

Market-Based Solutions to Reduce Energy Costs in Low- Income Homes

**Efficiency Maine Trust
Michael D. Stoddard
Executive Director**

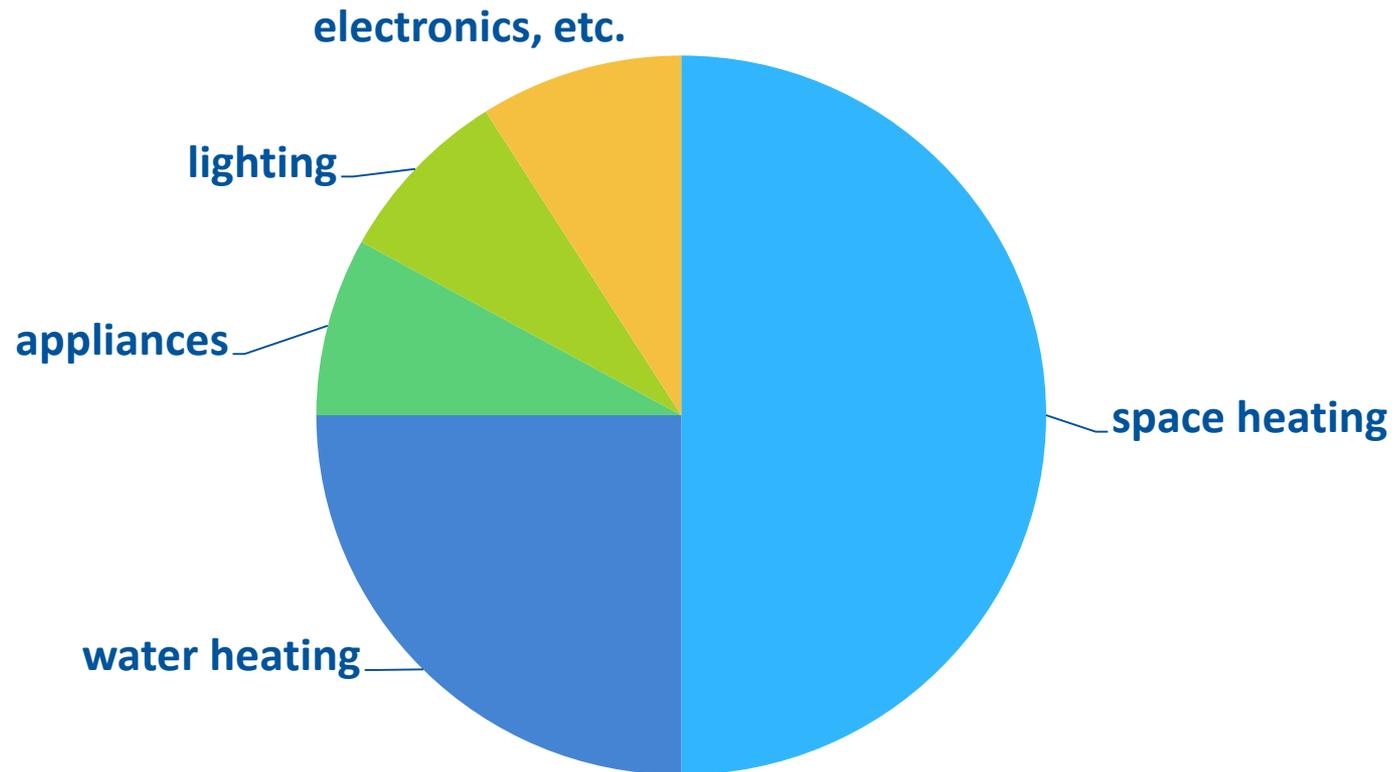
October 13, 2015

The Trust's Mission is:

- To lower the cost and environmental impacts of energy in Maine by promoting cost-effective, customer-sited, energy efficiency and alternative energy systems

The Trust is the independent administrator for energy efficiency and alternative energy resources programs in Maine

Typical Residential Energy Use



HESP

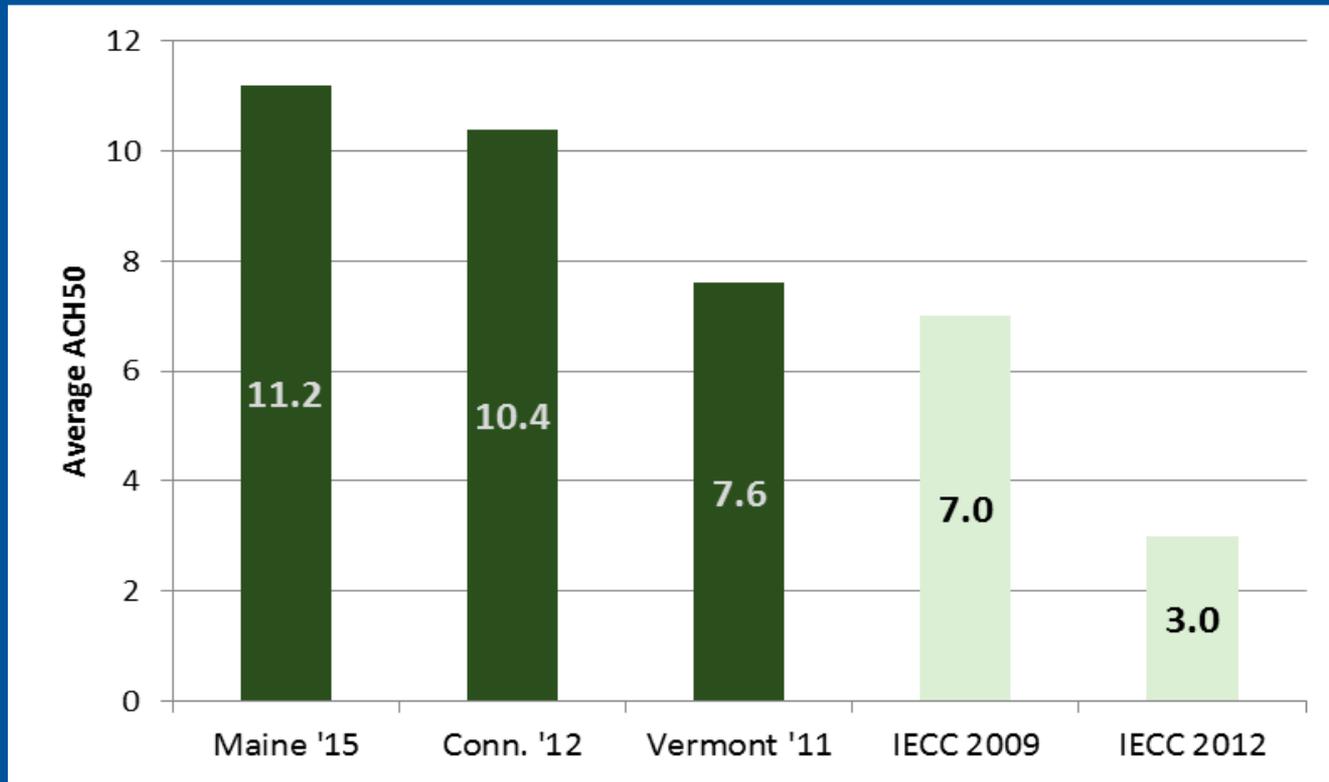
The Home Energy Savings Program



*Lower your monthly energy costs with
a more efficient heating system.*

**Up to \$1,500 in incentives
available now.**

LEARN MORE ►



- **Maine homes are too leaky**

- Average Maine home is leakier than similar homes in CT or VT
- Sampled homes scored between 3.6 to 55 Air Changes per Hour (ACH) at 50 Pascals depressurization
- Newly built homes must meet standards in IECC (7.0)

Program Elements

- 1. Rebates**
- 2. Financing**
- 3. Vendor Locator**
- 4. Trusted Information**

HESP Energy Upgrade Menu



Air Sealing with Assessment \$400 rebate



Insulation \$500 per zone; up to \$1,000 rebate



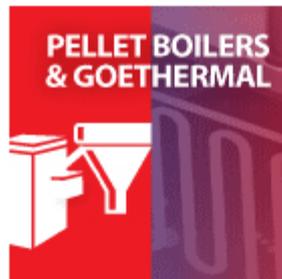
Ductless Heat Pump \$500 rebate



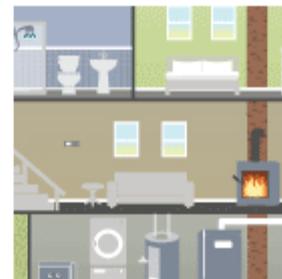
High Efficiency Central Heating Systems \$500 rebate



Pellet and Wood Stoves \$500 rebate



Renewable Central Heating Systems \$5,000 rebate



Custom Whole Home Projects \$1,000 or \$1,500 rebates



Find a Registered Vendor

Financing

- Loans from \$1,000 to \$25,000
- No Fees
- 4.99% / 5.99% APR Fixed
- 5, 10, 15, 20 year terms
- Air sealing & Assessment plus at least one Eligible Upgrade
 - Heat Pumps, Insulation, Boilers



EMT's Online, Searchable Vendor List

Search and Sort Options

Start by entering your ZIP Code and a search radius.

ZIP Code: Radius: 

Sort by:
 

* Ranked according to the quantity of projects that were completed and received a rebate from Efficiency Maine over the past four months.

What services do you need?

Hover over service icons below for more information on services and qualifications.

What services do you need?

Hover over service icons below for more information on services and qualifications.

-  All Services
-  Energy Advisor
-  Air Sealing & Assessment
-  Insulation
-  Heat Pumps
-  Gas
-  Oil
-  Pellet Boilers
-  Pellet/Wood Stoves
-  Geothermal
-  Heat Pump Water Heaters
-  Solar

SEARCH

Listed vendors must have proper insurance, proper licenses, and sign a code of conduct.

Heating Solutions

[Home](#) » Heating Solutions

Efficiency Maine offers rebates and financing for homeowners installing qualified high-efficiency heating equipment. Click on the links below to find out more about high-efficiency systems, rebates, and how much you might save with an energy upgrade.

Central Heating Systems

If you have high energy costs or a heating system that is older than twenty years old, it may be time to consider upgrading your boiler or furnace to a new system. Find out more about high-efficiency options below:



[High-Efficiency Boilers and Furnace:](#) Most Maine homes are heated with either a boiler or furnace. Energy-efficient models are available for all heating fuels. Find out more about your options [here](#).



[Pellet Boilers:](#) Central wood pellet boilers are high-efficiency systems that use a local, renewable fuel resource. Find out more about pellet boiler systems [here](#).



[Geothermal Systems](#) (also called ground source heat, ground source heat pumps, or geothermal heat pumps) take advantage of the constant temperature of the ground below the frost line to heat in the winter and cool in the summer. Efficiency Maine offers incentives up to \$5,000 for geothermal systems through the [Home Energy Savings Program](#).



Heating Solutions

[Find a Residential Registered Vendor](#)

[Residential Forms](#)

[Energy Upgrade Rebate Menu](#)

[Financing Solutions](#)

[Compare Heating Costs & Options](#)

[High-Efficiency Boilers and Furnaces](#)

[Wood and Pellet Heating](#)

[High Efficiency Heat Pumps](#)

High Efficiency Heat Pumps

[Home](#) » High Efficiency Heat Pumps

Efficiency Maine is now offering \$500 rebates through the [Home Energy Savings Program](#) on the installation of eligible high efficiency ductless heat pumps. Click here for [Eligibility Criteria and Units](#). Word is spreading quickly about how this exciting new technology is able to extract heat from outdoor air (even when it is very cold) and deliver heat energy into homes. There are over [200 registered contractors](#) actively installing units around the state who are familiar with the highest performing models as well as our rebate process. Heat pumps can also be part of larger energy upgrades that qualify for \$1,500 in incentives.

\$500 to \$1,500
available in incentives

Interested in
**COMMERCIAL
HEAT PUMPS?**

LEARN MORE

Multifamily
**HEAT PUMP
REBATES**

LEARN MORE

Heating Solutions

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[High-Efficiency Boilers and Furnaces](#)

[Wood and Pellet Heating](#)

[High Efficiency Heat Pumps](#)

Click on the video below to see a Ductless Heat Pump Case Study in Presque Isle:



Taking Action

1. **Registered Heat Pump Installers** – [Click here](#) to find some installers in your area that sell heat pumps.
2. **Get incentives and financing for energy upgrades** – [Click here](#) to find out about loans and incentives for projects that include energy assessments, air sealing, insulation, heat pumps and

Wood and Pellet Heating

Home » [Renewable Energy](#) » Wood and Pellet Heating



- [Renewable Energy](#)

- [Wood and Pellet Heating](#)

- [Geothermal Heating and Cooling Systems](#)

- [Solar Electric](#)

- [Solar Hot Water](#)

- [Find a Residential Registered Vendor](#)

- [Financing Solutions](#)

Wood and pellet fuels are a renewable and cost-effective way to heat your home or business. Pellets and wood are a popular fuel choice due to their affordability over fossil fuels and the fact that Maine has significant, locally-produced wood fuel supplies. High-efficiency wood and pellet heating systems are eligible for [Home Energy Savings Program \(HESP\) Incentives](#) and Efficiency Maine [Energy Loans](#).



A **wood or pellet stove** burns logs or pellets to heat a single room, although many homeowners locate these systems centrally and offset half or more of their primary fuel use. Pellet and wood stoves are typically fireplace inserts or free-standing models. Many different types are available. For example, pellet stoves can be fed from the top or the bottom and some models have longer fuel storage capacity and are easier to clean and remove ash. Advances in stove design have dramatically increased output efficiency and convenience, while reducing particulate emissions. [Click here](#) for Efficiency Maine's list of approved wood and pellet stoves.



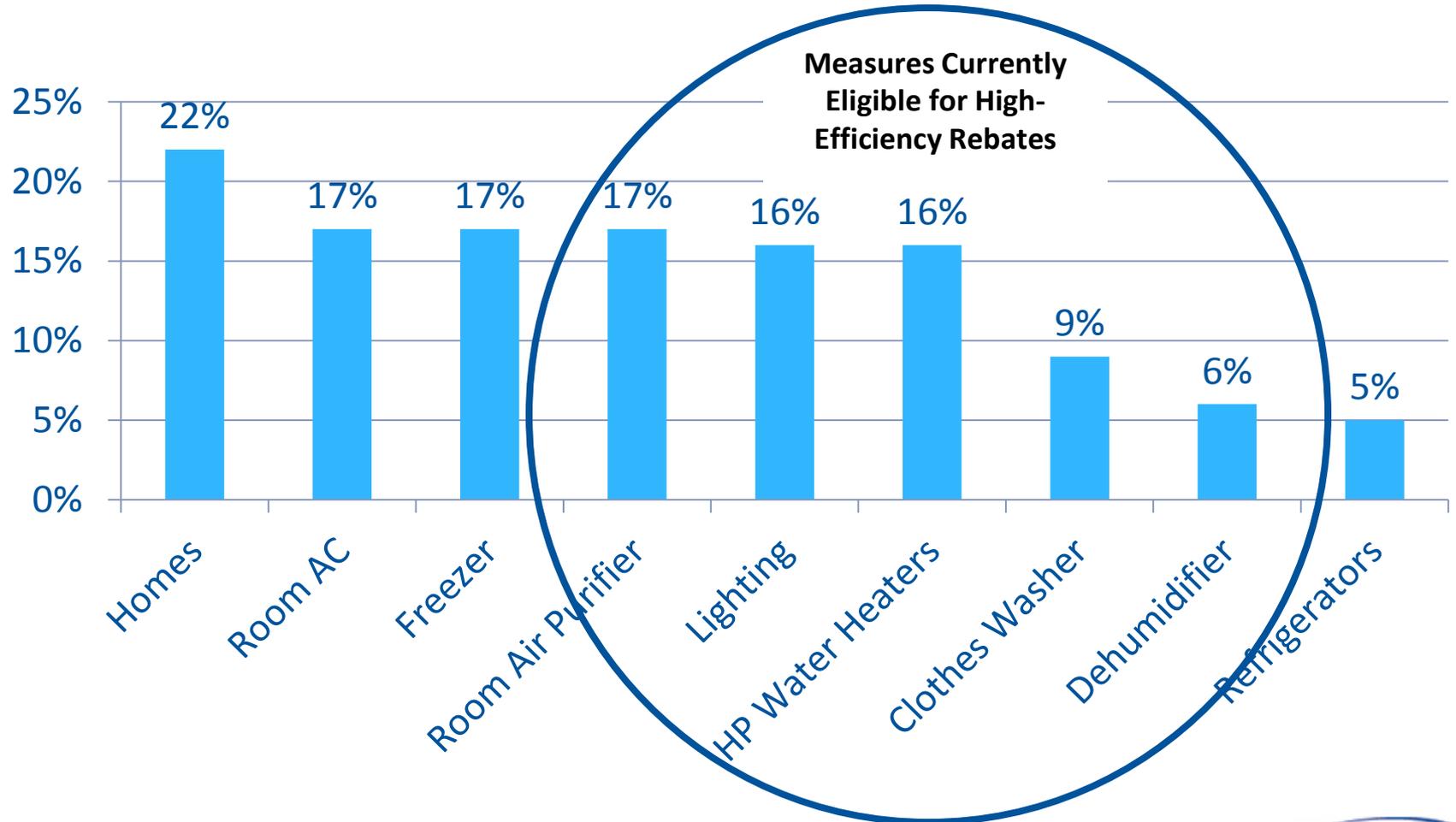
A **pellet boiler** burns pellets and is connected to a central heating and hot water system. Many Mainers are familiar with pellet stoves, but pellet boilers are a

CONSUMER PRODUCTS PROGRAM

- Appliances
- Lighting



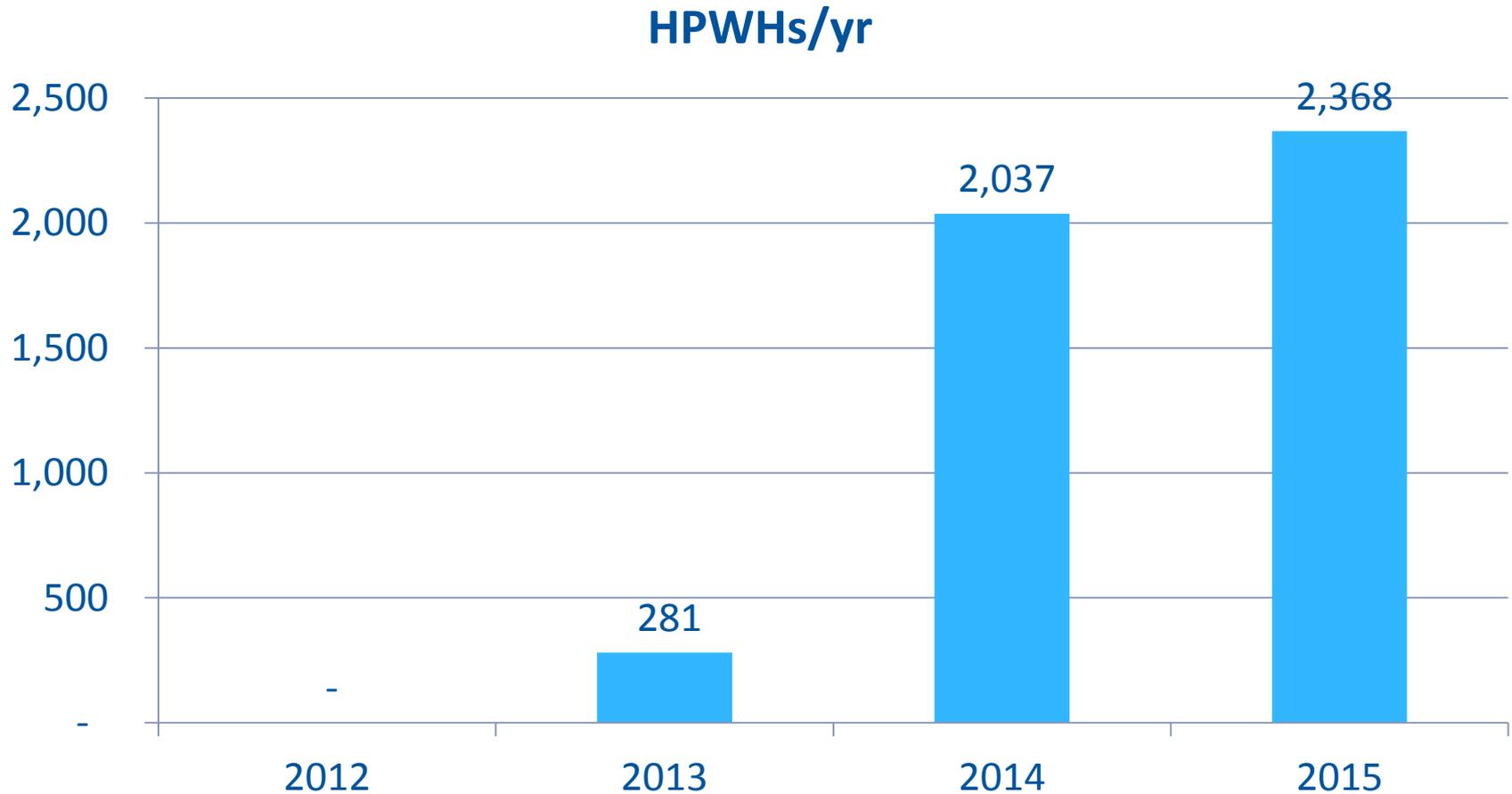
Market Share for Low Income Homes



Opportunity for High-Efficiency Electric Water Heaters

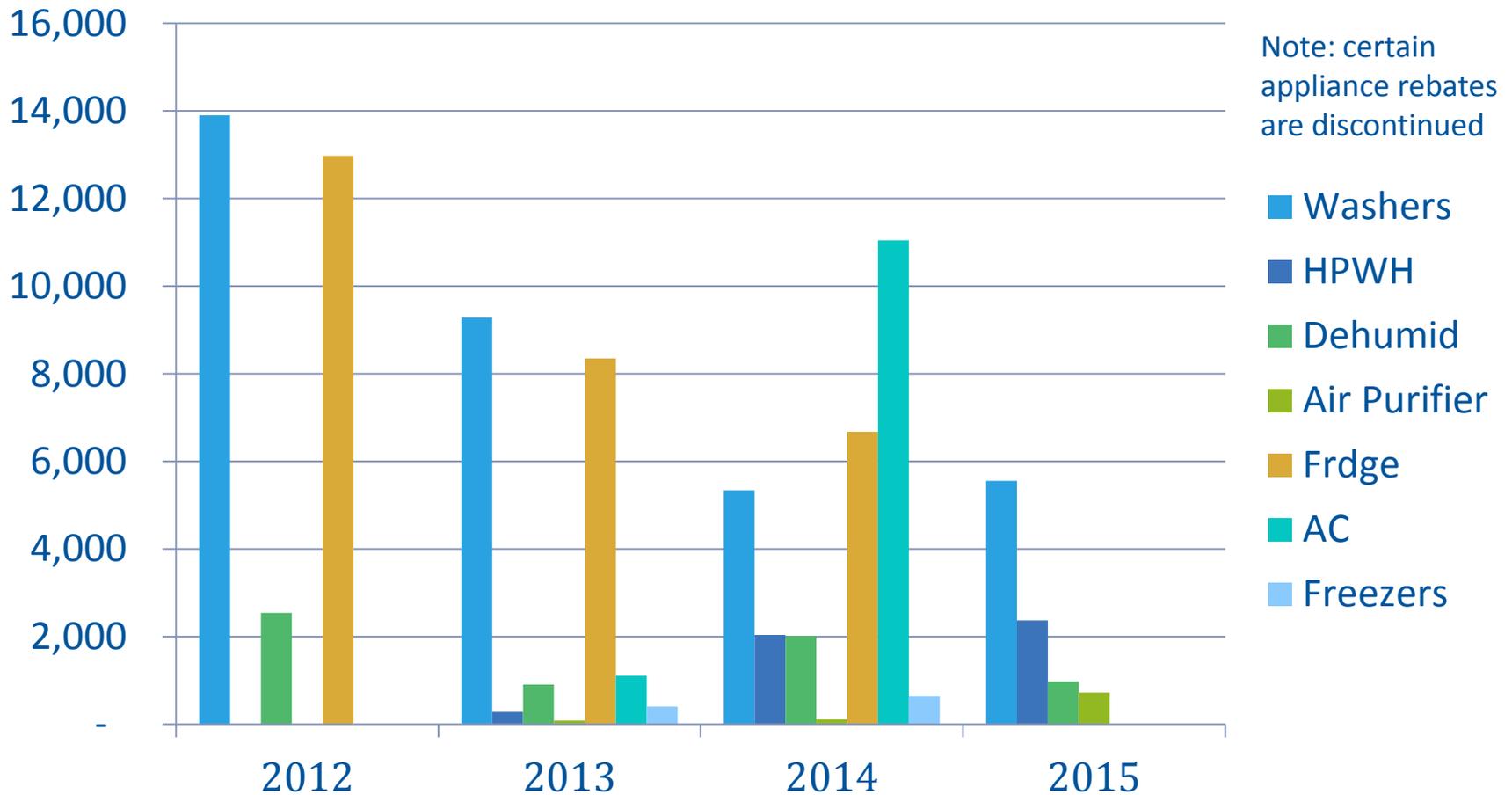
Data	Units and References
551,000	Households (US Census)
* 35%	Electric water heaters (est.)
~200,000	Electric water heaters (est.)
÷ 13 yr	Measure life (per GE)
15,000/yr	Replace on burnouts, per year
+ 1,000	New homes (35% * ~2,500/yr)
16,000/yr	Electric water heaters sold per year in Maine

Recent Results for Heat Pump Water Heaters



Recent Results

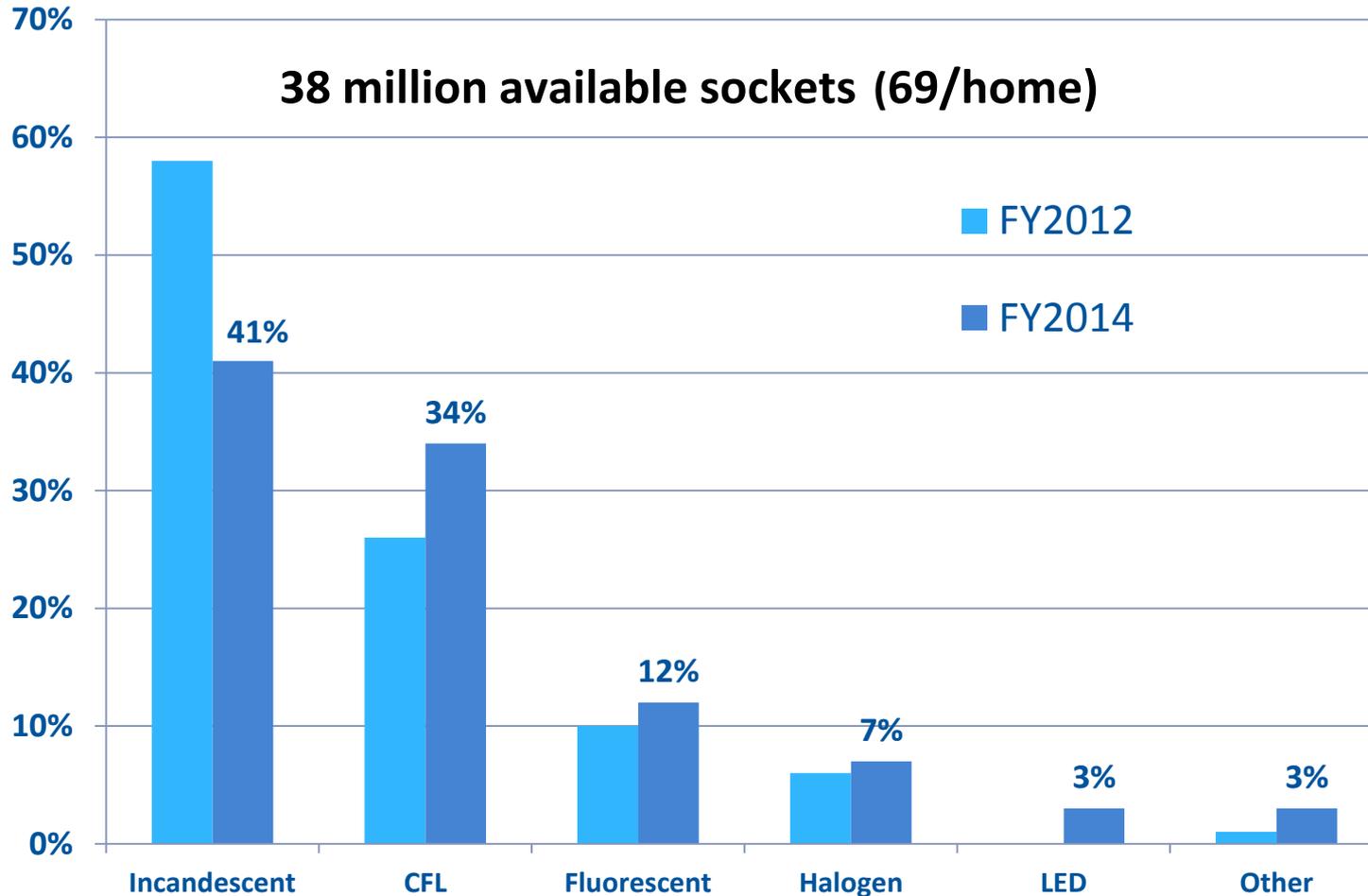
Other Efficient Appliance Rebates



Lighting Program

- Measures - CFLs and dimmable LEDs
- Limits
 - Energy Star Maximum 20 bulbs per purchase (use in Maine verified for waivers)
- Incentives
 - Marked down to prices below incandescents/halogens
 - In-store rebate for stores that can't track markdowns

Maine's Baseline Lighting Market (Residential)



Incandescent Bulbs Available, Marketed in Stores

Family Dollar
Skowhegan, ME
March 11, 2015



Sunbeam 60W
Incandescent

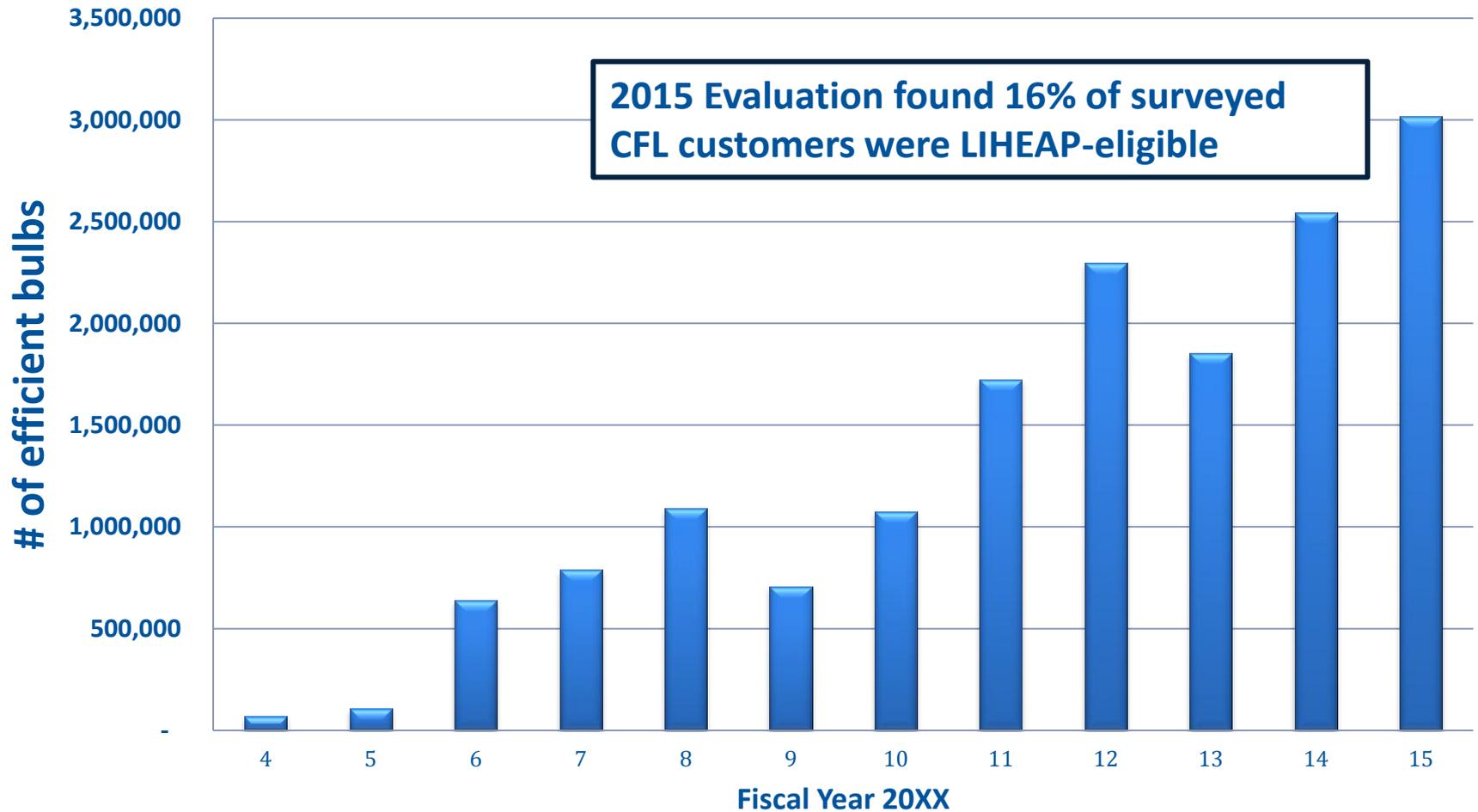
EMT Discounted,
Efficient Alternative

Average Rebate per Bulb

Total Dollars / bulb



Program History - Annual Sales



Non-market-based Efficiency Programs for Low-Income Mainers

- CFL offerings at food pantries
- Direct installation of appliances/supplemental heaters
- Issues
 - High Cost
 - Equity
 - There is not sufficient funding to give all eligible homes equal coverage

Issues and Ideas

- Enhance amount of incentives for identifiable, eligible, low-income customers;
 - Air sealing
 - Insulation
 - Supplemental Heaters
- Lower Program Costs, Improve Fairness
 - Increase customer involvement in choices/selecting upgrades
 - Apply customer contributions to cost
 - Spread costs over time
 - leasing, micro-loans
- Complementary Partnering
 - Supply efficient lights/appliances to organizations that visit eligible homes for direct installation

Thank You!

Contact Us:

1-866-ES-MAINE

www.energycymaine.com

