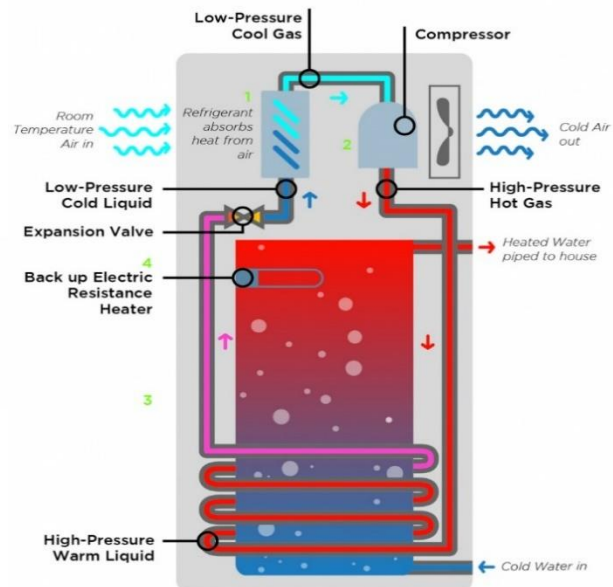


Residential Heat Pump Water Heater 240V Installation Pilot



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Prepared For
Commonwealth Edison Company

Prepared By
CLEAResult

Acknowledgements

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EXECUTIVE SUMMARY

Electric heat pump water heaters present the potential for significant energy savings compared with conventional water heaters. As of the date of this report, this technology continues to see relatively low adoption within the Midwest, with relatively low contractor and customer awareness. The scope of this heat pump water heater pilot was to lay the groundwork for an energy efficiency program design and launch within the ComEd service territory, as noted below.

- **Workforce Development:** Recruit and train 5-10 plumbing and HVAC contractors to create a closed network of qualified Energy Efficiency Service Providers (EESPs).
- **Customer Recruitment:** Secure participation of 30-50 residential customers representing a diverse customer sample that encompasses a wide range of water heater types, including those powered by natural gas, propane, and electricity.
- **Intelligence Gathering:** Develop an engineering calculator; oversee the collection of equipment performance data, manufacturer, distributor, EESPs, and customer interviews; and develop a marketing case study, with the intent of informing a future development of a heat pump water heater program design.

The results of this pilot indicate that heat pump water heaters are well suited for the northern Illinois region. Their indoor installation eliminates concerns about winter weather hampering their performance. To champion this efficient technology, it is recommended that ComEd expand this heat pump water heater pilot as a 2024 downstream offering that focuses on preparing the market to transition to Midstream no sooner than 2025. A full-scale downstream offering is required to allow for adequate EESP recruitment, education, technical training and QC, all of which are critical elements for achieving the desired energy savings and customer adoption.