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Renewable revolution: Geothermal heat pumps are substantially changing the renewable landscape with thermal energy

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Renewable thermal energy is a vast untapped resource easily accessible around the planet. At the same time, nearly half the energy used in homes and office buildings is for thermal energy. Geothermal heat pumps already harvest terawatt-hours of renewable energy every year to provide heating, cooling, and hot water from Alaska to Florida. The Lifecycle Cost of Energy from these heat pumps is lower than any other form of renewable energy today while operating efficiencies range from 100% - 500% more efficient than existing alternatives.

Implementing widespread use of geothermal heat pumps can drive de-carbonization and eliminate on-site fossil fuel use. In fact, this is a critical part of Environmentally Beneficial Electrification.

There are a number of compelling reasons to learn more about this powerful technology:

- The 30% US Federal Tax Credit is back in place for geothermal heat pumps.
- Geothermal heat pumps harvest renewable energy more efficiently and more economically than any other available heating and cooling solution.
- Delivering 15 – 30 MWh of renewable energy per home per year, geothermal heat pumps harvest thermal energy at less than \$0.03 per KWh over 30 years.
- Utilities are eagerly seeking Environmentally Beneficial Electrification where carbon fuels are used. That's what geothermal heat pumps do better than anything else.
- The US grid is de-carbonizing rapidly; geothermal heat pumps capitalize on that trend.
- Widespread understanding of how geothermal works, and its impact, is key to our greener future.

Biography

Will Lange has a diverse background in the US Coast Guard and the HVAC industry. With experience ranging from political liaison assignments in Western Africa to Fortune 50 Product Management, since 2010 he has dedicated his career to the cause of harvesting renewable thermal energy with geothermal heat pumps.

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