



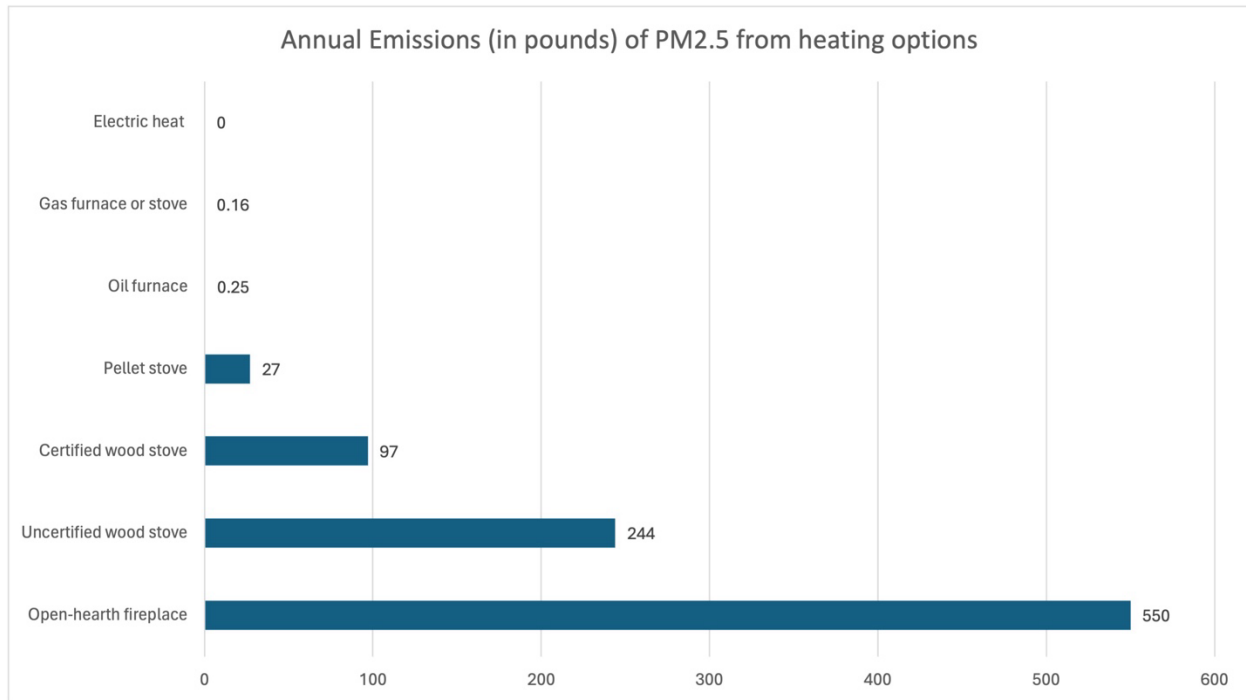
Comparison of Heating Fuels

Everyone appreciates the comfort of a warm home but choosing the best way to generate the heat for your home is subject to debate. What fuel produces the least air pollution? What offers the lowest climate impact? Which is most cost-effective?

Comparing the various methods of home heating is challenging, but we've found some quality research to help you make an informed choice about how to heat your home. Below we provide graphs illustrating the relative emissions and costs associated with various home-heating methods.

Fine Particulate Matter – PM_{2.5}

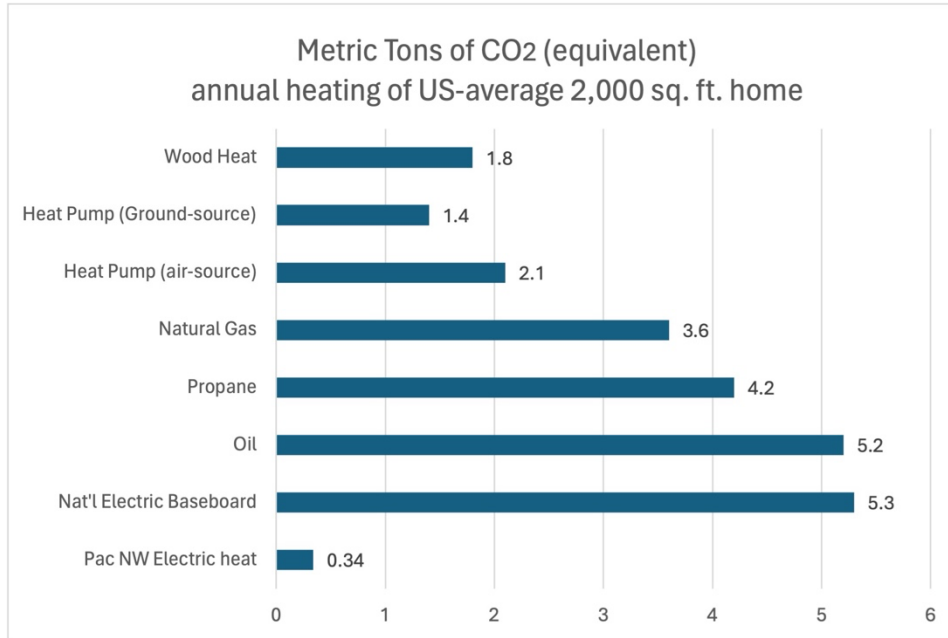
All burning generates some amount of smoke, or fine particulate matter, but not all burning creates the same amount of pollution. Wood burning – whether its cord wood or pellets – creates more smoke than burning natural gas or propane. And electric appliances have no direct emissions. The Puget Sound Clean Air Agency (PSCAA) conducted research and found the following annual emissions for an average home heating system using different fuels and heat sources.



Data and graphic provided by Puget Sound Clean Air Agency. <https://pscleanair.gov/327/Clean-Heating>

Greenhouse Gas Emissions

The Alliance for Green Heat and the Massachusetts Clean Energy Center has published research on the projected CO₂ emissions from various home heating systems throughout the U.S.

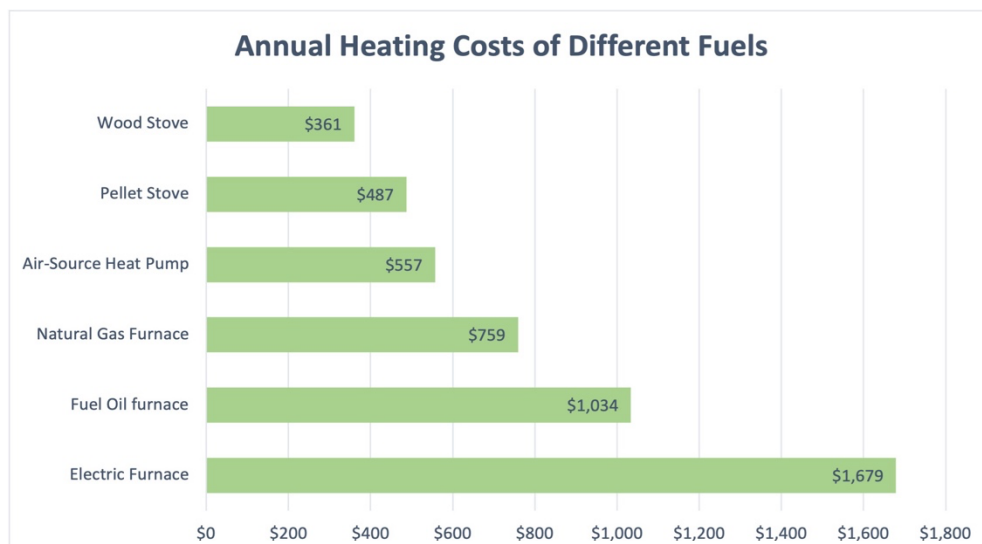


NOTE: Electric emissions are based on national averages – NW electricity generally has lower GHG emissions due to wind and hydro power generation. Pacific NW electric heat data provided by NW Power and Conservation Council.

The Massachusetts Clean Energy Center (MassCEC) is a state economic development agency. <https://www.masscec.com/>

Cost Comparisons

The non-profit research consumer research organization, Shrink That Footprint, collects data from the U.S. Energy Information Administration to compile annual cost-comparisons for different home heating fuels in the United States. Their 2023 report included the following.



NOTE: According to the US Energy Information Administration, the average US home uses approximately 10,632 kWh annually.

Data provided by the U.S. Energy Information Administration (<https://www.eia.gov/>) and [ShrinkThatFootprint.com](https://shrinkthatfootprint.com)