



May 19, 2023

Maddie Koewler, Senior Program Manager
National Association of State Energy Officials
1300 North 17th Street, Suite 1275
Arlington, Virginia 22209
mkoewler@naseo.org

Re: Response to Request for Information for Implementation Options for Home Energy Performance-Based Whole-House Rebate Program and High-Efficiency Electric Home Rebate Program.

Dear Maddie Koewler,

Cohen Ventures Inc, dba Energy Solutions (Energy Solutions) is pleased to submit this response to The National Association of State Energy Officials (NASEO) request for information (RFI) for ideas for the implementation of the Home Energy Performance-Based Whole-House Rebate Program (HOMES) and the High-Efficiency Electric Home Rebate (HEEHR) programs.

Energy Solutions' State Home Energy/Electrification Rebate (SHEER) program design approach is applicable to both HOMES and HEEHR and focuses on market transformation as the basis for state energy office (SEO) programs to build the infrastructure to support long-term electrification and decarbonization initiatives.

Energy Solutions authorizes NASEO to publish and distribute this response to the NASEO RFI on its website and through other means to the states and general public. We have included no confidential or proprietary information in our response.

We appreciate the opportunity to provide our SHEER program approach to NASEO members. Please contact me if you have questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "AS MacCurdy".

Alex MacCurdy
Senior Director, Energy Efficiency
Cohen Ventures Inc, dba Energy Solutions
449 15th St, Oakland, CA 94612
procurement@energy-solution.com, 717.787.1070 x504

Executive Summary

Energy Solutions is pleased to submit this response to The National Association of State Energy Officials (NASEO) request for information (RFI) for ideas for the implementation of the Home Energy Performance-Based Whole-House Rebate Program (HOMES) and the High-Efficiency Electric Home Rebate Program (HEEHR) programs (collectively Homes Energy Rebate Programs).

Since 1995, Energy Solutions has provided innovative solutions that deliver reliable, large-scale, and cost-effective energy savings to our clients across North America. To achieve transformative results, our approaches facilitate the creation of market mechanisms that value decarbonization benefits, allowing profitable business models to emerge and attract further long-term investment. We support state and local government energy programs, state economic development agencies, utilities, and private sector clients with designing and implementing successful programs that achieve state and federal energy goals.

With the recent passage of the Bipartisan Infrastructure Law (BIL) and Inflation Reduction Act (IRA), an increased focus on funding state decarbonization programs in the United States is a major step towards mitigating the worst impacts of climate change. Our staff devotes extensive time and resources to strategize ways in which states and economic development agencies can make use of these new federal funding opportunities. Energy Solutions is an affiliate of NASEO, and actively participates in regional and national meetings as well as in the new Residential Energy Efficiency and Beneficial Electrification Task Force, which was created to prepare for the two IRA-mandated residential energy efficiency programs.

Developing and Implementing Effective State Programs for HOMES and HEEHR

With many state energy offices (SEOs) looking for ideas on ways to use HOMES and HEEHR funding, NASEO has the opportunity to provide guidance and offer best practices to support meaningful program development, implementation, and administration. Energy Solutions offers the following expertise and strategies to support transformative state programs with our State Home Energy/Electrification Rebate (SHEER) program design approach:

1. **A Flexible Program Design to Meet States' Needs.** States have varying programmatic, logistical, and regulatory infrastructure supporting energy efficiency and electrification, as well as differing state priorities and objectives. Our SHEER design complements existing incentive program infrastructure through strategies such as our incentive clearinghouse, and enables incentive layering to simplify customer experience, facilitate regional coordination, and focus on states' targeted populations.
2. **Proven Experience Catalyzing Market Transformation.** Energy Solutions has designed and implemented award winning statewide market transformation programs and built a roadmap that can be used for subsequent electrification infrastructure efforts to inform future programs after HOMES and HEEHR funds are expended.
3. **A Simple-to-Use Program Platform.** Energy Solutions' Iris incentive processing platform encourages market actor participation through its streamlined processes. Our SHEER design supports and coordinates participation across multiple programs and guides participants through eligibility requirements, leaving the complex parts of the program design to be handled by tools on the back end rather than adding to the lift for participants.
4. **Shared Program Infrastructure for Both Home Energy Rebate Programs.** While the programs differ, both HOMES and HEEHR require similar programmatic infrastructure that support efficiency and effectiveness when centralized and implemented in tandem. SHEER supports:
 - a. Measure verification/eligibility
 - b. Contractor enrollment and verification
 - c. Program reporting (standardizing reporting outputs across both programs for ease-of-use)
 - d. Streamlined rebate processing system implementation.

A Design for Lasting Market Transformation.

While there is a large amount of funding available through the IRA, it is relatively small compared to the broader funding amount needed to scale broad household adoption. Heat pump (HP) programs recently launched in California, Colorado, and New York have all shown that there is a great interest in HPs from consumers and that funding for programs could be quickly depleted. Energy Solutions' program design is built on elements that will have lasting effects after initial funds run out and will provide the roadmap to inform and shape future programs that can be adopted or continued to be funded by other sources.

SHEER's approach does not aim to simply create programs that provide a "sugar rush" of incentives that are quickly depleted and fail to create long-term effects; rather, we intend to use HOMES and HEEHR funding to develop a selection of core and optional program elements that can be used to inform continued statewide efforts and build the market long after BIL and IRA funds are exhausted. Through SHEER's design, we aim to create: 1) a market-friendly approach that engages a large number of contractors who will see heat pumps, weatherization, and measured savings as part of the future of their business; 2) market accountability that creates natural competition based on selling the best products and outcomes; and 3) robust data collection and reporting so that these projects help build a path towards each state's long-term clean energy goals. These program elements will help build a future where contractors engage participants in efficiency, electrification, and weatherization discussions during their normal business practices, and customers are confident that they will achieve promised energy savings without negative bill impacts. This type of integration into contractors' existing business models will lead to a sustainable market that is ready to sell improved comfort and energy savings at competitive prices, and not just "sell" incentives.

Table of Contents

Category 1. Comprehensive Program Design	3
Category 2. Program Elements	8
Category 3. Indication of Vendor Interest	12

Category 1. Comprehensive Program Design

Company Characteristics

1. Contact Name: Alex MacCurdy, Energy Efficiency Senior Director; **Contact Information:** 717.787.1070 x504; procurement@energy-solution.com; **Company:** Cohen Ventures Inc, dba Energy Solutions, 449 15th Street, Suite 400, Oakland, CA 94612

2. Approach and Commitment to DEIA. Energy Solutions has a formalized plan to advance **diversity, equity, inclusion, and accountability/accessibility (DEIA)** within Energy Solutions, across program teams, and for program participants. We carefully considered definitions, researched strategies, set ambitious—but achievable—goals, and chose tactics that will enable us to evaluate our progress over time and iterate on successful strategies. Our primary objective is to **ensure that we are supporting all employees to fully engage and bring their whole selves and the best of their abilities to work to support our climate-focused mission.** To gain valuable insight, we also will work with a third-party DEI consultant to facilitate continuous learning and iteration to ensure we work intentionally toward long-term goals for our company and our clients. Our DEIA plan encompasses the following key performance indicators (KPIs) and goals:

KPI-Diversity (defined as encompassing ethnicity, gender, age, ability, sexual orientation and gender identity, and generational educational achievement). **Goal:** Exceed the diversity of the United States as a benchmark. Show annual progression and meet or exceed aim of 3% more diverse than the non-majority category than benchmark at the end of 3 years.

KPI-Equity (defined as encompassing retention, pay, transparency in job descriptions, career development, leadership participation). **Goal:** Percentage of growth year over year above baseline and a minimum score in each equity survey category. Establish 3-year goals for improved equity within employee retention and promotion practices. Targets for equity to be established from the scorecard with aim to increase 3%/year.

KPI-Inclusion (defined as encompassing key inclusion topic areas include culture, supervision, careers, flexibility, safety). **Goal:** Achieve equivalent average response ratings to similar firms/industries. Targets for inclusion will be established from the scorecard and aim to increase 3%/year.






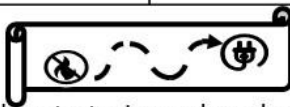
3. Relevant Current Programming: Energy Solutions, with our partners, administers the Technology and Equipment for Clean Heating (TECH) Clean California (<https://techcleanca.com/>), a statewide heat pump (HP) market transformation effort that includes many program HOMES/HEEHR ("Homes Energy Rebate Programs") design elements. TECH is a contractor driven, point-of-sale (POS), prescriptive rebate program aimed at driving market adoption of low-emissions space and water heating technologies for existing single and multifamily residences. The TECH initiative includes elements designed to reach low-income (LI) populations—40 percent of program funds are dedicated to disadvantaged communities (DACs) and LI customers—and the TECH team coordinates with community-based organizations (CBOs) such as those that receive Low Income Home Energy Assistance Program (LIHEAP) and Low-Income Weatherization Program (LIWP) funds.

The TECH initiative administers incentives to drive HP market expansion; conducts and facilitates training and consumer engagement; implements regional pilots that address adoption barriers; and collects and publishes program data to inform California's long-term building decarbonization framework. Since its inception in 2021, TECH Clean California's approach focuses on three high-level pillars:

Spur the clean heating market through statewide strategies	Create scalable models through regional pilots	Inform long-term building decarbonization framework
Activate the supply chain <ul style="list-style-type: none">Contractor incentivesStreamlined incentive clearinghouseTechnical and sales trainingDrive consumer demandStatewide marketing campaign and website	Improve targeting and project finance <ul style="list-style-type: none">Target customers using meter-based analysisDeploy Tariffed-On-Bill financing pilot Expand benefits to HTR customers <ul style="list-style-type: none">Support low-income programsCreate multifamily pilots targeting property owners Streamline installation <ul style="list-style-type: none">Streamline permitting and installation costsEnable load-shifting Innovation through Quick Start Grants	Develop public reporting site <ul style="list-style-type: none">Inform policymakers and market actors on progress and impacts Quantify decarbonization benefits <ul style="list-style-type: none">Avoided costs, grid benefits, and customer bill impacts Inform policy development <ul style="list-style-type: none">State, regional, and local regulatory policy

Program Goals

4. Program Design Goals and Market Transformation. While the Home Efficiency Rebate programs are a considerable investment in electrification, the reach of these programs will still be limited relative to the overall need. The Home Energy Rebate programs can be used to build crucial programmatic building blocks to enable sustained market transformation and can be designed to strategically advance various state electrification and efficiency efforts. Our State Home Energy/Electrification Rebate program approach (SHEER) is designed to enable sustained market transformation by: 1) building consumer interest/demand for efficient technologies (e.g., HPs) and other eligible measures; 2) engaging with contractors and the supply chain to increase the industry's capacity for current and future efficiency and electrification programs; 3) collecting data to demonstrate and substantiate the long-term benefits and positive results of electrification and inform subsequent policies and program designs; 4) testing concepts to support large market reach; and 5) setting up a programmatic framework and infrastructure that can be used by states that continue to invest in decarbonization program concepts after HOMES and HEEHR funds run out. SHEER's approach includes:

SHEER Design Approach and Goals for <i>Both</i> HOMES AND HEEHR			
 <p>Establish a statewide network of trained contractors ready to install efficiency technologies.</p>	 <p>Deploy centralized website that simplifies customer & contractor participation in state and regional programs.</p>	 <p>Launch education & awareness campaign about efficient technologies to drive market demand.</p>	 <p>Identify & continually improve strategies to engage DAC and LI populations.</p>
 <p>Report data and analysis of clean heating technology impacts (total GHG reductions, energy savings, time of use, customer bill changes) to inform utilities and state programs to support energy savings goals.</p>		 <p>Develop strategies and roadmap for decarbonization programs post-HOMES/HEEHR funding, including quantifying impacts, developing large-scale project finance options (setting up sustainable and diversified funding strategies).</p>	
HOMES Specific Approach and Goals		HEEHR Specific Approach and Goals	
<ol style="list-style-type: none"> 1. Use measured savings results to show program impact and inspire a paradigm shift towards whole-building measured energy savings across the energy efficiency and decarbonization industries. HOMES enables a scalable alternative to the uncertainties and complexities inherent in deemed savings methodologies, and offers an opportunity to demonstrate a long-term, viable path to modeled and measured pathways at scale. SHEER's design validates and refines modeled savings approaches as only using modeled approaches without verifying savings will fail to offer the long-term market transformation impacts HOMES should support. 2. Create a sustainable, performance-based market and program model in which multiple aggregators can participate and support contractor training to ensure quality installations of high efficiency technology. 		<ol style="list-style-type: none"> 1. Increase electrification and use of high efficiency technologies in low-to-middle (LMI) homes without negative impacts. If a program works to electrify hundreds of thousands of LMI households, but those homes experience higher utility bills as a result, the program will not be a success. SHEER is designed to demonstrate the viability of high efficiency and electrification options for LMI households without raising utility bills. SHEER's approach maps how programs can appropriately scope projects, target high energy use customers, and monitor and analyze bill impacts to ensure long-term customer satisfaction. 2. Deploy solutions to barriers to electrification in LMI homes. These solutions include demonstrating a viable strategy for multifamily property participation, streamlined customer participation, and incentive stacking and financial strategies that sufficiently address capital cost concerns. 	

5. Building Type Focus. SHEER's design approach targets both residential single and multifamily residences that are individually conditioned or centrally conditioned. SHEER can further refine targeted building types based on state goals.

6. Income Level Targets and How Programs will Effectively Engage Target Populations. SHEER's design agility can be adapted to align our approach to serve the entire band of eligible participants or refine our approach based on states' targeted income brackets or customer demographics (e.g., hard-to-reach [HTR] or DAC/underserved populations). We regularly collaborate with CBOs and will work to integrate and leverage existing infrastructure to coordinate with existing state programs such as LIHEAP/WAP, LI utility programs, or others targeted programs.

7. HOMES and HEEHR Involvement. Our SHEER design considerations are for both HOMES and HEEHR. HOMES promotes treating the house as a system and moving toward addressing all home needs at the same time. HEEHR allows for capturing measures in an emergency replacement or piece-by-piece manner as needed by the participant. There are many benefits to a shared infrastructure between the two programs to increase positive program outcomes, however, we can implement them as standalone programs as well.

8. Energy Savings Measured and Modeled Relative to HOMES. Energy Solutions, with our partners, can support both measured and modeled approaches for HOMES programs based on a state's needs. Using metered data to monitor results from a modeled approach would be important to analyze performance and energy savings, GHG emissions reductions, and customer bill impacts analysis for all HEEHR and HOMES projects. This approach allows states and utilities to quantify benefits from projects and use it to procure future funding, support rate cases, and inform regulations that can lead to long impacts.

9. Efficient Technology Focus and Method of Determining Eligible Technologies. SHEER will use established qualified product lists (from the Air Conditioning, Heating, and Refrigeration Institute [AHRI] and Energy Star®) to determine equipment eligibility and standard tiers from The Consortium for Energy Efficiency (CEE) to systemically adopt minimum efficiencies.

Market Conditions

10. Necessary Market Conditions, Policies, and Relationships and How Energy Solutions Has Established These Requirements. The bill impacts of some efficiency and electrification measures offered through HEEHR depend heavily on utility rates and a state's climate. While other market conditions—such as availability of eligible equipment, trained contractors, and customer awareness—can be changed through program interventions, rates and the impacts of installations are not controlled by the program and therefore need to have conducive market conditions in place in order to ensure positive outcomes. Additionally, for programs to successfully serve LMI communities, programs need to consider carefully which measures are installed and how they are installed to avoid negative financial and safety impacts for customers. SHEER's approach has room for including rate case policies or optional enrollment in demand response (DR) programs that avoid energy usage during peak hours can help ensure customer bills will not increase when measures are installed and that utilities are able to properly manage new loads.

11. Impact of Building Permits and Inspections. Program administrative costs, schedule, customer satisfaction, and cashflow can all be impacted if rebates are contingent upon passing inspection. The SHEER approach will require advance coordination with permitting offices and Home Energy Rating System (HERS®) companies to support the influx of inspections. SHEER also supports training initiatives to ensure inspectors understand the technologies being installed and their proper installation requirements. Additionally, SHEER will facilitate coordination with other efficiency programs to streamline inspections with other certification bodies to reduce redundant inspections and duplicate work. Finally, SHEER will also support replace-on-burnout emergency situation strategies to mitigate risk for occurrences such as HVAC replacement during winter in cold climates to protect occupants' health and safety.


Implementation Proposal:

12. Implementation Plan

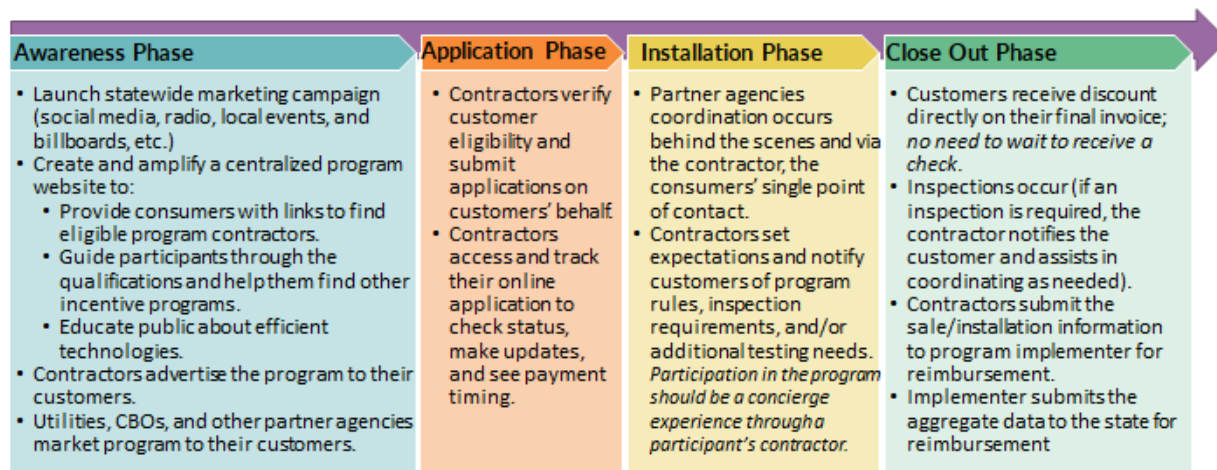
a. Program Concept. Energy Solutions' funding approach differs for HOMES and HEEHR programs. **For HOMES**, Energy Solutions' SHEER design will include an aggregator approach for the measured approach and

will work to pay a portion of incentives are paid to participants up front while the aggregators wait to receive the full incentive reimbursement after one year of data has been collected. Energy Solutions' SHEER design will engage contractors that are already using modeling approaches in the area in order to expand current coverage wherever possible. **For HEEHR**, SHEER's program design features a point-of-sale (POS) incentive program in which contractors provide discounts to end-use customers when eligible HEEHR equipment is purchased and get reimbursed by submitting a claim application after installing measures agreed upon by the program implementer and the state energy office (SEO). SHEER also employs contractor "spiffs" (up to \$500) to cover project administrative costs—a proven technique to drive program participation. Energy Solutions' highly configurable online incentive processing system, Iris, enables rapid application submission, validation, and processing to participants in the programs we implement and is already used by over 1,000 contractors for POS HP programs. To encourage contractor participation and minimize disruption to their cashflow, Energy Solutions advances funds to provide expedited incentive payment. We then receive reimbursement from the client upon receipt of submitted sales data. Customer eligibility is determined by income according to HEEHR rules—or by state rules when they are more restrictive than federal rules—and verification can be completed through other agencies, a DOE approved tool, or through in-house or partnered solutions for income verification. If desired, Energy Solutions can also provide POS program designs for do-it-yourself customers with participating retailers to support a parallel market to our midstream model.

Energy Solutions' SHEER design addresses the following program considerations for *both* HOMES and HEEHR.

Certification of Work Completion Contractors submit invoices, pictures of completed work, & document that required inspections occurred.	Contractor Training & Management Participants are informed of program rules & contractors are trained how to sell & install measures correctly. A WE&T program trains workforce to meet increased demand.	 Recycling of Existing Appliances & Capping Gas Lines Program will coordinate with contractors or third parties to verify equipment removal and recycling through receipts, pictures, or participants records, ensuring they follow local guidelines on refrigerant capture.
Quality Assurance (QA) & Quality Control (QC) QA ensures program & measures results meet industry standards & that adequate training is provided, facilitates application completion, requires installation photos, & documents required licensing, insurance, & permits. QC verifies adherence to QA and includes manual QC and automated QC through online application processing system. Inspections procedures will validate the accuracy of information submitted and photos taken. Projects for LI customers may need safety testing if combustion appliances remain.		Leveraging funding with weatherization agencies and existing utility programs to maximize project scope per customer. A centralized website provides directions on how to participate in different programs. Other programs can also join our incentive clearinghouse to provide a one-stop shop for all rebates for which the customer and contractor are eligible. (Aligning requirements and processes required. See Program Elements section for details).

b. Participant Journey. SHEER's approach guides participants through the following phase activities.



c. Roles and Responsibilities. **The Program Implementation Team** is responsible for designing and implementing the turnkey program which includes program marketing, onboarding contractors, processing

incentives, paying incentives, coordinating partner activity, and reporting to SEOs. Energy Solutions plans to use subcontractors per our response to **question 13**. **Contractors** offer POS discounts to customers, communicate with partners to determine income/leveraging, and apply for and receive incentives reimbursements. **Program Collaborators** include distributors, manufacturers, utilities, financing agencies, and policy advocacy groups, informing overall program objectives, supporting customer and contractor participants, helping market the program, providing layered incentives or financing, and supporting overall program success. **State Energy Offices (SEOs)** distribute program funding, review program performance, approve any major design changes, and can collaborate with the implementation team as much or as little as desired to shape the program. SHEER can be modified based on the SEOs' priorities.

d. Benefits. SHEER is designed to cover the entirety of a state, although measured energy savings approaches may be limited by utility data availability. SHEER's design aims to maximize grid impacts through thoughtful incentive design and layered program integration that considers all state and utility incentives for key products. It monitors program burn rates and product costs to guide program adjustments and pairs program activities together through our incentive clearinghouse (which can provide account matching as needed by utilities) to further expand program reach and impacts. We can also help estimate savings through deemed savings approaches and verify actual energy savings through HOMES partners' measured savings tools that can be used to study additional grid and GHG benefits for utilities and other organizations.

e. Secondary Market Implications. Building electrification can produce a wide range of clean energy benefits beyond energy bill savings (e.g., reduced GHG and nitrous oxide [NO_x] emissions, improved health and safety, etc.). These additional benefits can have secondary off takers that are investing in projects to achieve these non-energy outcomes. In areas with established markets, these benefits can potentially be layered to create an additional value stack and drive deeper customer impacts or scale additional funding.

Types of Implementation Partners

13. Partner Plan. While Energy Solutions provides turnkey services, we plan to create partnerships unique to each state in order to expand capabilities, offer unique services, and integrate with existing programs. We will build off the relationships of partner organizations and forge new connections with the organizations that are seen as trusted experts within each state and that are already engrained in their existing efficiency efforts. This includes partners that have platforms that assist with modeled and meter pathways for HOMES, partners that are LI focused, have existing relationships with CBOs or serve LI communities in the state, or technology providers that have existing infrastructure to help facilitate increased adoption of equipment in the state through their unique platforms. In addition to paid program partners, we will also work with other market actors in each state, which may include distributors, manufacturers, utilities, financing agencies, and advocacy organizations.

Other: 14. Additional Comments. None.

RFP Language: 15. Any RFP Language that Could be Used to Execute SHEER Program Idea.

We recommend states consider incorporating the following questions into their RFP language:

Consumer and Contractor Experience and Engagement:

- How does the proposed program design create a seamless customer journey?
- How does your proposed program design ensure high customer satisfaction?
- How does your program ensure customer bill savings are realized?
- How does your proposed program design enable incentive layering with existing programs and streamlined customer and contractor experiences?
- How does your program build broad contractor and supply chain support for your program?

Achieving Long-Term Scale:

- What are the outcomes at the end of the program period?
- What are your assumptions about participation and how will you deal with unexpected changes?
- How does your proposed program design leverage these investment dollars to build towards longer term market transformation?
- What is your data collection and reporting plan?

Category 2. Program Elements

Company Characteristics

16. Contact Name: Alex MacCurdy, Energy Efficiency Senior Director; **Contact Information:** 717.787.1070 x504; procurement@energy-solution.com; **Company:** Cohen Ventures Inc, dba Energy Solutions, 449 15th Street, Suite 400, Oakland, CA 94612

2. Approach and Commitment to DEIA. Energy Solutions has a formalized plan to advance **diversity, equity, inclusion, and accountability/accessibility (DEIA)** within Energy Solutions, across program teams, and for program participants. We carefully considered definitions, researched strategies, set ambitious—but achievable—goals, and chose tactics that will enable us to evaluate our progress over time and iterate on successful strategies. Our primary objective is to **ensure that we are supporting all employees to fully engage and bring their whole selves and the best of their abilities to work to support our climate-focused mission.** To gain valuable insight, we also will work with a third-party DEI consultant to facilitate continuous learning and iteration to ensure we work intentionally toward long-term goals for our company and our clients. Our DEIA plan encompasses the following key performance indicators (KPIs) and goals:

KPI-Diversity (defined as encompassing ethnicity, gender, age, ability, sexual orientation and gender identity, and generational educational achievement). **Goal:** Exceed the diversity of the United States as a benchmark. Show annual progression and meet or exceed aim of 3% more diverse than the non-majority category than benchmark at the end of 3 years.

KPI-Equity (defined as encompassing retention, pay, transparency in job descriptions, career development, leadership participation). **Goal:** Percentage of growth year over year above baseline and a minimum score in each equity survey category. Establish 3-year goals for improved equity within employee retention and promotion practices. Targets for equity to be established from the scorecard with aim to increase 3%/year.

KPI-Inclusion (defined as encompassing key inclusion topic areas include culture, supervision, careers, flexibility, safety). **Goal:** Achieve equivalent average response ratings to similar firms/industries. Targets for inclusion will be established from the scorecard and aim to increase 3%/year.

3. Relevant Current Programming: Energy Solutions, with our partners, administers the Technology and Equipment for Clean Heating (TECH) Clean California (<https://techcleanca.com/>), a statewide heat pump (HP) market transformation effort that includes many program HOMES/HEEHR ("Homes Energy Rebate Programs") design elements. TECH is a contractor driven, point-of-sale (POS), prescriptive rebate program aimed at driving market adoption of low-emissions space and water heating technologies for existing single and multifamily residences. The TECH initiative includes elements designed to reach low-income (LI) populations—40 percent of program funds are dedicated to disadvantaged communities (DACs) and LI customers—and the TECH team coordinates with community-based organizations (CBOs) such as those that receive Low Income Home Energy Assistance Program (LIHEAP) and Low-Income Weatherization Program (LIWP) funds.

The TECH initiative administers incentives to drive HP market expansion; conducts and facilitates training and consumer engagement; implements regional pilots that address adoption barriers; and collects and publishes program data to inform California's long-term building decarbonization framework. Since its inception in 2021, TECH Clean California's approach focuses on three high-level pillars:

Spur the clean heating market through statewide strategies	Create scalable models through regional pilots	Inform long-term building decarbonization framework
Activate the supply chain <ul style="list-style-type: none">Contractor incentivesStreamlined incentive clearinghouseTechnical and sales trainingDrive consumer demandStatewide marketing campaign and website	Improve targeting and project finance <ul style="list-style-type: none">Target customers using meter-based analysisDeploy Tariffed-On-Bill financing pilot Expand benefits to HTR customers <ul style="list-style-type: none">Support low-income programsCreate multifamily pilots targeting property owners Streamline installation <ul style="list-style-type: none">Streamline permitting and installation costsEnable load-shifting Innovation through Quick Start Grants	Develop public reporting site <ul style="list-style-type: none">Inform policymakers and market actors on progress and impacts Quantify decarbonization benefits <ul style="list-style-type: none">Avoided costs, grid benefits, and customer bill impacts Inform policy development <ul style="list-style-type: none">State, regional, and local regulatory policy

Program Elements

19. Program Element Important to SEOs. Energy Solutions can provide core program elements that any Home Energy Rebate program will require, as well as supplemental program elements that states can take advantage of depending on the context of broader decarbonization and market transformation efforts within the state. These optional elements can help build programmatic infrastructure that can support sustained market transformation of efficient technologies (HPs) and other measures even after IRA funds run out.

Program Administration

Energy Solutions provides turnkey program implementation services. Our experience designing and running TECH has provided us with ways to explore the best methods to engage the market (**Market Engagement**), use data from these projects to advise on future policy (**Data and Reporting**), and determine how to integrate new pilots with existing statewide efforts that help to expand current offerings without erasing them (**Strategic Market Initiatives**).

Market Engagement	Data and Reporting	Strategic Market Initiatives
Core Elements <ul style="list-style-type: none">• Incentive implementation• Low income verification• Outreach and program website• Contractor enrollment Optional Elements <ul style="list-style-type: none">• Technical and sales training• Statewide marketing campaign• Statewide electrification marketplace	Core Elements <ul style="list-style-type: none">• Client reporting• Participation reporting Optional Elements <ul style="list-style-type: none">• Bill impact reporting• Public reporting website	Core Elements <ul style="list-style-type: none">• Layered incentive design• Supply chain engagement Optional Elements <ul style="list-style-type: none">• One-stop shop incentive clearinghouse• Financing partnerships• Load shifting• Customer targeting

Market Engagement

Market engagement activities lead directly to more efficiency and electrification projects performed in the market.

CORE PROGRAM ELEMENTS

1. **Incentive Implementation.** Energy Solutions' incentive implementation process includes configuring our online application processing system, creating accounts for enrolled contractors, processing applications, performing verification and inspections, and making incentive payments. Additionally, a key component of Energy Solutions' success in TECH Clean California has been the ability to simplify the program's rebate process and pair incentives with other existing program offerings by layering contractor incentives.
2. **Low Income Verification.** Energy Solutions will employ state or DOE-sponsored approaches to low-income verification. We can also employ a solution to qualify participants by income level, based on data sets and rules.
3. **Outreach and Program Website.** Our SHEER approach incorporates a centralized website where consumers can learn about program participation, look up eligible equipment, connect with eligible contractors, and determine other incentives or offerings (such as financing) that may be available to them. The program website can also host additional, optional features as determined in collaboration with the State Energy Office (SEO). SHEER's approach also includes creating marketing materials for distribution throughout the supply chain, which will be responsible for a large portion of customer engagement and should be able to successfully enroll enough customers to utilize program funds without an extensive statewide marketing campaign.
4. **Contractor Enrollment.** SHEER's approach focuses on qualified contractors as the main point of sale for the Home Electrification Rebates program and key partners in the HOMES program. To maximize benefits to participants, streamline participant engagement, and establish quality assurance, contractors must be licensed, maintain specific insurance requirements, and complete basic training on the program. Contractor networks can be established through existing work in the state, distributors networks,

existing utility networks, and trade organizations. Energy Solutions' existing programs and market relationships throughout the country can accelerate contractor enrollment. Contractors will be able to both recruit new customers through their normal sales activities and benefit from leads and referrals generated from the program website and marketing efforts. A large contractor network will foster board participation in the Home Energy Rebate Programs, gaining experience installing and selling efficient technologies (e.g., HPs) and participating in state programming. Contractors integrating these measures into their business model will continue to promote and install this equipment after incentives are exhausted and are more likely to participate in subsequent programs.

OPTIONAL PROGRAM ELEMENTS

1. **Technical and Sales Training:** Energy Solutions can engage WE&T partners to train contractors both on how to install efficiency and electrification projects as well as sales training for these projects. We can also implement “Learn and Earn” programs to give contractor staff equipment in their homes or training facilities at no cost to help with training and familiarization. Contractors often have no experience with equipment like HP water heaters, and this first-hand experience is critical to familiarizing these key actors with the technologies they can then promote.
2. **Statewide Marketing Campaign:** Energy Solutions can help provide a broader, statewide marketing campaign through a variety of channels such as radio, tv, billboards, utility bill stuffers, digital advertisement, social media, and in-person events to help spread the word about the program, the informational website, and general education and awareness of efficient technologies. Marketing can also reach specific demographics through door-to-door canvassing, utility bill targeting, or via a partner event (such as a food bank or phone give-away) targeted to specific demographics.
3. **Statewide Electrification Marketplace:** An electrification marketplace hosted on the website can bring a large number of pre-vetted contractors into a program quickly and provide consumers with tools that allow them to quickly connect with, get quotes from, and compare installers.

Data and Reporting

Data reporting is key for evaluating program effectiveness and quantifying impacts. Reporting out to participants, stakeholders, and our clients informs strategy for achieving short term goals—like number of installations—as well as show progress towards longer term market transformation goals and metrics.

CORE PROGRAM ELEMENTS

1. **Client Reporting.** SHEER programs will provide reports on program performance, market activity, incentive activity, measure information, and billing data submitted to the SEO. Suggested reports include monthly reports on program activities as well as annual reports that capture progress towards goals, major program wins, longer term market transformation, major trends, customer stories, and provide suggestions for program changes and improvements.
2. **Participation Reporting.** SHEER's approach will provide contractors with access to an online account on Energy Solutions' application processing system that will grant them real time access to the status of their incentive, final reports, and project information provided to the participating entities.

OPTIONAL PROGRAM ELEMENTS

1. **Bill Impact Reporting.** Measured savings approaches that can use utility data for measurement and verification of Home Energy Rebate projects. These impacts could be aggregated and shared in broader reports to help inform future utility savings, DR potential, rate cases, and other policies.
2. **Public Reporting Website.** The program could make certain data publicly available (excluding any personally identifiable information—PII), similar to <https://techcleanca.com/public-data/>. This approach allows different groups to help inform future program design and demonstrates transparency and openness with results. It also allows policy makers, advocates, and others to study program data and make informed decisions and set informed, obtainable goals for future electrification programs.

Strategic Market Initiatives

In order for HOMES and HEEHR to have the biggest impact, they should be integrated with existing market activities and provide a path towards a future where programs can operate sustainably after HOMES and HEEHR run out of incentive funding.

CORE PROGRAM ELEMENTS

1. **Layered Incentive Design.** Energy Solutions will research and coordinate with other available rebates and incentives programs to reduce market confusion and administrative burden by consolidating program applications and coordinating program engagement through an optional “one-stop shop incentive clearinghouse” (see optional elements below for more information).
2. **Supply Chain Engagement.** A majority of contractors enrolled in the TECH Clean California program heard about the program through their distributors. In addition to contractors, Energy Solutions works with distributors and manufacturers in order to garner full support of programs and ensure manufacturer incentives and advertising—as well as distributor stocking practices and promotions—align with program goals. The Energy Solutions' dedicated Trade Ally Management (TAM) team maintains trusted relationships with manufacturers and distributors in HVAC and water heating.

OPTIONAL PROGRAM ELEMENTS

1. **One-Stop Shop Incentive Clearinghouse:** Energy Solutions can work with existing utility programs to create a centralized website with customer and contractor informational resources—such as incentive eligibility—and a single application submittal for contractors and customers that enables participation in multiple programs. This single application directs project information and required eligibility data to produce multiple rebate claims for each applicable program that can then either be processed through Energy Solutions' incentive processing platform (depending on program compatibility) or can be used to provide information to other programs for processing. Similarly, Energy Solutions can create pathways with existing programs to take in their data into our system and quickly process Home Efficiency Rebates process to reduce the administrative burden of applicants. Where possible, it is ideal to have all incentives for which a customer is eligible go through a single hub, linked on a single statewide website. This one-stop-shop can help get the most impact from programs by alleviating customer confusion, decreasing fraudulent claims, and increasing the scope of energy efficiency projects.
2. **Financing Partnerships:** Most customers, especially LI customers, cannot afford expensive home repairs and upgrades that have large out of pocket expenses, even if they have favorable returns on investment or have large incentives. We partner with existing statewide financing programs to ensure that they cover building electrification projects and offer unique solutions for multifamily units.
3. **Load Shifting:** Coordinating with utilities to further subsidize measures that shift load off peak can provide additional incentive layering opportunities—such as controllability—to help with electrification.
4. **Customer Targeting,** including:
 - a) **Zonal and Community Targeting:** Zonal electrification targeting, or community targeting, will bring focus to identified areas that may be of specific interest to states to electrify. This could include customers that are defined as hard-to-reach (HTR), are in DACs, or could be customers that are specifically targeted because of load and grid constraints.
 - b) **Energy Usage Targeting.** Coordinating to use utility customer advanced metering infrastructure (AMI) data, Energy Solutions can partner with HOMES aggregators to assess all utility customers for high consumption customers and other propensity indicators to target customers who stand to benefit the most economically or that will result in the greatest GHG savings.

Other: 20. Additional Comments. None

RFP and Contract Language: 21. RFP Language that Could be Used to Execute SHEER Program Idea.

- How does your proposed program design enable incentive layering with existing programs and streamlined customer and contractor experiences? *For more language inclusions, refer to RFP Language: 15. Any RFP Language that Could be Used to Execute SHEER Program Idea.*

Category 3. Indication of Vendor Interest

Company Characteristics

22. Contact Name: Alex MacCurdy, Energy Efficiency Senior Director; **Contact Information:** 717.787.1070 x504; procurement@energy-solution.com; **Company:** Cohen Ventures Inc, dba Energy Solutions, 449 15th Street, Suite 400, Oakland, CA 94612

2. Approach and Commitment to DEIA. Energy Solutions has a formalized plan to advance **diversity, equity, inclusion, and accountability/accessibility (DEIA)** within Energy Solutions, across program teams, and for program participants. We carefully considered definitions, researched strategies, set ambitious—but achievable—goals, and chose tactics that will enable us to evaluate our progress over time and iterate on successful strategies. Our primary objective is to **ensure that we are supporting all employees to fully engage and bring their whole selves and the best of their abilities to work to support our climate-focused mission.** To gain valuable insight, we also will work with a third-party DEI consultant to facilitate continuous learning and iteration to ensure we work intentionally toward long-term goals for our company and our clients. Our DEIA plan encompasses the following key performance indicators (KPIs) and goals:

KPI-Diversity (defined as encompassing ethnicity, gender, age, ability, sexual orientation and gender identity, and generational educational achievement). **Goal:** Exceed the diversity of the United States as a benchmark. Show annual progression and meet or exceed aim of 3% more diverse than the non-majority category than benchmark at the end of 3 years.

KPI-Equity (defined as encompassing retention, pay, transparency in job descriptions, career development, leadership participation). **Goal:** Percentage of growth year over year above baseline and a minimum score in each equity survey category. Establish 3-year goals for improved equity within employee retention and promotion practices. Targets for equity to be established from the scorecard with aim to increase 3%/year.

KPI-Inclusion (defined as encompassing key inclusion topic areas include culture, supervision, careers, flexibility, safety). **Goal:** Achieve equivalent average response ratings to similar firms/industries. Targets for inclusion will be established from the scorecard and aim to increase 3%/year.

3. Relevant Current Programming: Energy Solutions, with our partners, administers the Technology and Equipment for Clean Heating (TECH) Clean California (<https://techcleanca.com/>), a statewide heat pump (HP) market transformation effort that includes many program HOMES/HEEHR ("Homes Energy Rebate Programs") design elements. TECH is a contractor driven, point-of-sale (POS), prescriptive rebate program aimed at driving market adoption of low-emissions space and water heating technologies for existing single and multifamily residences. The TECH initiative includes elements designed to reach low-income (LI) populations—40 percent of program funds are dedicated to disadvantaged communities (DACs) and LI customers—and the TECH team coordinates with community-based organizations (CBOs) such as those that receive Low Income Home Energy Assistance Program (LIHEAP) and Low-Income Weatherization Program (LIWP) funds.

The TECH initiative administers incentives to drive HP market expansion; conducts and facilitates training and consumer engagement; implements regional pilots that address adoption barriers; and collects and publishes program data to inform California's long-term building decarbonization framework. Since its inception in 2021, TECH Clean California's approach focuses on three high-level pillars:

Spur the clean heating market through statewide strategies	Create scalable models through regional pilots	Inform long-term building decarbonization framework
Activate the supply chain <ul style="list-style-type: none">Contractor incentivesStreamlined incentive clearinghouseTechnical and sales trainingDrive consumer demandStatewide marketing campaign and website	Improve targeting and project finance <ul style="list-style-type: none">Target customers using meter-based analysisDeploy Tariffed-On-Bill financing pilot Expand benefits to HTR customers <ul style="list-style-type: none">Support low-income programsCreate multifamily pilots targeting property owners Streamline installation <ul style="list-style-type: none">Streamline permitting and installation costsEnable load-shifting Innovation through Quick Start Grants	Develop public reporting site <ul style="list-style-type: none">Inform policymakers and market actors on progress and impacts Quantify decarbonization benefits <ul style="list-style-type: none">Avoided costs, grid benefits, and customer bill impacts Inform policy development <ul style="list-style-type: none">State, regional, and local regulatory policy

Company Summary

25. Energy Solutions' Capabilities to Support State Energy Office (SEO) Programs. Energy Solutions is an innovative, dependable partner that has helped create large-scale environmental impacts through market-based solutions for over 25 years. Energy Solutions has demonstrated its capabilities of working on large, statewide market transformation initiatives, such as TECH Clean California, the state's HP market transformation program. Our innovative programs have won 15 national awards from organizations including the American Council for an Energy Efficient Economy (ACEEE), Association of Energy Service Professionals (AESP), and the Department of Energy since 2010, three in the market transformation category. In TECH Clean California, we created a seamless contractor and customer experience through our incentive clearinghouse and enabled significant increases in HP market share that has already led to significant increases in the adoption of HP technologies. We collect and publicly report on project and energy usage data (before and after HP installation) that grants unprecedented insight into project economics and market trends that can inform customer targeting efforts as well subsequent policy and program design.

We understand the challenges and work it takes to integrate new efficiency and electrification programs into existing markets and have strategies and experience integrating new programs and creating centralized knowledge hubs that lead to a more streamlined experience for participants. We also have experience bringing true market transformation efforts to markets and have used that to design our State Home Energy/Electrification Rebate program approach (SHEER), built on elements that will have lasting effects after HOMES and HEEHR funds run out and leave states with competitive markets that see efficiency and electrification as a thriving economic opportunity for customers and contractors. Our SHEER approach strategy relies on four key elements.

- 1. A Flexible Program Design to Meet States' Needs.**
- 2. Proven Experience Catalyzing Market Transformation.**
- 3. A Simple-to-Use, Proven Program Platform.**
- 4. Shared Program Infrastructure for *Both* Home Energy Rebate Programs.**

Energy Solutions brings our best-in-class program administration and implementation experience, and we will determine the best approach to bring to each state and work towards each state's unique goals. We have deep experience combining a coalition of providers that can bring local community knowledge and sophisticated software solutions together to create high impact programs. As indicated in the Program Elements section, there are many program elements that can run adjacent to HOMES and HEEHR core offerings in which SEOs may want to invest in order to build out a more complete, long-term pathway towards building electrification. Energy Solutions can also provide strategic consulting, program implementation, market characterization, and other services directly to SEOs for other work.