

Geothermal Heat Pump Technology

- Renewed Interest by utilities of all kind, Electric (both IOUs & Cooperatives), Gas and most recently Water Utilities.
- Recognition by the Engineering Community (ASHRAE) on the value of GHP Technology.
- the growth of “net zero” developments, both Public and Private, that depend on GHPs, along with PV to achieve this rating.



Geothermal National and International Initiative Inc.
1615 M. Street N.W. Suite 800 Washington DC 20036

The Road to 30%!

GHP's - as a Renewable Technology for Utilities.

- 1- They are a “**demand reduction**” technology which does not have to have “backup” generation. A equivalent megawatt of installed ghp capacity, reduces that amount from the grid.
- 2- They work **24/7, 365**, never needing the sun to shine or the wind to blow.



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3- It is a **permanent (50 year) demand reduction**, one that does not need any notification.

4- It can become a **new business unit** (Loop leasing or collection of REC benefits).

5- It is using “**energy**” **already owned** by the consumer but delivered by the Utility.



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Job Creation / Retention & Training

In an Industry study done in 2010 it was determined that a commercial project involves **22 different job classifications**.

The International Ground Source Heat Pump Association has, in partnership with the Association of Energy Engineers, ASHRAE and NATE, developed the **training and certifications** needed to ensure a strong infrastructure to support the growth of geothermal heat pumps both nationally and internationally.



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IGSHPA Certification & Accreditation

IGSHPA training & certifications are now being recognized by State Legislators and Energy Offices as the standard for any programs of projects because it give them a standard to go by.

These include, designer (CGD), installer (AI) driller, vertical loop installer (VI) and Certified Geothermal Inspector (CGI)

Currently Wisconsin has 66 AIs, 4 CGDs. 1 Trainer. There is training available from the Wisconsin Geo Association, this points to the fact that we do have an infrastructure capable of supporting this technology.



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Geothermal Heat Pump Technology

Uses the “**ENERGY UNDER OUR FEET**”,
the energy **we already OWN** to deliver the
Triple E benefits of:

Energy independence & security.

Environmental stability.

Economic prosperity.



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We cannot solve our problems with the same thinking we used when we created them.”

- Albert Einstein



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If you have any questions or need further information please contact me at 610-659-4998 or e-mail me at jdienna@geonii.org



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