

Appendix H - Glossary/Acronyms

Glossary / Acronyms

- AHRI - Air-Conditioning, Heating and Refrigeration Institute. AHRI is the trade association representing manufacturers of heating, ventilation, air-conditioning, refrigeration and water heating equipment within the global industry
- ASHP - Air-Source Heat Pump. ASHPs are an HVAC technology which uses a vapor compression cycle to transfer heat between outdoor air and indoor air or water.
- Aware - In reference to market actors, aware means a market actor knows technology exists.
- Cold climate ASHPs - Air-Source Heat pumps that are optimized to perform (provide heat and do so efficiently) at temperatures below 17°F. NEEP maintains a listing of cold climate ASHPs (<http://www.neep.org/initiatives/high-efficiency-products/emerging-technologies/ashp/cold-climate-air-source-heat-pump>)
- Conclusive - Decisive or convincing data.

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- DMSHP - Ductless Mini-split Heat Pump. DMSHPs are a type of split Air-Source heat pump that delivers conditioned air to a space without use of air ducts. Very narrow piping carries refrigerant to localized indoor units where the heat or cool is delivered directly to the space. Ductless fan coils are often wall mounted.
- “Downstream” Market Actors - In reference to the distribution chain, downstream actors typically mean the end consumer, i./e. the customer, who is farthest down the distribution “stream”.
- Educated - In reference to market actors, educated means a market actor can install/sell/operate/repair the technology effectively.
- EER - Energy Efficiency Ratio. EER represents the ratio of total heat removed from the conditioned space during the 95°F test as outlined in AHRI Standard 210/240 , expressed in Btu’s, divided by the total electrical energy consumed by the air conditioner or heat pump during the same 95°F test, expressed in watt-hours. Like SEER and HSPF, EER has units of Btu/Wh.

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- HARDI - Heating, Air-conditioning & Refrigeration Distributors International. HARDI is a not-for-profit international organization serving wholesaler-distributors and their suppliers within the HVACR industry.
- HSPF - Heating Seasonal Performance Factor. The total space heating required during the space heating season, expressed in Btu's, divided by the total electrical energy consumed by the heat pump system during the same season, expressed in watt-hours (Wh). HSPF has units of Btu/Wh; higher numbers indicate better efficiencies. To determine heating capacity and HSPF of ASHPs, systems must be tested at outdoor dry bulbs of 17°F, 35°F, 47°F, and 62°F (210/240 Table 10).
- Inconclusive - When data did not lead to a firm conclusion.
- Midstream Market Actors - Midstream actors typically mean the retailers and installers, who are in the middle of the distribution “stream”.

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- ❑ NEEP - Northeast Energy Efficiency Partnerships. NEEP is a non-profit organization that works to accelerate energy efficiency in the Northeast and Mid-Atlantic states.
- ❑ SEER - Seasonal Energy Efficiency Ratio. The total heat removed from the conditioned space during the annual cooling season, expressed in Btu's, divided by the total electrical energy consumed by the air conditioner or heat pump during the same season, expressed in watt-hours. SEER has units of Btu/Wh; higher numbers indicate better efficiencies. To determine cooling capacity and SEER of DMSHPs, manufacturers are required to test performance at four different outdoor temperature conditions: 67°F, 82°F, 87°F, and 95°F (AHRI Standard 210/240 Table 9).
- ❑ Trained - In reference to market actors, trained means an installer can install/sell/operate/repair the technology effectively

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- Upstream Market Actors - Upstream actors typically mean the manufacturers and distributors, who are farthest up the distribution “stream”.
- VRF - Variable Refrigerant Flow. VRF heat pump systems typically refer to larger heat pumps (over five tons) that serve larger buildings with many fan coils. These are becoming more common in larger commercial, institutional, and multifamily buildings in the U.S
- Value Proposition - An innovation, service, or feature intended to make a company or product attractive to customers.
- Wh - watt-hour. The watt-hour (symbolized Wh as per SI) is a composite unit of energy equivalent to one watt (1 W) of power sustained for one hour.
- TWh - terawatt-hour. One trillion watt-hours.