Air-Source Heat Pumps

Ready for Primetime in Cold Climates

NEEP Report Provides Strategies to Accelerate Adoption of Residential ASHP

Near-Term 2014-2015

1. Develop more accurate tools to predict energy and cost savings associated with ASHP installations, through real world performance data
2. Develop standardized Metrics for Cold Climate ASHP Performance
3. Increase Consumer Awareness and Education
4. Expand HVAC Contractor Awareness and Education
5. Improve Integration of ASHPs with Other Heating Systems
6. Provide ASHPs at Affordable Costs to Consumers
7. Characterize policy implicationsof large scale deployment of ASHPs

Long-Term 2016-2018

8. Clarify the policy case for broad-scale deployment of ASHPs
9. Support federal appliance efficiency standards that incorporate improved cold climate performance metrics
10. Support International Code Council recognition of ASHP in model energy codes

Northeast Energy Efficiency Partnerships

Historically, ASHPs have been inadequate for home heating in the collder climates typical of the North-east and Mid-Atlantic region. Older, conventional ASHP do not have the capacity or efficiency to sufficiently perform during very cold weather.

Today's high efficiency, high performing ASHP systems can perform at a high level of efficiency even at very low ambient temperatures.

Consumer & Contractor Barriers
There is poor awareness of available technologies by consumers and contractors alike, related to older ASHPs that did not have good cold-climate performance.

Regulatory, Utility, & Program Barriers
For regulators and program administrators, a key challenge is predicting energy consumption and/or savings.

Household Savings
(compared to Electric Resistance)

- 480 dollars
- 3,000 KWh energy
- Payback is 8 years
- 4,500 pounds of CO_2
- 50% reduction in opperating costs *when replacing oil

Cold Climate Air-Source Heat Pumps have arrived for the Northeast and Mid-Atlantic region

By working through the strategies outlined in the ASHP report, the Northeast and Mid-Atlantic region can save **$2.2 Billion** in energy costs and **8.1 million metric tons** of annual carbon emissions by:

Retrofiting approximately 7.7 million homes that currently heat with electricity, oil or propane.

NEEP will be hosting webinars, producing strategy briefs, and providing additional material to help the region reach its potential! To get involved today, visit www.neep.org/efficient-products/emerging-technologies.

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For More Information, Contact Dave Lis
djlis@neep.org | 781.860.9177 x127