are well established and widely available in the market, others are still emerging. The City should lead on enabling market transformation (housing developers and asset managers).

- **Readiness -** Coordinate with market actors such as manufacturers and utilities to better understand availability and reliability of new and emerging technologies (housing developers and asset managers).
- **Price guidance -** Establish standard for energy efficient appliances and provide price sheets so that property managers can set budgets (housing developers and asset managers).
- **Contractor adoption –** Provide training and mid-stream incentives to contractors that can be passed on to customers to offset the marginal cost of electric appliances compared to gas in order to boost market demand (Arup recommendation).

3.12 Offramps for owners wishing to sell properties

The high cost of owning and operating housing may push some owners out of the market. When that happens, opportunities should be created to transition housing to tenants or other owner types committed to housing affordability. While not specific to decarbonization, these pathways could be leveraged if owners find the cost of decarbonization prohibitive.

- **Tenants' right to purchase** – Create a right of first refusal for tenants to buy buildings from landlords wishing to sell their property (tenant protection and environmental justice groups).
- **Tax exemptions for sale to tenants or non-profits**—Enable pathways for owners wishing to sell to receive reductions or exemptions in capital gains tax if selling to tenants, community land trusts, non-profit or public housing providers at a discounted rate (Arup recommendation).

Appendix

Please note: given nature of zoom format and the ability to enter and leave at any point, some attendees may have been missed when attendance was taken and not captured correctly in the tables below. Role attributions were based on an internet search (LinkedIn and/or organization's website) and may be outdated or incorrectly noted.

Attended

Table 2. Stakeholders who attended sessions

Meeting Date	Attended?	Role (based on internet search)	Stakeholder Group
6/10/2022	Yes	President & CEO	**A Community of Friends**
5/26/2022	Yes	Director of Housing	**A Community of Friends**
6/10/2022	Yes	Director of Housing	**A Community of Friends**
6/9/2022	Yes	Asset Management Consultant	**A Community of Friends**
6/1/2022	Yes	Executive Director	**Apartment Association of Greater Los Angeles**
6/29/22	Yes	Executive Director	**Apartment Association of Greater Los Angeles**
6/1/2022	Yes	Director Government Affairs and External Relations	**Apartment Association of Greater Los Angeles**
6/29/22	Yes	Director, Government Affairs & External Relations	**Apartment Association of Greater Los Angeles**
6/29/22	Yes	Board of Director of AAGLA,CEO of Sky Properties	**Apartment Association of Greater Los Angeles**
6/29/22	Yes	Realtor	**Keller Williams Realty**
6/29/22	Yes	Senior Director of Engineering	**AvalonBay Communities**
6/29/22	Yes	Senior Building Systems Engineer	**AvalonBay Communities**
6/22/22	Yes	Treasurer	**Beverly Vermont CLT**
5/26/2022	Yes	Director of Multifamily Supportive Housing Development	**Brilliant Corners**
6/1/2022	Yes	Senior VP	**CAA**
6/15/2022	Yes	Sustainable Housing Program Director	**California Housing Partnership Corporation**
5/26/2022	Yes	Vice President, Housing Development	**Century Housing**
5/26/2022	Yes	Housing Director	**Clifford Beers Housing**
6/10/2022	Yes	Executive Director	**Clifford Beers Housing**
6/15/2022	Yes	Asset Management Assistant	**Clifford Beers Housing**
6/9/2022	Yes	Director of Organizing and Tenant/Healthy Homes Outreach	**Coalition for Economic Survival**
6/9/2022	Yes	REAP Tenant Outreach Organizer	**Coalition for Economic Survival**
6/22/22	Yes	Asset Manager	**Coalition for Responsible Community Development**
6/17/22	Yes	Senior Staff Attorney	**Communities for a Better Environment**
6/17/22	Yes	(role unknown)	**Communities for a Better Environment**

6/17/22	Yes	Housing Outreach Coordinator	**Communities for a Better Environment**
6/9/2022	Yes	Director of Property Management.	**Community Corporation of Santa Monica**
5/26/2022	Yes	Director of Housing Development	**Community Corporation of Santa Monica**
6/9/2022	Yes	Senior Asset Manager	**Community Corporation of Santa Monica**
6/10/2022	yes	Chief Executive Officer	**Downtown Women's Center**
6/9/2022	Yes	Affordable Housing Asset Management Consultant	**East LA Community Corporation**
6/9/2022	Yes	(role unknown)	**EJU LA City Attorney**
6/22/22	Yes	Executive Director	**El Sereno Community Land Trust (ESCLT)**
6/9/2022	Yes	Director, Vulnerable Populations	**Enterprise Community Partners**
6/15/2022	Yes	Program Director	**Enterprise Community Partners**
6/9/2022	Yes	Program Director	**Enterprise Community Partners**
6/29/22	Yes	Assistant Vice President - Environmental and Climate Adaptation	**Equity Residential**
6/29/22	Yes	Vice President, Investments	**Equity Residential**
6/17/22	Yes	Board President	**Esperanza Community Housing**
6/9/2022	Yes	Board President	**Esperanza Community Housing**
6/17/22	Yes	Senior Organizer - Clean Energy / Just Transition	**Food & Water Watch**
5/26/2022	Yes	Director of Housing Development	**Hollywood Community Housing Corporation**
6/23/22	Yes	HACLA Innovation and Development Associate	**Housing Authority of the City of LA**
6/22/22	Yes	Manager, Program Development	**Housing Authority of the City of LA**
6/22/22	Yes	Program Development Coordinator	**Housing Authority of the City of LA**
6/9/2022	Yes	(role unknown)	**Impact Assessment**
6/9/2022	Yes	Program Associate	**Koreatown Immigrant Workers Alliance**
6/9/2022	Yes	Health Program Coordinator	**LA County CLPPP Program**
5/26/2022	Yes	Chief Real Estate Officer	**LA Family Housing**
6/9/22	Yes	Assistant Director of Asset Manager	**LA Family Housing**
6/9/2022	Yes	Director of Asset Management	**LA Family Housing**
6/9/2022	Yes	Project Coordinator Lead Hazard Remediation Program	**LA Family Housing**
6/10/2022	Yes	President & CEO	**LA Family Housing**
6/9/2022	Yes	Director	**LAHD Code Enforcement**
6/22/22	Yes	Property Manager	**Liberty CLT**
5/26/2022	Yes	Director of Real Estate Development	**Little Tokyo Service Center**
6/9/22	Yes	Director	**Little Tokyo Service Center CDC**
6/10/2022	Yes	Executive Director	**Little Tokyo Service Center CDC**
6/17/22	Yes	RePower Director	**Los Angeles Alliance for a New Economy**

6/17/22	Yes	Community Organizer, RePower	**Los Angeles Alliance for a New Economy**
6/17/22	Yes	Director, Water Campaign	**Los Angeles Alliance for a New Economy**
6/17/22	Yes	(role unknown)	**Los Angeles Alliance for a New Economy**
6/22/22	Yes	Executive Director	**Los Angeles Better Buildings Challenge**
6/22/22	Yes	Director of Marketing	**Los Angeles Better Buildings Challenge**
6/22/22	Yes	Managing Director, Operations	**Los Angeles Better Buildings Challenge**
6/23/22	Yes	Sustainability Policy and Programs Associate	**Los Angeles Business Council**
6/9/2022	Yes	Communications & Media Strategist	**Los Angeles County Department of Public Health**
6/9/2022	Yes	Environmental Health Specialist	**Los Angeles County Department of Public Health**
5/26/2022	Yes	Associate Director of Real Estate	**Mercy Housing**
6/29/22	Yes	Board member AAGLA, Moss and Company	**Moss & Company Property Management**
6/29/22	Yes	Founding Principal / Vice-Chair	**Pacific Crest / HACLA**
6/17/22	Yes	Policy Director	**Pacoima Beautiful**
6/9/2022	Yes	Health Promoter	**Pacoima Beautiful**
6/9/22	Yes	Director of Asset Management	**PATH Ventures**
6/10/2022	Yes	Acting Executive Director	**PATH Ventures**
6/17/22	Yes	Nuclear Threats & Energy Justice Program Manager	**Physicians for Social Responsibility**
6/17/22	Yes	Environmental Justice Advocate	**Physicians for Social Responsibility**
6/1/2022	Yes	VP Property Management	**Prime Group**
6/1/2022	Yes	Senior Counsel & VP of Risk Management	**Prime Group**
6/29/22	Yes	Chief Financial Officer	**Realty Center Management, Inc. (RCMI)**
6/29/22	Yes	Partner	**ROM Residential**
6/17/22	Yes	Executive Director	**Sacred Places Institute for Indigenous People**
6/17/22	Yes	Orange County Indigenous land Rematriation (OCILR)	**Sacred Places Institute for Indigenous People**
6/10/2022	yes	Chief Executive Officer	**Skid Row Housing Trust**
6/9/22	Yes	Policy Director	**Southern California Association for Non-profit Housing**
5/26/2022	Yes	Policy Director	**Southern California Association for Non-profit Housing**
6/10/2022	yes	Chief Executive Officer	**SRO Housing Corporation**
6/17/22	Yes	Assistant Director of Building Equity and Transit	**Strategic Actions for a Just Economy**
6/17/22	Yes	Intern	**Strategic Actions for a Just Economy**
6/17/22	Yes	Policy & Research Associate	**Strategic Concepts in Organizing and Policy Education**
6/29/22	Yes	Senior Vice President	**The California Apartment Association**
6/23/22	Yes	Director Of Operations	**Thomas Safran & Associates**
6/9/2022	Yes	(role unknown)	**United Tenants**

5/26/2022	Yes	Senior Director of Housing Development	**Venice Community Housing**
6/10/2022	Yes	Executive Director	**Venice Community Housing Corporation**
6/15/2022	Yes	Senior Director of Asset Management	**Venice Community Housing Corporation**
6/10/2022	Yes	(role unknown)	**W.O.R.K.S.**
6/29/22	Yes	Founder/President	**Williams Real Estate Advisors**

Invited but unable to attend

Table 3. Stakeholders who were invited to sessions but did not attend

Meeting Date	Attended?	Role (based on internet search)	Stakeholder Group
6/9/2022	No	COO	**A Community of Friends**
6/15/2022	No	COO	**A Community of Friends**
6/15/2022	No	Senior Asset Manager	**A Community of Friends**
6/9/2022	No	Senior Asset Manager	**A Community of Friends**
6/22/22	No	Asset Management Consultant	**A Community of Friends**
6/15/2022	No	Asset Manager	**Abbey Road**
6/9/22	No	Asset Manager	**Abbey Road**
6/9/2022	No	Vice President of Property and Asset Management	**Abode Communities**
6/15/2022	No	Vice President of Property and Asset Management	**Abode Communities**
5/26/2022	No	Senior Vice President, Real Estate Development	**Abode Communities**
6/15/2022	No	Asset Manager	**Abode Communities**
6/9/2022	No	Asset Manager	**Abode Communities**
6/23/22	No	Senior Development Associate `	**Apartment Management & Investment Company**
6/22/22	No	Operations Manager	**Beverly-Vermont Community Land Trust'**
6/15/2022	No	SVP of Portfolio	**BRDIGE Housing**
6/9/2022	No	SVP of Portfolio	**BRDIGE Housing**
6/15/2022	No	Chief Operating Officer	**Brilliant Corners**
6/9/2022	No	Chief Operating Officer	**Brilliant Corners**
6/23/22	No	Executive Director	**California Community Economic Development Association**
6/9/2022	No	Director of Property Management	**Century Housing**
6/15/2022	No	Director of Property Management	**Century Housing**
6/15/2022	No	Chief Operating Officer	**Cesar Chavez Foundation**
6/9/2022	No	Chief Operating Officer	**Cesar Chavez Foundation**
6/15/2022	No	Asset Manager	**Clifford Beers Housing**
6/9/2022	No	Asset Manager	**Clifford Beers Housing**
6/9/2022	No	Asset Management Assistant	**Clifford Beers Housing**
6/23/22	No	Director of Housing & Support Services	**Coalition for Responsible Community Development**
6/22/22	No	Chief Real Estate Officer	**Coalition for Responsible Community Development**
6/15/2022	No	Asset Manager	**Coalition for Responsible Community Development**
6/9/2022	No	Asset Manager	**Coalition for Responsible Community Development**

6/17/22	No	Wilmington Youth Organizer	**Communities for a Better Environment**
6/17/22	No	Organizing Director	**Communities for a Better Environment**
6/17/22	No	Coordinator	**Communities for a Better Environment**
6/15/2022	No	Director of Property Management.	**Community Corporation of Santa Monica**
6/9/2022	No	Director	**Deep Green Housing**
6/15/2022	No	Director	**Deep Green Housing**
6/10/2022	no	Advisory Council	**Downtown Women's Center**
6/15/2022	No	Vice President Operations	**EAH Housing**
6/9/2022	No	Vice President Operations	**EAH Housing**
6/22/22	No	Director of Finance	**East LA Community Corporation**
6/15/2022	No	Affordable Housing Asset Management Consultant	**East LA Community Corporation**
6/9/2022	No	Executive Director	**El Sereno Community Land Trust (ESCLT)**
6/15/2022	No	Director, Vulnerable Populations	**Enterprise Community Partners**
6/23/22	No	Reginal Manager	**Equity Residential**
6/23/22	No	Director of Policy	**Esperanza Community Housing**
6/9/2022	No	Asset Manager	**Hollywood Community Housing Corporation**
6/15/2022	No	Asset Manager	**Hollywood Community Housing Corporation**
6/15/2022	No	Director of Asset Management	**Hollywood Community Housing Corporation**
6/9/2022	No	Director of Asset Management	**Hollywood Community Housing Corporation**
6/23/22	No	Manager, Program Development	**Housing Authority of the City of LA**
6/23/22	No	Attorney	**Housing Rights Center**
6/23/22	No	Policy Director	**Inclusive Action for the City**
6/15/2022	No	President/Chief Executive Officer	**Jamboree Housing**
6/9/2022	No	President/Chief Executive Officer	**Jamboree Housing**
6/15/2022	No	Assistant Director of Asset Manager	**LA Family Housing**
6/15/2022	No	Director of Asset Management	**LA Family Housing**
6/9/2022	No	Asset Manager & Financial Analyst	**Linc Housing**
6/15/2022	No	Asset Manager & Financial Analyst	**Linc Housing**
6/10/2022	No	Executive Director	**Little Tokyo Service Center CDC**
6/15/2022	No	Director	**Little Tokyo Service Center CDC**
6/23/22	No	Assistant Program Officer	**Local Initiatives Support Corporation**
6/17/22	No	Senior Research and Policy Analyst	**Los Angeles Alliance for a New Economy**
6/17/22	No	Outreach Specialist	**Los Angeles Alliance for a New Economy**

6/17/22	No	Communications Specialist	**Los Angeles Alliance for a New Economy**
6/23/22	No	Attorney	**Los Angeles Center for Community Law & Action**
6/23/22	No	Member, Volunteer Organizer, Co-founder	**Los Angeles Tenants Union**
6/23/22	No	Director	**McCormack Baron Salazar**
6/10/2022	No	Principal	**Nancy Lewis Associates**
6/15/2022	No	Vice President of Asset Management	**National CORE**
6/9/2022	No	Vice President of Asset Management	**National CORE**
6/17/22	No	City Climate Advocate	**Natural Resources Defense Council**
6/9/2022	No	Director of Real Estate and General Counsel	**New Economics for Women**
6/15/2022	No	Director of Real Estate and General Counsel	**New Economics for Women**
6/22/22	No	Real Estate Pre-purchase Home Inspector	**o' KAY Property Services**
6/17/22	No	Policy Director	**Pacoima Beautiful**
6/17/22	No	Community Organizer	**Pacoima Beautiful**
6/10/2022	No	(role unknown)	**PATH Ventures**
6/15/2022	No	Director of Asset Management	**PATH Ventures**
6/23/22	No	Director of Development	**People Organized for Westside Renewal**
6/17/22	No	Climate Justice Organizing Manager	**Physicians for Social Responsibility**
6/17/22	No	Executive Director	**Physicians for Social Responsibility**
6/23/22	No	Senior Staff Attorney	**Public Counsel**
6/23/22	No	Staff Attorney	**Public Counsel**
6/17/22	No	Director of Water, Land, and Climate	**Sacred Places Institute for Indigenous People**
6/10/2022	no	Chief Executive Officer	**Skid Row Housing Trust**
6/15/2022	No	Chief Executive Officer	**Skid Row Housing Trust**
6/9/2022	No	Chief Executive Officer	**Skid Row Housing Trust**
6/10/2022	no	President & CEO	**Step Up on Second**
6/17/22	No	Research & Policy Director	**Strategic Actions for a Just Economy**
6/23/22	No	Assistant Director of Building Equity and Transit	**Strategic Actions for a Just Economy**
6/17/22	No	Executive Director	**Strategic Actions for a Just Economy**
6/17/22	No	Executive Director	**Strategic Actions for a Just Economy**
6/17/22	No	Community Organizer	**Strategic Actions for a Just Economy**
6/17/22	No	Communications Associate	**Strategic Actions for a Just Economy**
6/23/22	No	Senior Director of Compliance	**Thomas Safran & Associates**

6/23/22	No	Associate Director / Community Development Director	**TRUST South LA**
6/22/22	No	Government Contracts and Compliance Manager	**Venice Community Housing Corporation**
6/9/22	No	Sr. Director of Asset Management	**Venice Community Housing Corporation**
6/10/2022	no	President	**W.O.R.K.S.**
6/15/2022	No	Director of Property & Asset Management	**West Hollywood Community Housing Corporation**
6/9/2022	No	Director of Property & Asset Management	**West Hollywood Community Housing Corporation**
6/15/2022	No	Director of Developments	**Women Organizing Resources, Knowledge and Service (WORKS)**
6/9/2022	No	Director of Developments	**Women Organizing Resources, Knowledge and Service (WORKS)**

Attachment 1: **Cost Recovery Programs and Rent Increase Regulations by Unit Type**

<table>
<tr><th></th><th>Unit Type</th><th>RSO Cost Recovery Programs</th><th>Rent Increase Regulations</th></tr>
<tr><td>1</td><td>RSO Apartment Units</td><td>1) Capital Improvement (50% recovery with temporary surcharge)

2) Primary Renovation (100% recovery with permanent rent increase)

3) Rehabilitation (100% recovery with temporary surcharge)

4) Seismic Retrofit (50% recovery with temporary surcharge)</td><td>RSO allowable annual percentage plus approved cost recovery program increases.</td></tr>
<tr><td rowspan="2">2</td><td rowspan="2">RSO Condo Units</td><td><u>Tenancy before 1/1/1996</u>

1) Capital Improvement

2) Primary Renovation

3) Rehabilitation</td><td><u>Tenancy before 1/1/1996</u>

RSO allowable annual percentage plus approved cost recovery program increases.</td></tr>
<tr><td><u>Tenancy on or after 1/1/1996</u>

None, because per Costa Hawkins Act, the rent is not regulated by the RSO.</td><td><u>Tenancy on or after 1/1/1996</u>

Rent can be set at market rate for current and future tenants unless the condo is corporate owned & subject to AB 1482 in which case the current tenant’s rent may only be increased 5% + inflation, as measured by the Consumer Price Index (CPI), or 10%, whichever is lower.</td></tr>
<tr><td>3</td><td>AB 1482 Condo and Apartment Units

(RSO Exempt Apts and Condos +</td><td>None</td><td><u>If current tenant is not evicted</u> 5% + inflation, as measured by the Consumer Price Index (CPI), or 10%,whichever is lower.

<u>If current tenant is evicted</u> Rent</td></tr>
</table>

	Unit Type	RSO Cost Recovery Programs	Rent Increase Regulations
	RSO Condos with Post 1/1/1996 tenancies)		can be set at market rate for future tenants.
4	Non-RSO & Non-AB 1482 Apartments and Condos (RSO exempt condos owned by natural persons & affordable, HACLA or Hotel units)	None	Rent can be set at market rate for current and future tenants unless restricted under an affordable covenant.

Attachment 2. **Existing RSO Cost Recovery Programs:**

Program Type	Program Purpose	% Cost Recovery	Max Monthly Rent Increase	Amortization	Duration
Capital Improvement	New improvements that have a useful life of 5 years or more.	50%	$55	60 months	Temporary Surcharge Until 50% recovered.
Primary Renovation	Permitted work on major building systems. Requires Tenant Habitability Plan. Allowed once every 5years.	100%	10% of the unit's rent	180 months	Permanent Increase Phased in 50% Year 1 & 50% Year 2.
Rehabilitation Work	Work required by a change in the health, safety or building codes or to comply with an order as a result of fire or natural disaster.	100%	$75	60 months	Temporary Surcharge Until 100% recovered.
Seismic Retrofit Work	Only for seismic retrofit work as mandated under Ordinance No. 183893.	50%	$38	120 months	Temporary Surcharge Until 50% recovered.

*Applicable to RSO Units Only