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March 29, 2023

House Energy and Environment Committee
Colorado General Assembly
200 East Colfax Avenue
Denver, CO 80203

Re: Support HB23-1252 Thermal Energy and Amendments L.001 & L.002

Chairwoman Kipp, Vice Chair Willford, and Members of the Committee:

Western Resource Advocates (WRA) works to protect the West's land, air, and water. We support policies that help to drive down greenhouse gas emissions, that improve our air quality, that protect the health of our river systems, wildlife, and drinking water, and that support our communities, and industries like agriculture, and the outdoor economy, which our state relies on. For more than 30 years WRA has worked alongside non-profit allies in partnership with Colorado state legislators, regulators, agencies, and the Governor's office to help craft smart policy solutions to address climate change. We are grateful to Representative Lieder and Chairwoman Kipp for bringing this bill forward.

Colorado cannot wait to tackle sources of climate pollution. While Colorado has made important progress on climate change in recent years, we still have a long way to go to reach our greenhouse gas reduction goals.

WRA supports HB23-1252 because it:

- Establishes geothermal systems for heating and cooling as eligible for grants from the Colorado Energy Office, and as eligible emissions reduction technologies in a utility Clean Heat Plan
- Supports development of thermal energy resources, including geothermal networks
- Permits gas utilities to develop thermal energy networks as a new utility service, and directs the Public Utilities Commission to determine if rules are needed for this purpose
- Includes provisions that allow development of thermal energy networks serving more than one building, including for certain campuses and local governments, while protecting consumer interests

House Bill 23-1252 is an important next step in our state's efforts to address the effects and causes of climate change and to continue our progress towards a decarbonized economy

We thank Representative Lieder and Representative Kipp for their work on this measure and House Energy and Environment Committee members for your consideration. We urge you to vote "yes" on HB23-1252.

Sincerely,
Gwen Farnsworth
Deputy Director of State Advocacy
Western Resource Advocates

Water Conservation in O&G Testimony – Thursday, March 23, 2023

Good afternoon, Chair Kipp and Committee members. My name is Becca Curry, I'm a Policy Council with Earthjustice.

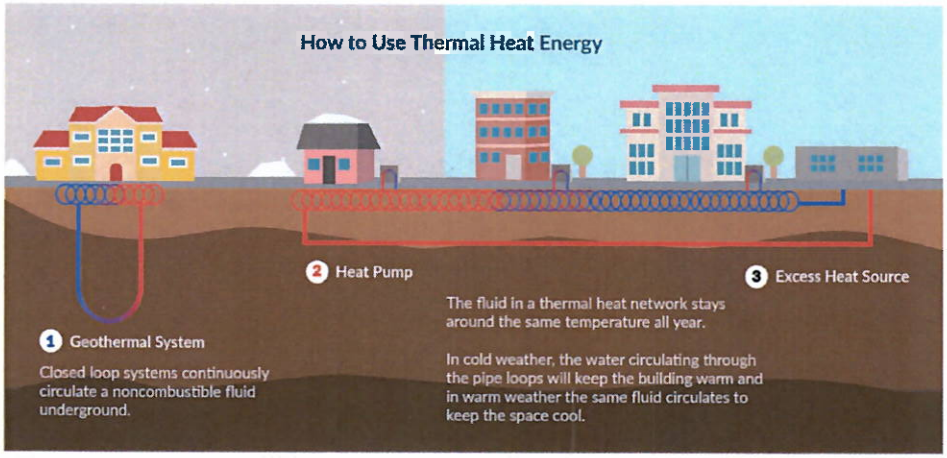
I support House Bill 1242 and ask for your vote in favor. Water is a scarce resource in Colorado and in the broader southwestern United States to which the Colorado River system provides water. We are in the worst drought in 1200 years, yet the amount of water used in hydraulic fracturing for oil and gas is on the rise. Over the past four years, oil and gas operations created 95 billion gallons of contaminated and toxic produced water that are permanently removed from the hydrological cycle. Additionally, an average of 17 million gallons of water are injected into a single well, according to the Colorado Oil and Gas Conservation Commission (COGCC). During this time of water scarcity, when many Coloradans face water restrictions, we must preserve our precious fresh waters.

HB 1242 proposes to preserve fresh water by requiring that an increasing amount of produced water be recycled or reused – while requiring a decrease in the amount of fresh water used in oil and gas operations. It also improves the reporting and transparency for water utilized in oil and gas operations. Currently, operators are not required to disclose their water sources nor their produced water disposal methods. State agencies cannot currently provide the necessary data to understand consequential risks posed to public health and the environment, especially in disproportionately impacted communities.

These provisions will help save billions of gallons of fresh water for farmers and growing communities and it will increase transparency about water used in oil and gas operations. As Colorado is behind other states in terms of recycling—some Texas producers are recycling 80 to 90% of their produced water—this is an opportunity to become a leader in water management, especially in this time of drought.

Again, I ask for your yes vote. Thank you!

Thermal Energy Systems for Colorado



What is Thermal Energy?

Thermal energy adds or removes heat from buildings for the purpose of efficient building temperature control. The process works by circulating non-combustible fluids through a network of pipes to heat (or cool) a campus, building, residential community, or other structures. Thermal energy can provide the everyday needs of domestic hot water, temperature-controlled spaces, or refrigeration. Methods of exchanging heat can include natural, underground thermal temperatures; thermal energy released from industrial processes such as wastewater treatment facilities; or any other source with excess thermal energy that can achieve desired fluid temperatures.

The Problem:

The current definition of a clean heat resource is limited. Current examples of clean heat resources include energy efficiency programs, alternative fuels like green hydrogen, or electrification strategies like installing heat pumps, but leave out the larger umbrella of thermal energy systems.

Colorado needs this expanded definition of clean heat resources so the state can begin to adopt technology that increases energy efficiency in building heating and cooling. Not only will this decrease greenhouse gas emissions from this sector, it could increase job opportunities in a burgeoning, clean energy field.

The Solution:

Representative Lieder and Representative Kipp are introducing the bill, "Thermal Energy" to create a pathway for the widespread adoption of this clean technology. If this bill is passed, we'll be supporting new thermal energy projects and safeguarding existing infrastructure. Colorado already employs this technology all across the state including the sewer heat recovery system at the National Western Center as well as geothermal exchange systems at Colorado State University and even at the State Capitol. These systems eliminate thousands of metric tons of carbon dioxide from being emitted into the air every year.

By including thermal energy systems as a clean heat resource, encouraging utilities to propose pilot projects, and requiring the PUC to create rules for this technology, more of these thermal energy networks will be built around the state—a win for the environment, communities, and workers.

FAQs:

How much does this cost?

Costs vary depending on project size and scope with large projects benefiting from scale. By allowing regulated utilities to propose thermal heat pilot projects, we can collect data on their functions that will make thermal heat networks more viable in the future including potential cost savings that can be passed on to ratepayers. This trusted technology is also eligible for funding from the Bipartisan Infrastructure Law and the Inflation Reduction Act. Plus, thermal energy systems are incredibly efficient and can provide millions of dollars in energy savings, making them a great long-term environmental and economic choice.

Are thermal energy systems the same as a heat pump?

A heat pump can be a part of a closed loop geothermal energy system, but is not always required. A closed loop thermal energy system with a heat pump uses a ground water loop to function similarly to an air conditioner. The system provides water at a consistent temperature year round, cooling temperatures in the summer and heating cold outside air in the winter.

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