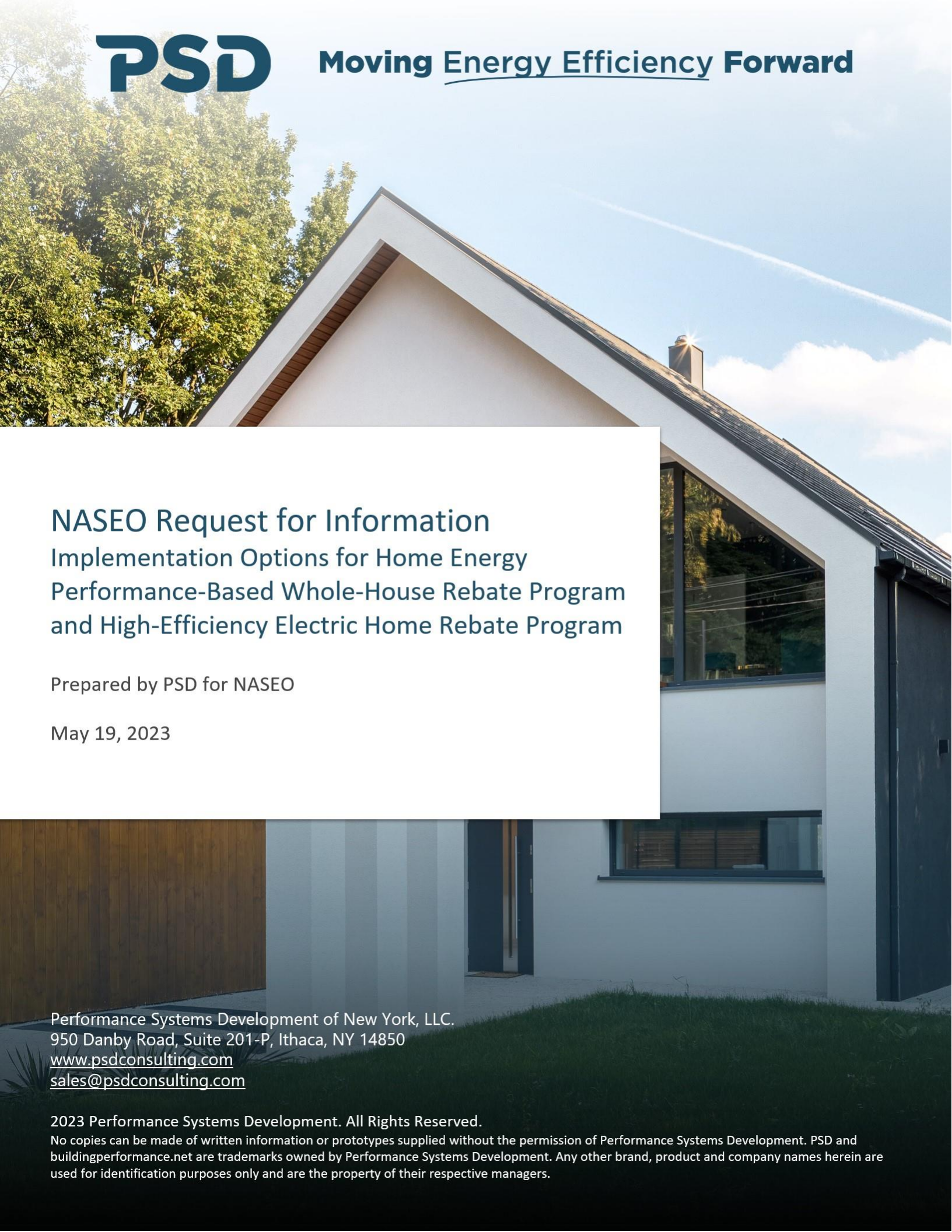

PSD

Moving Energy Efficiency Forward

NASEO Request for Information

Implementation Options for Home Energy Performance-Based Whole-House Rebate Program and High-Efficiency Electric Home Rebate Program

Prepared by PSD for NASEO

May 19, 2023

Performance Systems Development of New York, LLC.
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www.psdconsulting.com
sales@psdconsulting.com

Cover Letter

May 19, 2023

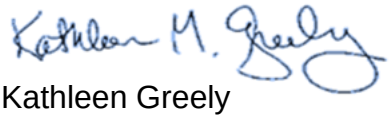
Maddie Koewler
NASEO

Dear Maddie,

Performance Systems Development (PSD) is pleased to submit the following response to NASEO Request for Information – Implementation Options for Home Energy Performance-Based Whole-House Rebate Program and High-Efficiency Electric Home Rebate Program.

PSD 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.

Regards,



Kathleen Greely
Performance Systems Development
Chief Executive Officer

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Program Elements

Company Characteristics

PSD

Performance Systems Development of New York, LLC. is headquartered in Ithaca, NY, with 98 employees in 16 states. Founded in 1998, PSD has been in continuous operation for 25 years. PSD is a US SBA-certified SBE (Small Business Enterprise). Our primary contact for this RFI is Greg Thomas, Chief Strategy and Technology Officer, gthomas@psdconsulting.com, (607) 327-0213; PSD can also be reached via Allison Lauer, Market Analyst, sales@psdconsulting.com.

Diversity, Equity, Inclusion, and Accessibility Approach

PSD is committed to fostering, cultivating, and preserving a culture of diversity, equity, and inclusion. See PSD's policy in Additional Information. PSD completes EEO reporting each year and prepares an Affirmative Action Program annually to both measure our previous year's results and look forward to our goals for the year ahead.

In addition to our DEIA policies, much of PSD's work is focused on the income-eligible community. In 2022, we did field inspections of over 3,100 homes throughout the mid-Atlantic region, and in 2023, that will grow to over 4,000 homes. We worked with the Pennsylvania Housing Finance Agency to draft and implement new policies to better enable affordable housing developers to incorporate utility incentives in funding for high-performance new construction.

Experience

PSD's trajectory has been significantly aligned with the needs of HOMES and HEEHR for over twenty years. From our early award-winning work developing TREAT in 2000, a DOE WAP-approved software tool still used for multifamily modeling across the nation (https://future.psdconsulting.com/software/treat/treat-multifamily/), we have moved forward with sophisticated software designed to meet the requirements of HOMES and HEEHR programs, addressing the needs of both contractors in the field *and* program implementers requiring comprehensive and transparent reporting. PSD is unique in that its software expertise is complemented by our hands-on work supporting programs, contractors, and homeowners through training, contractor network management, third-party field inspections, and implementation of residential retrofit programs.

PSD is proud of its history of long-term work with our clients, spanning decades and multiple rebid cycles. As a few examples, we've been supporting NH Saves since 2002, FirstEnergy since 2010, New Jersey Comfort Partners since 2016, and Mass Save since 2017.

PSD first built "OTTER", a precursor to our enterprise tracking platform Compass, for the New Hampshire statewide utility consortium NH Saves in 2002. OTTER was built to automate standardized XML submissions from the TREAT modeling tool into a central database; it currently supports NH Saves entire residential portfolio, including both income-eligible and market-rate home retrofit programs. This early experience with XML and energy modeling resulted in PSD originating the HPXML data standard.

We've implemented and/or supported residential retrofits programs with municipal and state clients such as Philadelphia Gas Works (https://pgwenergysense.com/), Sustainable Finger Lakes (https://www.tompkinsweekly.com/articles/affordable-heat-pump-project-launched/), and NYSERDA Comfort Home (https://www.nyserda.ny.gov/All-Programs/Comfort-Home-Program). Both New York programs incorporate PSD's "Heat Pump Toolkit" to help contractors appropriately

size and integrate heat pump selection with packages of envelope upgrades to maximize energy savings and decarbonization while minimizing grid impacts. This “Heat Pump Toolkit” supports the requirements of both HOMES and HEEHR in the IRA.

PSD has been delivering third-party quality assurance services for a number of states and utilities since 2014. In 2023, we will deliver over 4,000 field inspections for programs including FirstEnergy WARM (Pennsylvania LIURP), New Jersey Comfort Partners (statewide income-eligible consortium), and SEDA-COG (large Pennsylvania WAP provider) plus another 1,000 inspections for market-rate offerings. In addition, PSD has recently been awarded an agreement for QA services with NYSERDA. PSD’s approach emphasizes support and hands on involvement and training with contractors. In contrast to approaching QA as a punitive process, PSD successfully approaches QA as a collaborative opportunity to further improve programs by identifying and addressing additional technical assistance and training needs based on QA data.

Program Elements

As described in Additional Information, PSD has been supporting the design, deployment, and analysis of the NYSERDA Comfort Home next generation whole building program.

Heat Pump Toolkit

With Small Business Innovation Research (SBIR) funding from US DOE, PSD has developed advanced heat pump tools that extend the NY Technical Resource Manual (TRM) approved EnergyPlus calculations. These tools are deployed in PSD’s Heat Pump Toolkit (HPTK). The Heat Pump Toolkit is currently being tested in another NYSERDA pilot that is developing electrification approaches for low-income rental housing. Link to pilot description. *PSD developed EnergyPlus savings and demand impact calculations that underlie the Heat Pump Toolkit and have been approved by the NYS Department of Public Service.*

The PSD Heat Pump Toolkit combines five different tools into a single package that collects data once and uses it many times:

1. An offline data collection app that supports walk-through audits and easy photo documentation
2. Weatherization improvement savings calculations
3. Heating and cooling design load calculations (currently for heating dominated climates)
4. Advanced cold climate Air Source Heat Pump (ccASHP) equipment selection tool that auto sizes every unique heat pump in the NEEP ccASHP across the four calculated heating loads
5. Heat pump and heat pump hot water calculations for specific equipment performance including combinations of multiple pieces of equipment

The PSD Heat Pump Toolkit supports rapid design and analysis of the energy impacts of energy efficiency improvements in combination with heat pumps and hot water heat pumps. Heat pumps are complex systems that interact with other systems, have back up heat options, may or may not be sized to meet the full load of a house, and have performance that varies in multiple dimensions. The Heat Pump Toolkit supports heat pump project optimization, allowing in minutes the assessment of options that would have taken hours using an array of unconnected tools to determine. This allows the tool to support even HEEHR heat pump plus envelope installations, providing significantly increased confidence that the customer will not see bill increases.

The PSD Heat Pump Toolkit compares the cost of a home’s current heating, cooling and hot water energy bills to their heating hot water and energy bills after improvements, using the packages to make comparisons easy and fast. The following chart from the HPTK shows the conversion of a

gas heated home to heat pumps and the automatic load sizing of a ducted cold climate air source heat pump selected from the NEEP database. The existing heat and hot water fuel is natural gas. Note that the installation of this heat pump in upstate New York without envelope improvements (the second column, Base w/ASHP) increases the annual energy cost. Package 1 provides some additional cushion against fuel bill increases and Package 2 even more.

These analysis tools can also support large scale modeling to support the development of program requirements. PSD ran 192,000 EnergyPlus models to support the development of the packages for the Comfort Home program and has used machine learning methods generation over 35 million results to support the NYSERDA RetrofitNY multifamily deep retrofit program. The Heat Pump Toolkit also does furnaces and boilers.

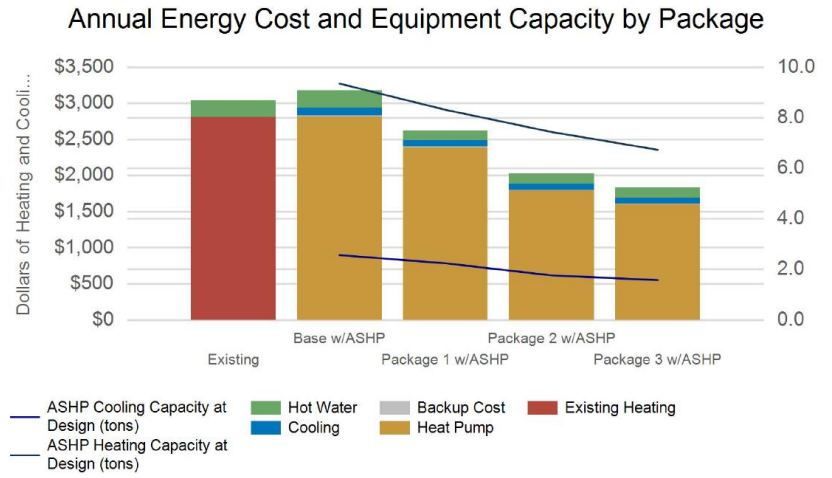

Figure 1: Annual energy costs across different package options as defined by NYSERDA Comfort Home

Compass Program Management Platform

Our software offering consists of an ecosystem of tools that can be configured and customized to meet the complete needs of residential energy efficiency programs. The core of our offer is our purpose-built application, Building Performance Compass. Compass forms the central hub to which all other tools connect. Salesforce.com is fully integrated with PSD's Compass platform. Leveraging the proven capabilities of Salesforce.com and Compass while allowing each to focus on their core strengths improves implementation timelines and provides a comprehensive solution. PSD uses Compass internally to deliver whole building retrofit programs for residential, commercial and multifamily programs, and supports program administrators and program implementators who use Compass.

Compass manages EnergyPlus based savings calculations, including the Heat Pump Toolkit. Compass can use HPXML from an third party audit or rating tool to drive program standardized EnergyPlus savings. Compass also supports mapping HPXML to utility TRM calculations.

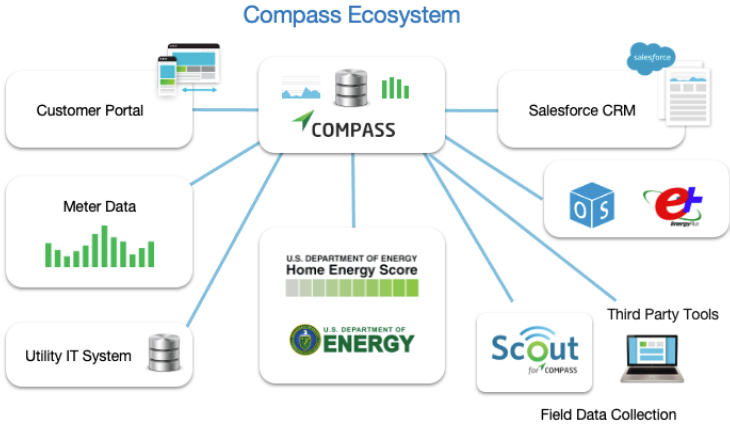

Figure 2: Compass Ecosystem

The Compass data model supports multiple jobs per customer account, multiple stages per job, and allows for multiple funding sources per job.

Basic Compass features include:

1. **Data Integration** via dedicated tools (Scout, Surveyor), API connections, custom spreadsheet, or third-party XML file uploads for audit data collection and/or savings results.
2. **Document management** at the building, job, and measure level, including photos, spreadsheets, customer contracts, modeling files, etc.
3. **Baseline Energy Use Analysis** using open-source regression analysis and weather normalization methods for identification of potential savings and for contractors to calibrate models.
4. **Job Workflow** that is customizable with dashboards for fast identification of jobs requiring action by roles (Contractor, Program, State Admin, Vendor, Financing, etc.)
5. **Incentive Calculations** dynamically calculate incentives based on the program rules such as measures installed, savings achieved, and job fees.
6. **Savings Calculations** dynamically per energy conservation measure based on simple deemed values, custom TRM equations, or whole building EnergyPlus models.
7. **Measured vs Predicted Savings Tracking** comparing pre vs post usage and predicted performance for actual weather.
8. **Reporting/Data Analytics** including both homeowner-facing and support for program administration using Tableau or PowerBI including the ability to brand.

Compass is configured on a case-by-case basis to support clients. Client data is separated from all other customers and stored in a unique database. Compass can support multiple programs within a single instance, with, as one example, over 50 programs in one utility customer's Compass.

Quality Assurance Services

PSD is known for delivering high quality QA services for electric and gas utility energy efficiency programs. Our approach is designed to provide equal emphasis on validating the accuracy of reported activity within a program, as well as enhancing the technical skills of program participants. We leverage a powerful combination of building science, engineering, program management, inspection expertise, and data analysis by a staff of experienced professionals who are recognized as leaders within the industry and are passionate about the quality of their work. PSD has engaged in QA programs as the sole or major inspection project manager for 30+ different IOUs in the Northeast, Mid-Atlantic, and Midwest. In addition, PSD has a 22-state footprint providing energy modeling desk review and field inspections for RESNET energy raters.

PSD provides structured and focused mentoring in combination with our field QA services. Our experience as a QA provider is equally matched by years of experience as a leading building science trainer with a focus on workforce development and market transformation. PSD has trained and tested thousands of individuals on BPI and weatherization standards, auditing best practices, and a host of other residential energy efficiency topics. PSD is one of the few entities in the country accredited as both a BPI Training Center and a RESET rater training provider. We pair our QA services with a proven and results driven commitment to training.

Indication of Vendor Interest

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In addition to our DEIA policies, much of PSD's work is focused on the income-eligible community. In 2022, we did field inspections of over 3,100 homes throughout the mid-Atlantic region, and in 2023, that will grow to over 4,000 homes. We worked with the Pennsylvania Housing Finance Agency to draft and implement new policies to better enable affordable housing developers to incorporate utility incentives in funding for high-performance new construction.

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PSD is proud of its history of long-term work with our clients, spanning decades and multiple rebid cycles. We've been supporting NH Saves since 2002, FirstEnergy since 2010, New Jersey Comfort Partners since 2016, and Mass Save since 2017. In addition to the HOMES and HEEHR experience summarized below, PSD has significant expertise in residential new construction programs, as well as energy code support and training (currently supporting PA, DE, NY and MA).

PSD first built "OTTER", a precursor to our enterprise tracking platform Compass, for the New Hampshire statewide utility consortium NH Saves in 2002. OTTER was built to automate standardized XML submissions from the TREAT modeling tool into a central database; it currently supports NH Saves entire residential portfolio, including both income-eligible and market-rate home retrofit programs.

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Company Summary

PSD specializes in innovative program design, implementation, engineering and training services, and software solutions for the energy efficiency industry. We are focused on the development and delivery of whole-building and performance-based energy efficiency programs and services, with a strong emphasis on market transformation. psdconsulting.com

- Program design energy modeling assistance for HOMES and HEEHR including support for large scale modeling to understand the customer, energy, and demand impacts of program design options. This includes analysis of combinations of climate, rate, cold climate heat pump performance options and envelope work that will support confidence in obtaining customer cost reductions. Also, modeling analysis to support time and location-based load reduction demand impacts from HOMES and HEEHR program designs.
- Program design support for transaction cost reduction including the use of standardized data, reductions in contractor data entry, and the use of packages of improvements, similar to NYSERDA Comfort Home’s approach, to reduce contractor/program overhead.
- Support in aligning existing programs (stacking & braiding) with HOMES modeled savings requirements, e.g., data mapping/transformation of existing program data into HPXML, mapping of HPXML into regulated program calculations. Development and credentialing of Standardized Simulations for joint use of regulated programs and HOMES.
- Support for integration of sampled or large-scale measurement into the HOMES modeled savings approach and HEEHR. This includes methods for low-cost heat pump performance verification.
- Tools to support program delivery including the Heat Pump Toolkit (which supports fossil fuel equipment as well) and program management databases. Advanced program building science-based data analysis using data from program management system.
- Full program implementation, including contractor network management and incentive processing, as well as collaboration with PSD national partners supporting outreach to low-income populations and Community Based Organizations.
- Field, desk and remote data-driven quality assurance for modeled savings, measured savings and HEEHR. Contractor training delivery in person, remote and via PSD’s learning management system, specifically targeting areas identified in QA.

Additional Information

NYSERDA Comfort Home

For the past four years PSD has been working with NYSERDA, with the support of the US DOE, to design and support the delivery of NYSERDA's next generation whole house program. This program, Comfort Home, is designed to support cost-effective at-scale building envelope load reduction as part of meeting the aggressive climate goals adopted by the State of New York. The program increases the value of envelope investments by supplying site-based time and location demand impacts that result from reducing the required heat pump capacity for every participating building. At the same time the program dramatically reduces the cost of energy modeling and the cost of program approval for whole house incentives. These tools are helping New York State manage the impact of large-scale residential building electrification on the grid.

Building envelope load reduction programs are a key part of any large-scale electrification strategy. Envelope load reduction provides permanent removal of demand impacts by avoiding the installation of heat pump equipment. The realization rate of an envelope load reduction program is determined by its success in accurately sizing installed heat pumps in homes that are retrofitted or planned for retrofit, not by measurements of energy use at the meter.

Building envelope load reduction is also a key part of low-income decarbonization strategies. Envelope load reduction reduces the size and cost of required heat pump equipment, improves comfort, and most importantly helps to ensure that the bills actually go down and stay down after a heat pump is installed.

PSD's engineering and software expertise have helped design and enable the delivery of this program.

The NYSERDA Comfort Home Program has a number of unique characteristics.

Comfort Home uses predefined "packages" of improvements that require homes to meet an envelope performance level for a package before accessing the next level of improvement incentive. These packages impose a "loading order" that focuses work on the most cost-effective load reduction investments first, and supports improvements that include window replacement, if the attics, walls and floors are brought up to the program standard first. These predefined packages also significantly reduce contractor costs for audits and speed up and help automate program approvals. *PSD helped design the packages, has implemented the packages in the program software, and has implemented the automated approval mechanisms in the PSD Compass Program platform.*

Comfort Home uses a US DOE EnergyPlus based simplified input simulation to determine site-based savings. *This "Standardized Simulation" method, developed by PSD, has been approved for use by regulated efficiency programs in New York State by the New York State Department of Public Service.* Contractors currently take about 10 minutes to enter data into forms that generate a unique set of eight EnergyPlus simulations for each building that include the existing building and all the proposed (or eventually, installed) improvements. *PSD's work in developing this EnergyPlus based simulation method and credentialing it in the NY Technical Resource Manual was given the 2022 Home Energy Score Innovation Award by US DOE Building Technologies Office.* Credentialing in the NY TRM means this method is approved for use by NYSERDA and all NY utilities. This allows NYSERDA (and potentially other NY utilities) to align its regulated programs with the requirements of the IRA HOMES modeled savings program.

The EnergyPlus calculations are accessed using the HPXML data standard. This allows the Comfort Home program to optionally access other tools that consume HPXML data, such as the DOE Home Energy Score. PSD was responsible for initiating and developing the original version of HPXML, with funding support from the US EPA Home Performance with ENERGY STAR program. PSD is committed to developing and leveraging this data standard to improve saving methods and improve the value of data through data standardization.

Data standardization will be key to interoperability between HOMES and HEEHR and other efficiency efforts such as utility funded programs. *PSD has developed and implemented program interoperability solutions for states outside NY that map third party HPXML data from energy modeling tools to state required energy efficiency calculations*. In other states, PSD has mapped savings to load shapes used to determine impacts. This includes New Hampshire, where PSD has supported the award-winning NH Saves statewide multi-utility program that has provided side by side low-income and market rate programs using PSD's energy modeling software for over 22 years.

The simplified inputs in the Heat Pump Toolkit and the form-based data collection help reduce contractor training. Integrated error checking alerts contractors and program coordinators of data inputs that require attention. Additional support is provided in the tool, through an integrated help desk and soon through PSD's own Learning Management System.

Modeling Plus Measurement

PSD embraces a Total Quality Management based approach to the delivery of predicted energy savings that combines continuous improvement approaches with market transformation. Our continuous improvement approach to combining measurement and modeling is described in the figure below.

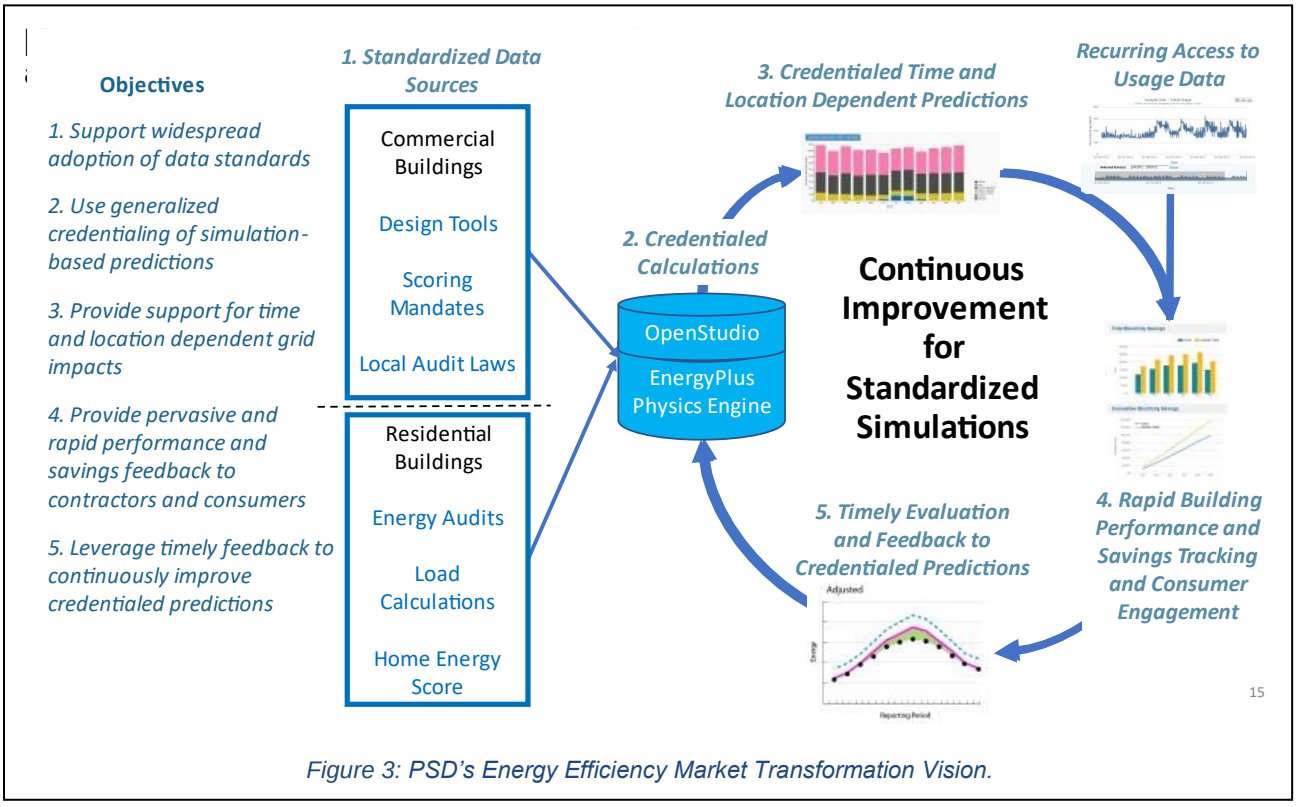

Figure 3: PSD's Energy Efficiency Market Transformation Vision.

Our approach leverages credentialed Standardized Simulations, such as those used by NYSERDA Comfort Home whole building retrofit program, along with performance feedback and data driven QA, to improve both customer level installation performance and average program results.

PSD has deep experience with energy modeling, advanced measurement methods, and pay for performance programs. PSD is under contract to NREL, supporting the development of the OpenStudio/EnergyPlus energy modeling platform. PSD was selected by US DOE for the 2022 Home Energy Score Innovation award for its work with EnergyPlus and HPXML. PSD uses accepted open-source measurement technology, such as the ASHRAE Inverse Modeling Toolkit, to process meter data for analysis and saving measurement. PSD has tested advanced and real time measurement methods with support from US DOE and NYSERDA, including testing of the OpenEE measurement methods on data from NYSERDA programs. PSD has supported a range of pay for performance programs in various regulated programs. PSD's Compass platform internally supports monthly and interval meter data storage and analysis and has connected third party program implementers to utility meter data using Green Button Connect.

Understanding Measured Savings Programs

Measured savings programs can influence savings performance in three ways:

- Through targeting customers with high bills and screening out customers less likely to generate high savings returns. This is different than the right to incentive access required of many regulated efficiency programs. This is particularly important in low-income programs where energy use may be reduced through thermostat settings as a way to maintain housing.
- By managing the scope and quality of the installation. This largely aligns with how predicted savings operate, with somewhat more immediate and direct consequences for low savings performance. Predicted savings program can also benefit from faster and more standardized measurement without monetization of savings measurement. Where savings are occurring due to multiple programs being stacked or braided, it will be very difficult to attribute savings, except perhaps by relying on savings predictions.
- By influencing customer behavior after installation. The measured savings program has an incentive to influence customer behavior, at least during the measurement period. These are savings, but should these savings be valued as highly as savings that are permanently installed in the building? The measurement system does not distinguish the source of the saving.

PSD has developed a detailed analysis comparing the delivery of monetized modeled savings (modeled incentives) programs to monetized measured savings programs (measured incentives).

Guardrails for Aggregators

PSD's CSTO and founder has over 34 years of experience with Pay for Performance starting with a $12M low-income multifamily pay for performance utility contract implemented starting in 1989. This contract made payments based on regression analysis of performance of individually metered apartments and was the first utility contract of this type for low-income multifamily buildings. PSD has expanded on this experience as described elsewhere. This experience has supported PSD's analysis of the IRA opportunities.

States will need to be prepared to provide additional constraints on the role of aggregators as loosely defined in the IRA Rebate programs.

Aggregators are different from program implementers. Program implementers are the agents of the program administrator. Program implementers do not normally attempt to make profits off the program clients. Aggregators have a broader business model, which can include generating

revenue from the client via project management fees, via financing fees or interest rate enhancements, or via measured savings payments that are not passed through to the client.

There are three key areas where special caution is needed.

First, program administrators should be careful to require transparency in the aggregators' use of incentive funds, in the fees applied to customer transactions and in the nature of financing arrangements. This is especially true for low-income focused programs. Generating revenue from low-income clients may reduce program overheads but will increase the cost burden carried by low-income clients. Clients and programs should have access to the information needed to understand how their money is being used. This transparency can be as simple as requiring a form similar to the those used in the mortgage industry to disclose the use of funds and the interest rate costs in a home mortgage.

Second, transparency in installation information from aggregators is also important. Programs need to understand what was installed in a building to inform required quality assurance inspections. This detailed information on installed measures is needed to verify installation quality and safety. Simple analysis of this information can also be used to detect fraud and other issues where major misalignments of measure scope and savings point to external influence on metered data. Analysis and use of this information is greatly enhanced if the information is provided in a standardized format, ideally using the BPI HPXML data standard (BPI-2100-S-2013), supported by NREL. This HPXML data is an already an output from the energy modeling tools used by both modeled savings program and aggregators doing whole building retrofits.

Data provided in HPXML format allows program administrators and their consultants to easily convert this information into a standardized program savings prediction for each building, using the OpenStudio/EnergyPlus framework. These are the same NREL tools underneath the PSD Heat Pump Toolkit, the DOE Home Energy Score, and NREL's ResStock analysis platform. The HPXML data also allows a Home Energy Score to be easily provided to buildings that get a retrofit. The aggregator is free to make their own predictions of savings, but the program administrator can now easily compare the results of measurement to the predictions from the program administrator generated EnergyPlus results.

Having access to predictions means that the program administrator can understand what is working in the retrofits installed in the program and what is not working. Without access to predictions, the only party that knows what is working is the aggregator. The state will have invested in a measurement system and made large payments to an aggregator and will not be able to improve or evolve the savings performance of other programs in the state. Aggregators currently treat this savings prediction information as proprietary. The use of the HPXML data allows for transparency in realization rates without disclosing the aggregators own predictions of performance.

Third, aggregators need competition around access to incentives. Without competition, aggregators control contractor access to incentives and pushing down contractor costs becomes a source of profit for the aggregator. With competition, there is pressure on the aggregator to reduce costs and opportunities for contractors that want to do their own customer acquisition to develop their businesses. This helps create local generational wealth.

Program Design Considerations

Under a current contract with NYSERDA, PSD is conducting research on options for amending the BPI 2400 energy modeling standard. PSD's founder was responsible for initiating the standard with BPI in 2010, and PSD's engineering staff supported the original standard. The chart below provides some of the HOMES program savings analysis conducted under this effort.

The table shows which combinations of improvements on an older home are likely to access the threshold-based incentives in the HOMES program modeled savings option. The table also shows, on the left in $'s, the rough relative cost of different improvements.

A key finding in this table is the very large impact that the installation of a heat pump has on the site energy percentage savings used by the HOMES program. This also indicates that measured savings program aggregators will carry very low risk of not achieving high levels of savings, and therefore high-performance payouts, if a heat pump is installed.

HOMES Tier1 >=20%

HOMES Tier2 >= 35%

Avg Site Energy Savings [%/yr]	IECC Locations								
SPP Bin Package	CA San Diego	CO Denver	FL Tampa	GA Atlanta	MN Rochester	NY Buffalo	NY New York	TX El Paso	WA Seattle
Gas Home									
1, $	13	28	15	30	33	30	30	26	24
2, $		21			22	22	21		21
3, $$	14	34	16	32	37	35	35	28	31
4, $$		31			31	32	31		32
5, $	10	4	8	3	2	3	4	3	5
6, $$$	14	18	26	22	22	21	22	19	17
7, $$$$	37	64	35	55	63	69	67	46	66
8, $$$$	21	26	33	34	29	29	30	31	26
9, $$$$$	41	66	42	61	66	71	70	53	68
Elec Home									
1, $	10	26	13	26	31	28	27	23	22
2, $		19			21	20	19		19
3, $$	12	31	14	28	35	33	32	25	28
4, $$		29			30	30	29		29
5, $	11	5	8	4	3	4	5	4	6
6, $$$	7	1	20	7	1	1	3	7	1
7, $$$$	32	56	30	47	53	60	59	38	59
8, $$$$$	15	11	28	21	9	11	13	21	12
9, $$$$$	36	59	37	54	57	63	62	46	62

	Upgrade Scenarios
Package 1	Insulate Attic/Roof and Basement Walls + Airsealing
Package 2	Insulate Attic/Roof and Basement Ceiling + Airsealing
Package 3	Package 1 + Duct Sealing and Insulating
Package 4	Package 2 + Duct Sealing and Insulating
Package 5	HPWH
Package 6	Gas Heat and DHW to Standard Electric and High SEER AC
Package 7	Switch to ASHP and HPWH
Package 8	Package 6 + Duct Sealing and Insulating
Package 9	Package 7 + Duct Sealing and Insulating

Figure 1

Diversity, Equity, Inclusion, and Accessibility Policy

PSD is committed to fostering, cultivating, and preserving a culture of diversity, equity, and inclusion. Our human capital is the most valuable asset we have. The collective sum of the individual differences, life experiences, knowledge, inventiveness, innovation, self-expression, unique capabilities, and talent that our employees invest in their work represents a significant part of not only our culture, but also PSD's reputation and achievements.

We embrace and encourage our employees' differences in age, color, disability, ethnicity, family or marital status, gender identity or expression, language, national origin, physical and mental ability, political affiliation, race, religion, sexual orientation, socio-economic status, veteran status, and other characteristics that make our employees unique.

PSD's diversity initiatives are applicable—but not limited—to our practices and policies on recruitment and selection; compensation and benefits; professional development and training; promotions; social and recreational programs; and the ongoing development of a work environment built on the premise of gender and diversity equity that encourages and enforces:

- A collaborative work environment in which all employees participate and contribute.
- A safe space for all employees to express themselves, exchange ideas, and feel heard.
- Employees to be open and curious about others' experiences and perspectives.
- Respectful communication and cooperation between all employees.
- Employer and employee contributions to the communities we serve to promote a greater understanding and respect for diversity.

All employees of PSD have a responsibility to always treat others with dignity and respect. All employees are expected to exhibit conduct that reflects inclusion during work, at work functions on or off the work site, and at all other PSD-sponsored and participative events.

Any employee found to have exhibited any inappropriate conduct or behavior against others may be subject to disciplinary action.

Employees who believe they have been subjected to any kind of discrimination that conflicts with the PSD's diversity policy and initiatives should seek assistance from a supervisor or an HR representative.