GeoHarness - Executive Summary

GeoHarness is a sustainable energy company dedicated to providing efficient and cost-effective geothermal heating solutions in the commercial sector of Alaska. Located in Anchorage, we work with commercial companies and large buildings all over the state to provide reliable and eco-friendly heating systems that reduce the carbon footprint and energy costs of current heating systems. We make clean energy accessible where there is otherwise limited access to it. Our mission specifically pursues goals 7 and 13 of the United Nations Sustainable Development Goals (SDGs), which are "Affordable and Clean Energy" and "Climate Action" respectively.¹

While geothermal heat pumps (GHPs) are available for homeowners in Alaska, there is a gap in the industry for commercial installations, as well as a shortage of companies that both distribute and install GHPs. We fill this gap by partnering with EnerTech, a GHP manufacturer that serves Alaska, to market, distribute, and install GHPs for commercial businesses. Our business currently has 4 employees who will market the GHPs, and obtain certifications in GHP construction in order to offer high quality specialization in our construction and installation process. We aim to help Alaskan business owners lower their heating bill by up to 70% and lower their carbon emissions, from heating, by up to 70%. Our company will break even on our expenses in year 4, and we expect our clients to conservatively break even on their investment by year 3. GeoHarness is making clean heating practical, affordable, and scalable for Alaska's future.

¹ United Nations. (2025). Department of Economic and Social Affairs - Sustainable Development. *United Nations*. https://sdgs.un.org/#goal_section

² EnerTech. (2025) Energy and Technology. https://enertechusa.com/