



Honorable Chairman Beltz and Agricultural Committee members,

Thank you for the opportunity to testify on this important bill which is intended to enhance our state's long-term energy independence and economic competitiveness. The bill aims to pave the road for industries interested in and engaged in leveraging geothermal energy with existing power generators, and to feed power data centers in addition to boosting agricultural productivity. It is noteworthy that geothermal energy is part of the energy independence and sustainability plan, President Trump proclaimed on January 20, 2025.

By having the study develop a roadmap, North Dakota is preparing to efficiently utilize its underground energy while simultaneously repurposing abandoned wells, thereby transforming potential environmental liabilities into assets.

The recap testimonies presented to the Senate Committee, the main revenue element is electricity production. Note that each repurposed well could generate 2-5 MW of electricity. Using just 10% of our inactive wells, our state is expected to generate 6 GW capacity powering up to 2 million households at an annual unit rate of 26,000 kWh.

Globally, geothermal projects have proven successful for many decades:

- **The Geysers, California:** The world's largest geothermal installation producing 1,205 MW from 18 power plants from 350 wells, operational since the 1960s.
- **Salton Sea Geothermal Field, California:** Over 430 MW capacity from 11 plants, with potential for lithium extraction to support battery production since early 1980ies.
- **Coso Geothermal Field, California:** A 270 MW power project from 4 power plants running for decades near China Lake Naval Base since the late 1980ies.

The agricultural sector will also benefit from geothermal energy:

- Commercial growers save up to **80% on fuel costs** compared to traditional heating.
- Typical ROI for geothermal greenhouse heating ranges from **\$1.50 to \$2.50 per sq. ft annually**, with a **3-7-year payback period**.
- **Geothermal greenhouses extend growing seasons by 2-3 months** in cold climates, increasing revenues by **20-30%**.
- **Crop quality improves by 15-20%**, with higher nutrient content in vegetables due to optimized growing conditions.

Fargo, ND 58103

www.gwe-us.com

(701) 630-0538



Notable examples include:

- **Edwards and Flint Greenhouses, Idaho:** Annual savings of **\$0.85–\$1.20 per sq. ft** on heating costs.
- **Chena Hot Springs Resort, Alaska:** Produces **1,500+ pounds of produce monthly** with annual energy savings exceeding **\$30,000**.
- **Burgett Wholesale, New Mexico:** Achieves **60–70% lower heating costs** in its 13-acre rose facility.

These examples, large and small, demonstrate geothermal energy's potential to reduce costs, boost production, and enhance sustainability. I urge the committee to support this bill thereby attracting future geothermal investments to our state.

Fargo, ND 58103

www.gwe-us.com

(701) 630-0538