



# TECH CLEAN CALIFORNIA

## 2025 Quick Start Grant Scaling Fund Application

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### Instructions

1. **Submit Intent to Apply-** Email your name, organization, and project title to [TECH.pilots@energy-solution.com](mailto:TECH.pilots@energy-solution.com) with the subject line: “Quick Start Grants – Intent to Apply.” TECH will send updates during the application period.
2. **Review Program Info-** Visit the [TECH website](#) to learn about the Quick Start Grants and other available funding resources.
3. **Prepare Your Application-** Complete this application form and gather all required attachments.
4. **Submit by Deadline-** Email the completed application and attachments to [TECH.pilots@energy-solution.com](mailto:TECH.pilots@energy-solution.com) by Friday, October 31, 2025, by 5PM PT. Use the subject line: “Quick Start Grant Scaling Fund – [Company Name].”

### Application Checklist

- Completed application form
- Completed Excel workbook
- Supporting documentation attachments
- DBE certification (optional)
- T&C explanation (optional)
- Submit intent to bid (optional)

### Questions?

Email any questions to [TECH.pilots@energy-solution.com](mailto:TECH.pilots@energy-solution.com) with the subject line “Quick Start Grants – Q&A” before 5:00 pm PDT October 14, 2025. Questions and answers will be added on a rolling basis to the TECH website.

## Project Team Information

1. Project name	Clean Air and Repair for Family Child Care
2. Lead organization name	San Francisco Environment Department
3. Submitter name	Benny Zank
4. Submitter title/position	Building Decarbonization Coordinator
5. Phone number	(415) 355-3740
6. Email address	Benny.Zank@sfgov.org
7. List of subcontractors (if applicable)	n/a
8. Are any members of the project team a state- certified diverse business enterprise in California? If yes, attach certification with your application.	No <input type="button" value="v"/>
9. Does the proposal team accept the Terms and Conditions? If not, please attach an explanation with your application.	Yes
10. Is any member of the project team a past Quick Start Grant recipient?	No <input type="button" value="v"/>
11. Project geographic location	San Francisco Low-income and Disadvantc

<p>12. Technology type</p>	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> HPWH</li> <li><input type="checkbox"/> Central HPWH</li> <li><input type="checkbox"/> 120V HPWH</li> <li><input type="checkbox"/> Split system HPWH</li> <li><input checked="" type="checkbox"/> Heat Pump HVAC</li> <li><input type="checkbox"/> Portable/window HVAC</li> <li><input type="checkbox"/> Other heat pump technology (describe)</li> </ul> <div style="border: 1px solid black; height: 20px; width: 100%; margin-top: 5px;"></div>
<p>13. Housing type</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Single Family Renters</li> <li><input type="checkbox"/> Regulated affordable housing</li> <li><input type="checkbox"/> Naturally occurring affordable housing</li> <li><input type="checkbox"/> Manufactured housing</li> <li><input checked="" type="checkbox"/> Other housing (describe)</li> </ul> <div style="border: 1px solid black; padding: 2px; margin-top: 5px;">Family Child Care Providers in residential fa</div>
<p>14. Focus area (if applicable)</p>	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Expansion of past Quick Start Grant or TECH Pilot</li> <li><input type="checkbox"/> Innovative and accessible financing models</li> <li><input checked="" type="checkbox"/> Facilitating quality installations and contractor success</li> <li><input type="checkbox"/> Deployment of emerging heat pump technologies for challenging housing conditions</li> <li><input checked="" type="checkbox"/> Integrated home decarbonization and remediation models</li> <li><input type="checkbox"/> Soft costs and barriers reduction</li> </ul>

## Project Impact

15. Please provide a summary of your project. (150–250 words)

San Francisco Environment Department (SFE) will work with the Low Income Investment Fund (LIIF) on a pilot effort to layer HPWH installations in up to 30 family child care provider facilities in San Francisco that have, or will receive, renovation and repairs through LIIF's Child Care Facilities Fund program. Family child care is a unique child care model where residents provide child care out of their residential property. These facilities are licensed and regulated by the department of social services but are not considered commercial properties. Family child care providers are required to occupy these facilities as their primary residence. This pilot builds on Alameda County Green and Healthy Homes's quick start project recommendation to expand the reach of electrification training to similar organizations and partners with contractors working in housing rehabilitation programs. Currently, most of these programs offer like-for-like appliance replacement, and thus offer an opportunity to shift programs toward fuel substitution to advance the HP market. Our project will:

- Complete heat pump installations in residential-based family childcare facilities alongside efficiency measures as applicable.
- Design a standard heat pump fuel substitution measure into the LIIF Family Child Care Renovation and Repair Grant Program.
- Remove the financial risk and incentivize contractors to become trained on heat pump technology, and demonstrate the scalability of this contractor approach.
- Share findings across a wide variety of renovation and repair programs and encourage the adoption of heat pump fuel substitution measures

16. Please define the problem your proposal seeks to address. Explain why solving this problem is critical to accelerating the adoption and increasing the installed base of heat pump technologies. (250–500 words)

Problem Statement: Is it possible to layer fuel substitution/electrification measures on existing renovation and repair programs (AKA “rehabilitation”) in a replicable, scalable and financially viable way for programs and contractors?

Currently, low-income renovation and repair programs are well-established, and have been providing critical rehabilitation of homes for many years. A standard offering within these programs is replacing broken or inefficient appliances. Typically, these replacements have been made with a like-for-like appliance with the same fuel type. This project proposes to make fuel substitution measures—where a broken or inefficient gas appliance is replaced with a heat pump—standard for renovation and repair programs. SFE will work with the LIIF on a pilot effort to layer HPWH installations in up to 30 family child care provider facilities operating out of residential homes that have received or are receiving renovation and repair. SFE will collect baseline information on fuel substitution measures, including cost, feasibility for scaling, and customer and contractor satisfaction to create a standard product offering that renovation and repair programs can integrate into their existing offerings.

Understanding the barriers to inclusion of HP technology in these programs, changing the standard appliance replacement measure from like-to-like to HP, and sharing learnings widely among renovation and repair programs will dramatically accelerate the adoption of the technology. Learnings from this pilot could also be used to inform efficiency programs such as the Energy Savings Assistance program, advocating an upgrade to their standard gas appliance replacement measures from like-for-like to fuel substitution for a heat pump.

To ensure the success of any HP installations in existing renovation and repairs programs, there must be a large number of contractors experienced in installing heat pumps and heat pump water heaters, and who can provide trusted, culturally appropriate service to low-income renters and owners speaking languages other than English. The SFE/LIIF pilot would provide training and financially risk-free installation opportunities to contractors that are already completing like-for-like appliance replacements, but are unfamiliar with fuel substitution and heat pumps. The pilot will focus on recruiting contractors for the pilot from the communities being served (particularly Cantonese-speaking) that are able to provide in-language and culturally relevant services. Using grant funds to remove the financial risk from contractors, as well as customers, will ensure SFE’s ability to collect data in a controlled environment and ultimately use the findings to develop standard product offerings.

17. How does your project build upon previous TECH QSG projects or TECH pilots? What lessons from past work will your project incorporate, and what new outcomes do you aim to achieve? (250-500 words)

This project builds on Alameda County Green and Healthy Homes's quick start grant project, specifically the next steps recommendation for other similar/future programs: "Expand the reach of electrification training to similar programs and partnerships. Electrification education of the staff and contractors employed by housing rehabilitation programs is needed, as well as assistance to establish a supply chain of electrification equipment."

LIIF runs a renovation and repair grant program with a strong track record of improving the homes of family day care providers, but neither the program nor many of the contractors that have completed those grant-funded projects have experience with heat pump technology. SFE will recruit contractors that have completed LIIF-funded projects, as well as contractors that have either participated in Emerald Cities Collaborative's Electrification Contractor Academy and/or SFE's heat pump water heater trainings—particularly Cantonese-speaking contractors—to participate in this pilot. Through past work with its contractor training program, SFE has found that contractors shadowing more experienced contractors completing heat pump water heater installations is a highly effective training method, and that it takes approximately 3-5 HPWH installations before contractors experience a high-level of confidence with the technology. The installations that are a part of this pilot will provide critical opportunities for contractors to gain experience doing HPWH installs alongside renovation and repair, and will provide SFE with the opportunity to better understand the barriers and opportunities for contractors and programs of layering fuel substitution HPWH and HVAC into existing renovation and repair programs. The collaboration on the pilot will enable SFE to reach residential-based family child care providers and connect them with contractors that can provide in-language, culturally appropriate HP technology and renovation and repair services.

At the close of the pilot, LIIF will be connected to a robust number of contractors available who are skilled in both renovation and repair as well as HP technology, and SFE will develop a standard fuel substitution offering that can be layered into both LIIF's, and other existing renovation and repair programs.

18. How do you expect your project to contribute to long-term change? For instance, how could it help transform the market or policy landscape for heat pump adoption beyond the grant period? (250–500 words)

Training contractors in HP technology is one of the most critical components to rapid market transformation of the space and water heating sectors, and local training programs like SFE's contractor training program are especially critical to supporting an equitable transformation of these markets by providing in-depth support for hyper-local, small, minority contractors. Demonstrating scalable and replicable training programs that empower contractors to become ambassadors for heat pump technology is key for accelerating market adoption.

Additionally, incorporating heat pumps as the standard offering for renovation and repair programs that replace gas appliances unlocks an entire segment of untapped installation opportunities for heat pumps. This pilot further presents a unique subset of customers for whom replacement of gas-powered water heaters and furnaces is essential to ensuring the improvement of indoor air quality for LIC and DAC children and families served by family child care providers in residential units. Additional opportunities for market transformation include:

- Renovation and repair contractors are trained to promote, recommend, and install heat pump technology as part of a whole building approach that prioritizes health
- Prove the viability of heat pumps as an integral offering in a renovation and repair approach and influence other programs to adopt it as a standard offering
- Prove the effectiveness of a contractor training model providing stipends to complete heat pump training and allowing emerging contractors to shadow established ones while providing financial support to complete first installations
- Make it best practice for family child care providers operating in residential facilities to adopt heat pump technology

## Feasibility

19. Complete the Excel workbook template to provide the project goals, milestones, and budget. Attach the completed workbook with your application.
  
20. Describe how the qualifications and expertise of the team will support the success of the project. If multiple organizations are applying, describe the specific role of each partner. Describe your organization's or project team's relationship with or experience working in any specific locations or communities targeted in the project. (250–500 words)

SFE is the lead municipal agency in San Francisco responsible for implementing San Francisco's Climate Action Plan, of which equitable building decarbonization is a key strategy. SFE has decades of experience designing and managing public energy programs, and has effectively used state and federal grants to advance local and regional energy policies and programs.

In April, 2024, SFE and community partners launched the Climate Equity Hub (the Hub) which installs electric appliances in income-qualified homes to advance building electrification, particularly in low-income/ environmental justice communities. The Hub's inaugural program is its HPWH direct install program, which provides technical assistance, education, and workforce development services to contractors. Along with its outreach partners, SFE is leading the implementation of the HPWH direct install program.

In addition, SFE plays a major role in many BayREN programs. For instance, SFE leads BayREN's commercial small business programs: BayREN Business and BayREN Refrigerant Replacement. As well as local outreach and marketing for BayREN's residential and workforce development programs. SFE's project team has over twenty years' experience working in energy, energy efficiency, and building electrification in communities throughout San Francisco. The team's deep connections both with contractors and community-based organizations through the Hub, coupled with its experience administering BayREN programs, make SFE the ideal lead to successfully perform the work outlined in this proposal

As a leading community development financial institution (CDFI), LIIF has been at the forefront of the community development and financial industry since 1984. LIIF is committed to strengthening communities across the nation, and empowers the early childhood education sector through grantmaking and technical assistance to build, expand and/or renovate facilities through California, and in New York City, Washington DC, and Atlanta. Currently, LIIF is working with the San Francisco Department of Early Childhood Education to provide grants and technical support through the Child Care Facilities Fund for renovation and repair of family child care provider facilities. To date LIIF has positively impacted more than 43,000 childcare spaces.

SFE's primary role in the pilot is to bring its technical expertise and HPWH/HPHVAC direct install experience and contractor training program to a new LIC and DAC-serving population: family child care providers operating out of residential facilities in need of renovation and repair. LIIF will provide the program experience working with family child care providers and referrals to customers that will enable SFE to successfully manage installations in these facilities. SFE will integrate former and current contractors that have completed LIIF-funded projects into its contractor electrification training program, and leverage existing Hub program structures to perform the installs, enabling the pilot project team to rapidly implement. Finally, SFE will develop a standard for layering HP technology into renovation and repair programs, including LIIF's, that will help meet the dual goals of improving indoor air quality and facility conditions, while also helping to decarbonize LIC and DAC residential units in San Francisco—and beyond.

21. Please supply three references with name, company/organization, Email and phone number.

Reference #1

Jane Elias, Energy Director, The Association of Bay Area Governments,  
jelias@bayareametro.gov, 415-778-4428

Reference #2

Avni Jamdar, Bay Area Regional Director, Emerald Cities Collaborative (ECC),  
ajamdar@emeraldcities.org, 510-734-6237

Reference #3

Chad Asay, Principal, Smart Building Solutions, smartbuildingsca@gmail.com,  
707-484-2448

22. Please attach 1-3 supporting items with your application that will strengthen your proposal (e.g., links to similar projects completed, letters of support, results from other pilots/projects).

## Equity

23. Will the proposed project benefit a TECH equity community (see definitions <https://techcleanca.com/heat-pump-data/equity-budget-report/>) or other historically underserved community? Yes

- a. If yes, how does your project benefit communities that face additional barriers to building electrification or that have been historically underserved by clean energy or energy efficiency programs? (150-200 words)

San Francisco LIC and DAC communities rely on family child care providers to provide critical services in their neighborhoods. Many of these facilities are minority/immigrant-run, and are housed in single family and small multifamily homes. While there is funding available for renovation and repair at these facilities, electrification measures like HPWH are not included. Instead, these programs have historically completed like-for-like appliance replacements, which puts these communities at a cost disadvantage when California regulations banning gas-powered appliances roll out. Additionally, the families and children served by the facilities targeted in this pilot for combined HPWH installations with renovation, repair and energy efficiency measures serve low income, and disadvantaged communities, and are often Cantonese speaking. Finally, improving air quality through electrification in these facilities is critical to ensuring these children and families do not continue to experience the negative health impacts of gas combustion appliances.

- b. Explain how your project addresses the distinct needs of these groups. Consider how your approach is tailored to overcome barriers or meet specific challenges faced by priority populations (e.g., low-income households, renters, communities of color, or others disproportionately affected by energy burdens). (150–250 words)

Supporting family child care providers in these neighborhoods with electrification that both improves the air quality, while also improving the facilities through renovation and repair will help create healthier indoor environments for children and families while also helping drive energy usage and costs down. Providing both electrification alongside renovation and repair at the same time minimizes construction time and cost burdens for the facilities. SFE, through its work with the Climate Equity Hub, has deep experience providing in-language outreach and electrification education in LIC and DAC in San Francisco, for both contractors in need of HP technology training and experience, as well as potential residential customers. SFE also understands how critical building trust around government support and electrification through word of mouth is in our communities—particularly now. Therefore, the project team will also facilitate the sharing of information about successful HPWH installations and renovation and repair measures from the child care providers to the families they serve, thereby further supporting behavior shift across a broader audience—which is essential to the uptake of HP technology in our LIC and DAC communities. Supporting contractors to provide quality installs, a positive customer experience, and in-language, culturally appropriate services is a solid driver for advancing electrification technology.

24. What is the estimated percentage of project resources that will be directed to serving these communities? 75%

25. If applicable, please indicate how your pilot design process has included or will meaningfully include community-based organizations, project beneficiaries, or other groups with experience in the community (e.g. focus groups, surveys, co-design, workforce development, nonprofit partnerships, etc.). Please refer to the [Initiative for Energy Justice](#) website for insights on advancing energy equity and inclusive program design. (150-200 words)

First proposed in 2015 by the San Francisco Energy Efficiency Coordinating Committee (SFEECC) and refined through ongoing community input, The San Francisco Climate Equity Hub entered active development under SFE in 2022, with community participants from the SFEECC process. SFE, in collaboration with Hub partners, launched the Hub in April 2024, to address some of the pronounced challenges faced by historically disadvantaged communities. These challenges include chronic disease, air pollution, heat exposure, and other environmental hazards. Through workshops and one-on-one interviews with community-based organizations, residents, and decarbonization organizations, SFE identified the need to develop a one-stop-shop for engaging residents around building decarbonization and sharing the benefits of the green transition with these communities through electrification efforts. As a participant in the Hub SFE has provided critical insights into program scaling and incentive funding needs, as well as technical assistance and program structure. The Climate Equity Hub Advisory meets monthly and has given critical feedback and input in designing the Hub's direct install program, as well as provided input and feedback into the design of the BayREN EASE Home program and California Energy Commission's Equitable Building Decarb program. The Advisory Committee is working to ensure that frontline communities receive the maximum benefit of all these programs. SFE's extensive work in programming, policy, environmental justice, and grantmaking has established it as a trusted presence in communities across the city and region.

SFE and LIIF have been discussing piloting electrification measures for residential-based childcare providers to improve the health, safety and comfort of the children that attend these facilities. LIIF has a long history of working with and supporting family childcare providers to renovate and repair their facilities. This, coupled with SFE's strong track record of delivering on electrification projects and familiarity in this market segment with nearly 50 residential-based childcare providers engaged through its Commercial Reuse program, ensures the success of the pilot, and provides a unique opportunity to rapidly gain the data and information SFE needs to develop a fuel substitution standard for renovation and repair programs.