

A two-story house with a large sunroom, surrounded by lush greenery and trees at dusk. The house has a dark roof and a brick chimney. The sunroom has large windows and is brightly lit. The house is surrounded by dense trees and a well-maintained lawn. In the foreground, there are two Adirondack chairs and a small table with a fire pit.

Leveraging the Measured + Modeled Pathways of IRA HOMES Rebates

Connecticut DEEP, May 2024

Sealed

Meet Sealed.

Sealed provides software and solutions to contractors, enabling them to install more home weatherization and electrification projects and grow their business.

Sealed also serves as an aggregator of projects for utility and government incentives, handling all rebate processing and payment on behalf of contractors.



Sealed Pro product (for contractors)

1

Qualification

Get decisions on eligibility across programs based on simple inputs contractors provide about the project.

2

Calculation

Sealed handles all required modeling and calculations to give contractors a rebate guarantee.

3

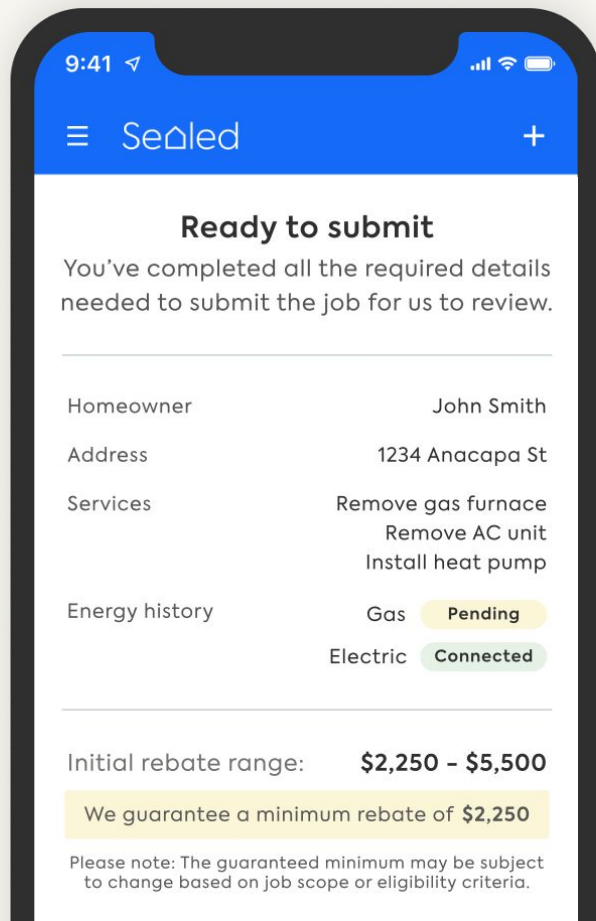
Processing

No paperwork required. Sealed runs all processing of the rebate based on simple inputs contractor provides.

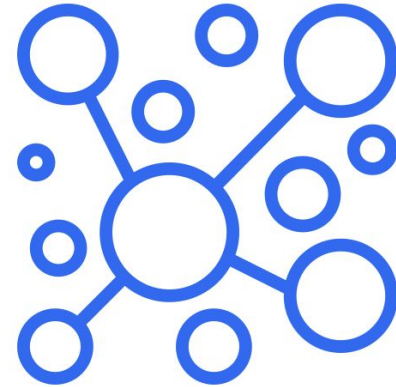
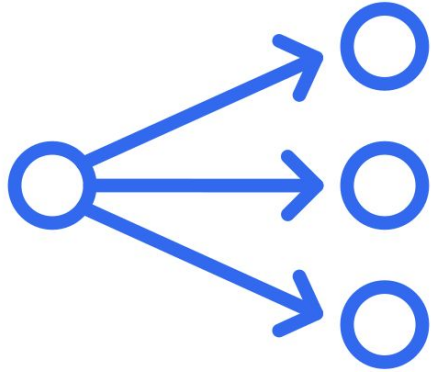
4

Payment

No more waiting months for payment. We pay contractors within days of project submission.



Aggregators make rebates easy for contractors & programs



From contractor perspective:

One application, many programs

Aggregators find stackable programs and submit a project for all eligible rebates


From program perspective:

Many projects, one portfolio

Aggregators create a portfolio of retrofit projects and take on performance savings risk for that portfolio

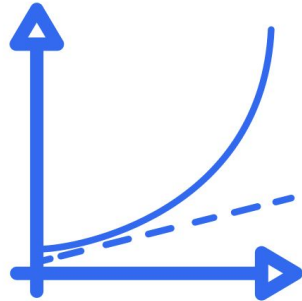


The IRA HOMES rebates are both based on energy savings, but with some important differences

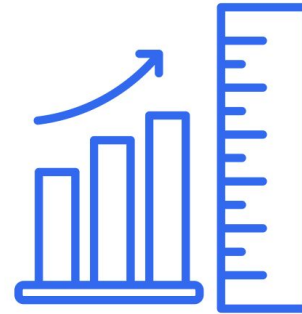
	Modeled	Measured
12 month historical energy usage	✓	✓
What is Required of the Contractor	BPI 2400 modeling, energy bill calibration, energy usage history pre-install	Basic home and measure inputs, energy usage pre-and-post install
Basis for rebate amount	Estimated energy savings	Actual energy savings
General rebate ranges in CT	\$2k-\$4k <i>(doubled for low income)</i>	\$2.2k-\$6.9k <i>(doubled for low income)</i>
 Payment Terms	Flat amount paid ~2 months after installation	Variable, quarterly payments paid out over 12 months

We recommend CT deploy both HOMES measured and modeled program options

Useful for homes that do not have 12-months of energy data



The modeled option is a safe foundation...



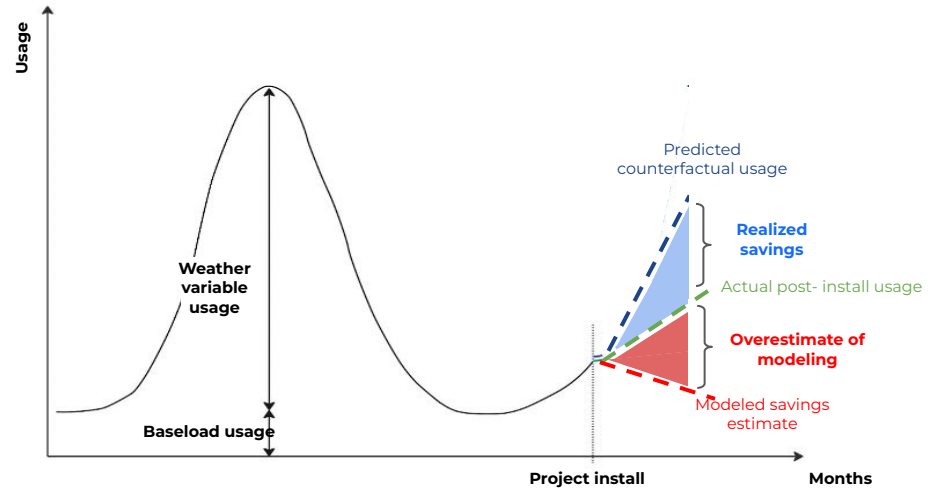
Useful for most homes

...and the measured option is a path to the future.

Measured savings is the future of energy efficiency

Measured savings approach provides **performance-based incentives, “using open-source advanced measurement and verification software...to determine energy usage before and after”**¹ project installation

Measured approach is based on actual savings, while modeled approach often overestimates savings

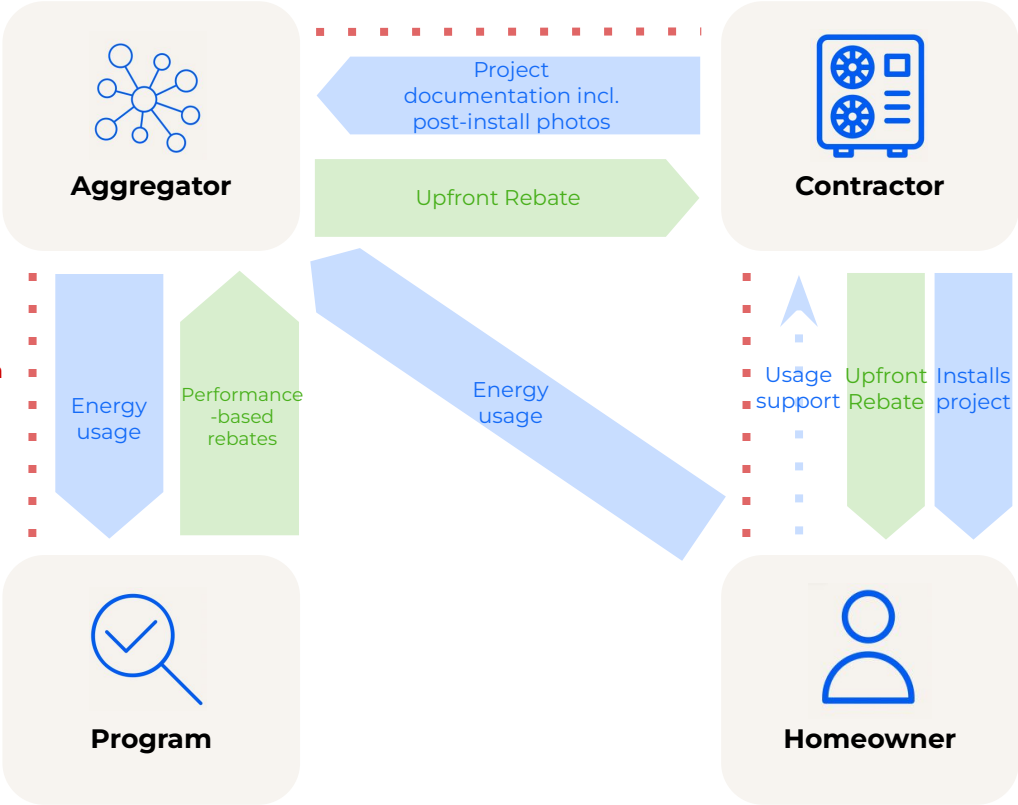


¹ Source: [IRA SEC. 50121-C](#)

Measured Savings: How it all works

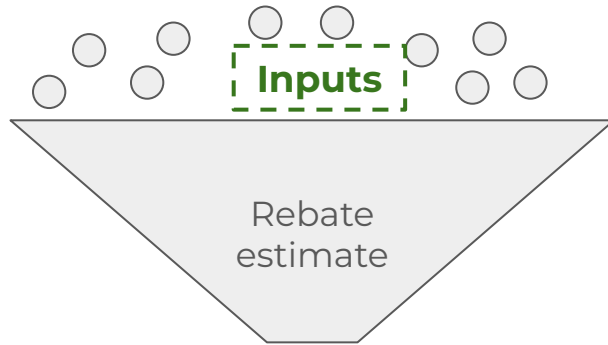
- Cash
- Contract
- Services / Data

Program Participation Agreement



Measured savings programs resolve the balance of accountability and scalability

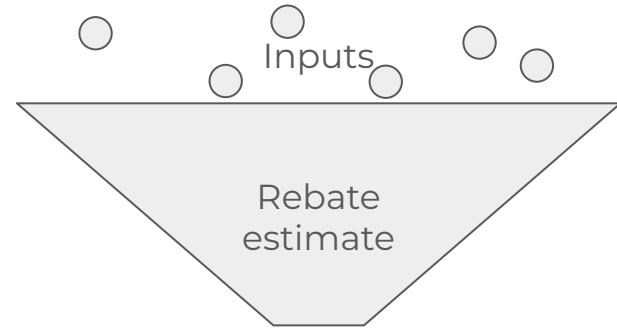
In most programs today, the only way to raise accountability is by monitoring many inputs...



Output (actual energy savings)

...causing **scalability to decrease** as more requirements are added for better accuracy

But with measured programs, accountability is based on a single (but important) output...



Output (actual energy savings)

...which **allows scalability to increase** since the inputs are not the basis for payment



Legend



Accountability and payment

Measured pathway results in more money and impact per project



Scenario	Project type	Measured approach	Modeled approach
Market-rate	Weatherization	\$2.9K	\$2.0K
	Electrification	\$7.0K	\$4.0K
	Combined	\$9.0K	\$4.0K
Low- or moderate-income	Weatherization	\$4.5K	\$4.0K
	Electrification	\$10.8K	\$8.0K
	Combined	\$13.8K	\$8.0K

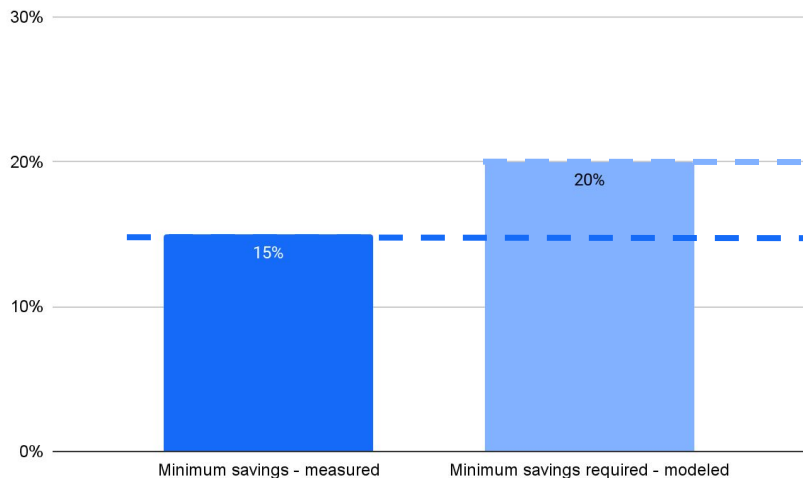
Note: energy savings are based on pre-built NREL ResStock database scenarios for weatherization, HVAC electrification, and combined projects. **All scenarios on this slide are based on homes that have natural gas as primary heating fuel in baseline.** Energy savings converted to incentives based on per-state kWh-equivalent incentives as prescribed in Inflation Reduction Act SEC. 50121 - C 2 A iii I. Mkt homes adjusted for higher than average size (130% of state average); LMI homes do not include adjustment

Source: NREL ResStock database, EIA electricity and natural gas consumption rates by state

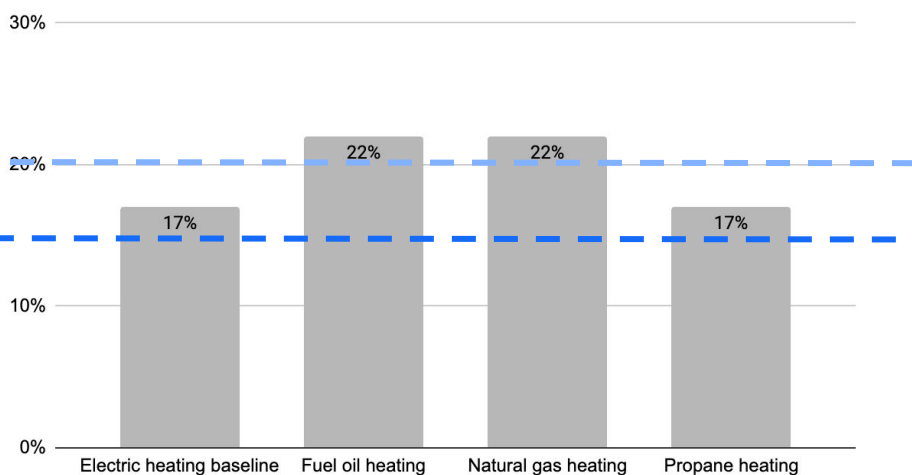
Without measured pathway, many weatherization-only projects will struggle to qualify for HOMES rebates

Minimum savings threshold is lower for measured pathway than the modeled pathway...

...Which is particularly helpful for CT weatherization-only projects

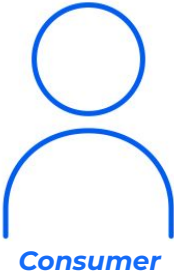


Average CT energy savings from weatherization-only work



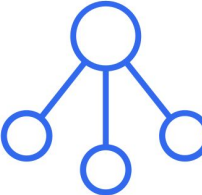
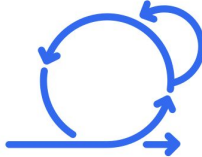
Flexible solutions for customer **energy data** access already exist today

Move data from here...



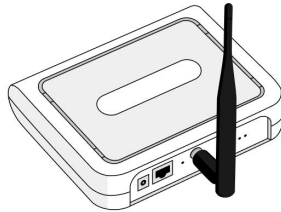
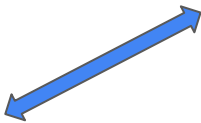
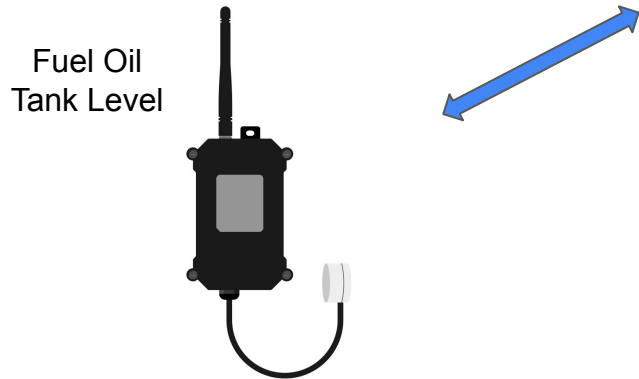
- 1 Third-Party Tools:** national coverage today, does not require ratepayer dollars (e.g., Arcadia)
- 2 Utilities:** more robust, but limited to utilities with extensive data access in place (e.g., CA IOUs)
- 3 Energy bills:** reliable way to get all forms of energy data incl. delivered fuels, but increases soft costs
- 4 Wireless sensors:** automated way of tracking data, but requires installation

...to here

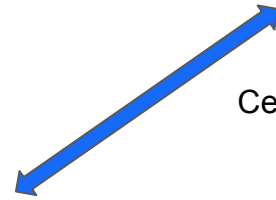


Aggregators and implementers

Fuel Oil Tank Level Monitoring



Gateway
(LoRaWAN® Network)



Cellular to Cloud



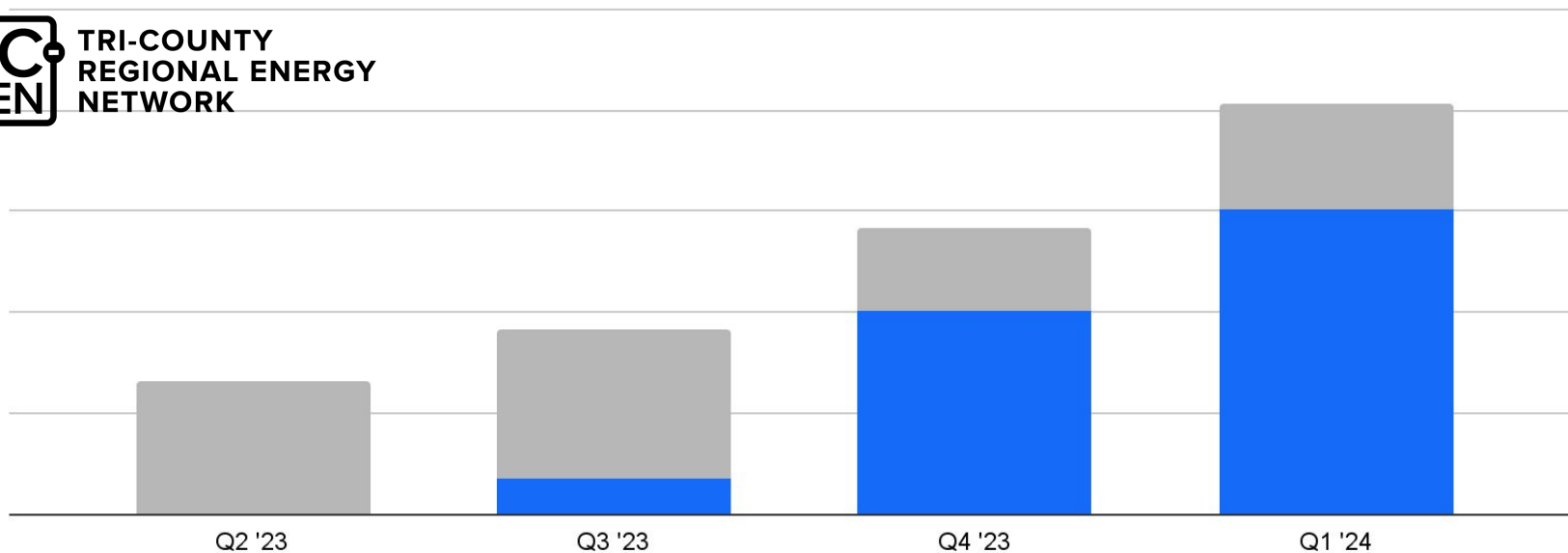
Aggregators like Sealed can drive program growth

3C-REN Single Family Home Energy Savings Program installs by quarter

■ Installs by Other Aggregators ■ Installs with Sealed as Aggregator



TRI-COUNTY
REGIONAL ENERGY
NETWORK



Source: 3C-REN program dataset

Thank you!



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Sealed