

**DE-FOA-0003056, AOI 3b**

**Control Number 3056-1551**

**Topic AOI 3b:** Adoption and Implementation of Innovative Building Energy Code: Innovative Building Energy Codes with Energy Savings Equivalent to Zero Energy Codes

**Project Title:** Building Performance Standard: Adoption, Enforcement and Equitable Support, and Preparation for Regional Adoption.

**Summary Abstract**

The City and County of San Francisco, Environment Department (SFE), will partner with the City of Berkeley (CoB) and regional entities to adopt, implement, and enforce Building Performance Standards (BPS) in both San Francisco and Berkeley, and support regional preparedness in Alameda County and other parts of the nine-county San Francisco Bay Area to adopt BPS. The primary goals for the project are to 1) adopt, implement, and enforce BPS in Berkeley and San Francisco; 2) work with community partners to ensure Equity Priority Building (EPB) compliance with the BPS requirements; 3) collaborate on a model Building Performance Standard based on San Francisco and Berkeley's efforts that could be adopted by cities across the Bay Area; and 4) leverage existing regional expertise and infrastructure to provide technical assistance for region-wide BPS adoption.

The faster San Francisco and Berkeley put forward a model BPS, the faster other cities in the Bay Area and around California will adopt BPS. Both cities recognize the opportunity to integrate regional considerations into their policy development processes to enable smaller jurisdictions to follow suit more easily. Through partnership with Stopwaste/Energy Council (EC) and in coordination with staff from other jurisdictions, the team will create a set of lessons learned and a toolkit for BPS policy development, implementation, and enforcement, specific to Alameda County and the wider Bay Area.

BPS to be adopted in San Francisco and Berkeley will include all DOE-classified building types that meet the square footage criteria: small, medium, and large office; small and large hotel; primary and secondary school; standalone retail and strip mall retail; full-service restaurant; non-refrigerated warehouse; multifamily (3+ stories); hospital; and outpatient healthcare facilities. Central to this effort is ensuring that mandated compliance does not negatively impact historically underserved and environmentally burdened communities. Both San Francisco and Berkeley have buy-in for BPS and will engage communities in the policy development process to build confidence among both commercial and multifamily building operators, as well as Equity Priority Buildings that BPS is affordable, achievable, and provides ROI and benefits.

A key part of implementation and adoption includes defining, and building supportive programs for, Equity Priority Buildings (EPBs). This project will help create centralized resources, leverage existing resources from TECH Clean California, the Equitable Building Decarbonization Program funded by the Inflation Reduction Act, and others to ensure low or no-cost burden holistic retrofits for San Francisco's EJ Communities, and the broader project's Justice 40 communities.

As members of the National BPS Coalition, San Francisco's BPS stakeholder process is underway, targeting adoption in 2025, while Berkeley anticipates adoption in 2026. BPS will help Berkeley meet or exceed its goal to achieve zero carbon emissions by 2045 and will support San Francisco in meeting its goal to achieve net zero citywide by 2040. The combined BPS targets are 90% emissions reductions by 2040, with a compliance rate greater than 70% from mandated building types.

# Application Summary Building Performance Standards Adoption

**Project Summary:**

The City and County of San Francisco, Environment Department will partner with the City of Berkeley (CoB) and regional entities to adopt, implement, and enforce Building Performance Standards (BPS) in both San Francisco and Berkeley. Additionally, they will support regional preparedness for BPS adoption in Alameda County and other parts of the nine-county San Francisco Bay Area.

**Project Impact:**

San Francisco and Berkeley will adopt BPS to reach 90% emissions reductions among compliant buildings by 2040

Prime Recipient, Principal Investigator, Senior/Key Personnel:	San Francisco Environment Department Barry Hooper, barry.e.hooper@sfgov.org Ammon Reagan, areagan@berkeleyca.gov
Industry Partner(s):	BayREN, Stopwaste/Energy Council, BEI

Labor Organization Partner(s):	San Francisco Office of Economic and Workforce Development (OEWD)
Other Key Partner(s):	Community-Based Organizations, SF Building Operations Task Force

**Proposed Project Goals:**

- Adopt, implement, and enforce, BPS in Berkeley and San Francisco
- Work with community partners to ensure Equity Priority Buildings (EPB) are supported
- Collaborate on a model Building Performance Standard for other Bay Area jurisdictions

**Project Key Ideal Takeaway:**

- Carbon performance targets for subject buildings and alternative pathways where needed
- Strong resources and toolkits for smaller jurisdictions in the Bay Area to implement BPS
- Easily navigable decarbonization resources and supportive services for EPBs

**Topline Community Benefits:**

- An increase in housing quality and durability, an increase in energy resilience, and a decrease in environmental exposure and burdens
- Clear decarbonization plans for each building, leveraging incentive programs and low-cost capital
- Increases in energy democracy and parity in clean energy technology access and adoption

**Projected Outcomes**

Compliance of mandated buildings	70%
BPS-related emissions reductions	90%
Zero Carbon Emission in Berkeley	2045
Net Zero Emissions citywide in San Francisco	2040
Additional Bay Area cities adopting BPS model	3

**Requested DOE Funds and Proposed Applicant Cost Share:**

	Federal Share	Recipient Share
Total Project Cost	\$19,994,217	
Total Shares (Prime+FFRDCs+Subcontractors)	\$19,994,217	\$0
Prime	\$6,203,965	\$0
FFRDCs Total, if applicable	\$0	\$0
Subcontractors Total, if applicable	\$13,790,252	\$0



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**Project Title:** Building Performance Standard: Adoption, Enforcement and Equitable Support, and Preparation for Regional Adoption. Our primary goals for the project are to 1) adopt, implement, and enforce BPS in Berkeley and San Francisco, 2) work with community partners to ensure Equity Priority Building (EPB) compliance with the BPS requirements, 3) collaborate on a model Building Performance Standard based on San Francisco and Berkeley’s efforts that could be adopted by cities across the Bay Area, and 4) leverage existing regional expertise and infrastructure to provide technical assistance for region-wide BPS adoption.

**Specific Topic AOI being addressed:** AOI 3b: Adoption and Implementation of Innovative Building Energy Code: Innovative Building Energy Codes with Energy Savings Equivalent to Zero Energy Codes

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**Any additional locations (city, state, zip code) of project work:** Sites include geographic areas covered by the City and County of San Francisco; the City of Berkeley; Alameda County; and Bay Area Regional Energy Network (BayREN) (nine counties comprising the San Francisco Bay Area).

**Statement regarding confidentiality:** Partners do not claim confidentiality for components in the concept paper but may hold parts of the final project as confidential.

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[3056-1551](#) DE-FOA-0003056 Topic Area 3, Subtopic B**Project Overview****Summary**

The City and County of San Francisco, Environment Department (SFE), will partner with the City of Berkeley (CoB) and regional entities to adopt, implement and enforce Building Performance Standards (BPS) in both San Francisco and Berkeley, and support regional preparedness in Alameda County and other parts of the nine-county San Francisco Bay Area to adopt BPS.

**Attestation of Code-Making Authority**

California Health and Safety Code 18941.5 and Public Resource Code 25402.1(h)(2) allow local governments to adopt building codes stricter than California Title 24 building standards. Since 2008, San Francisco and Berkeley have regularly adopted and continuously enforced advanced energy and green building codes that have been widely replicated by other Bay Area localities, the State, and foreign countries. California updates building codes every three years; San Francisco adopts and amends state building codes every three years to advance local safety, energy, and sustainability priorities.

**Background**

The nine-county San Francisco Bay Area has a history of regional coordination in adopting local reach codes above and beyond state energy code requirements—and adopting, implementing and enforcing BPS in San Francisco and Berkeley is the logical next step for supporting region-wide building decarbonization. For over a decade, the Association of Bay Area Governments has led the Bay Area Regional Energy Network (BayREN) Codes & Standards program, collaborating with the other counties of the Bay Area to improve energy code understanding and enforcement, and to develop and adopt advanced energy codes in line with local priorities. Title 24 Part 6 Energy Standards are 12.5% stricter than IECC 2021 and 10% stricter than ASHRAE 90.1-2019 in California Climate Zone 3.

To date, both San Francisco and Berkeley have made significant progress toward BPS adoption including the passage of energy codes, policies, and ordinances, as well as enforcement of Title 24. In addition to enforcing statewide standards, San Francisco and Berkeley regularly adopt and enforce stricter local requirements. For example, the San Francisco Green Building Code consists of the combination of Title 24 Part 11 (“CalGreen”) with local amendments advancing sustainability. Other innovative building policies in San Francisco that exceeded State standards include:

- *Solar PV*: mandating solar PV on residential and commercial new construction.
- *EV Charging*: electric vehicle readiness requirements ensuring EV chargers are installed in new building construction in addition to necessary wiring and electric capacity to install more.
- *Existing Building Energy Performance Ordinance (EBO)*: mandating annual energy benchmarking for commercial buildings 10,000 square feet and larger and requiring an ASHRAE Level 2 energy audit or retro commissioning every 5 years.
- *100% Renewable Energy Ordinance*: requires large commercial buildings subject to EBO to purchase 100% renewable electricity.
- *Electric Preference Ordinance*: requires higher energy efficiency in mixed-fuel new construction.
- *All-Electric New Construction Ordinance*: In 2020, San Francisco enacted the most comprehensive all-electric new construction ordinance in the country, following Berkeley’s adoption of the first all-electric new construction ordinance in the country.

Similarly, the City of Berkeley enforces California’s building codes, exercises its authority to adopt stricter local energy standards, and enforces local energy requirements for existing buildings. Berkeley is the birthplace of many statewide and regional efforts, including piloting the innovative Berkeley FIRST

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(Financing Initiative for Renewable Solar Technology) program providing financing for solar photovoltaic (PV) installations. Berkeley FIRST served as a national model for Property Assessed Clean Energy (PACE) programs. Additionally, Berkeley piloted a local incentive pilot, Money for Energy Efficiency (ME2), that provided free home energy audits and deferred home remodel payment equal to the projected rebate amount. The ME2 program inspired the design of the statewide Energy Upgrade California program. Other innovative building policies in Berkeley include:

- *Natural Gas Prohibition*: a landmark Natural Gas Prohibition which banned the installation of natural gas appliances in new buildings.
- *Building Emissions Saving Ordinance (BESO)*: Berkeley adopted the BESO in 2015, which required buildings 25,000 square feet and larger to submit annual energy benchmarks and publicly report comprehensive energy assessments every 5 years. In 2023, 60% of commercial and apartment buildings 25,000 square feet and larger have complied. Berkeley will be issuing its first citations to non-compliant buildings this year.

San Francisco and Berkeley have long been considered leaders in community engagement and the development of equitable policies. That's why it is no surprise that each city's climate and energy policies and goals were developed through robust stakeholder processes centering racial and social equity, as outlined in the Community Benefits Plan and Community Partnership Documentation. Moving forward, BPS policy efforts will be built upon this background of effective policy development and community engagement. While both cities will propose a comprehensive policy applicable to a broad range of existing buildings, community participants and stakeholders as well as elected officials will determine the final policy through each jurisdiction's legislative process. San Francisco's Climate Action Plan (CAP) notes a threshold for participating buildings at 50,000 sq ft and greater. San Francisco's policy proposal will therefore include the 50,000 sq ft threshold as an option, as well as a 20,000 sq ft threshold option consistent with Berkeley. During the policy development process, community stakeholders may adjust this threshold to include more building sizes.

As members of the National BPS Coalition, San Francisco's BPS stakeholder process is underway, targeting adoption in 2025, while Berkeley anticipates adoption in 2026. We anticipate the local laws will be effective in both cities by 2027. Based on prior experience, it is anticipated that requirements will be phased in for the largest (typically most well-resourced) buildings first: Buildings greater than 50,000 sq ft will be mandated to comply beginning in 2028, and buildings less than 50,000 sq ft by 2030.

As part of this proposal package, SFE has submitted a single equivalence calculator representing the combined BPS targets for San Francisco and Berkeley. The equivalence calculator affirms both cities are committed to reducing emissions for subject buildings beyond FOA requirements. However, should the grant be awarded, individual calculators will be submitted to ensure each City's alignment with its own stated emissions reduction and decarbonization goals. BPS will help Berkeley meet or exceed its goal to achieve zero carbon emissions by 2045 and will support San Francisco in meeting its goal to achieve net zero citywide by 2040. Berkeley's interim target is 50% emissions reductions by 2035, and San Francisco is targeting net zero for the largest commercial buildings by 2035. Combined BPS targets are 90% emissions reductions by 2040, with a compliance rate greater than 70% from mandated building types.

Critical success factors include:

- Culturally informed community and stakeholder engagement featuring robust feedback loops, with transparent outcomes and success metrics.
- Continued support from regional entities to leverage existing incentives, expertise, processes, and relationships for applying BPS best practices to a broader region.

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- Adequate financial and technical support for Equity Priority Buildings (EPB, defined below), accompanied by a process for ongoing verification/identification of EPBs, and sustainable funding sources for EPB support.
- Sufficient technical analysis to model ordinance impacts based on various factors raised during policy development.
- Promotion of early compliance case studies to share successful, equitable, and efficient pathways that encourage broad participation.
- Building strong enforcement capacity while maintaining and enhancing protections for multifamily tenants and Justice 40 community tenants of commercial buildings.

**DOE Impact**

The faster San Francisco and Berkeley put forward a model BPS, the more quickly other cities in the Bay Area and around California will adopt BPS. This, in turn, will accelerate statewide BPS efforts, and inevitably lead to other states to follow California's path. DOE funding accelerates adoption of BPS in both San Francisco and Berkeley and enables smaller jurisdictions to prepare for adopting BPS. Currently, there is no funding to support BPS implementation or enforcement, nor are there any federal awards or grants funding BPS policy development in San Francisco or Berkeley. Most smaller jurisdictions do not have access to building performance data needed to implement and enforce BPS, and they do not have resources to allocate staff for implementing and enforcing advanced energy codes. Emissions from medium and large buildings remain a very significant portion of smaller jurisdictions' total carbon pollution. This grant will allow smaller jurisdictions in the San Francisco Bay Area to participate in the policy development for San Francisco and Berkeley's BPS, leading to a model BPS that can be adopted by these jurisdictions in the future. Both San Francisco and Berkeley have buy-in for BPS, but in addition to the legislative process, significant community engagement work remains to be done to build confidence among both commercial and multifamily building operators, as well as EPBs that BPS is affordable, achievable, and provides ROI and benefits. DOE funds accelerate BPS adoption, implementation, and enforcement, and make broad compliance with this daunting task possible.

**Additional Benefits**

Due to the region's mild climate and marine layer, buildings in San Francisco and Berkeley have not historically been built to prioritize efficient heating, and cooling is very uncommon in residential buildings. However, climate changes, including more frequent hazardous air quality events from wildfires, Spare The Air days, and heat waves, are significantly impacting health and quality of life. In San Francisco, fossil fuel combustion in buildings is the one of the largest sources of criteria air pollution and responsible for 44% of carbon emissions. Additionally, San Francisco is directly adjacent to the San Andreas Fault. In the event of a major earthquake, ruptures to gas distribution lines pose direct hazards to the public and could potentially contribute to more than 40% of post-quake fires. Local utility Pacific Gas & Electric estimates that after a 7.0 magnitude quake, electricity will be nearly fully restored within six days, while gas distribution will lag by six months. BPS with carbon emission targets will directly reduce air pollution, contribute to public safety and disaster resilience, and slow San Francisco and Berkeley's contribution to climate change. Improving building efficiency, in addition to potentially providing buildings with energy savings but also helps to mitigate impacts of climate hazards on local communities. Additional benefits are outlined in the Community Benefits Plan.

**Technical Description, Innovation and Impact****Relevance**

The cities of San Francisco and Berkeley will adopt, implement, and enforce Building Performance Standards as the primary component of this project. Both San Francisco and Berkeley have laid significant

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groundwork including deep conducted community engagement to prepare for the development of BPS, but neither have yet created a policy.

San Francisco's impetus for implementing BPS is driven by its [2021 Climate Action Plan](#). The city's revised climate goals for buildings were informed by the [recommendations and findings of the Zero Emission Buildings Task Force](#)—a broad group of labor, tenant, ownership, technical and municipal stakeholders. This engagement effort formed the basis for the Climate Action Plan, which then went through years of inclusive community revision and amendment processes involving a broad swath of communities and leaders. Today SFE is co-creating building decarbonization policies for San Francisco with the [Building Operations Task Force](#)—a working group of community, labor, business, and engineering leaders. According to timelines developed by the working group, the proposals include the adoption of BPS for commercial buildings.

In 2021, Berkeley's City Council adopted [Berkeley's Existing Building Electrification Strategy \(BEBES\)](#), which is Berkeley's plan to transition existing buildings from natural gas appliances to all-electric alternatives in a way that benefits all residents, especially members of historically marginalized communities. The development of BEBES was a multi-year effort with extensive community input with an equity approach. Developing and implementing building performance standards is one of four primary policy strategies identified to reduce emissions in Berkeley's existing buildings.

Both cities recognize the opportunity to integrate regional considerations into the policy development processes to enable smaller jurisdictions to follow suit more easily. Through partnership with Energy Council (EC) and coordination with staff in other jurisdictions, the team will create a set of lessons learned and a toolkit for BPS policy development, implementation, and enforcement specific to Alameda County. There is significant momentum in the Bay Area to pursue ambitious climate policies, thoughtfully integrate equity considerations, and encourage consistency given the shared network of building owners and workforce across the region. The regional coordination outlined in this grant will enable smaller jurisdictions to pursue BPS and ensure the regional ecosystem of robust technical assistance for EPBs can be expanded to meet additional demand.

### **Feasibility**

Both cities are prepared to develop BPS policy with community organizations, experts, and other entities, and will build upon this effort to ensure our policies have participation and buy in from all impacted entities, particularly Justice 40 and EJ Communities. For decades, San Francisco has created plans, implemented innovative policies, and invested in emission reduction. By 2020, San Francisco's citywide emissions had been [cut 48% from a 1990 baseline](#) while the city's economy increased 199% and population grew 21%. Reduction of emissions from buildings has been driven by cleaner electricity supply, improvement and enforcement of energy codes, and city-wide energy efficiency. Emissions from electricity have declined precipitously with California's escalating Renewable Portfolio Standard (minimum 44% renewable content as of 2024) and transition to the CleanPowerSF community choice aggregation program, which procures the majority of citywide electricity use for all sectors and is already sourcing [97% of power from zero-emission resources](#).

To address the escalating climate emergency and long-standing challenges of inequality and racial injustice, San Francisco formally adopted revised climate targets through a multi-year process led by the Environment Department in collaboration with community based organizations, tenants, ownership, labor, and institutions. Targets include reducing emissions from the building sector 61% by 2030 and net zero emissions citywide by 2040; eliminating fossil fuels in new construction by 2021; supplying 100% renewable



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electricity citywide by 2025; and requiring zero onsite fossil fuel use in existing large existing commercial buildings by 2035.

San Francisco's 2021 CAP laid out the most impactful strategies and actions to achieve these goals. The plan was guided by science and equity, and informed by lived experience presented in the recommendations and findings of the Zero Emission Buildings Task Force. Residential recommendations were developed via the Anchor Partner Network (as described in the Community Benefits Plan). Today, SF Environment is co-creating building decarbonization policies for San Francisco with the Building Operations Task Force (SF BOTF).

The City of Berkeley has also achieved significant reductions in citywide emissions. In their latest GHG inventory from 2021, Berkeley reduced citywide emissions by 25% from the baseline year of 2000. Additional substantial reductions occurred in 2022 when the City of Berkeley transitioned all residential and commercial electricity accounts to AVA Community Energy's 100% renewable electricity product. However, Berkeley's building sector remains the second largest source of community-wide emissions through the consumption of natural gas.

Berkeley's Building Emissions Saving Ordinance (BESO) is the city's main ordinance and program aimed at reducing emission from existing buildings. When it was adopted in 2015, BESO's focus was to provide building owners with information on how to reduce energy use through energy benchmarking and assessments and it relied on voluntary action to complete upgrades. After years of implementing BESO it became clear that voluntary action is not enough, and mandated action is needed to address the current climate crisis and achieve climate action goals. In 2020, Berkeley City Council amended BESO to align with their city's electrification and fossil fuel free city goals by directing staff to develop energy upgrade requirements for all building sizes and types for Council's consideration. For large buildings, these upgrade requirements will be achieved through the creation of building performance standards.

In order to equitably develop these standards, BEBES, Berkeley's electrification strategy, identified the critical need for the city to work closely with the community to co-create Building Performance Standards through direct outreach and meeting people where they are, including those from minority groups and those who cannot attend traditional City-led community meetings. As part of Berkeley's Existing Building Electrification Strategy, the City developed four equity guardrails that each potential building electrification policy will be assessed against. The guardrails are outlined in detail in the Community Benefits Plan.

Finally, as part of the process of developing this proposal, SFE, team members from the City of Berkeley, and key staff from the Bay Area Regional Energy Network (BayREN), the StopWaste/Energy Council, and the Building Electrification Institute met with a number of cities and organizations interested in, working on, and that have already implemented BPS. The goal was to assess the current landscape of BPS policy interest and development, to be transparent about our BPS goals, and gather knowledge about successful BPS adoption, implementation, and enforcement. As San Francisco and Berkeley begin work on this project, our goal is to maintain communications with all our regional partners and cities to ensure as much coordination as possible throughout the Bay Area. The team has been in communication with San Jose, San Luis Obispo, Santa Monica and Santa Barbara (through Green Cities California), who are interested in, and working toward BPS adoption, through statewide peer exchange. Finally, the team has been in communication with the California Energy Commission, which is working on a statewide BPS plan. CEC has affirmed interest in exchanging insights with and learning from San Francisco and Berkeley's efforts to inform the statewide BPS proposal required by CA SB48(2023). CEC has also reaffirmed its commitment to accepting local BPS enforcement as a compliance option in the SB48 plan. Some of the organizations and entities we have met

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with during this process include: the Institute for Market Transformation, The City of Oakland, the City of Alameda, the City of Hayward, Denver, and StopWaste, among others.

### Impacts

BPS to be adopted in San Francisco and Berkeley will include all DOE classified building types that meet the square footage criteria: small, medium and large office; small and large hotel; primary and secondary school; standalone retail and strip mall retail; full-service restaurant; non-refrigerated warehouse; multifamily (3+ stories); hospital and outpatient healthcare facilities. Central to this effort is ensuring that mandated compliance does not negatively impact historically underserved and environmentally burdened communities. Throughout the San Francisco Bay Area, many older buildings—especially those buildings currently in environmental justice communities or that are used by historically underserved populations—may have significant deferred maintenance that must be addressed prior to energy efficiency and decarbonization improvements. Significant assistance in the form of technical support, financial resources and incentives is needed to stack available funding sources to ensure low or no-cost burden holistic retrofits.

A key part of implementation and adoption therefore includes building supportive programs for Equity Priority Buildings (EPBs). This project will help create centralized resources, leverage existing resources from California ratepayers and the Equitable Building Decarbonization Program funded by the Inflation Reduction Act, and support free one-on-one technical assistance to help building owners:

- Complete onsite assessments to uncover emissions and energy saving opportunities
- Create a decarbonization plan to reach their interim and final BPS targets
- Submit alternative compliance plans (if needed)
- Draft scopes of work for retrofit plans and bids
- Review vendor bids and choices for contractors
- Find and stack various financial resources together to make energy efficiency upgrades attainable

Defining Equity Priority Buildings can be complex and is often specific to their geographic location. In San Francisco, a rigorous community process has been undertaken to define environmental justice (EJ) communities in terms of geographic locales within the city. The San Francisco EJ Communities Map identifies areas with higher pollution levels, predominantly inhabited by low-income communities and communities of color. This map is informed by CalEnviroScreen, a tool developed by CalEPA and OEHHA, which identifies California communities most impacted by pollution and other health risks. The EJ Communities Map incorporates additional local data on pollution and demographics and has been refined through a comprehensive community engagement process. The map has been adopted by the San Francisco Board of Supervisors and is incorporated into the City's General Plan.

In this context, policy development efforts will define San Francisco EPB in alignment with the EJ Communities Map and in collaboration with EJ communities. Berkeley will define EPBs along similar lines. In addition to defining what an EPB is, collaboration will include developing the necessary real-time supports that will enable these buildings to be compliant, or adopt an alternative pathway for compliance, with BPS. Examples of EPBs include:

- Multifamily buildings housing low- and moderate-income tenants, or owned and operated by non-corporate, small business building owners
- Community-serving buildings in low- and moderate-income neighborhoods (cultural centers, clinics, houses of worship, particularly entities providing critical social services to Justice 40 communities)

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- Facilities offering healthcare services to income-qualified or fixed income communities
- Commercial buildings owned or leased by non-profits or other tax exempt entities
- Mixed-use buildings clustered in Disadvantaged Communities (DAC, according to the EJ Map)
- EJ communities and groups who are tenants of larger, non-EPB designated buildings

The San Francisco Bay Area offers several technical assistance and incentive programs for multifamily buildings. These include TECH Clean California, the Equitable Building Decarb Program, and the Bay Area Multifamily Building Enhancement program (BAMBE). BAMBE provides rebates for technologies like Heat Pump Water Heaters, mini-splits, panel upgrades, and building assessments. A crucial aspect of reducing costs for underserved communities in Equity Priority Buildings is facilitating the navigation and application of these programs and leveraging multiple incentives to minimize decarbonization expenses. For this proposal, Berkeley and San Francisco will collaborate with BAMBE, which operates under the broader framework of BayREN and the Energy Council, to enhance and extend the reach of their existing multifamily assistance program. This approach would involve supporting affordable housing, EPBs, and other equity-qualified commercial buildings. BAMBE will help building owners navigate the landscape of available incentives and program resources essential for successfully funding and implementing upgrades. Teams of energy experts will provide personalized technical assistance, offering guidance on energy-efficient and clean energy technologies, local building regulations, and the various incentives and financing options available to fund building upgrades. As part of the implementation and enforcement phases, San Francisco and Berkeley will develop distinct technical support mechanisms for standard commercial properties.

## Workplan

### Project Goals and Outcomes

The City and County of San Francisco, Environment Department (SFE), will partner with the City of Berkeley (Berkeley) and regional entities to adopt, implement and enforce Building Performance Standards (BPS) in both San Francisco and Berkeley, and help to prepare smaller jurisdictions in Alameda County and other parts of the Bay Area to adopt BPS. Our primary goals are:

1. Adopt, implement, and enforce BPS in Berkeley and San Francisco
2. Work with community partners to ensure Equity Priority Building (EPB) compliance with the BPS requirements
3. Collaborate on a model Building Performance Standard based on San Francisco and Berkeley's efforts that could be adopted by cities across the Bay Area, and
4. Leverage existing regional expertise and infrastructure to support region-wide readiness for BPS adoption

At the close of the performance period, the following outcomes are aimed to be achieved:

- A variety of compliance pathways for buildings of various sizes and types that enable buildings to participate in BPS to help cities reach the target of 70% building compliance and 90% emissions reductions
- Strong resources and toolkits for smaller jurisdictions in the Bay Area to implement BPS including case studies, retrofit guides, building stock analyses, and more, that enable at least three key cities in Alameda County to work toward BPS adoption (Hayward, Oakland, Emeryville)
- Easily navigable and sustainable, ongoing decarbonization resources and supportive services for EPB that include a fund for noncompliance fines that can be used toward supporting EPB, and/or the development of a ratepayer contribution to EPB supportive services

[3056-1551](#) DE-FOA-0003056 Topic Area 3, Subtopic B**Technical Scope Summary**

The scope of this project is nine years, with three budget periods spanning approximately three years each. Broadly, the three budget periods are for policy development and adoption, implementation, and enforcement. San Francisco and Berkeley expect to collaborate closely with each other as well as regional entities and community-based organizations across all budget periods to support consistency in BPS, and regional preparedness for adoption. However, San Francisco and Berkeley will have different timeframes, and may have different implementation and enforcement mechanisms, given the size and scope of building stock in each city. These differences in timing across tasks are detailed in the project schedule (Gantt chart below).

**Task Description and Objectives Summary**

Tasks are generally the same for both San Francisco and Berkeley. Each budget period contains three - five primary tasks, with subsequent related tasks to complete objectives. Instances when San Francisco's and Berkeley's work diverts, and includes additional—or fewer—subtasks, are noted in the project schedule. Below are the task, milestone, and Go/No-Go high-level summary descriptions by budget period, with key objectives for each budget period listed accordingly to provide a full scope of the project. The total budget for the nine year project is \$19,994,217.

**Budget Period 1: Policy Development and Adoption**

Timeline: 3 years

Budget: \$3,013,043

Berkeley and San Francisco will develop BPS policy proposals in close coordination with each other, and the broader Bay Area governmental networks, and extensively engage with communities and stakeholders. The conclusion of this budget period will result in the adoption of Building Performance Standards in each respective jurisdiction and will lay the foundation for a model BPS for the region.

**Objectives:**

- Robust community engagement in both Berkeley and San Francisco to develop the BPS policy. Participants will include residents, tenants' rights advocates, labor, engineers and design professionals, building owners & property management, Chambers of Commerce, community based organizations, housing and health agencies, and others.
- Collaborate with communities to co-develop a plan for sustainable decarbonization that supports making compliance achievable for EPB.
- Develop compliance pathways for buildings of various sizes and types to reach targets.
- Move policy through legislative process.

**Develop and Adopt BPS Policy**

Establish a Technical Advisory Committee (TAC) and a Community Accountability Committee (CAC). The TAC will consist of experts, engineers, design professionals and others to develop rules procedures and complementary programs. The CAC will be composed of community representatives, CBO's, and representatives of local businesses serving frontline communities to recommend programs, practices, and rules to reduce historical inequities. In San Francisco, the CAC will work in close coordination with the BOTF and will likely be composed of at least one BOTF representative. Extensive community engagement is needed to gain community input and support, and will involve a series of listening sessions, workshops, and virtual meetings to gather feedback, educate the community, and incorporate suggestions into the proposed policy. The team will conduct an existing BPS policy analysis to model emissions, energy, and costs to building owners and tenants based on policy variables, such as covered building types, building size thresholds, interim and final BPS targets. The analysis will also incorporate considerations for carbon offsets and renewable energy credits and help determine amounts for alternative compliance payments and/or

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finer. This analysis will need to be dynamic to inform TAC and CAC of potential impacts, and adjust modeling based on their feedback. A final policy will be developed including metrics and targets, covered property types, compliance pathways, and fines and penalties for non-compliance, and will be proposed to the City Council and Commissions.

**Develop support programs**

The team will work with the CAC, CBOs, and EJ communities to understand needs, gaps, and define components to include in EPB supportive programs, including navigation of suite of available resources and financing across the region for stacking, as well as to establish criteria for residential and/or community-serving buildings to become EPB. The working group will also determine criteria for commercial EPB, including at the tenant level. This will result in the development of a preliminary database of EPB, which will be used to inform the development of EPB supportive services and ensure EPB incentives flow to underserved communities/tenants. Commercial buildings will also require some technical support for navigating available financing programs, and the TAC and CAC, as well as SF BOTF will work together to develop a framework for providing this support.

**Establish San Francisco Early Adopter Incentive for Commercial Buildings**

To support voluntary compliance of BPS among San Francisco's commercial buildings, SFE will work with the SF BOTF, building owners, and asset managers to develop the plan for rolling out an early adopter incentive to attract an initial sample of buildings (up to 10) for inclusion in initial BPS rollout.

- MILESTONE 1: Project communications established (Q4 2024)
- MILESTONE 2: Technical and community advisory committees established
- MILESTONE 3: Preliminary database of EPB-designated buildings is completed
- MILESTONE 4: The EPB definition, an achievable and sustainable EPB support services structure, and alternative compliance pathways to reach targets, are all included in the policy to be adopted

GO/NO-GO: If BPS policy is not adopted by San Francisco and/or Berkeley we will need to review next steps

**Budget Period 2: Outreach and Implementation**

Timeline: 3 years

Budget: \$11,480,290

San Francisco and Berkeley will begin the rollout of information regarding the new BPS policy, phases of mandatory participation, and targets. San Francisco will launch its Early Adopter Incentive program to complete by or before the end of the budget period and will use findings from this program for additional commercial building outreach. Both cities will establish EPB supportive services, as well as commercial EPB concierge-style technical assistance through BAMBE, to prepare for full rollout.

**Objectives:**

- Rollout BPS in phases for commercial buildings, beginning with a small group of varied building types ranging from standard to difficult and coordinate technical assistance to help building owners plan for, finance, and implement decarbonization to comply with local ordinances
- Develop concierge-style services free for EPB, and available to commercial EPB buildings, to navigate the field of available incentives, resources, and financing to support BPS compliance
- Build staff capacity for implementation and enforcement efforts
- Disseminate resources and toolkits enabling Alameda County cities to implement building performance standards

Prepare for BPS Implementation

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Teams will work with the CAC and TAC to create a set of rules and regulations to guide implementation of BPS, including exemptions and/or deferrals for various building types, configurations, or hardships. The TAC and CAC will design processes for reviewing and approving alternative compliance pathways, such as the creation of an Alternative Compliance Review Board. Using energy benchmarking data from the baseline data year, both cities will create and publish BPS interim and final targets for each building and will conduct outreach to all BPS covered buildings in multiple languages and through multiple vehicles, including direct mailers, emails, and webinars. BPS software and online tools will be created and/or expanded to meet the needs of the adopted policies. The platform may include the ability to track compliance with BPS targets and alternative compliance paths, display BPS target/benchmarking compliance through an online look-up tool, including EPB designation, issue building scorecards with benchmark submittals that display a building's progress towards its BPS targets, track staff interactions with covered buildings through CRM, including enforcement communications and potential penalties, and report citywide progress toward goals. Finally, a robust ecosystem of online resources for building owners will be created to assist them with BPS compliance. These resources will include compliance guides for various building types, policy compliance checklists and pathway selection tools, lists of financial resources, such as available incentives and financing mechanisms, and case studies of buildings that comply early, elevating lessons learned and informing compliance guidance documents.

#### Launch Supportive Programs

The team will work with the implementer of BAMBE to develop an outreach strategy and process to onboard new EPBs. These efforts will expand BAMBE's capacity to address Berkeley's EPBs. The existing Climate Equity Hub will provide a model for community engagement with EPB owners and tenants in San Francisco. BAMBE will provide one-on-one assistance to building owners on BPS target and compliance path considerations, and support navigation of and access to TECH, Equitable Building Decarb Program, and other incentives for stacking. San Francisco will select its Early Adopter Incentive buildings and begin the technical assistance process for mapping compliance pathways and tracking progress toward targets. At the same time, Berkeley will launch its commercial building supportive program, aiming to become a One-Stop-Shop for these buildings, offering free technical assistance for buildings meeting the EPB definition, and general resources and advising for all BPS buildings on retrofits and compliance.

#### Prepare for BPS enforcement

The team will develop a plan to enforce BPS targets, including enforcement outreach to buildings, establishing alternative compliance payment and fine deadlines, and reporting requirements. Each city will establish a fund for BPS fines to be used for EPB supportive services. Continued work with the TAC and CAC as well as relevant partners including the SF BOTF will determine how these funds should be used to support EPB with BPS compliance.

#### Assist with Regional Scaling

The team will create an Alameda County focus group with the assistance of the Energy Council, to review Berkeley's and San Francisco's BPS policy, and begin developing policy adoption and implementation toolkits for cities. With the assistance of the Energy Council and BayREN, there will be a clear set of next steps, lessons learned, and recommendations for other Bay Area jurisdictions to adopt an aligned BPS ordinance. This may include assessment of what regional infrastructure will be available to support additional BPS jurisdictions, model ordinance language, and analysis of regional building stock including EPBs.

- MILESTONE 5: Supportive Services for EPBs, and fund for fines to be used for EPB supportive services is created in San Francisco and Berkeley, respectively

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- MILESTONE 6: Model BPS policy and toolkit components approved by participating entities across Alameda and other Bay Area Counties

GO/NO-GO: If EPB supportive programs are not able to be launched we will need to review  
If BPS is not adopted by other Alameda or Bay Area jurisdictions we will need to review

**Budget Period 3: Enforcement and Continued Implementation**

Timeline: 3 years

Budget: \$5,500,884

San Francisco and Berkeley will begin full rollout of BPS to all mandated buildings, fine tune pathways, and begin notification processes for non-compliant buildings, including the collection of fines and/or alternative compliance pathways.

Objectives:

- Full rollout of BPS to all eligible buildings including enforcement-related outreach and notifications

**Ongoing BPS Implementation**

The team will continue proactive communication with building owners including notification of their compliance status, options, and next steps to minimize enforcement needed. Early Adopter Incentive buildings and other successful compliance journeys will be amplified to building owners through the sharing of detailed case studies. Cases will also be included in the regularly updated online resources for owners.

**Enforce first BPS target**

The teams will issue enforcement communications ahead of the first BPS target, providing notice to building owners of the upcoming target date and paths to comply, with transparent information on potential penalties. Alternative compliance applications will be reviewed and approved as appropriate, closely tracking lessons learned. Teams will issue fines and/or collect alternative compliance payments through citations and/or notices sent to buildings informing them that they have not met their required BPS targets. Funds will be channeled into the BPS supportive services fund for EPB established in Budget Period 2. A process for expenditure of these funds will be developed by CAC and SF BOTF.

**Expand BPS requirements for additional building types or size thresholds**

Depending on policies adopted, the BPS may be extended to additional buildings. Using energy benchmark data from the baseline data year, interim and final BPS targets will be created for each additional/new building, and outreach will be conducted to inform buildings of the requirement, and the resources available to assist with compliance.

**End of Project Goal**

San Francisco and Berkeley's combined target for BPS compliance should help Berkeley to meet or exceed its goal to achieve zero carbon emissions by 2045 and will support San Francisco in meeting its goal to achieve net zero emissions citywide by 2040. At the close of the project, it is expected to have a 70% compliance rate from mandated buildings, with 90% emissions reductions by 2045 given the rollout timeline. Berkeley's interim target is 50% emissions reductions by 2035, and San Francisco is targeting net zero for the largest commercial buildings by 2035.

**Project Schedule (Gantt Chart)**

**Building Performance Standard Adoption, Enforcement, Equity Support, and Preparation for Regional Adoption**

Project Period: January, 2025 - December, 2033

Task	Budget Period 1				Budget Period 2				Budget Period 3				Year 9			
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2033	2033	2033	2033	2033	
<b>Task #1 Communicate Plan</b>																
1.1 Set up public web content with Community Benefits Plan milestones and progress																
1.2 Identify California BPS development teams																
1.3 Schedule quarterly calls with California jurisdictions developing/adopting BPS																
<b>MILESTONE 1: Project communications established</b>																
<b>Task #2 Develop and Adopt BPS Policy</b>																
2.1 Select CBO partner, & community engagement and technical consultants																
2.2 Form San Francisco Building Occupations Task Force (BFOTF)																
2.2.1 Form San Francisco Building Occupations Task Force (BFOTF) (Continued)																
2.2.2 Form Berkeley BPS Technical Advisory Committee and Community Accountability Committee																
2.2.3 Form Local Government Technical Advisory Committee (Interested Alameda County cities)																
2.3 Analyze BPS carbon, energy, and cost impacts (dynamic analysis)																
2.3.1 Compare and contrast to other jurisdictions and communities between cities																
2.3.2 Compare and contrast to other jurisdictions and communities between cities (Continued)																
2.3.3 Compare and contrast to other jurisdictions and communities between cities (Continued)																
2.4 Conduct Extensive Community Engagement																
2.4.1 San Francisco conducts community engagement																
2.4.2 Berkeley conducts community engagement																
2.5 Develop Policy Components																
2.5.1 Develop and adopt covered building type, size, metrics, and phase-in period																
2.5.2 Define applications and options for alternate compliance																
2.5.3 Set financial penalties and define mechanism to direct revenue to EPR services																
2.6 Adopt Building Performance Standards																
2.6.1 Draft ordinance language																
2.6.2 Legal review																
2.6.3 Legal review																
2.6.4 Introduce BPS legislation for adoption - San Francisco																
2.6.5 Introduce BPS legislation for adoption - Berkeley																
2.6.6 Provide staff support in relevant public hearings leading to vote by Board of Supervisors/Council																
2.6.7 Local Government TAC reviews adopted BPS recommendations; adaptations for small jurisdictions																
2.6.8 Share progress with California Energy Commission																
<b>MILESTONE 2: Technical and community advisory committees established</b>																
<b>MILESTONE 3: Preliminary database of EPR-designated buildings is completed</b>																
<b>REVIEW E: Report summarizing expected policy impacts of San Francisco BPS proposal in both cities, with recommendations for Berkeley BPS</b>																
<b>DELIVERABLE: Report including SF and Berkeley BPS, with recommendations from Local Government TAC</b>																
<b>Task #3 Develop equity priority building (EPB) support programs</b>																
3.1 Assess needs and draft program requirements for EPB supportive services																
3.2 Establish criteria for residential and commercial qualification for EPB services																
3.3 Define program requirements and qualification criteria with community advisory committees																
3.4 Develop program requirements and qualification criteria for the HOME program																
3.5 Select commercial building supportive program provider serving both cities, based on outcomes from 3.1, 3.2, 3.3																
3.6 Publish map and list of qualifying equity priority buildings																
3.7 Publish map and list of qualifying equity priority buildings - recognizing qualifying EPB in addition to 3.6																
<b>MILESTONE 4: The EPR definition, an achievable and sustainable EPR support services structure, and alternative compliance pathways to reach targets are all finalized in the policy to be adopted</b>																
<b>Task #4 Prepare San Francisco early adopter incentive for commercial buildings</b>																
4.1 Develop plan with commercial stakeholders to offer a competitive incentive for early adopters																
4.2 Develop outreach materials, criteria for participation, and guidelines for early adopters																
4.3 Conduct Open Call to develop list of qualified decarbonization engineering providers																
4.4 Issue RFP for early adopter participation																
<b>EPB Go/No-Go: Both cities have proposed a BPS and San Francisco has adopted</b>																
<b>Task #5 Implement Building Performance Standards</b>																
5.1 Create administrative rules and regulations																
5.2 Set building-level BPS targets and penalties for non-compliance																
5.3 Notify building owners and stakeholder for covered buildings about BPS requirements																
5.4 Update software and online tools																
5.5 Train staff and develop training materials																
5.6 Train Help Desk staff and develop tools to support BPS																
5.7 Review Strategic Decarbonization Plans submitted for initial compliance																
5.8 Implement review of requests for alternative compliance pathways																
<b>Task #6 Launch supportive programs for Equity Priority Buildings</b>																
6.1 Launch augmented support services to aid multifamily EPR planning and compliance																
6.2 Launch augmented support services to aid multifamily EPR planning and compliance (Continued)																
6.3 Implement strategy to onboard EPBs in support services																
6.4 Offer EPBs free decarbonization planning and financing application assistance as defined by Task 3.1																
<b>Task #7 Implement San Francisco early adopter program for commercial buildings</b>																
7.1 Select 10 Early Adopters based on Task #2 RFP																
7.2 Fund strategic decarbonization plan for Early Adopter																
7.3 Fund strategic decarbonization plan for Early Adopter (Continued)																
7.4 Fund strategic decarbonization plan for Early Adopter (Continued)																
7.5 Prepare 5 Early Adopter case studies to support BPS rollout																
<b>Task #8 Prepare for BPS enforcement</b>																
8.1 Publish Enforcement Plan based on Tasks 2 and 5																
8.2 Create fund to hold revenue for EPR supportive services (as designed in #2.3)																
<b>MILESTONE 5: BPS is implemented in each city, dedicating fine revenue to EPR supportive services and program administration</b>																
<b>Task #9 Prepare for regional adoption</b>																
9.1 Document feedback from Local Government Adoption TAC (LGATAC)																
9.2 Write Bay Area Model BPS containing Berkeley & San Francisco policies with LGATAC criteria																
9.3 Develop policy adoption and implementation toolkit																
<b>DELIVERABLE: BPS policy adoption and toolkit to extend performance standards to regional jurisdictions</b>																
10.1 Approved by LGATAC participants																
<b>MILESTONE 6: Bay Area Model BPS Program is adopted and a Strategic Decarbonization Plan of Request for Alternative Compliance</b>																
<b>BP2 Go/No-Go: Equity Priority Building Support programs are launched and BPS is adopted in two cities.</b>																
<b>Task #10 Maintain BPS implementation</b>																
10.1 Evaluate and update compliance, notifications, online resources, Help Desk, how to access resources, etc.																
10.2 Evaluate pilot & successful compliance journeys; share detailed case studies and update online resources																
10.3 Notify additional building types of sizes of requirement (if applicable based on 2.3.1)																
<b>Task #11 Enforce first BPS performance target</b>																
11.1 Issue enforcement communications																
11.2 Issue enforcement communications (Continued)																
11.3 Implement penalties issued via the Violation and collect fines																
11.4 Invest BPS Support Fund in EPR decarbonization																
<b>Task #12 Prepare Final Report</b>																



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### **Financial Management**

The project will use standard financial principles in all areas. Oversight by SFE includes tracking of the budget, tasks, and timelines, as well as contracting with, and receiving and paying invoices from, subawardees. Contract management by SFE includes issuing contracts, receiving invoices, paying invoices, and submitting invoices to the DOE.

### **Project Management Practices and Systems**

The project will use standard Project Management principles. Daily operations will be managed by SFE including coordinating with stakeholders, managing any contracting technical partners, managing project budget, tasks and timelines and reports for DOE review. The PI, Barry Hooper, has 18 years of experience managing green building, building performance, and decarbonization programs which have been repeatedly recognized for excellence. Hooper will be responsible for ensuring timely reporting, managing subawardees, coordinating with team members, consultants, and partners, and managing communications. Hooper will also manage risk and ensure a well-coordinated team of qualified and experienced people and will manage regular communications with DOE.

### **Process for Managing Project Changes**

Difficulties will be reported directly to the PI to be either resolved on the phone, or in a separate call with only those parties directly involved. Changes in budget, a timeline shifting more than two quarters (6 months), or a change in tasks or task assignments, will first be discussed with the project team to clarify the impact. The DOE project manager will be informed by email and/or telephone of the proposed change and the expected impacts. If agreed, SFE will send an updated budget, timeline, or task description, depending on the change.

### **Project Team Responsibilities**

Team responsibilities are outlined in the budget, task and milestone summary, and the project schedule (detailed in the Gantt chart), as well as throughout this narrative. SFE staff will manage the overall project, with the leads in the City of Berkeley, and wider Bay Area implementing the project specific to their area and constituents. Team members have allocated adequate resources in their respective budgets to cover project responsibilities.

### **Internal Communications**

SFE will facilitate the project launch and conduct regular teleconferences or in-person meetings. Documents will be shared on Google docs or equivalent software, and include all participants and contact information, project schedule, meeting agendas, notes from weekly phone calls/virtual meetings, as well as draft documents, budget and other program documents.

### **Project Risks, Mitigation Strategies and Risk Management Responsibilities**

The primary project risk is related to slow commercial building uptake of the new BPS policy in San Francisco. The goal is to minimize the number of commercial buildings that obtain hardship waivers delaying compliance. To mitigate this risk, a “prize” structure for an initial subset of commercial buildings will be folded in to demonstrate the way BPS implementation will function, and the bottom line value of BPS compliance. This initial subset of buildings will enable the team to highlight case studies, test the pathways structure, and fine tune the process in advance of broad rollout. All buildings may not be able to be fully compliant. But for those buildings, our preference is for them to make as much progress toward targets as possible. Additional risks may be predominantly timeline related, for instance, approval of the BPS policy and movement through each city’s legislative process, and community engagement. Both San Francisco and Berkeley have leadership readiness for BPS passage, but it can be difficult to account for the

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length of time it takes for policies to move through approval processes. Lastly, community engagement around EPB identification and supportive services development could take more time than planned, if additional meetings, workgroups, and listening sessions are required. However, the budget periods are designed to provide some flexibility for the time-related uncertainties of these components, and we will be in regular communication with the team as well as DOE to update them on the progress of tasks for each budget period.

**Quality Assurance/Control**

Each member of the team has years of experience successfully delivering projects of similar magnitude and complexity. Throughout the project, the PI will ensure that the team stays on track to complete deliverables and tasks in keeping with project goals.

**Buy America**

The project will not involve construction, alteration, or repair of infrastructure in the United States. Minimal construction may be needed by buildings on pathways toward compliance with BPS, which are the responsibility of the buildings and do not constitute use of funds from the proposed BPS project. This construction will likely not be related to infrastructure.

**Technical Qualifications and Resources****Project Team Qualifications, Expertise, and Experience**

San Francisco is a noted leader in low-carbon mobility and climate policy. The city has aggressively reduced its annual GHG emissions by enforcing new green building standards, investing in renewable energy, and advancing alternative fuels and transportation electrification.

SF Environment has extensive experience designing, evaluating, and validating projects. Created by voter mandate in 1996, the Department is responsible for tracking and meeting the City's GHG reduction goals and designing and implementing a range of policies and programs to accelerate decarbonization. The City of San Francisco is on track to reach zero emissions by 2040, having already halved total building emissions since 1990. SFE is responsible for enforcing energy requirements for existing commercial, residential, and municipal buildings adopted in the San Francisco Environment Code, including:

- Section 704: Requires municipal existing building alterations to install efficient all-electric equipment, to install battery storage & solar PV for resilience, achieve site zero net energy, or design energy use intensity 50% better than the national median.
- Chapter 20: The Existing Buildings Energy Performance Ordinance requires commercial and multifamily existing buildings to benchmark energy use and requires commercial buildings to either undergo an ASHRAE energy audit every 5 years or submit a plan for existing building decarbonization.
- Chapter 30: Requires existing commercial buildings to purchase 100% renewable electricity from a qualified utility or the CleanPowerSF community choice aggregation program.

The San Francisco Department of the Environment (SFE) has been deeply engaged with local stakeholders in support of the Zero Emission Building Taskforce (ZEBT) including workgroups focused on New Construction, Existing Municipal Buildings, Existing Residential Buildings, and Existing Commercial Buildings to support the development of SFE's Roadmap to Zero Emission Buildings. Our primary learning in these sessions was that participants prefer pathways to citywide building decarbonization that treat building owners as partners and support effective plans and investments that help buildings and the city achieve shared goals. BPS-specific work will build upon these learnings and provide the Building Operations Task Force with key insights for BPS policy development.

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As climate change continues to accelerate, over the past few years, SFE has started to receive limited financial support from the city's general fund. Nevertheless, SFE continues to rely primarily on grant funds to accomplish its work, including funding from the CEC, DOE, Bay Area Air Quality Management District, and other institutions. The following are four active grant-funded projects relevant to our community engagement and decarbonization work.

- In 2024, SFE received \$800,000 from the DOE's Energy Efficiency and Community Block Grant program. The funding supports the city's efforts to coordinate with BayREN energy programs and augment funding sources from BayREN and other available electrification rebates/incentives. The aim is to electrify single-family and small multifamily (two to four unit) buildings in disadvantaged communities in San Francisco.
- In 2023, the EPA awarded SFE a \$1 million G2G environmental justice grant to support community-led environmental projects supporting improved health outcomes for communities.
- In 2023, SFE received the \$400,000 DOE HeroX American Made Prize for its equity-centered concept to upgrade 200 homes in 200 days with hot water heat pumps and efficiency measures in and next to a San Francisco Disadvantaged Community.
- In 2023, SFE received a \$600,000 award from the Department of Energy to promote the use of e-bikes for food delivery throughout the city and study the economic benefits of bikes over cars to the delivery person.
- In 2022, the California Energy Commission awarded SFE \$2.4 million to implement select actions from the EV Blueprint, including increasing public awareness of EVs, expanding charging infrastructure, and developing a charging depot in a Justice40 community.

The City of Berkeley, the primary subawardee and partner with SFE on this proposal, is a national leader in climate action and initiating ambitious and replicable policies that reduce greenhouse gas emissions. In 2006 Berkeley voters overwhelmingly voted to reduce community greenhouse gas emissions by 80% below 2000 levels by 2050. Since then, Berkeley has aggressively worked to enact policies, such as the nation's first natural gas ban for new construction, to not only meet those goals, but to ultimately make Berkeley a Fossil Fuel Free city.

Berkeley has shown that it has outsized impact for its size and that it is a hub for piloting innovative decarbonization policies. In 2021, in appreciation of these efforts and for making real progress on climate goals, Berkeley received recognition from the Carbon Disclosure Project, as one of only 88 cities out of more than 800 worldwide, to successfully make significant progress in reducing community-wide greenhouse gas emissions.

Berkeley has extensive experience managing large contracts and grants, including the following decarbonization-related projects:

- In 2016, Berkeley received a \$1.5 million grant from the California Energy Commission as part of its Electric Program Investment Charge (EPIC) program to conduct the Berkeley Energy Assurance Transformation (BEAT) project that analyzed the regulatory, technical, and financial aspects of how to design a clean energy community microgrid.
- In 2021, Berkeley allocated \$600,000 in funding for a Pilot Climate Equity Fund to provide building electrification funding and e-bikes to income-qualified residents as well as funding for resilience measures and a forum to elevate under-represented community voices in climate and resilience projects.

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- In 2022, Berkeley approved \$1.5 million for a Just Transition Pilot program to provide direct installation of building electrification upgrades to income-qualified residents paired with high-road job labor standards and wages for the residential electrification contractors and installers.

### Roles and Key Staff

The Principal Investigator, Barry Hooper, Senior Green Built Environment Coordinator. Hooper will manage San Francisco's BPS implementation as well as the overall project. Oversight will be provided by Cyndy Comerford, Climate Program Manager, and community outreach will be managed by Nik Kaestner, Senior Building Decarbonization Coordinator. Joyce Oloresisimo-Arpon, Assistant Coordinator, will provide project support. Hooper will coordinate with partners and be the conduit for communication to DOE. He will ensure the project is on schedule and that reports and communication with DOE are done in a timely manner. Hooper has more than 15 years of experience managing projects of a similar scope and scale at SFE. Hooper manages the Existing Buildings Energy Ordinance, which motivates improved energy efficiency in commercial and multifamily buildings through energy benchmarking and disclosure and requires commercial buildings to prepare an actionable plan for improvement. Hooper also leads development and supports implementation of San Francisco's Green Building Code which advances energy, water, material, and air quality improvement in local construction projects. He represents San Francisco in the Bay Area Regional Energy Network Codes & Standards program, the C40 Cities Private Buildings Decarbonization Network, and Bay Area Air Quality Management District appliance rules Implementation Working Group.

Cyndy Comerford is SFE's Climate Program Manager with over 15 years of experience creating partnerships and managing complex projects in public health and sustainability. She oversees the city's climate action planning efforts, building decarbonization, healthy ecosystems, circular economy and environmental justice work. Prior to SFE, she served as the deputy director for climate programs for the City of San Jose, CA and was the Manager of Policy and Planning for the San Francisco Department of Public Health. Cyndy will provide project oversight, strategic guidance, and coordination support with local public agencies. Cyndy's time will be provided in-kind.

Kaestner is the Senior Building Decarbonization Coordinator at the SF Environment Department, where he oversees the development of policies and programs called out in the Building Operations section of San Francisco's Climate Action Plan (CAP). His team is currently working with local stakeholders to draft a Building Performance Standard for large existing buildings, launching a heat pump water heater direct install program for income-qualified residents, and preparing a citywide building electrification campaign. Before joining the city, Kaestner spent over a decade leading sustainability efforts at the SF Unified School District, overseeing programs to reduce energy and water use, work towards zero waste, reduce car trips during the school commute, and expand green schoolyards to all District sites. During his tenure, he drafted the *Carbon Neutral Schools Resolution*, *SFUSD Carbon Reduction Plan*, and *Zero Net Energy Guidelines* to chart and implement a path for the district to eliminate on-site fossil-fuel use by 2040.

Oloresisimo-Arpon is the staff lead for the Existing Buildings Energy Ordinance Helpdesk, providing technical support and compliance review of energy benchmarks and audits for the 2,600 private sector buildings subject to EBO, maintaining data and public reporting, and serves as project manager for annual municipal benchmarking reports for the city's portfolio of 500 municipal facilities. Oloresisimo-Arpon has an extensive project management, data management, and content development background from her service at SFE and previous career in retail, advertising, and publishing.

Additional staff members for SFE will include future hires during implementation and enforcement phases, as outlined in the budget and workplan.

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Berkeley's Principal Investigator on the project is Ammon Reagan and will be assisted by Valerie Nguyen. Reagan will manage Berkeley's BPS implementation efforts and will manage both BEI and Energy Council's work, as their efforts on this project will be focused primarily in Berkeley and Alameda County. Reagan will be the primary contact for SFE communication. Reagan is a former employee of SFE, and Hooper and Reagan have an existing relationship and shared historical knowledge of the BPS process to date. This will be an added benefit to collaboration on the project. For the last 9 years, Reagan has worked for local governments (including San Francisco and Berkeley) focusing on the implementation of existing building decarbonization programs. Reagan has managed Berkeley's Building Emissions Saving Ordinance (BESO) for the last 5 years and led several key policy development efforts including an amendment to BESO in 2020, to better align the program with Berkeley's electrification and climate action goals. In 2023, Reagan led efforts to expand Berkeley's BESO to develop electrification requirements for small residential buildings triggered at time of sale. This policy development included oversight of a technical advisory committee, extensive community and stakeholder engagement, including listening sessions, workgroups, and meetings with building owners, tenants' rights advocates, community partners, and others, as well as drafting policy language for adoption. This policy will go to Berkeley's City Council for approval in 2024 and would be, if adopted, one of the first such policies in the nation.

Nguyen has worked for the City of Berkeley since 2022. During her first year as a Civic Spark fellow, she implemented Berkeley's Climate Equity Fund, which included planning and facilitating meetings with a coalition of Berkeley's CBOs, before transitioning to her current role as the BESO Program Specialist. Nguyen implements Berkeley's BESO, working directly with large building owners to comply with the benchmarking and assessment requirements.

Additionally, the City of Berkeley currently has two FTEs, Reagan and Nguyen, to implement BESO. These team members will continue to support BESO and its expansion to incorporate building performance standards alongside a new position that will be dedicated to BPS development and implementation, as outlined in the budget and workplan.

Additional participants in this proposal include BayREN, the Energy Council, and the Building Electrification Institute. All entities have provided letters of support that outline roles and commitment, and key resumes have also been included in this submission.

**Time Commitment of Participants**

Staff in each organization have been identified to perform the tasks as outlined in the budget justification and workplan. SFE and Berkeley will leverage their long term relationships in the field, to ensure broad participation and representation in work groups, listening sessions, and meetings for this project. All team members have attended weekly meetings to develop this proposal, which has included conversation about governance structure, flow of funds, time commitment across budget periods, integration into existing work groups and supportive services, and data needs and concerns. Team members have therefore allotted adequate time and resources, including the addition of staff during implementation and enforcement, to meet our building compliance goals, and perform the activities outlined in the workplan.

**Business Processes**

Business agreements between San Francisco and Berkeley will be completed in development with, and approved by, each city's attorney. Roles and commitments are outlined in the Letter of Commitment provided by each organization and included in this submission package. SFE will be responsible for scheduling regular meetings with partners on an as needed and regular basis, specifically working with Berkeley, BayREN, BEI, and the Energy Council.

[3056-1551](#) DE-FOA-0003056 Topic Area 3, Subtopic B

### **Process for Scientific/Technical Decision-making**

This role will be shared by SFE and Berkeley. The emphasis will be on stakeholder review through Working Groups and their subcommittees together with Building Operations Task Force meetings which will be conducted on a monthly basis; as needed in person and by teleconference.

### **Publication Arrangements**

The Community Benefits Plan and milestones summaries will be published for each city on its publicly accessible website. Updates to the BPS development process during community engagement, specifically the community participants, as well as the EPB definition and supportive services, will be made available in advance of the legislative process to adoption. Once the policy is passed, a public-facing website and CRM will be created for building owners and operators to support compliance. Additionally, materials will be developed for wider BPS adoption. These materials will be defined by working groups with BayREN and Energy Council's guidance, and may include toolkits, presentations, best practices, case studies, and more.

### **Intellectual Property**

As a government agency, all of San Francisco's and Berkeley's work is considered property of the public.

### **Communication Plans**

San Francisco and Berkeley will design communications strategies including press, local events, presentations to policy makers and community outreach to inform stakeholders and the broader public about the project and its impacts on communities. Project case studies, best practices manual, and challenges of the process of creating the plan and manual will be disseminated through existing channels. San Francisco and Berkeley will also continue conversations with participants who were engaged to provide insights into the development of this proposal, to ensure they are aware, and can benefit from, the BPS development and implementation process. Any and all communications will acknowledge DOE's support of the project and there will be at least one press conference related to plan release.

### **DOE/NNSA FFRDCs**

No technical services will be provided by DOE/NNSA FFRDCs

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**DE-FOA-0003056, AOI 3b**  
**Control Number 3056-1551**

**Project Title:** Building Performance Standard: Adoption, Enforcement and Equitable Support, and Supporting Regional Readiness for Adoption

**Specific FOA Topic AOI being addressed:** Area of Interest 3b: Adoption and Implementation of Innovative Building Energy Code: Innovative Building Energy Codes with Energy Savings Equivalent to Zero Energy Codes

**Community Benefits Plan**

Both San Francisco and Berkeley have extensively engaged a variety of labor, building, community, and justice organizations to develop the current energy codes and ordinances each city has adopted. Progress toward BPS today has built upon that work and included these entities in the BPS process as well. Both cities will continue engagement with these organizations as the BPS policy is developed to ensure the milestones outlined in our technical volume can be achieved.

**1. Community and Labor Engagement**

Each city's climate and energy policies and goals were developed through robust stakeholder processes centering racial and social equity. In 2019, SFE launched the Anchor Partners Network (APN). Led by the CBOs, PODER and Emerald Cities, APN brought together organizations providing workforce development programs, those developing low-income housing, and tenants' rights advocates to review and advise on proposed building electrification policies. APN looked at potential burdens to low-income residents and how these could be overcome, while also assessing potential benefits for job creation and air quality improvements. These activities informed the building electrification strategies that were included in San Francisco's 2021 [Climate Action Plan \(CAP\)](#). SFE engaged stakeholders to create a Community Climate Council to provide input on the City's CAP. The Council included representatives from faith-based communities, workforce development organizations, and environmental groups. SFE also worked with the American Indian Cultural District and Mayor's Office on Disability to ensure all voices were reflected in the CAP.

During this process, concerns were expressed that low-income residents would not have the resources to participate in decarbonization efforts. In response to this input, SFE created the community-serving Climate Equity Hub to provide technical assistance and incentives for building electrification to renters, homeowners, and small businesses in environmental justice communities. The Climate Equity Hub focuses on low-to no-cost electrification of single-family and small multi-family units for low-income San Franciscans. For its BPS policy, San Francisco will develop a plan for building an EPB outreach Hub for owners and tenants in Justice 40 communities modeled after its existing Climate Equity Hub. This will support larger multifamily EPBs, particularly affordable housing, as well as commercial EPBs, as San Francisco's CAP, outlines:

- Adopt a building performance policy requiring large commercial buildings to a) completely transition to efficient and all-electric equipment no later than 2035 b) in 2025, begin regular disclosure of progress toward goal c) allow payment of annual fees in lieu of electrification, which must be invested into decarbonization of low-income and affordable housing
- Develop and adopt tenant protection and anti-displacement policies for renters in buildings transitioning to efficient and all electric systems.

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- Offer targeted technical assistance for BIPOC and low-income owners and tenants including information about incentives, rebates, and public and private financing options.

A list of organizations that SFE currently engages with is included in the Community Partnership Documentation.

SFE also developed The Racial and Social Equity Assessment Tool (RSEAT) which is designed to assess the impacts of emissions reduction strategies proposed in the 2021 Climate Action Plan (CAP) on racial and social equity. This tool helps strategize opportunities to benefit all San Franciscans, reduce unintended negative effects on BIPOC, low-income, and other vulnerable groups, and address the underlying causes of inequality. Developed through a collaborative process involving SFE, People Organizing to Demand Environmental and Economic Justice (PODER), and Emerald Cities San Francisco Bay Area, RSEAT draws from a range of sources including the Equity Assessment Tool by Race Forward for the Zero Cities Project, the SF Office of Racial Equity (ORE), and the SF Planning Department's Community Equity Team. This tool can be used throughout the Building Performance Standard Initiative to ensure equitable outcomes.

Like San Francisco, Berkeley is also deeply committed to applying a racial equity and social justice approach to its decarbonization work. Over the past 5 years, Berkeley has radically changed its community engagement strategy from one that focuses on information transmission to all residents to a more targeted and equitable approach that seeks to elevate the voices and experiences of our local BIPOC community while providing funding to build capacity for organizations representing low-income and disadvantaged communities. Berkeley's Existing Building Electrification Strategy (BEBES) engaged 30 community groups, representing marginalized communities and construction laborers, to develop a plan to electrify existing buildings in Berkeley. In response to community concerns, BEBES included four equity guardrails that each potential building electrification policy will be assessed against:

- Access to Health and Safety Benefits - Ensure marginalized communities and others most impacted by climate change equitable access to health, safety and comfort benefits from electrification.
- Access to Economic Benefits - Ensure all community members, especially marginalized communities, have equitable access to affordable funding and financing mechanisms, and to highroad job opportunities.
- Maximize Ease of Installation - Ensure that incentives and programs for the community provide meaningful support to renters, owners, and marginalized community members to provide a simple process that minimizes the burdens and impacts associated with completing upgrades.
- Promote Housing Affordability & Anti-Displacement - Ensure upgrades don't displace renters or overburden homeowners. Programs should support housing production, housing preservation, and tenant protections.

In 2022, Berkeley furthered its equitable engagement work by partnering with the Ecology Center, a local community organization, to form the Climate Equity Collaborative. The Collaborative convenes community members and organizations to define climate equity, disburses small-scale resilience measures to collaborative members and their constituents, and has worked to develop a set of principles for engagement. The Collaborative has received recognition and additional funding from the Ocean Conservancy Ports Community Grant Program and the UC Berkeley Chancellor's Community Partnership Fund.

A list of organizations that Berkeley currently engages with is included in the Community Partnership Documentation.



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## **2. Engage and Support a Skilled and Qualified Workforce**

Both San Francisco and Berkeley are building on current workforce development efforts in building decarbonization. SFE is collaborating with multiple community-based organizations and the San Francisco Office of Economic and Workforce Development (OEWD) on workforce needs assessments. These assessments aim to identify gaps in training opportunities from currently available programs, reallocate funding, develop new trainings, and expand outreach efforts. OEWD works with employers, labor unions, and industry associations to identify employment needs from both small and large businesses, and to inform workforce programming priorities that guide job seekers. It also partners to deliver population/industry-specific job fairs and hiring events. Additionally, OEWD offers resources such as CityBuild, which connects individuals to green career pathways via a construction pre-apprenticeship program and provides work-based learning opportunities through programs like Young Adult Job Centers and RAMP, including summer internships and paid work experiences in green career industries. Moreover, San Francisco is reallocating \$6 million from law enforcement to the Dream Keeper Initiative to address the Black unemployment gap, where Black San Franciscans have an estimated unemployment rate 2.5 times that of the citywide average, with similarly disproportionate gaps in income and wealth. SFE has engaged with several community-based workforce development efforts through the Climate Equity Hub, with a growing focus on apprenticeships fueled by new incentives in the Inflation Reduction Act to develop a skilled, diverse workforce in clean energy fields like electrical and HVAC installation. SFE will leverage its existing workforce development efforts to integrate equity and job quality into building decarbonization investments, ensuring that efforts to reduce fossil fuels in buildings do not undermine social justice.

Both San Francisco and Berkeley are engaged in the High Road Training Partnerships (HRTPs), which are regional, industry-based collaborations focused on the workforce. These partnerships bring together management, workers, government, and community members to tackle critical issues like equity, job quality, worker voice, industry efficiency, and environmental sustainability, while also building skills for California's high road employers. This project presents a unique opportunity to enhance job quality and create career pathways for low-income communities of color in an emerging industry, at a critical moment, within a pioneering region.

Berkeley is applying H RTP research in its Just Transition Pilot and recent HARD HATS (Helping Achieve Responsible Development and Healthcare and Apprenticeship Training Standards) ordinance. Both programs push the model of equitable building decarbonization and construction to include real benefits for construction workers. The Just Transition Pilot requires that contractors who receive City funding to complete direct installation of building electrification measures for existing low-rise residential, income-qualified buildings must also provide high road jobs, including prevailing wages, benefits, and training, for their workers. Berkeley's Just Transition program is receiving widespread attention and being touted as a model that could be replicated across the region and state. The HARD HATS ordinance applies to new construction of buildings of 50,000 square feet or larger and received strong support from labor unions.

## **3. Diversity Equity Inclusion and Accessibility**

Both San Francisco and the City of Berkeley are represented by unions. Capacity built into each department for implementation and enforcement work in Budget Periods 2 and 3 will be union

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employees, paid prevailing wage. Significant funds across all budget periods will be set aside for consultation, facilitation, and engagement. These funds will be distributed either through grants to community-based organizations, or via competitive RFP processes aligned with respective City requirements, which includes focus on Minority Business Enterprises, Minority Owned Businesses, Woman Owned Businesses, and Veteran Owned Businesses for contractor/CBO support needs.

Much of San Francisco’s racial equity work is driven by SFE’s commitment to Environmental Justice. The San Francisco Commission on the Environment passed a resolution codifying its commitment to racial equity<sup>1</sup>. In addition to being guided by this resolution and SF Environment’s Racial Equity Plan, the team will also use its Racial Equity Scan. Created by the SF Environment’s Racial Equity Team with guidance from the Government Alliance for Racial Equity (GARE)<sup>2</sup>, the Scan assesses proposed policies and programs for potential burdens resulting from the policy or program. Viewing policies and programs through this tool ensures that all stakeholders are included, that benefits of policies are distributed equitably, and that solutions help bypass identified burdens.

The City of Berkeley developed four equity guardrails (noted above) that each potential building electrification policy will be assessed against to ensure broad inclusion from minority groups and those who cannot attend traditional City-led community meetings.

#### **4. Justice 40 Initiative**

##### *A) Benefits Tracking*

As noted above, and in the technical volume, supporting compliance among Equity Priority Buildings is a central component of the BPS adoption, implementation and enforcement plan. Our key milestone for budget period one as noted in the technical volume lays the groundwork for all future Justice 40 benefits that will result from the rollout of BPS. Metrics for tracking many of these benefits are embedded in the BPS design, through the development of the software platform with CRM. Partners on the project will also supply SFE with metrics on outreach to communities.

##### *B) Benefits Flow*

The following benefits are expected to be achieved through the implementation of BPS.

- 1) An increase in housing quality and durability, an increase in energy resilience, and a decrease in environmental exposure and burdens

BPS with carbon emission targets will directly reduce air pollution, contribute to public safety and disaster resilience, and slow San Francisco and Berkeley’s contribution to climate change. Improving building efficiency, in addition to providing buildings with energy savings, also helps to mitigate impacts of climate hazards on local communities. Top level additional benefits include:

- BPS will ensure consistent standards for owners across the San Francisco Bay Area, simplifying compliance
- Funds will support workforce development, such as training for building assessments, data technicians, and enforcement personnel, as well as training for contractors and laborers in new technology installations.
- Improved indoor air quality from reduced exposure to wildfire smoke and criteria air pollutants.

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- Equity buildings will benefit from reduced electricity bills and improved resilience by expanding access to cooling during extreme heat events exacerbated by climate change.
- Integrated tenant protections and close coordination with Housing Departments and agencies will expand affordability and ensure equitable retrofits in affordable housing that do not displace residents

### 2) An increase in access to low-cost capital

The San Francisco Bay Area offers several technical assistance and incentive programs for multifamily buildings. These include TECH Clean California, the Equitable Building Decarb Program, and the Bay Area Multifamily Building Enhancement program (BAMBE). BAMBE provides rebates for technologies like Heat Pump Water Heaters, mini-splits, panel upgrades, and building assessments. A crucial aspect of reducing costs for underserved communities in Equity Priority Buildings is facilitating the navigation and application of these programs and leveraging multiple incentives to minimize decarbonization expenses. This project will help create centralized resources, leverage existing resources, and support free one-on-one technical assistance (through BAMBE as described in the Technical Volume) to help building owners:

- Complete onsite assessments to uncover emissions and energy saving opportunities
- Create a decarbonization plan to reach their interim and final BPS targets
- Submit alternative compliance plans (if needed)
- Draft scopes of work for retrofit plans and bids
- Review vendor bids and choosing a contractor
- Find and stack various financial resources together make energy efficiency upgrades attainable

### 3) Increases in energy democracy and parity in clean energy technology access and adoption.

By building on our extensive engagement with community-based organizations who represent Justice 40 communities in both San Francisco and Berkeley, we will ensure that a definition of EPB is developed, and appropriate and necessary supports are identified by our Justice 40 community partners. Our primary milestone, and our associated Go/No-Go point hinge upon the inclusion of the EPB definition, an achievable and sustainable EPB support services structure, and alternative compliance pathways to reach targets in the policy to be adopted. If these are not included, and if the policy is not adopted, the project must make a Go/No-Go decision.

Please read the instructions on each worksheet tab before starting. If you have any questions, please ask your EERE contact!

Do not modify this template or any cells or formulas!

- If using this form for award application, negotiation, or budget revision, fill out the blank white cells in workbook tabs a. through j. with total project costs.
- Blue colored cells contain instructions, headers, or summary calculations and should not be modified. Only blank white cells should be populated.
- Enter detailed support for the project costs identified for each Category line item within each worksheet tab to autopopulate the summary tab.
- The total budget presented on tabs a. through i. must include both Federal (DOE) and Non-Federal (Cost Share) portions.
- All costs incurred by the preparer's sub-recipients, contractors, and Federal Research and Development Centers (FRDCs), should be entered only in section f. Contractual. All other sections are for the costs of the preparer only.
- Ensure all entered costs are allowable, allocable, and reasonable in accordance with the administrative requirements prescribed in 2 CFR 200, and the applicable cost principles for each entity type: FAR Part 31 for For-Profit entities; and 2 CFR Part 200 Subpart E - Cost Principles for all other non-federal entities.
- Add rows as needed throughout tabs a. through j. If rows are added, formulas/calculations may need to be adjusted by the preparer. Do not add rows to the Instructions and Summary tab. If your project contains more than five budget periods, consult your EERE contact before adding additional budget period rows or columns.

**8. ALL budget period cost categories are rounded to the nearest dollar.**

**BURDEN DISCLOSURE STATEMENT**

Public reporting burden for this collection of information is estimated to average 24 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Office of Information Resources Management Policy, Plans, and Oversight, AD-24-2 - GTN, Paperwork Reduction Project (1910-5162), U.S. Department of Energy, 1000 Independence Avenue, S.W., Washington, DC 20585, and to the Office of Management and Budget, Paperwork Reduction Project (1910-5162), Washington, DC 20503.

**SUMMARY OF BUDGET CATEGORY COSTS PROPOSED**

The values in this summary table are from entries made in subsequent tabs, only blank white cells require data entry

Section B - Budget Categories	Federal		Cost Share	Budget Period 1	Budget Period 2	Budget Period 3	Budget Period 4	Budget Period 5	Budget Period 6	Budget Period 7	Budget Period 8	Budget Period 9	Total Costs	Cost Share %	Proposed Budget Period Dates
	Budget Period 1	Budget Period 2													
<b>a. Personnel</b>	\$452,828	\$1,075,692	\$945,644	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,871,073	0.00%	7/1/2025 - 6/30/2026
<b>b. Fringe Benefits</b>	\$233,795	\$565,380	\$488,236	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,389,389	0.00%	7/1/2026 - 12/31/2027
<b>c. Travel</b>	\$6,692	\$6,133	\$7,361	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,473,461	0.00%	7/1/2026 - 6/30/2029
<b>d. Equipment</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,954,355	0.00%	7/1/2029 - 6/30/2031
<b>e. Supplies</b>	\$3,600	\$6,315	\$25,201	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,305,938	0.00%	7/1/2031 - 12/31/2033
<b>f. Contractual</b>	\$790,283	\$839,863	\$1,770,944	\$1,298,597	\$1,030,256	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,729,943	28.66%	
Sub-recipient Contractor	\$307,713	\$735,399	\$5,082,686	\$1,915,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,050,798	40.27%	
FRDC	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0.00%	
<b>Total Contractual</b>	\$1,097,996	\$1,575,262	\$6,863,630	\$3,213,597	\$1,030,256	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13,780,741	68.92%	
<b>g. Construction</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0.00%	
<b>h. Other Direct Costs</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0.00%	
<b>Total Direct Costs</b>	\$1,794,910	\$3,216,762	\$8,330,073	\$4,799,409	\$1,281,606	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$19,424,781	97.15%	
<b>i. Indirect Charges</b>	\$76,162	\$170,607	\$154,946	\$24,332	\$24,332	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$569,435	2.85%	
<b>Total Costs</b>	\$1,871,073	\$3,389,369	\$8,473,461	\$4,954,355	\$1,305,938	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$19,994,217	100.00%	

Additional Explanation (as needed):

**DE-FOA-0003056**

**Control Number: 3056-1551**

**Project Title:** Building Performance Standard: Adoption, Enforcement and Equitable Support, and Developing a Regional Model and Regional Readiness for Adoption

**Specific FOA Topic being addressed: Topic Area 3, Subtopic B**

San Francisco Environment Department attests that there are no conflicts, no potentially duplicative funding, nor potential project/funding overlap for this grant. San Francisco Environment Department regularly administers several grant-awarded projects. The workload of current projects is spread across the entire team and functions as part of the team’s regular workload. A list of these projects is below. San Francisco Environment does not engage with foreign entities.

I, Barry Hooper, certify to the best of our knowledge and belief that the information contained in this Current and Pending Support Disclosure Statement is true, complete, and accurate. I understand that any false, fictitious, or fraudulent information, misrepresentations, half-truths, or omissions of any material fact, may subject me to criminal, civil, or administrative penalties for fraud, false statements, false claims or otherwise. (18 U.S.C. §§ 1001 and 287, and 31 U.S.C. 3729-3733 and 3801-3812). I further understand and agree that (1) the statements and representations made herein are material to DOE’s funding decision, and (2) I have a responsibility to update the disclosures during the period of performance of the award should circumstances change which impact the responses provided above.



Barry Hooper  
Senior Green Built Environment Coordinator

Sponsor / Agency	Currently no active grant awards
Award No.	
Title of Award or Activity	
Total value of award or proposed value	
Status	
Award Period	
Brief Description of Award	

**DE-FOA-0003056**

**Control Number: 3056-1551**

**Project Title:** Building Performance Standard: Adoption, Enforcement and Equitable Support, and Developing a Regional Model and Regional Readiness for Adoption

**Specific FOA Topic being addressed: Topic Area 3, Subtopic B**

The City of Berkeley’s Office of Energy and Sustainable Development (OESD) attests that there are no conflicts, no potentially duplicative funding, nor potential project/funding overlap for this grant. OESD is currently administering one grant-awarded project, listed below. The workload of these projects is spread across the entire team and functions as part of the team’s regular workload. A list of these projects is below. City of Berkeley’s Office of Energy and Sustainable Development does not engage with foreign entities.

I, Ammon Reagan, certify to the best of our knowledge and belief that the information contained in this Current and Pending Support Disclosure Statement is true, complete, and accurate. I understand that any false, fictitious, or fraudulent information, misrepresentations, half-truths, or omissions of any material fact, may subject me to criminal, civil, or administrative penalties for fraud, false statements, false claims or otherwise. (18 U.S.C. §§ 1001 and 287, and 31 U.S.C. 3729-3733 and 3801-3812). I further understand and agree that (1) the statements and representations made herein are material to DOE’s funding decision, and (2) I have a responsibility to update the disclosures during the period of performance of the award should circumstances change which impact the responses provided above.



**Ammon Reagan**  
 City of Berkeley  
 Sustainability Program Coordinator

Sponsor / Agency	State of California, Office of Planning and Research
Award No.	Grant Number OPR23130
Title of Award or Activity	City of Berkeley Environmental Justice Element, Safety Element Update, and Equitable Climate and Resilience Metrics
Total value of award or proposed value	\$497,042
Status	In Progress
Award Period	October 23, 2023 – January 31, 2026
Brief Description of Award	The City of Berkeley, in partnership with the Ecology Center and the Berkeley Climate Equity Collaborative, was awarded a grant from the Governor’s Office of Planning and Research Adaptation Planning Grant Program. The project includes co-creating with community an update to the General Plan Safety Element, development of a new General Plan Environmental Justice Element, and creation of an Equitable Climate and Resilience Monitoring and Evaluation Strategy and Dashboard. As part of this work, the team will conduct additional technical analyses that will assess environmental justice impacts, which will guide strategies, goals and policies of the Safety and Environmental Justice Elements, as well as future General Plan Element updates.

**DE-FOA-0003056**

**Control Number: 3056-1551**

**Project Title:** Building Performance Standard: Adoption, Enforcement and Equitable Support, and Developing a Regional Model and Regional Readiness for Adoption

**Specific FOA Topic being addressed: Topic Area 3, Subtopic B**

Energy Council attests that there are no conflicts, no potentially duplicative funding, nor potential project/funding overlap for this grant. Energy Council does not engage with foreign entities.

I, Ben Cooper, certify to the best of our knowledge and belief that the information contained in this Current and Pending Support Disclosure Statement is true, complete, and accurate. I understand that any false, fictitious, or fraudulent information, misrepresentations, half-truths, or omissions of any material fact, may subject me to criminal, civil, or administrative penalties for fraud, false statements, false claims or otherwise. (18 U.S.C. §§ 1001 and 287, and 31 U.S.C. 3729-3733 and 3801-3812). I further understand and agree that (1) the statements and representations made herein are material to DOE's funding decision, and (2) I have a responsibility to update the disclosures during the period of performance of the award should circumstances change which impact the responses provided above.



Ben Cooper  
Program Manager  
Energy Council/StopWaste