

How to Sell GSHP Systems



A Quick Guide to Making the Case: Closing Your First GSHP Sale

**Presented by:
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Presentation Overview

- ☰ Make the case:
 - How they work
 - Economic benefits
 - Environmental benefits
 - Luxury benefits
 - General tips & pointers

- ☰ Example Residence
 - Sample Calculations



Space Conditioning: The Next Frontier

- April 1993 report:
 - *GSHPs are “the most energy efficient, environmentally clean and cost effective space conditioning system available today”*
- GSHP systems continue to improve while conventional heating/cooling systems reached their maximum efficiencies years ago



Did You Say “Geothermal”?

- ☀ Be prepared for questions
 - Each system needs to be “sold”



Heat Pumps are All Around Us

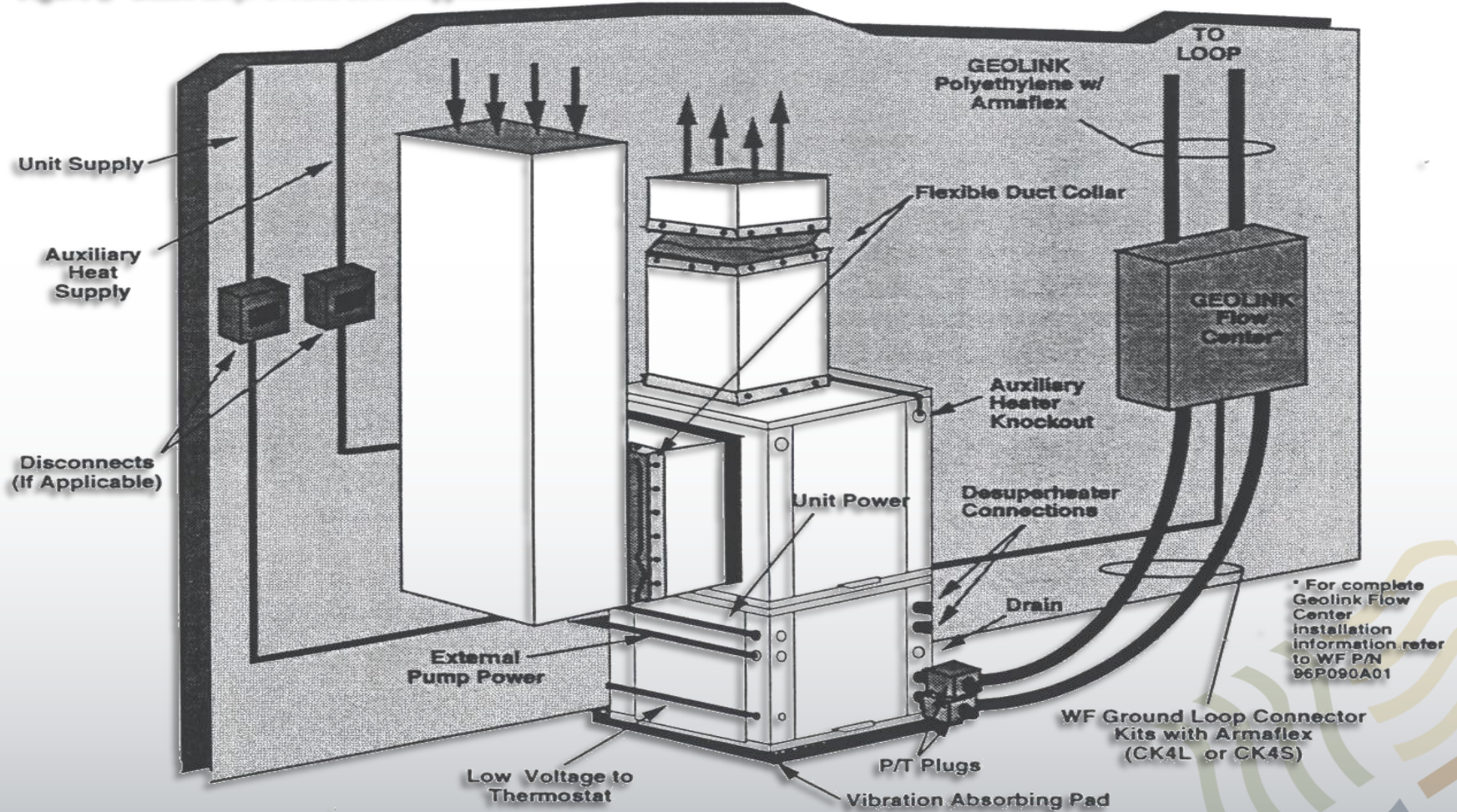
☀️ The technology is proven

- No need to explain vapor-compression cycle
- Make it relatable

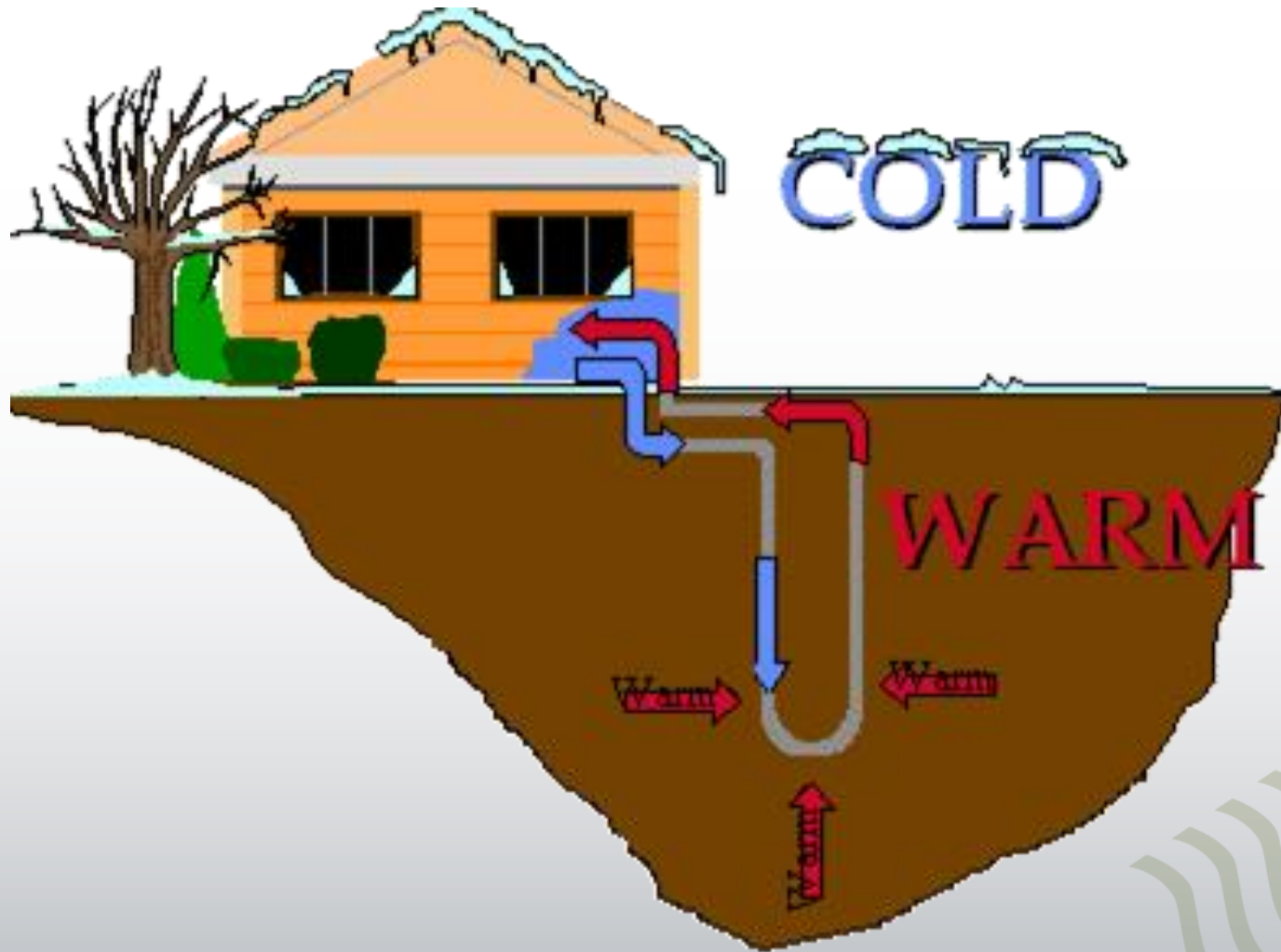


Forced-Air GSHP – One System Does It All

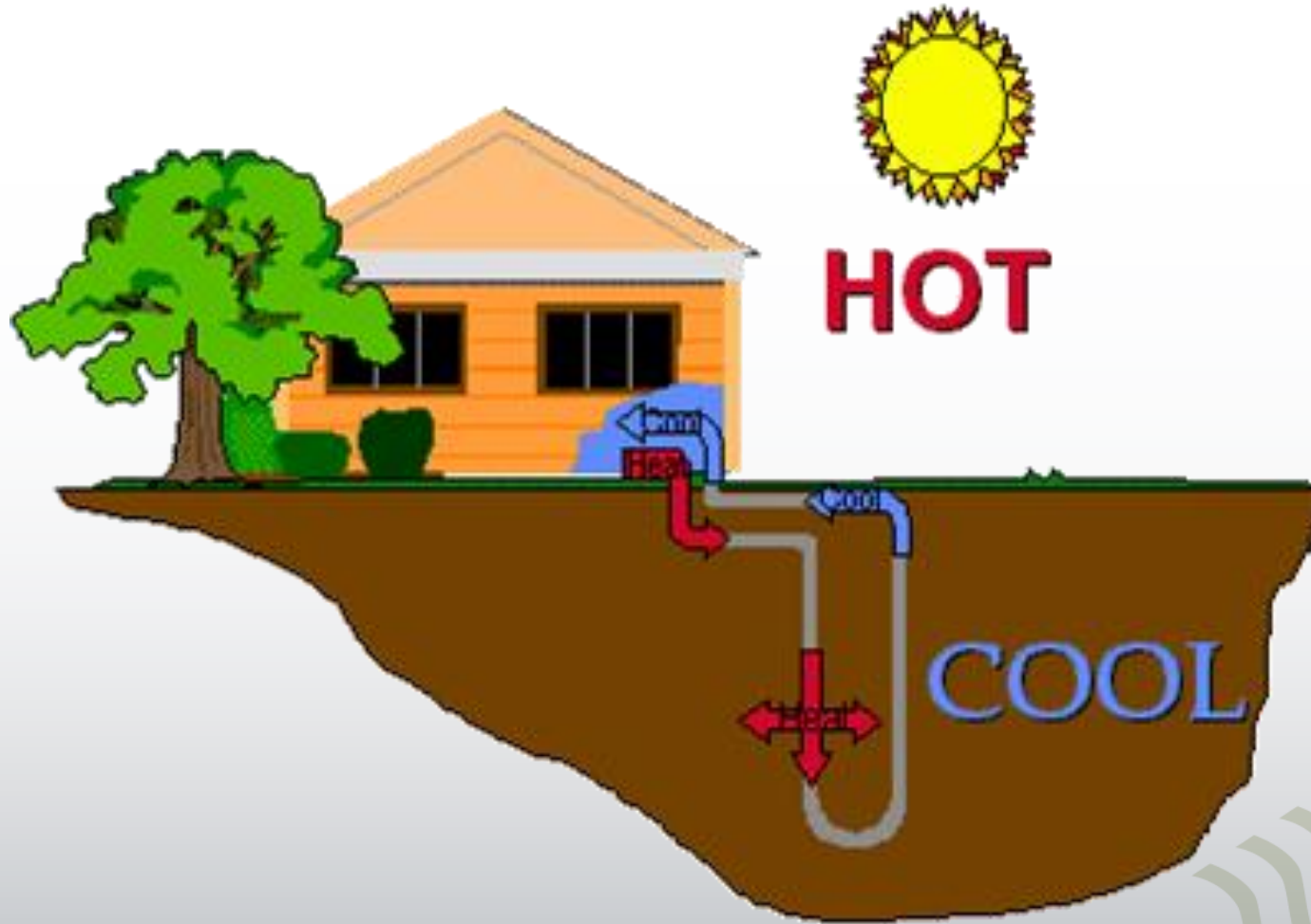
Figure 3- Closed Loop: Ground Source Application



The Heating Advantage of a GSHP



The Cooling Advantage of a GSHP



GSHPs Offer Luxury

☀️ Unmatched comfort & reliability

- Longer run cycles = even temp in the home
- Superior dehumidification
- Will not dry the air during heating
- Not affected by OAT

☀️ No combustion

- Lower homeowner's insurance
- No carbon monoxide detectors

☀️ Controls can be very simple



GSHPs are Flexible

Multitude of delivery options

- Single unit for forced-air and hydronic in smaller homes
 - Duct zoning with multiple zones
- Multiple small packaged units distributed through a larger home
- Centralized hydronic system
 - Radiant systems → high-end/high-comfort
- Any combination you can think of



Site Benefits

- ☰ All GSHP piping is installed underground
- ☰ No outdoor equipment / coils
 - Improved aesthetics
 - No chance of theft or vandalism
 - No outside wiring or refrigerant lines
 - Reduced envelope penetrations



Environmental Benefits

- 🌀 Packaged units require no field charging
- 🌀 No “point of use” pollutants
- 🌀 Significant reduction in greenhouse gasses
 - Every 1,000,000 GSHP installations:
 - Eliminates 5.8 million metric tons of CO₂ annually
 - Saves 40 trillion Btu’s of fossil fuels
 - Heating/cooling/hot water is 63% of home energy usage
 - Equivalent to planting 385 million trees or taking almost 1.3 million cars off of the road
- 🌀 www.eia.gov & www.geoexchange.org

Mechanical Benefits

Mechanically Reliable

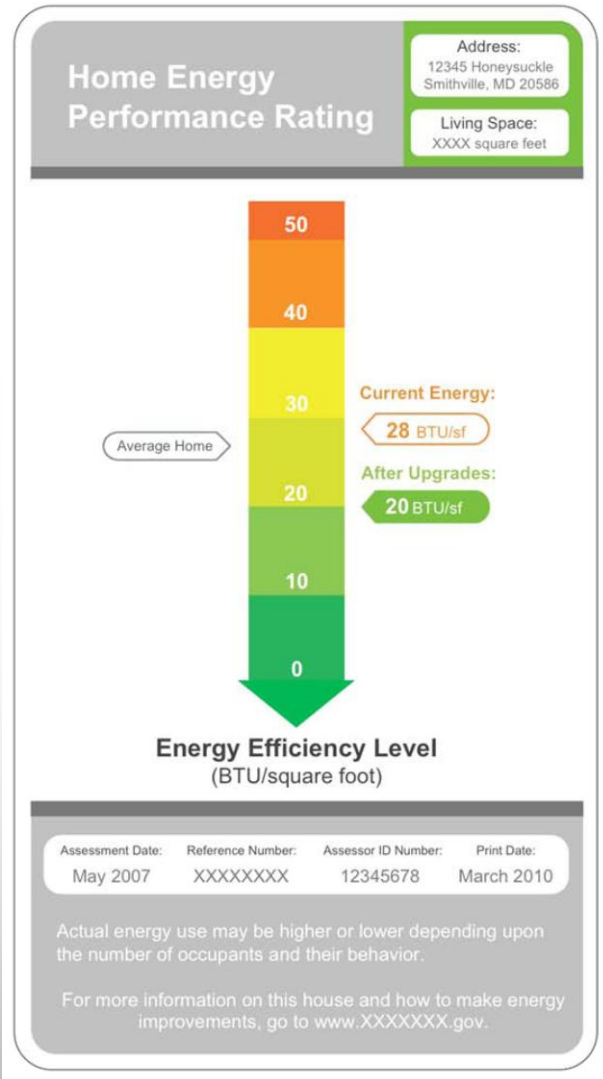
- Long service life
 - 20-30 years on the GSHP unit
 - 100 years on the GHEX piping
 - Compare to 12 years w/ ASHPs
- Little/no maintenance costs

Very simple

- Few mechanical components
- Easy to work on / service



GSHPs Increase Real Estate Value



GSHPs are similar to infrastructure

- Invest up front to collect energy for years to come
- Increased awareness means higher home values
 - With homes of equal price, energy efficiency wins

Incentives are Available

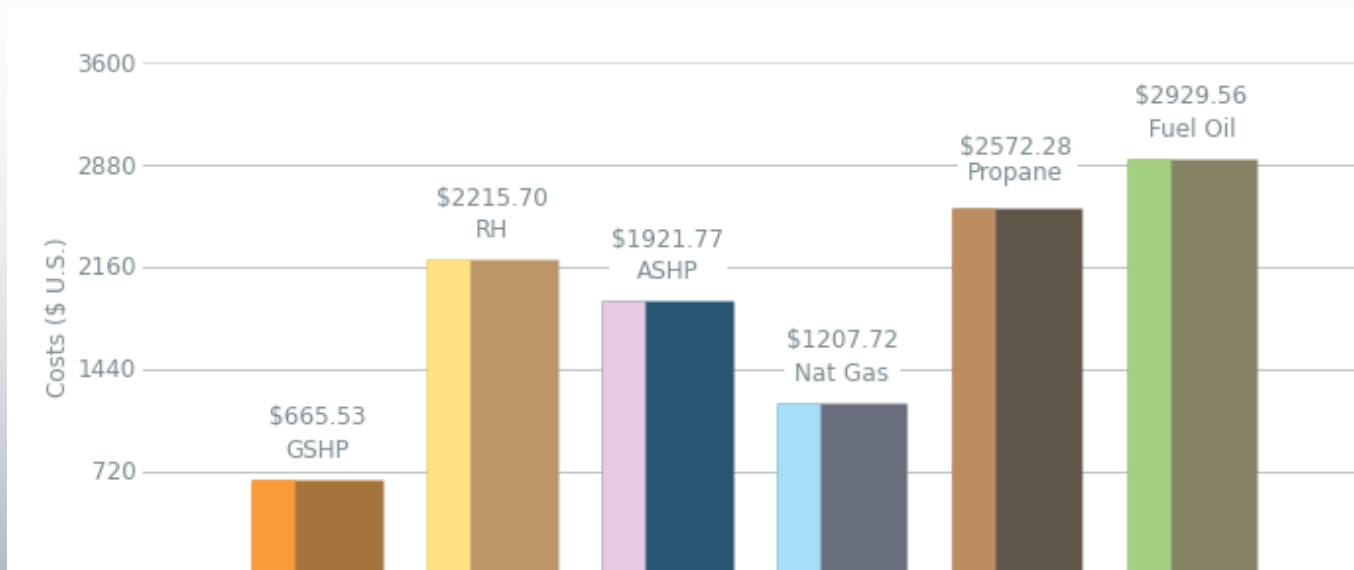
- Find them at www.dsireusa.org
- Payback not as sensitive to incentives as other renewables
 - Recoup with GSHPs regardless
 - Payback w/ GSHPs: 6-10 years without incentives
 - Payback w/ PV: 30+ years without incentives



The image shows a screenshot of the DSIRE (Database of State Incentives for Renewables & Efficiency) website. The header features the DSIRE logo, the U.S. Department of Energy logo, and the IREC logo. Below the header, there is a search bar and a navigation menu. The main content area includes a map of the United States with state abbreviations, a sidebar with resources, and a 'myDSIRE' section. The website is designed to provide information on state, local, utility, and federal incentives and policies for renewable energy and energy efficiency.

Economic Benefits

- ☰ Reduced operating cost
- ☰ Reduced maintenance costs
- ☰ Extended equipment life span
- ☰ Optional desuperheater for hot water



The Big Ticket: Sell the Investment

☰ Incremental cost not total cost

- \$20,000 total cost or \$10,000 incremental cost
 - Need to purchase something to heat/cool anyway
 - Investment is added cost to get the GSHP in the home
 - Show savings over 30-years
 - R.O.I.

☰ Loan payment vs. monthly savings

- \$10,000 added to 30-yr loan at 5% adds \$54
- Compare to monthly operating costs
- Usually show positive cash flow day-1

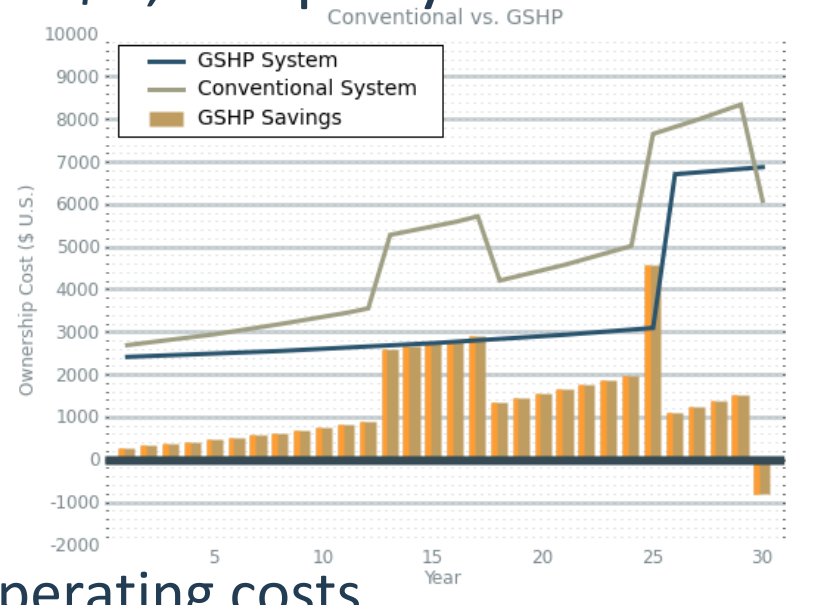
The Big Picture: Simple- vs. Long-Term Payback

Simple payback (SPB)

- Spend extra \$10,000 to save \$2,000 per year
 - SPB = 5 years
- Not always effective

Total cost of ownership

- Look at whole picture
 - Incremental cost for GSHP
 - Fuel inflation & long-term operating costs
 - Equipment service life & necessary replacement
 - Spend extra \$10,000 to save \$XXX,XXX over 30-years



Communication is Key

☰ Assume the homeowner knows nothing

- Will it be a hassle?
- Will it mess up the home? The yard? The flower bed?



Included in the Proposal

- ☰ Calculations used for design
- ☰ Credentials / experience
 - Showcase systems
- ☰ List of steps to take / checklist
- ☰ Provide a summary:
 - How much money they'll save vs. spend
 - How much gov't money they'll get
 - Short-term vs. long-term payback/cash flow
 - **How much they stand to lose if they don't chose geo**



Summary

☀ Be an Expert.....

- It helps to sell Geo if you know what you are doing. There is more than money on the line.



- Example

Questions?



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