Opportunity of Electricity to Reduce Oil Consumption in Maine
Heat Pump Opportunity

80% Less Carbon Emissions

3x More Efficient Heat

2x More Efficient A/C
Significant Opportunity for Heating

- Environmentally beneficial
  - Reduces carbon emissions up to 80%
  - Almost 2/3 of Maine’s net electricity generation from renewables
- Cost saving opportunities
  - 3x more efficient to heat than oil
  - 2x more efficient to cool than modern a/c units
- Leverages an underutilized infrastructure
  - Downward pressure on electric delivery rates
  - Natural gas by wire
Heat Pump Success

- **Emera Maine (Bangor Hydro)**
  - Heat Pump Pilot Program 2013 for rebates and financing
  - Established discounted delivery heating rate
  - 500 participants

- **Efficiency Maine**
  - Rebates for first and second units up to $750
  - 20,000 ductless heat pumps installed in past 3 years
  - 400+ registered installers state-wide

- **City of Bangor**
  - 10% of Heat Pump costs up to $500

- **Positive customer feedback**
Challenges to Further Adoption

- Upfront cost of capital investment
  - Alternative option for low or fixed income consumers
- Motivation
  - Current low price of oil
  - Mobility for renter or frequently relocated profession
- Education
  - Use as primary heat source for maximum savings
  - Behavioral changes with approach to heating strategies
  - Effective placement of heat pumps
- New construction
Presentation References

- Efficiency Maine
  www.efficiencymaine.com

- EIA – Maine State Profile and Energy Estimates
  https://www.eia.gov/state/analysis.php?sid=ME

- EnergySmart Bangor Residential Rebate Program
  http://www.bangormaine.gov/energysmartbangor

- Emera Maine Heat Pump Pilot Program – Results

- Emera Maine Heat Pump Pilot Program – Final Report

- Emera Maine Heat Pump Rate Petition - MPUC Docket 2015-00090