

Alaska's First Thermalize Campaign: An Effort to Reduce Fuel Reliance in Juneau, AK

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Introduction

What is the Thermalize Juneau 2021 Campaign?

In 2018, the Bureau and City of Juneau set the goal of reaching 80% renewable energy in the sectors of transportation and space heating by 2045.



Thermalize Juneau is a clean energy campaign focused on installing ductless heat pumps and energy efficiency improvements into homes in Juneau, Alaska. Participants in the campaign benefit from bulk purchase discounts as well as education about heat pumps and a simplified installation process.

Developed by Alaska Heat Smart, Renewable Juneau, and AEL&P and the first of its kind in Alaska, the THERMALIZE JUNEAU pilot program seeks to:

- INSTALL** ductless heat pumps in participating Juneau homes and businesses
- IMPROVE** energy efficiency of participating Juneau homes and businesses
- GROW** and support local clean energy jobs
- PIONEER** a repeatable framework for other communities to try!

After receiving a home assessment, 150 Juneau households and businesses will be able to choose between:

Assessment Only

No changes to resident's home/business*

Assessment + Heat Pump Installation

Resident installs heat pump*

Assessment+ Installation+Upgrades

Resident installs heat pump and energy efficiency upgrades*

Benefits of Thermalize Program:

- Homeowners pay less thanks to group pricing and bulk purchases
- The process is streamlined so it is easier for homeowners
- Participants receive a free, customized heat pump quote
- Participants have access to a heat pump installer and builder already vetted by the campaign
- Heat pumps run on Juneau's hydroelectricity which makes them completely renewable appliances
- Community use of heat pumps can lead to better indoor and outdoor air quality

Setting up the Thermalize Campaign

The campaign was advertised, and homes signed up to participate

Assessments and energy audits were performed by Alaska Heat Smart for each house

Heat pumps and energy efficiency contractors (ALCAN Electrical & Engineering, Panhandle Heat Pumps, and Building Pros Inc.) were selected through a bidding process

Participants finalized decision about which retrofits and/or heat pump they want

Participants were given a customized quote and contract from a heat pump installer and/or energy efficiency contractor

Participants produce clean heat and save money all while reducing their carbon footprints

What is a Heat Pump?

Heat pumps use electricity to efficiently heat homes. They are often thought of as a reverse refrigerator. Heat is transferred from the air outside of the home to the air inside of the home. There is an exterior unit that is connected to an interior unit by refrigerant lines. The heat pump utilizes a compressor and refrigerant to transfer the heat. Since they move heat, instead of just creating it, their efficiency can be more than 100%.

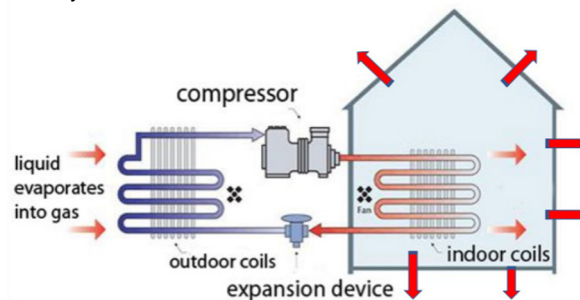


Image courtesy of Retscreen.com

Campaign and Research results

Research done by Rachel Dodd shows that by installing a ductless heat pumps, the average Juneau home would have a **57% reduction** in energy use and a **98.5% reduction** in carbon emissions

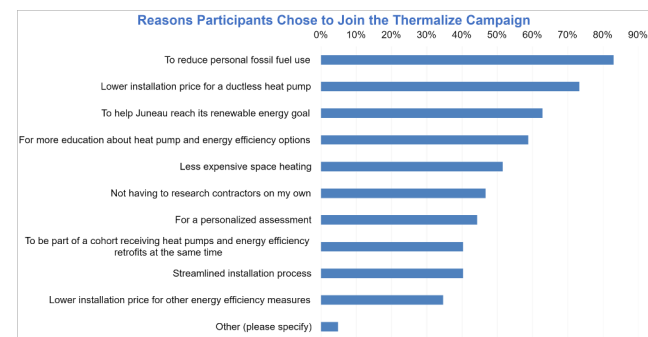
As of December 2021

- 164 have registered for thermalize (registration is now closed)
- 67 quotes for heat pumps have been completed
- 22 heat pumps have been installed
- 10 energy efficiency improvement quotes have been completed
- 1 retrofit to improve energy efficiency has been completed



Image courtesy of Alaska Heat Smart

The following graph shows why participants chose to sign up for the thermalize campaign. The most common reason was to reduce personal fossil fuel use.



Survey results from the Participant Intake Survey (respondents could choose more than one answer)

For More Information

For more information visit akheatsmart.org/programs/thermalize-juneau/ and cchrc.org/incentivizing-cold-climate-efficiency-in-juneau/