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The Honorable Tina Liebling  
Chair, Health Finance and Policy  
Minnesota House of Representatives  
477 State Office Building  
100 Rev. Dr. Martin Luther King, Jr. Blvd  
Saint Paul, MN 55155

The Honorable Jim Abeler  
Chair, Human Services Reform Finance and Policy  
Minnesota Senate  
3215 Minnesota Senate Building  
95 University Avenue W.  
Saint Paul, MN 55155

Chairs Liebling, Abeler, and Conference Committee members,

Fresh Energy is a 30-year-old, Minnesota-based nonpartisan, not-for-profit organization. We work to shape and drive bold policy solutions to achieve equitable carbon-neutral economies. We appreciate the opportunity to offer our **support of Senate language in the side-by-side comparison, Article 1, sections 1 through 4 (available on pages R9-A1 through R11-A1); the \$103,000 appropriation to cover the cost of this provision is found on the Senate side of Article 24 of the side-by-side comparison (page R43). This language will enable deployment of ground-source district energy heating and cooling systems**

While Minnesota has made progress reducing emissions for our power and transportation sectors, emissions from commercial and residential buildings have risen the most quickly of any other sector of Minnesota's economy; since 2005, emissions have risen 15% from commercial buildings and 32% from residential buildings.

We believe that ground-source district energy heating and cooling systems represent a cost-effective, scalable solution to help meet our climate challenge, improve public health, and provide equitable and reliable heating and cooling to Minnesota's buildings, especially commercial and multifamily buildings. A ground-source district energy system is a heating or cooling system that uses the constant temperature of the earth or underground aquifers to heat or cool multiple buildings connected through a piping network.

By comparison, ground-source district energy systems are up to eight times more energy efficient than natural gas systems and at least three times more energy efficient than air-source heat pumps. Because ground-source district energy systems distribute heat rather than carbon-based fuels, they are carbon- and pollutant-free. Of particular note, these systems work especially well in cold climates because they rely on the constant temperature of the earth, therefore providing heating and cooling reliably through extreme heat in summers and extreme cold in winters. Their vastly superior efficiency also confers lower energy bills and puts less pressure on the electric grid as we see electrification across other sectors of the economy continue to advance.

Fresh Energy believes enabling deployment of ground-source district energy technology is extremely important. These types of systems are already being deployed at utility-scale by National Grid, Eversource Energy, and NYSERDA on the East Coast. We know we must decarbonize our building sector to meet Minnesota's greenhouse gas reduction goals, align with the Governor's Climate Action Plan, and stave off the worst impacts of climate change. Deployment of ground-source district energy technology in Minnesota will also help chart the path for a *just labor transition*. Workers currently managing buried infrastructure that moves carbon-based fuels like natural gas have a clear path to management of very similar systems that instead move around heat. Ground-source district energy systems are safer and healthier for pipeline workers and building residents, reducing explosive accidents and exposure to pollutants. The lower energy bills, cleaner air, and reliable service conferred by district energy systems also contribute to a *just energy transition* in Minnesota's building sector, especially so in under-resourced and overburdened communities.

Senate language in Article 1, sections 1 through 4 enables deployment of innovative energy infrastructure technology to demonstrate the climate, energy, workforce, and public health benefits of ground-source district energy systems. Initial deployment now will de-risk future investments and allow systems like this to be deployed at scale across the state.

We appreciate the opportunity to offer our support of this legislation and encourage members to also support this provision.

Sincerely,

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Fresh Energy  
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