Dear Chair Sollman, Vice-Chair Brock Smith, and Members of the committee,

Climate Reality Project Portland Chapter writes in strong support of SB 1143, which intends to spur efficient thermal energy projects in Oregon, and the -1 amendment which would ensure a percentage of skilled union workers and union apprenticeship opportunities on each project.

As an organization that advocates for a just transition to clean energy, climate justice and public health, we thank all who worked on this bill and have brought it to a public hearing.

Thermal energy networks are ground-source systems for heating and cooling homes that use a network of shallow pipes that circulate water to transfer heat to or from a building's heat pump as needed. These systems are ultra-efficient year-round because of the near constant moderate temperature underground– a thermal energy network in Colorado shows a COP (coefficient of performance) of 5.7.[1] For comparison, all conventional heaters, whether electric or gas, have a COP below 1.

In 2024, Oak Ridge National Laboratory (ORNL) and the National Renewable Energy Laboratory (NREL) determined that if geothermal heat pump installation and weatherization improvements were done in around 70% of U.S. buildings, it could save as much as 593 terawatt-hours– 15% of total US electricity use– of electricity generation annually. The report further estimates that widespread adoption of this solution could avoid seven gigatons of carbon-equivalent emissions by 2050 and reduce the need for new long-distance transmission lines by 33%.[2]

Thermal energy networks are a win for climate justice because, by efficiently electrifying whole neighborhoods, they can avoid leaving lower-income households behind to bear rising costs of the gas network as individual homes electrify.

Thermal energy networks are also a beautiful example of a Just Transition to Clean Energy. Similar to greywater recycling systems, developing and maintaining thermal energy networks requires the exact skills that workers in the gas system already have. As an example, in Eversource Energy's pilot project "the mile of pipe and the service lines that we laid down in

Framingham to connect all of these customers up. All of that work was actually done by one of our traditional gas contractors."[3]

Installing ground source heat pumps, and especially thermal energy networks, is a triple win for all of our futures, utility affordability, and local union jobs. Please pass SB 54.

Thank you for your leadership on this important bill,
Helena Birecki
Interim Chair, Climate Reality Project Portland Chapter

References:

1, **3:** https://www.volts.wtf/p/thermal-energy-networks-are-the-next

2:https://www.nrel.gov/news/program/2024/new-analysis-highlights-geothermal-heat-pumps-as-key-opportunity-in-switch-to-clean-energy.html

About The Climate Reality Project Portland Chapter
The Climate Reality Project (CRP) Portland Chapter is a local, volunteer-led chapter of The Climate Reality Project, an international nonprofit of 5 million members led by climate leader and former US Vice President Al Gore, whose mission is to catalyze global solutions to the climate crisis. Our legislative committee bases its advocacy on CRP's 5 pillars: a just transition to clean energy, zero carbon transportation, climate justice and public health, green communities, and a fair, representative democracy.

climaterealitypdx.com/, www.climaterealityproject.org