REWIRING AMERICA

Efficiency Maine: The secrets of their success

How other states can replicate Maine's success when implementing the IRA's home rebate programs.

Maine is the first state in the nation to achieve building electrification at scale: Efficiency Maine (the quasi-state administrator of Maine's energy efficiency programs) has incentivized the installation of more than 100,000 heat pumps in a state with 570,000 homes.[1] And 60 percent of electric water heaters sold in Maine are heat pump water heaters (HPWHs).[2] While Maine enjoys the unique advantages of the state's relatively low density of existing gas infrastructure and years to iterate program designs, **many of its best practices are immediately replicable across the country.**

With the Department of Energy now accepting applications for the Inflation Reduction Act (IRA) Home Efficiency Rebate and Home Electrification and Appliance Rebate programs, states can get a head start on their program roll out by learning from one another and replicating strategies of success.

The following best practices all advance one overarching goal: **removing friction from the electrification supply chain.** Efficiency Maine is aggregating demand and kickstarting the flywheel of increased supply and lower costs, nudging the "market default" toward heat pumps and HPWHs.[3] It's also saving time and money by moving with the market, not against it. Efficiency Maine's best practices fall under four broad categories:

1. **Prioritize deployment**
2. **Engage directly with contractors, distributors, and retailers**
3. **Build on positive outcomes**
4. **Maximize accessibility and ease of use**

1 "After Maine Surpasses 100,000 Heat Pump Goal Two Years Ahead of Schedule, Governor Mills Sets New, Ambitious Target," July 21, 2023.
2 Andy Meyer, personal communication
3 Especially soft costs like customer acquisition. See pages 5-6 of the Efficiency Maine Qualified Partner Manual PY 2023 for more on their approach to "Leveraging the Private Sector."

Below we dive into the specifics of each best practice category

Prioritize deployment

The most successful rebate programs are laser-focused on deployment: metrics measure deployment, partners are incentivized to deploy, and processes are put in place only if they help with deployment.

Secret #1: Issue RFP Language that clearly defines deployment as the top program goal.

If hiring a program implementer, states should make sure their Request For Proposal (RFP) language prioritizes the deployment of electric appliances. Meet weekly with the deployment team to stay aligned on forecast and investment and to ensure you're getting tasks done and moving goals forward.

Secret #2: Don't let cost-effectiveness or fuel requirements get in the way of deployment.

Many efficiency programs run by utilities or funded through a surcharge on utility bills require projects to meet a cost-effectiveness test and/or prohibit fuel-switching, which ultimately hamstrings the deployment of electric technologies. Such restrictions mean that utility energy efficiency programs may not be the best fit for absorbing IRA funds. However, the IRA does not require cost-effectiveness tests and explicitly allows fuel-switching, and states should not add or allow these requirements. So long as a customer meets the income requirements for the Electrification Rebates, or a project meets the savings requirements for the Efficiency Rebates, the implementer should allow the project to move forward.

If existing utility programs are the only or best option for program administration, **make sure the program's goals prioritize deployment (as opposed to other metrics like total money spent)** and remove barriers to deployment such as restrictions on fuel switching.

Secret #3: Set minimalist standards for product performance and installation.

Efficiency Maine incentivizes only mini-split heat pumps, based on a single metric: AHRI HSPF. HPWHs must be ENERGY STAR certified to qualify. This makes it easy for manufacturers, retailers, distributors, installers, and homeowners to understand which products qualify for rebates. The federal requirement for ENERGY STAR replicates this simplicity.

Maine also uses the same structure for their income-qualified program, making it easier for installers to participate in both market-based and LMI programs without learning new rules. Their minimalist heat pump installation requirements checklist (excerpted below) is only one page long; it's been honed based on feedback from skilled contractors to include everything necessary for a high-quality installation and nothing more. It serves as both a best practices reminder for installers, and as the criteria for the voluntary quality assurance check offered to every customer (see #6).

RESIDENTIAL HEAT PUMP
Installation Requirements Checklist

efficiency MAINE

Customer Name:	
Street Address:	

This form does not need to be submitted, but all items are required for rebate eligibility.	
Outdoor Unit	
	18" above any surface where snow will accumulate
	Water from defrost will not form ice on walkway
	Secured to wall or stand
	Protected from roof runoff by gutter, rain cap, gable end, or overhang

Engage directly with contractors, distributors, and retailers

Respectfully supporting the entire supply chain helps the ecosystem grow and flourish.

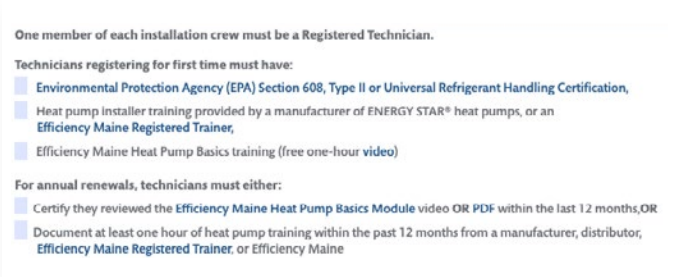
Secret #4: Support the entire supply chain, from manufacturers to customers.

By positioning itself as a supporter of the market ecosystem, Efficiency Maine has successfully engaged manufacturers, distributors, installers, training organizations, and retailers to deploy more heat pumps and HPWHs. “We look at ourselves as collaborators and consensus-builders, not dictators,” one Efficiency Maine senior staffer says. Manufacturers and distributors do much of the workforce training, installers voluntarily sign up to add heat pumps to their offering, and retailers are given marketing, stocking advice, and staff support to sell heat pump water heaters (more details in #5). By supporting each link in the chain to take initiative in playing its role, rather than attempting to dictate each of their actions, Maine has aligned market actors toward getting customers the highest quality installs at the best prices, and electric technologies are becoming the market default..

Secret #5: Make contractor participation easy and enticing.

Efficiency Maine’s accessible vendor network allows any installer to register with a simple form (see excerpt in next column), along with basic licensing/insurance qualifications and a Code of Conduct proven to increase customer satisfaction. For heat pumps, at least one member of each crew must be a Registered Technician (with additional training), which helps ensure quality installations. Installer trainings are regularly available from manufacturers, distributors, trade schools and community colleges, often for free. In addition, Efficiency Maine offers training scholarships up to $500 per employee.

Vendors can only offer rebates to customers if registered as an Efficiency Maine vendor. Participating vendors also receive marketing reimbursements up to $5,000 per year and free brochures. These enticements, combined with the ease of joining, has resulted in the growth of Efficiency Maine’s roll to over 700 registered vendors.



One member of each installation crew must be a Registered Technician.

Technicians registering for first time must have:

- Environmental Protection Agency (EPA) Section 608, Type II or Universal Refrigerant Handling Certification,
- Heat pump installer training provided by a manufacturer of ENERGY STAR® heat pumps, or an Efficiency Maine Registered Trainer,
- Efficiency Maine Heat Pump Basics training (free one-hour video)

For annual renewals, technicians must either:

- Certify they reviewed the Efficiency Maine Heat Pump Basics Module video OR PDF within the last 12 months,OR
- Document at least one hour of heat pump training within the past 12 months from a manufacturer, distributor, Efficiency Maine Registered Trainer, or Efficiency Maine

Secret #6: Use streamlined Quality Assurance (QA).

Currently, Efficiency Maine employs an ”opt-in” Quality Assurance model. Because it’s opt-in, and therefore not controlled by the installer, they are further incentivized to meet all installation requirements. About 25 percent of LMI customers and 15 percent of total customers opt into a voluntary QA checkup. The QA is conducted by field staff who use their phones to take photos of model numbers and various aspects of the installation, which are then checked by office staff to ensure compliance. Because the QA follows the installation requirements checklist (see #4 above), it’s fair and predictable. QA issues don’t delay contractor rebates and are instead treated — at least initially — as a coaching opportunity.

Efficiency Maine is considering transitioning to a model where QA would be conducted on the first few jobs performed by any contractor joining the network, to provide them with early coaching opportunities.

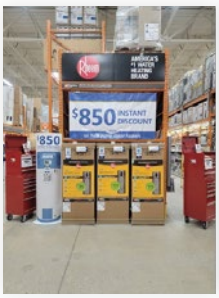
Secret #7: Determine whether you need to drive the sale or redirect the sale, and engage at the point of leverage.

Efficiency programs have shown that for appliances being replaced at burnout – lights, stoves, dryers, water heaters – the customer is already making a purchase, so the program needs to redirect the sale to the most efficient option. Discounts that bring down the price of the efficient options can redirect customers to those. Efficiency Maine offers instant discounts for HPWHs via retailers and installers to redirect the sale from a less efficient water heater to a HPWH.

Unlike HPWHs, heat pumps are not typically considered a replacement choice when existing heating systems burn out, due to the need of professional installation, time required, and discounts not being offered in a retail setting. Instead, program implementers need to help installers drive the sale by offering instant discounts through the installer. When installers tell customers about the discounts available, it sparks a conversation about why Efficiency Maine offers these discounts, giving the installer the opportunity to extol the benefits of heat pumps – they are more efficient, more comfortable, less costly. Heat pumps require a professional installer, so Efficiency Maine works with their network of registered installers to offer rebates. Customers get an instant discount on their invoice and the installer submits a rebate form to Efficiency Maine for reimbursement, which is paid out within two weeks (see #12). The Efficiency Maine rebate helps vendors educate the customer about the benefits of choosing a heat pump over fossil fuel equipment. Combined with statewide marketing, Efficiency Maine has managed to move the installer ecosystem towards heat pumps and away from fossil-fuel furnaces.

For market rate HPWHs, Customers get an instant discount either at the retailer checkout using a barcode, or on their invoice from an installer (who received an instant discount from the distributor). The retailer or distributor invoices Efficiency Maine for reimbursement. Or, if the customer can't figure out the barcode at the retailer, or when purchased online, they can mail-in a rebate request to Efficiency Maine and get a check mailed to them.

Efficiency Maine further works with retailers, including Home Depot and Lowe's, to prominently display HPWHs and discount the price below fossil fueled alternatives. Efficiency Maine negotiated with retailers to lower the Maine HPWH price by $300 to $500 relative to their national pricing. They were able to negotiate this through a combination of carrots (a successful mail-in rebate program that increased sales) and sticks (Efficiency Maine convinced a distributor to sell directly to consumers, increasing competition for the retailers). Efficiency Maine works with Lowe's and Home Depot to install in-store displays, including QR codes for customers to verify their Maine residency and receive an instant $850 coupon (see images below).



End Cap Display

Pro Desk

Check-out Counter

Due to the difficulty of verifying income at the point of sale with a retailer, Efficiency Maine only offers low-income HPWH discounts through the installer. The customer prescreens with Efficiency Maine and is matched with a participating installer who completes the installation free of charge to the customer, then invoices Efficiency Maine for reimbursement.

Secret #8: Support installers, distributors, retailers, and customers with technical support, marketing materials, and customer leads.

CLEAResult, the contracted implementer for Efficiency Maine, staffs the phones for all programs and supports retailers, distributors, and installers with inventory management, planning, marketing, consumer education, and more. Efficiency Maine's staff of 25 is supported by 175 CLEAResult employees. Their rule-of-thumb is that 80 percent of program costs go to incentives, 15 percent to the delivery team, and 5 percent to marketing.

Efficiency Maine collects program participant data (household, installation type, and year installed) from the claims form for all programs and puts it into a database. Then they send out mailers cross-marketing other incentives (for example: "Dear heat pump recipient, would you like a HPWH?") to create a domino effect, driving them to Efficiency Maine's website, which in turn drives them to the top performing contracts (see #9).

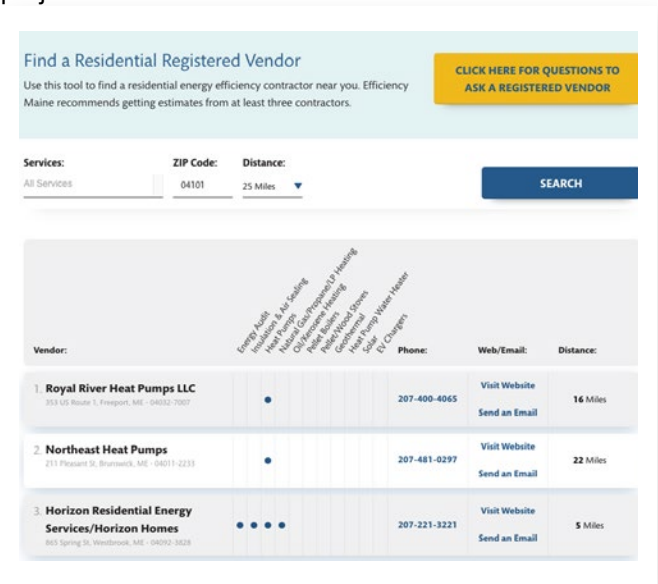
Efficiency Maine also markets to new home buyers through mailers and anyone paying county property taxes using an insert in tax mailings. Google ads are run based on Maine residents searching for "new furnace" or "hot water," leading them to see information about heat pumps and HPWHs and a link to Efficiency Maine's website. High performing contractors can rely on Efficiency Maine for free leads generated through these marketing tactics.

Build on positive outcomes

Increasing market demand with successful installs encourages increased market supply from manufacturers and installers, driven by continuous improvement.

Secret #9: Reward best-performing contractors with more business.

Efficiency Maine's Find a Residential Registered Vendor tool ranks installers in order of highest program participation over the last four months (see image below). This ordering directs customers to the most responsive contractors, avoids consumer fatigue of calling contractors who might be unresponsive, and further incentivizes contractor engagement. As a result, the top 20 installers (out of 700 registered) do >50 percent of the work, and all contractors are incentivized to respond to and perform more projects.



Secret #10: Continuously improve by listening to customers and installers, and getting out of the office to monitor the field.

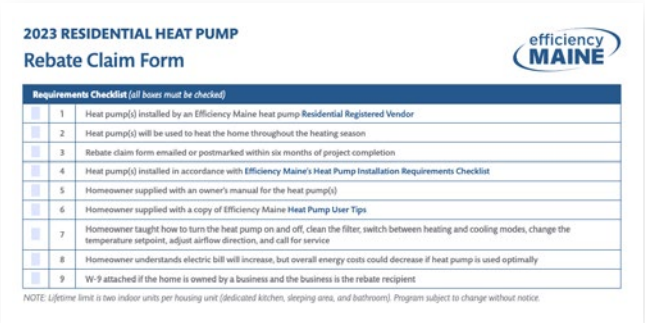
Getting a program up and running is a significant accomplishment, but it's crucial to consistently seek feedback from all levels of the supply chain regarding what is and what is not working well, identifying pain points, and implementing solutions. Efficiency Maine's program managers go on weekly "ride-alongs" with installers, participate in training and public events, and review all customer call recordings, inspection reviews, and satisfaction surveys. They also seek feedback from a Technical Advisory Group made up of the top-performing installers from each category.

Maximize accessibility and ease of use for customers and contractors

Reducing paperwork, administrative, and financial burdens helps increase participation and keeps the momentum going.

Secret #11: Simplify claim forms.

The Residential Heat Pump Rebate Claim Form (excerpted below) doubles as a checklist to help the customer learn operation and maintenance best practices from the installer. It also reduces burdensome paperwork for consumers and contractors and allows quick payment processing. There is no weatherization prerequisite for heat pumps because it would slow down the sale (though Efficiency Maine does offer an insulation incentive with its own claim form).



2023 RESIDENTIAL HEAT PUMP
Rebate Claim Form

efficiency MAINE

Requirements Checklist *(all boxes must be checked)*		
☐	1	Heat pump(s) installed by an Efficiency Maine heat pump **Residential Registered Vendor**
☐	2	Heat pump(s) will be used to heat the home throughout the heating season
☐	3	Rebate claim form emailed or postmarked within six months of project completion
☐	4	Heat pump(s) installed in accordance with **Efficiency Maine's Heat Pump Installation Requirements Checklist**
☐	5	Homeowner supplied with an owner's manual for the heat pump(s)
☐	6	Homeowner supplied with a copy of Efficiency Maine **Heat Pump User Tips**
☐	7	Homeowner taught how to turn the heat pump on and off, clean the filter, switch between heating and cooling modes, change the temperature setpoint, adjust airflow direction, and call for service
☐	8	Homeowner understands electric bill will increase, but overall energy costs could decrease if heat pump is used optimally
☐	9	W-9 attached if the home is owned by a business and the business is the rebate recipient

NOTE: Lifetime limit is two indoor units per housing unit (dedicated kitchen, sleeping area, and bathroom). Program subject to change without notice.

Secret #12: Deliver fast rebate repayments (within two weeks of rebate submission).

DOE guidance for the IRA rebate programs requires contractor repayment to occur within four weeks, but that could be too long for many small businesses to wait to recoup their costs, resulting in low participation. Efficiency Maine prioritizes rapid payment within two weeks, which supports the cash flow of small businesses, helps build trust, and encourages program participation.

Secret #13: Minimize the burden of income verification.

Efficiency Maine signs a Memorandum of Understanding (MOU) with state agencies that maintain lists of income-qualified households. For example, Maine Housing provides an annual list of the 40,000 households in the Home Energy Assistance Program. Efficiency Maine collects self-attestations from individuals whose income qualifies through Medicare, and the claims are verified by the Office of MaineCare Services on a weekly basis. DOE guidance requires this use of categorical income verification, which minimizes the burden placed on consumers, program implementers, and state energy offices.

Secret #14: Market widely, and cross-market programs to other interested and eligible customers.

Because Efficiency Maine is a statewide organization that speaks with a single voice, it's able to effectively market efficiency upgrades across many communications and outreach channels. Efficiency Maine cross-markets incentives to customers who are already engaged and/or qualified (e.g. a customer who receives a heat pump rebate might be offered a HPWH rebate as well). Cross-marketing is an effective way to maximize incentive uptake and is particularly helpful to ensure that low-income households can access the benefits of whole-home improvement. States can maximize impact and achieve their low-income set-asides by cross-marketing to income-verified customers.

Secret #15: Send contractors a list of vetted, income-qualified leads.

Contractors generally spend $400-$500 acquiring leads. Efficiency Maine helps participating vendors defray that cost and ensure they reach more low-income households by collecting and verifying leads for them. Efficiency Maine does “inreach” to income-pre-qualified households (see #13) using direct mail postcards. Potential customers often trust a postcard from a quasi-government agency more than a door knock from a private contractor. When someone calls in to claim a free HPWH or reduced-cost heat pump, the office staff verifies that the respondents are on an income-qualified list and sends a batch of 10 income-qualified and interested residents to a contractor who has agreed to a flat installation rate. The key is setting the flat rate at a level that is affordable for customers and also attractive to installers, given that they will likely lose money on some jobs but make money on others. Maine has set the rates around $4,000 for a single-zone heat pump and $3,000 for a HPWH, attracting 19 installers willing to work at the flat rate currently. Those contractors pipelines are full, and Maine has more leads than those 20 can follow up on.

Efficiency Maine does heavy quality assurance on this first batch by riding along with the installer or using video streaming to check the installation quality, as well as reaching out to the customers to verify their satisfaction with the job. Installers who pass the QA on their first 10 jobs are then cleared to receive another list of installs. This combination of verified leads and flat rate installs is a good model for scaling the Inflation Reduction Act’s rebate programs.