



Why Heat Pumps are like Bulletproof Vests

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Program Overview

When the program launched, customers faced numerous barriers to installing ductless heat pumps in Maine.



Limited awareness of technology



Customer skepticism



Lack of information regarding capable contractors



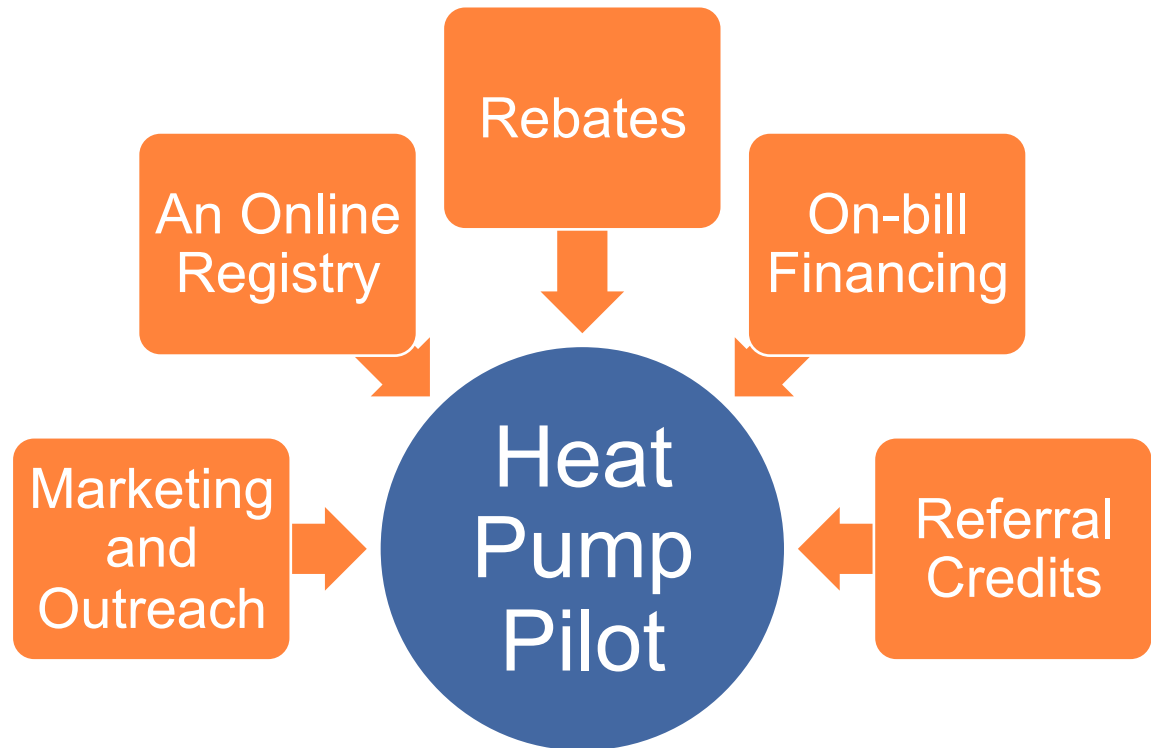
Large up-front costs



Limited availability to capital

Program Overview

The objective of the Pilot was to determine whether a program could drive demand for heat pump technology.



Program Overview

From an enrollment perspective, the program was a huge success. Past efforts have had difficulty enrolling participants.

May 2010 – Dec 2011

**Efficiency
Maine:** 55
participants in 18
months



April 2011 – Oct 2012

Bangor Hydro:
18 participants in
18 months



Oct 2012 – Aug 2013

Pilot Program:
1000 participants
in 10 months

Estimated Impact

Participants saved, on average, \$622 dollars in heating costs per year.

\$932	Average avoided cost of fuel oil
- \$310	Average cost of heat pump use
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\$622	Average savings for participants

Variations in Usage

In-home metering found large variations in usage and subsequent cost savings.

Usage Pattern	Operational Characteristics	Thermostat Setting
Low (less than 300 kWh/month)	Manually operated their heat pump, turning it on or off when needed throughout much of heating season	Less than 70°
Moderate (300 - 900 kWh/month)	Allowed thermostat to control heat pump so that it ran automatically, but relied on pre-existing heating sources to heat other living household spaces	70°-72°
High (over 900 kWh/month)	Allowed thermostat to control heat pump so that it ran automatically, but adjusted pre-existing heating sources	74° or higher

Conclusion

Customer education regarding **strategic use of their heat pumps** is key to maximizing cost savings.



Thanks!

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