

Geothermal Energy Plan

Eco-Resorts & Greenhouses

plus

Power To The People!



Geothermal History

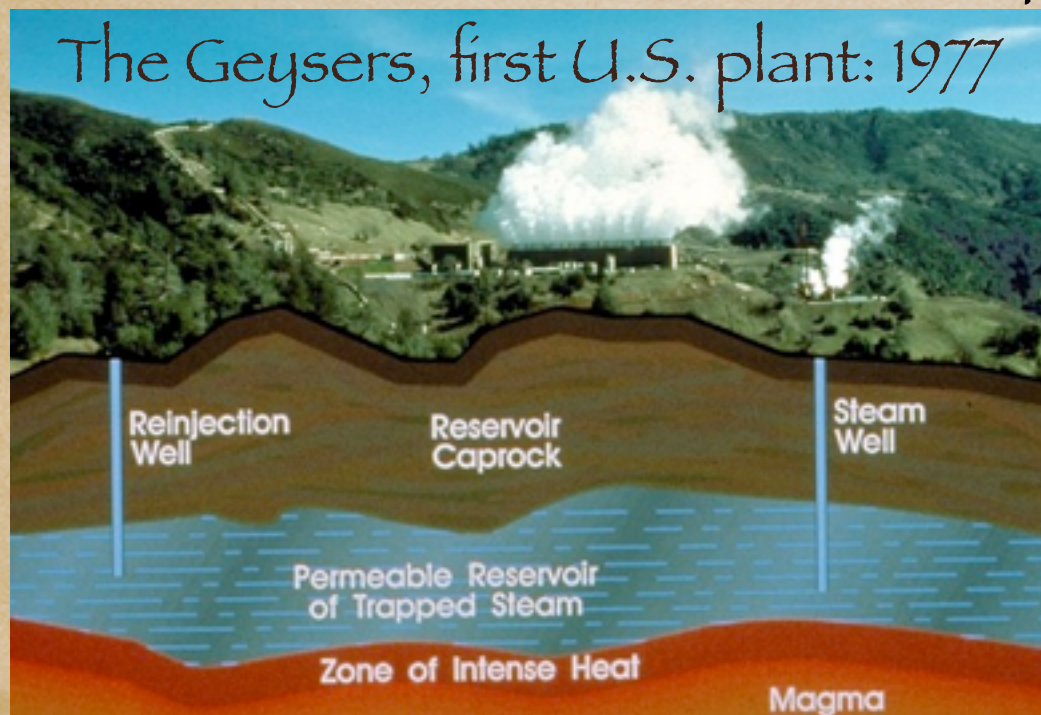


Native Americans age old use of hot springs.



First Geothermal Power Plant, 1904, Larderello, Italy

The Geysers, first U.S. plant: 1977



Japan has a long history of geothermal use.
Both bathing & heating

The Plan

- ◆ Build multiple geothermal power plants.
- ◆ Build an eco-resort at each power plant, pumping waste water (which is just hot mineral water) into spa pools and geothermal greenhouses. These resorts will also serve to educate the public about the green energy paradigm.
- ◆ Then nationalize these geothermal power plants within 30 years but investors keep eco-resorts & greenhouses.

Research & Development:

- ◆ R&D one stop shop: geothermal.marin.org
- ◆ There are many companies that build geothermal power plants: www.mannvit.com
www.mannvit.com/Services/
- ◆ Find suitable active locations.
- ◆ Purchase properties, build, they will come.
- ◆ Apply for gov. grants and subsidies.

Examples Iceland!



Iceland produces
100%
of its electricity from renewables.

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Geothermal Greenhouses

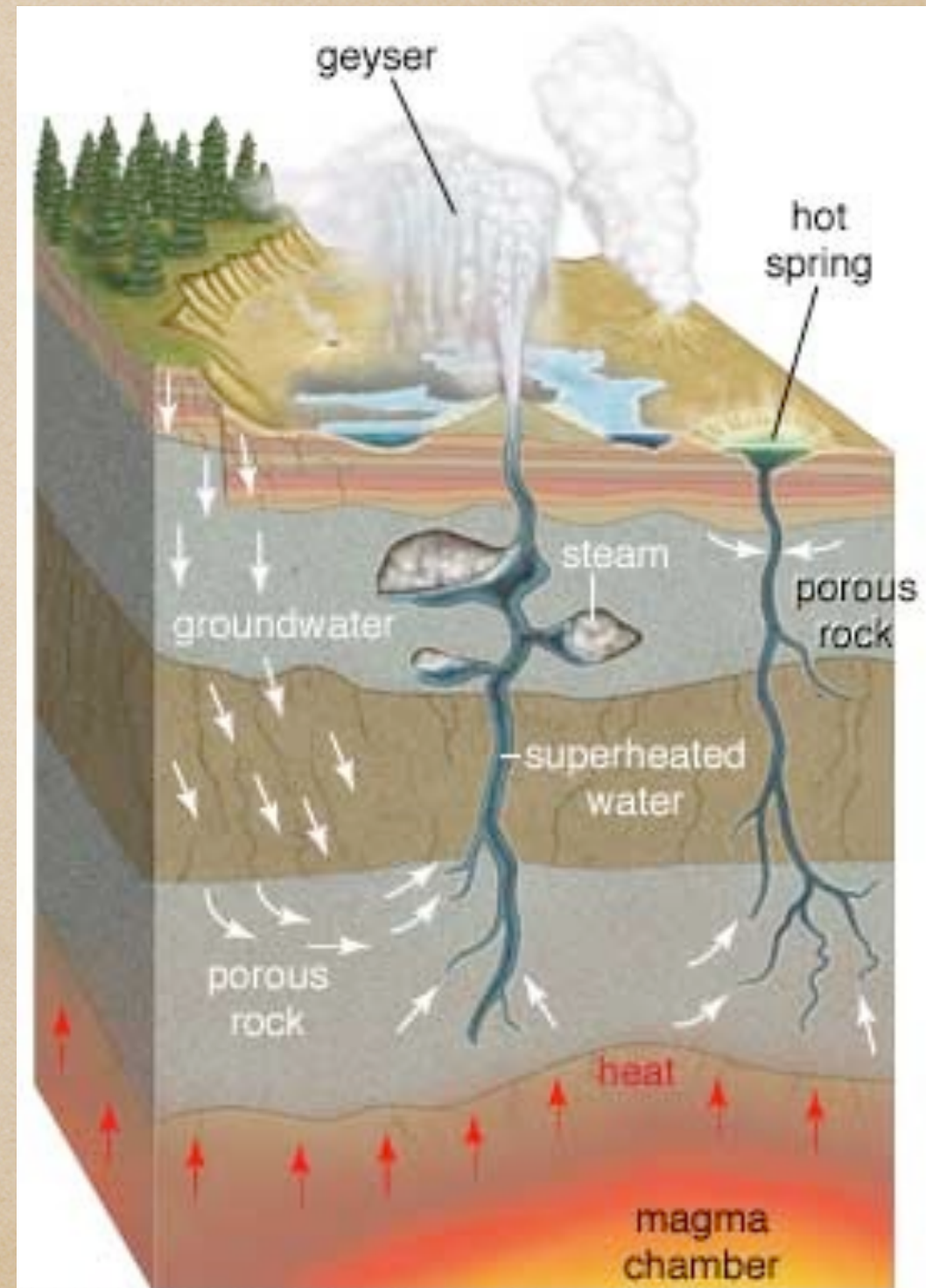
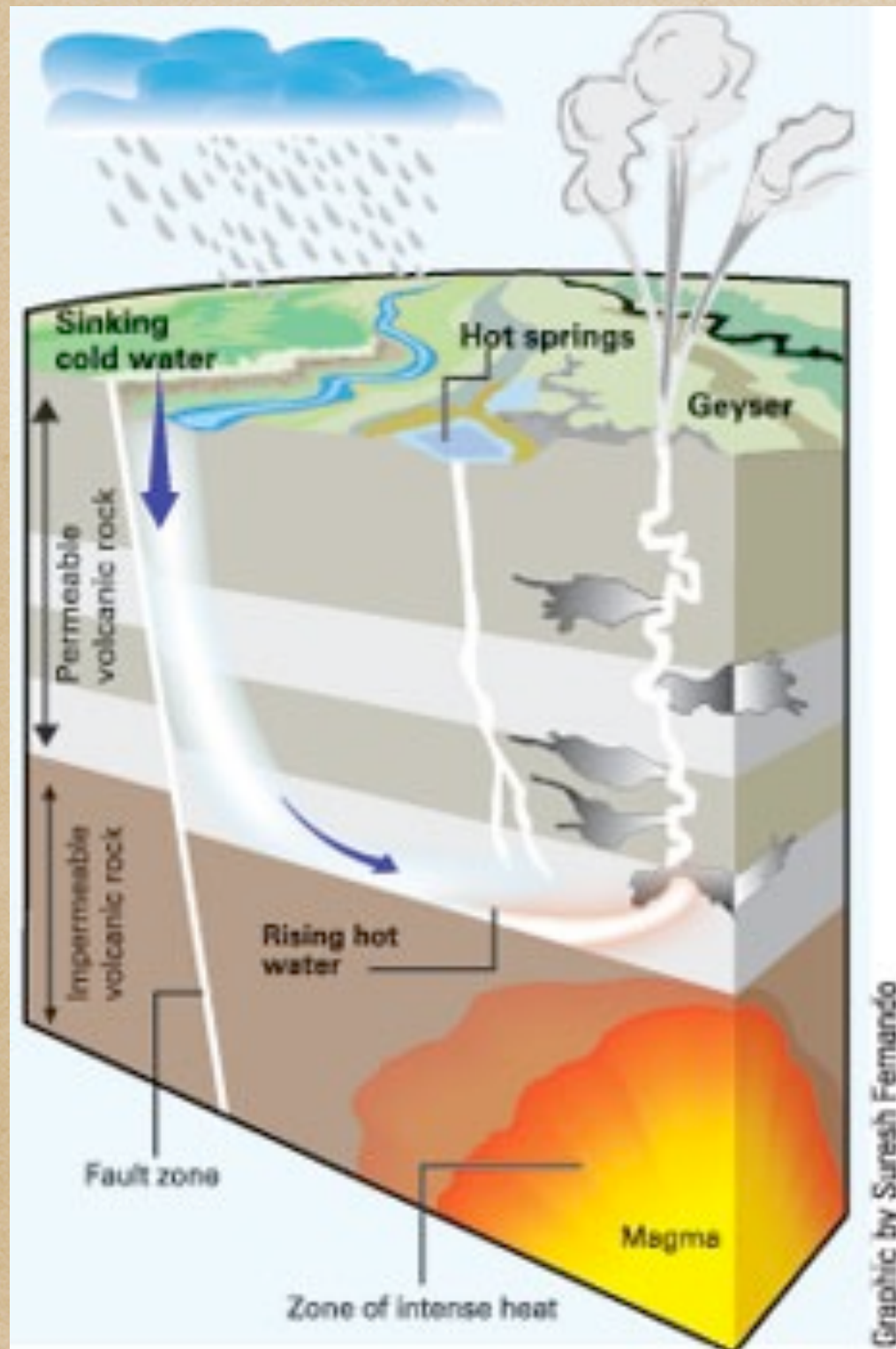


With the effects of global warming increasing domestic food security is a must. We can grow all our own foods cheaply in all seasons with geothermal greenhouses.

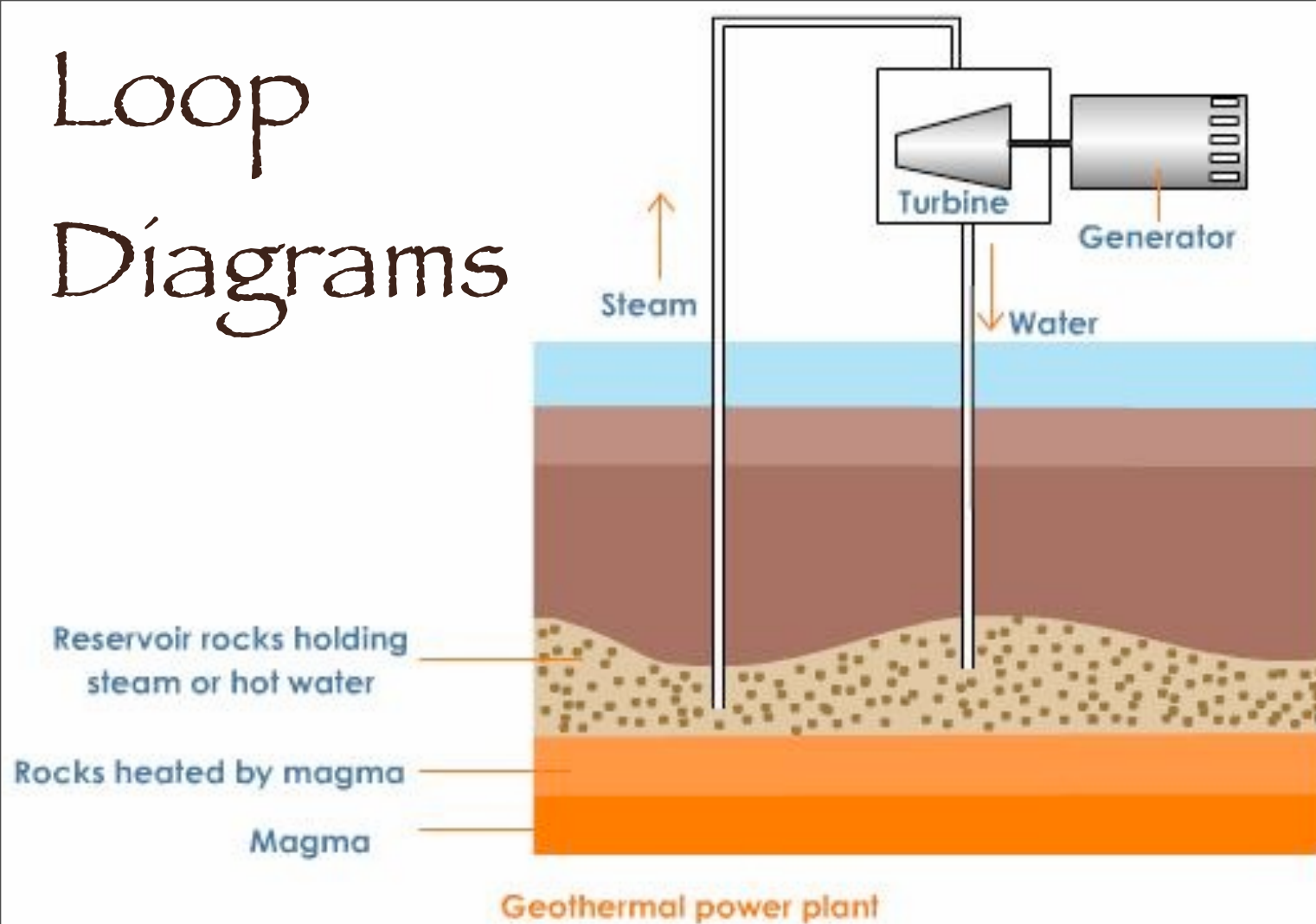
Geothermal radiant heating



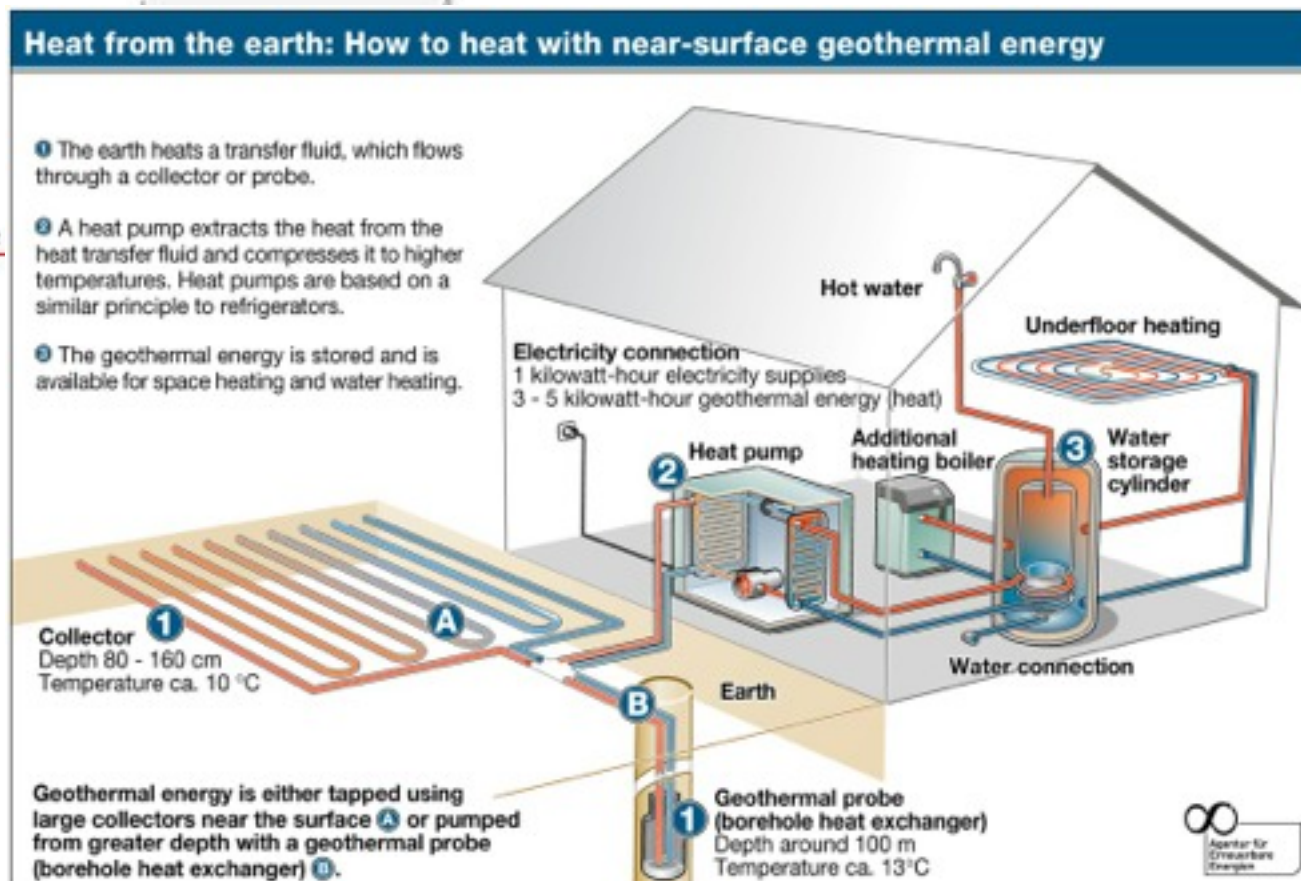
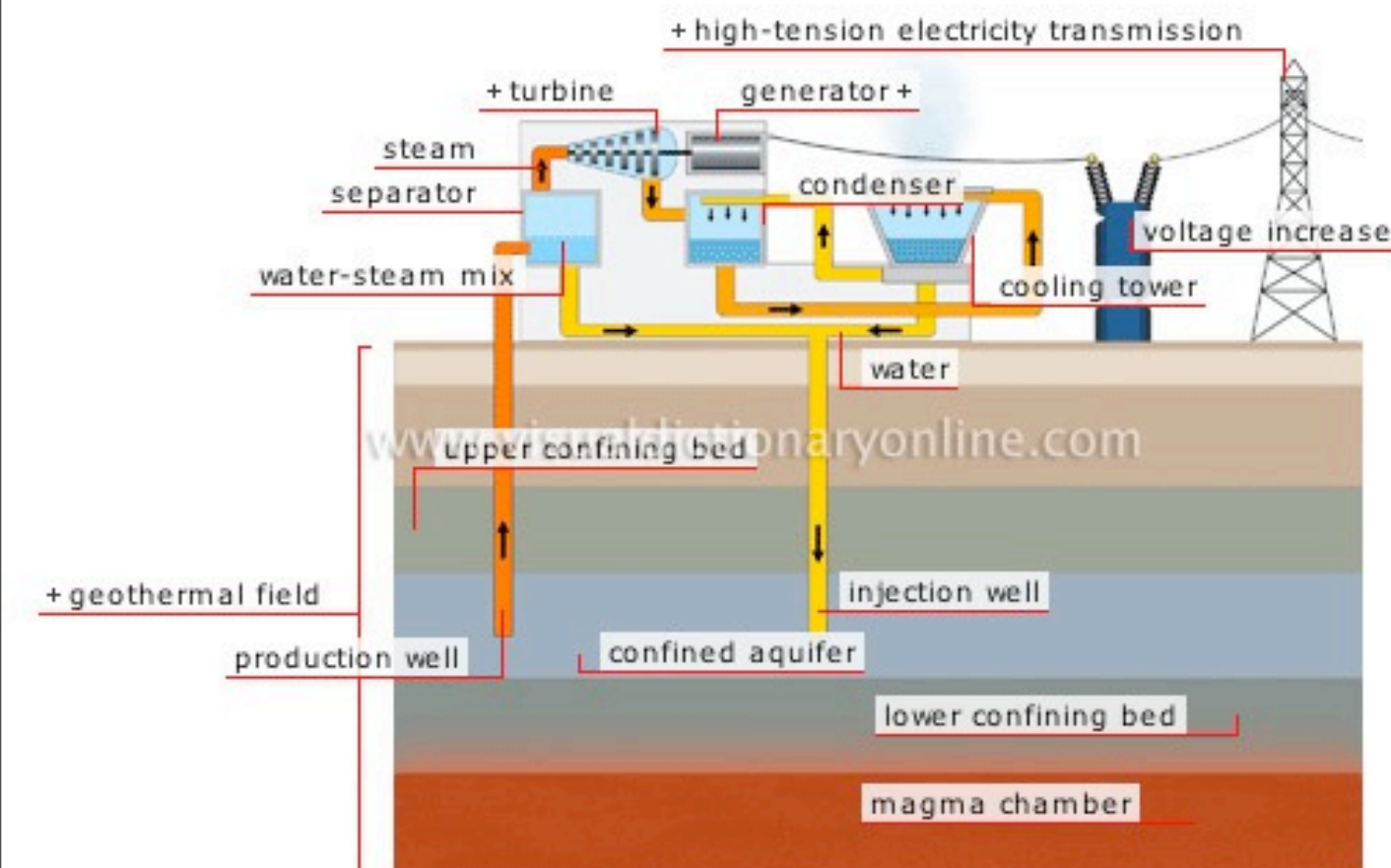
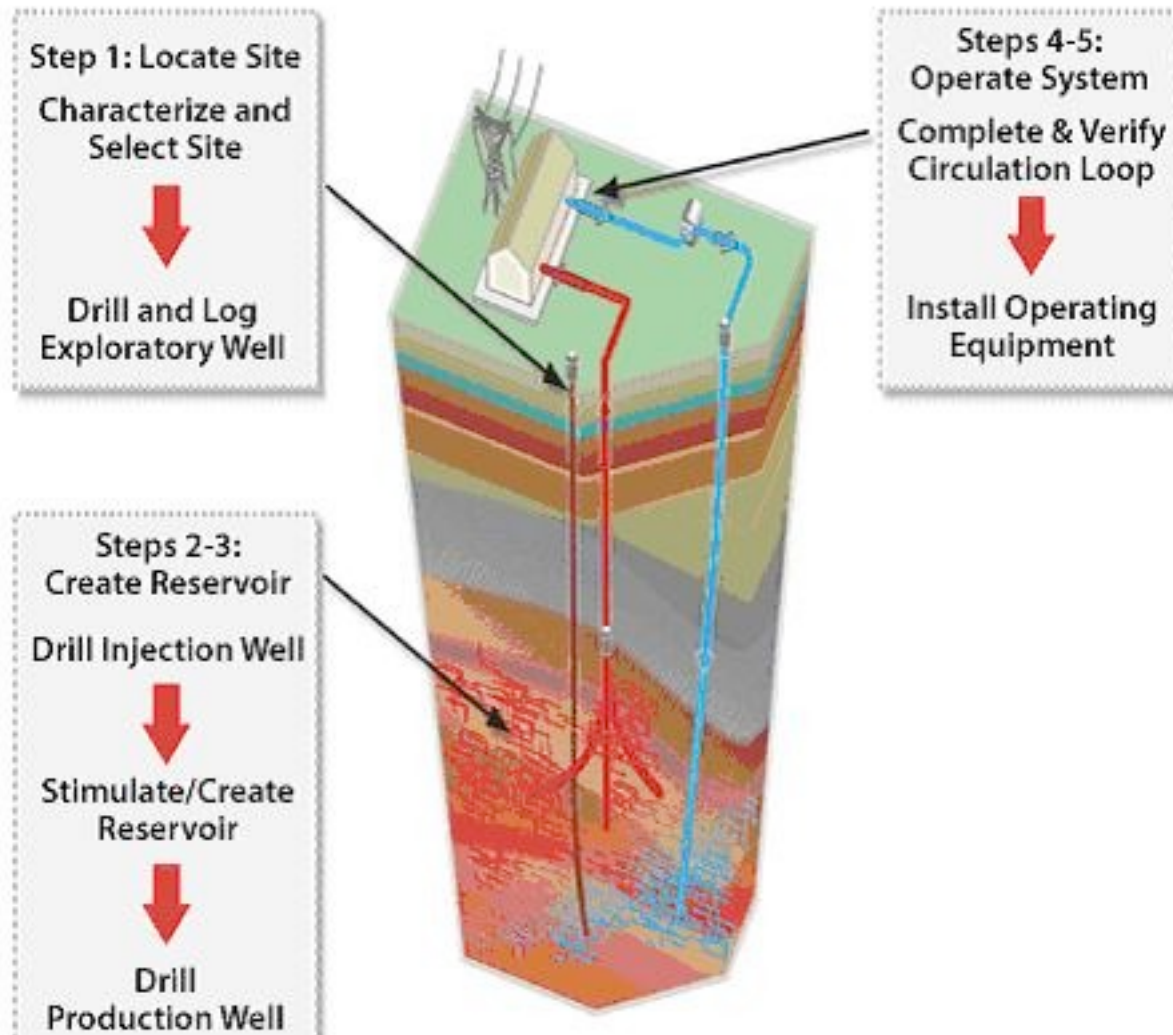
Geothermal Source Diagrams



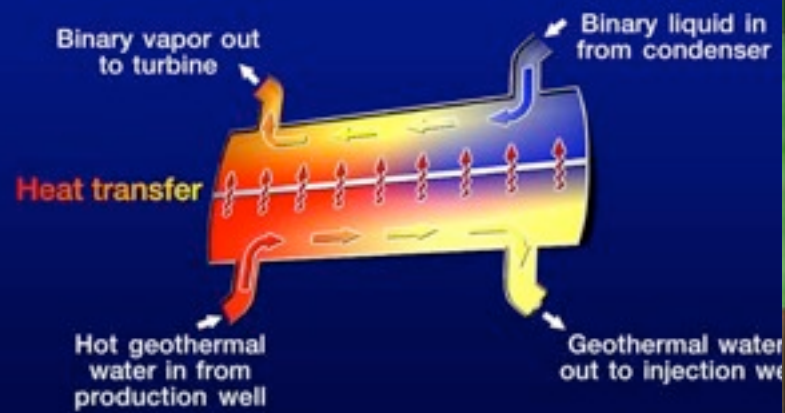
Loop Diagrams



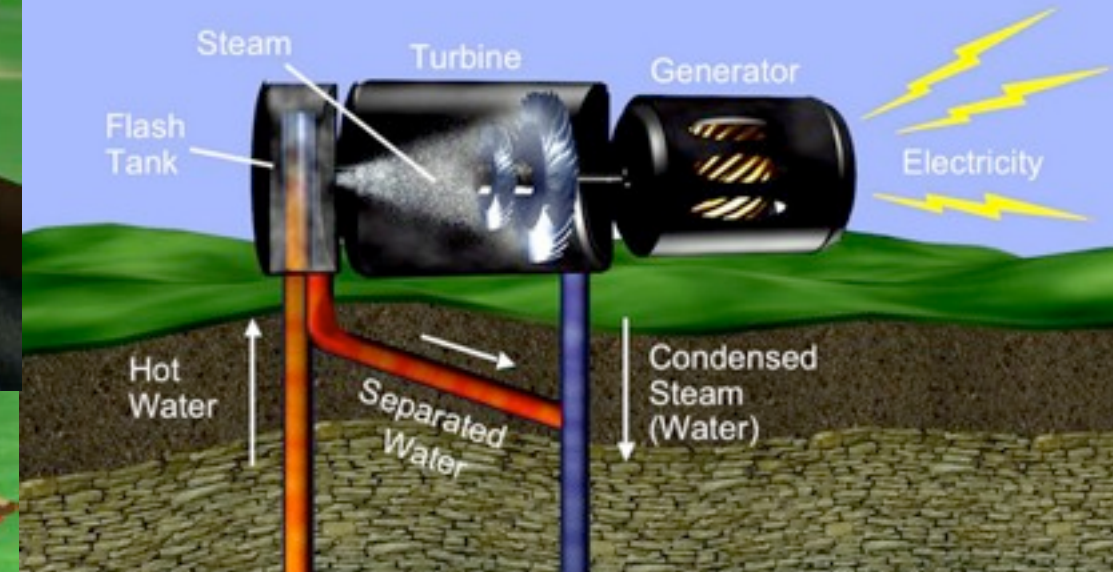
EGS Development Sequence



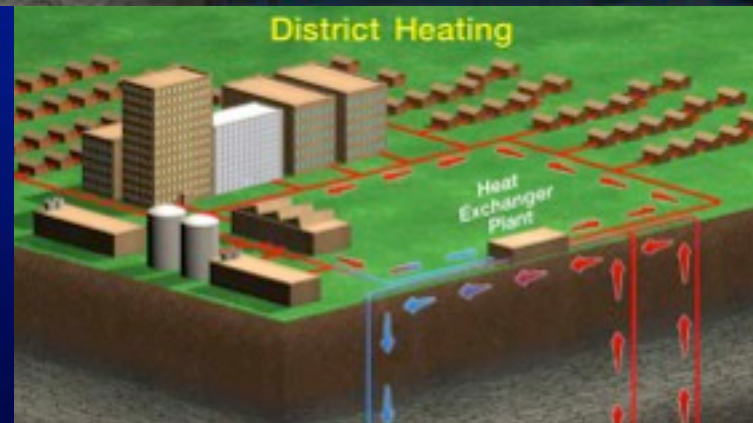
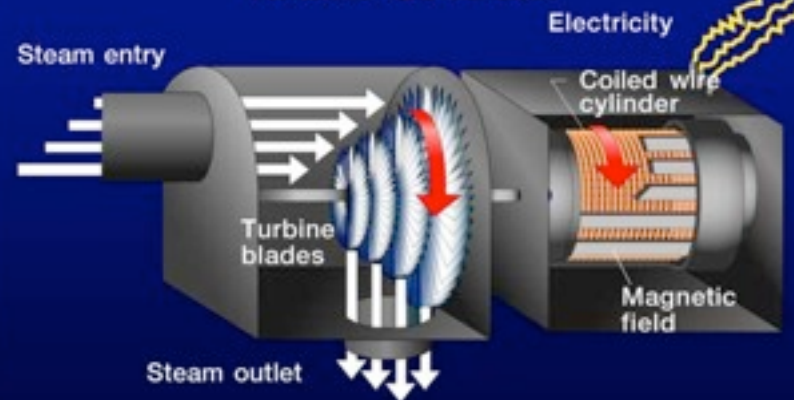
Binary Power Plant Heat Exchanger



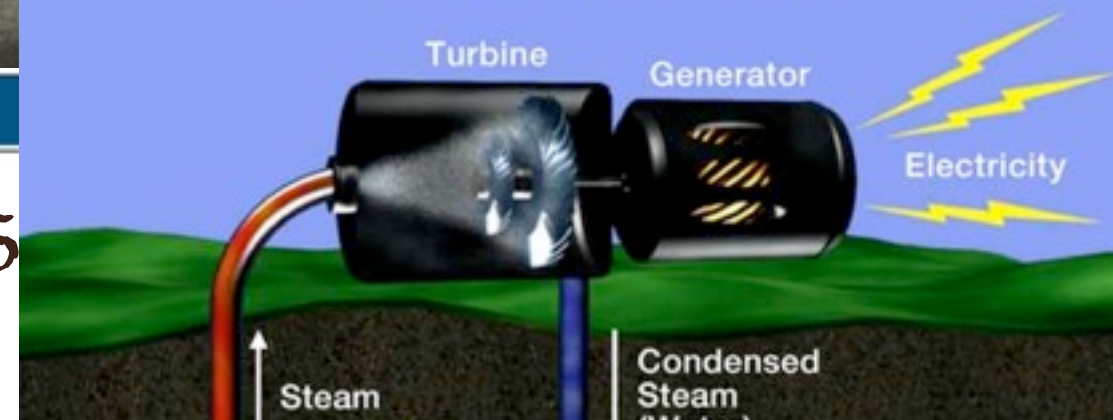
Flash Steam Power Plant



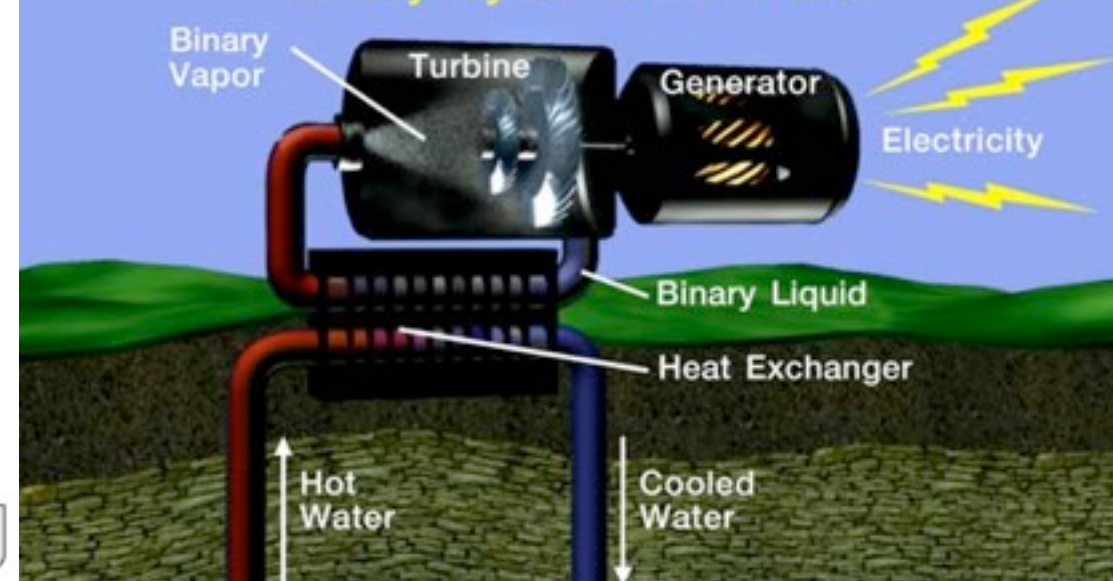
Turbine Generator



Dry Steam Power Plant



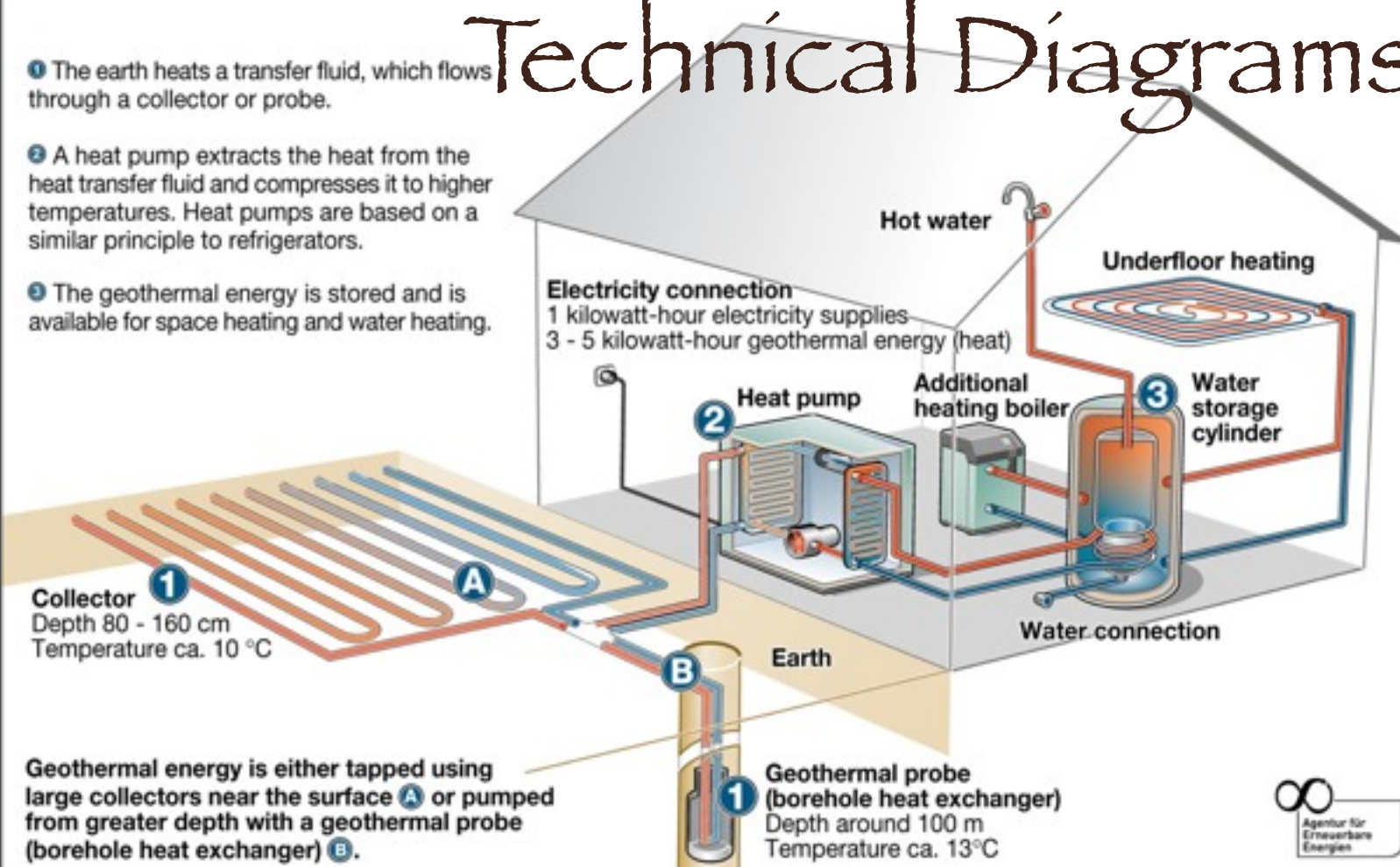
Binary Cycle Power Plant



Heat from the earth: How to heat with near-surface geothermal energy

Technical Diagrams

- 1 The earth heats a transfer fluid, which flows through a collector or probe.
- 2 A heat pump extracts the heat from the heat transfer fluid and compresses it to higher temperatures. Heat pumps are based on a similar principle to refrigerators.
- 3 The geothermal energy is stored and is available for space heating and water heating.



The Petrochemical, Oil, Coal, Nuclear and Gas Paradigm is Dead!



"I foolishly once believed the myth that nuclear energy is clean & safe. That myth has completely broken down. Restarting nuclear reactors while we still have no place to dispose nuclear waste is a criminal act toward future generations."

~ Morihiro Hosokawa, 79th Prime Minister of Japan

NUCLEAREXODUS.COM

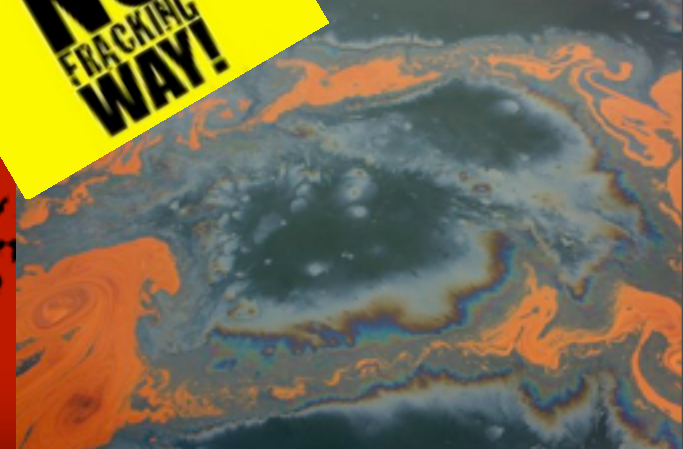
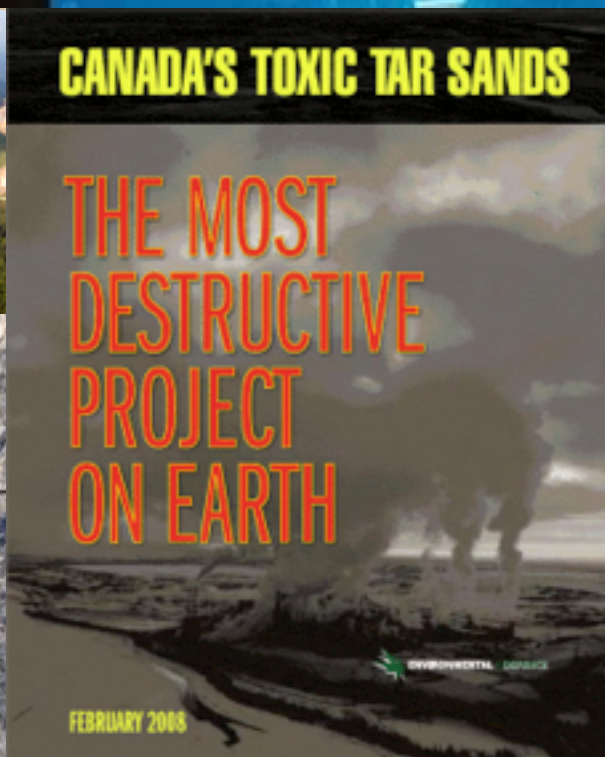


CANADA'S TOXIC TAR SANDS

THE MOST DESTRUCTIVE PROJECT ON EARTH



NO FRACKING WAY!

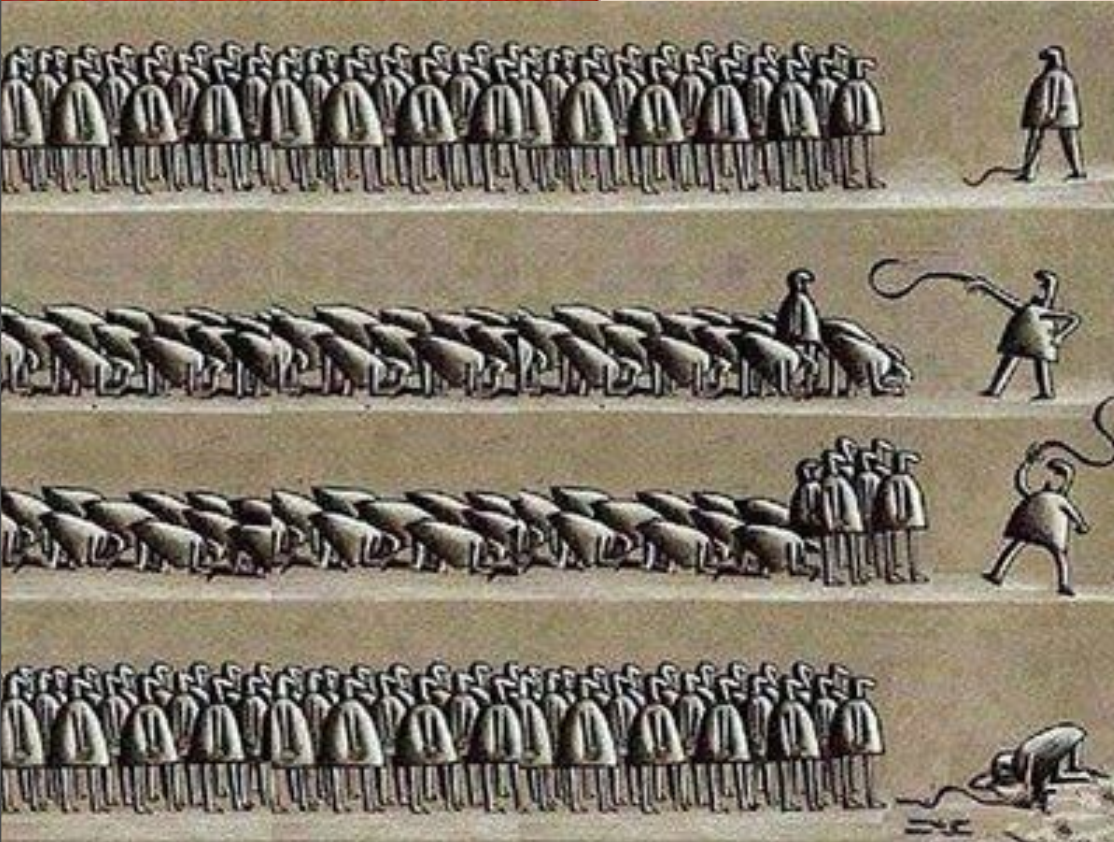


Why Nationalize?

- ◆ 1) This plant will be built with government subsidies & grants which comes from taxes/public money, so we believe it should be returned to the public after the private investors have recouped their investment plus some % of interest. This is a ethical choice and will serve to teach other corporations and the investment class that it is a privilege to do business in our societies, not a right. This will remind them about public service over endless profit.
- ◆ 2) Because public opinion has rightfully turned against unbridled capitalism that seeks profit at all costs with no regard for public health or the environment.
- ◆ 3) Because the energy sector should be totally decentralized or at the least out of a fews privileged and private hands. Eventually individual homes/families should supply all their own energy needs through solar, wind, geothermal/heat pumps, recycling their own waste water, growing a percent of their own food, as well as driving electric vehicles etc. True freedom, independence and energy democracy!



Why Nationalize?
Because the word is out!

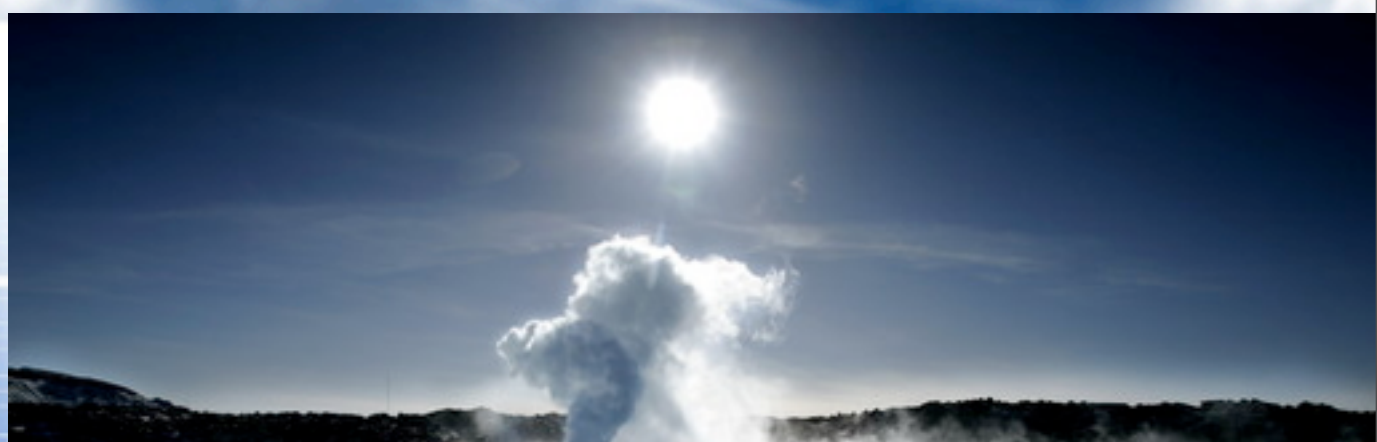
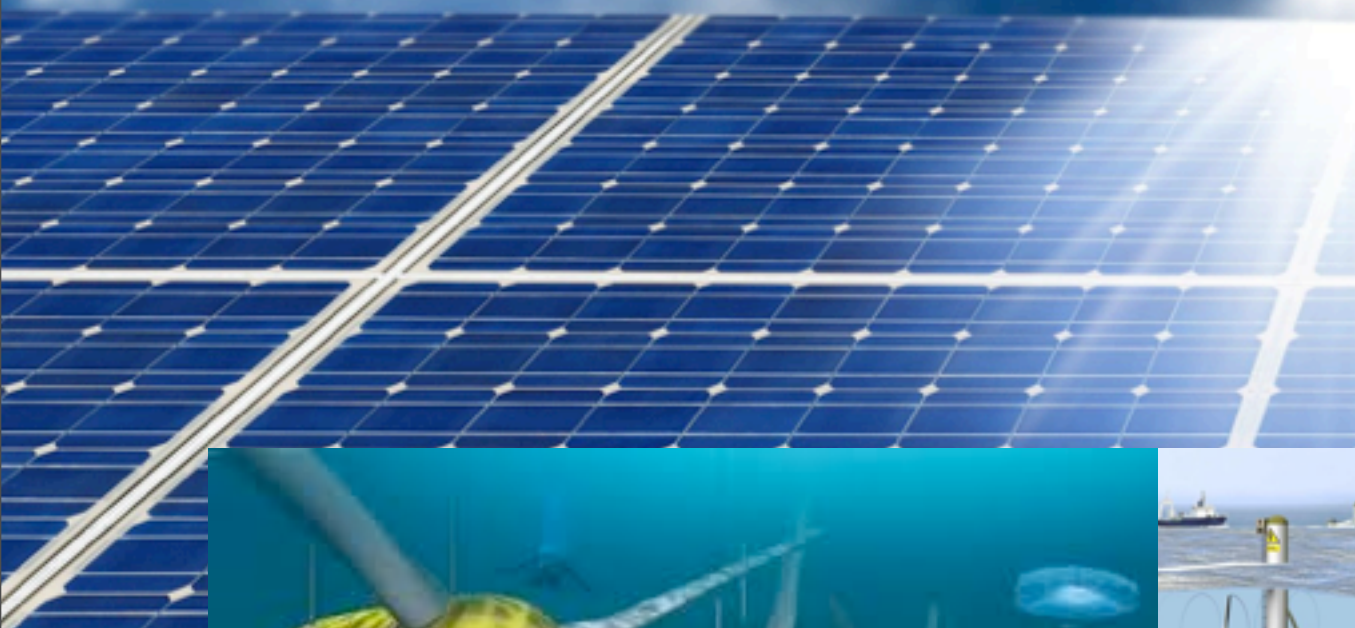


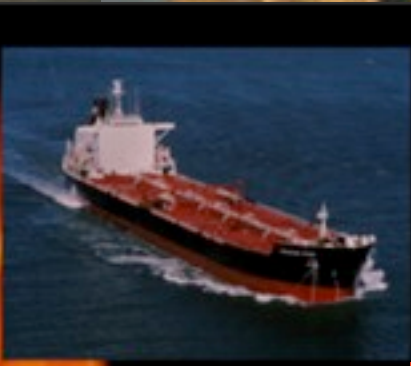


In With The NEW!

The Lean, Clean, Green, Renewable Energy Conservation Paradigm

Geothermal, Solar, Offshore Wind, Kinetic, Tidal, Energy Efficiency & Conservation! Plus, Hemp not Trees





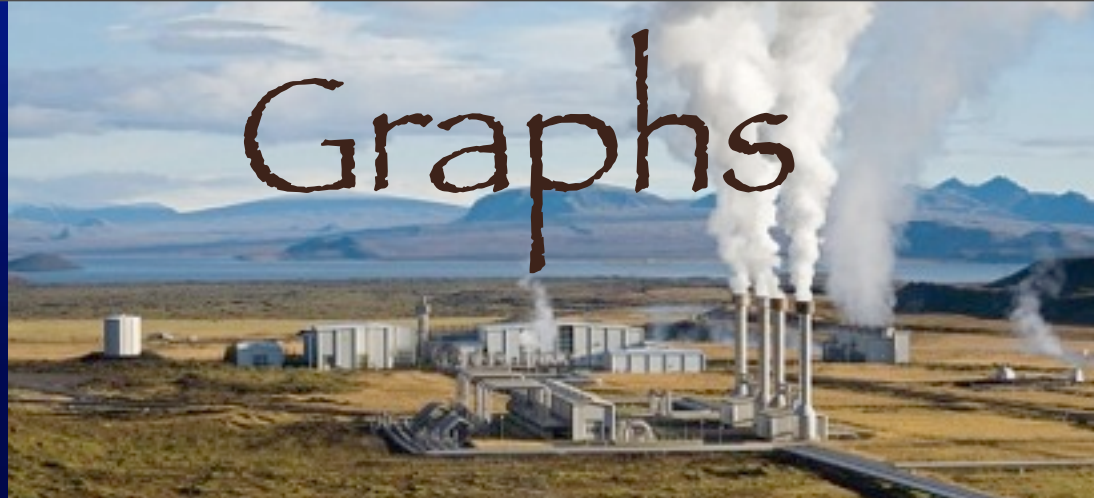
WAR FOR OIL
STOP
Fracking



"When we destroy something created by man.
WE CALL IT VANDALISM.
When we destroy something created by nature.
WE CALL IT PROGRESS.
— Ed Begley, Jr.



Graphs

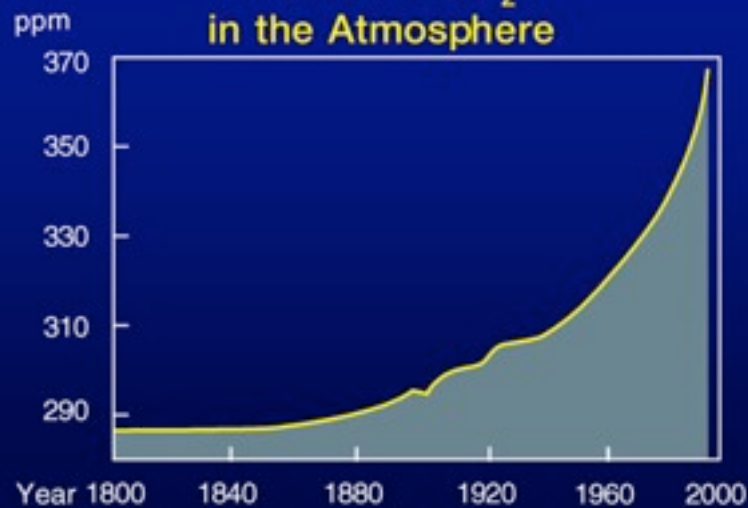


Countries Generating Electricity with Geothermal Resources

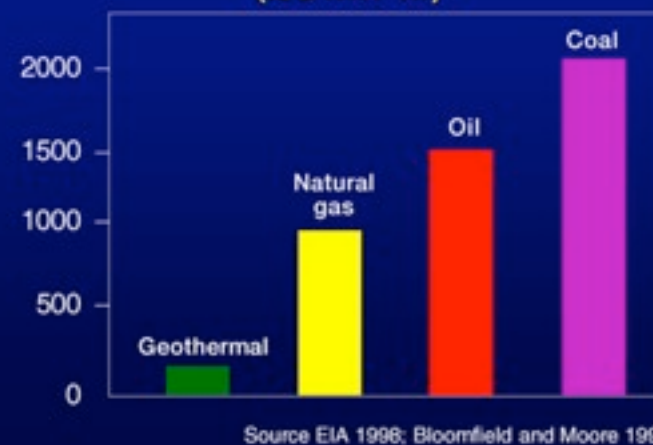
Australia	Indonesia	Portugal (Azores)
China	Italy	Russia (Kamchatka)
Costa Rica	Japan	Taiwan
El Salvador	Kenya	Thailand
Ethiopia	Mexico	Tibet
France (Guadeloupe)	New Zealand	Turkey
Guatemala	Nicaragua	United States
Iceland	Philippines	Zambia

...and geothermal power plants are planned in several other countries

Growth in CO₂ in the Atmosphere



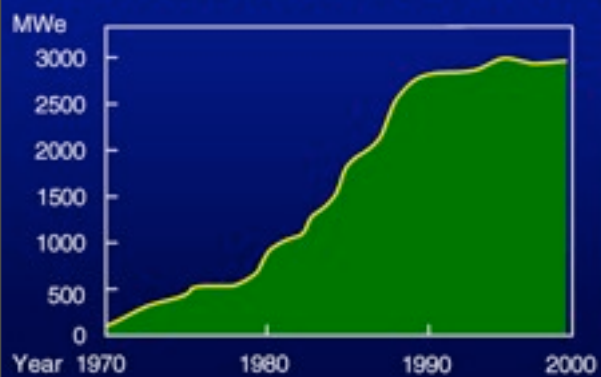
CO₂ Emissions Comparison (lbs/MW-hr)



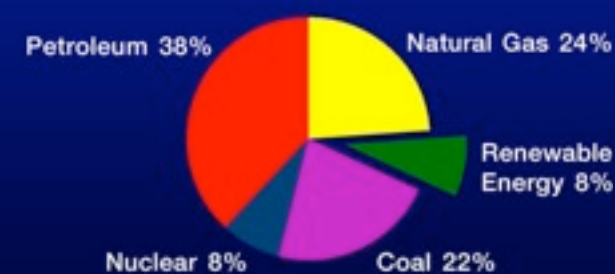
U.S. Geothermal Potential



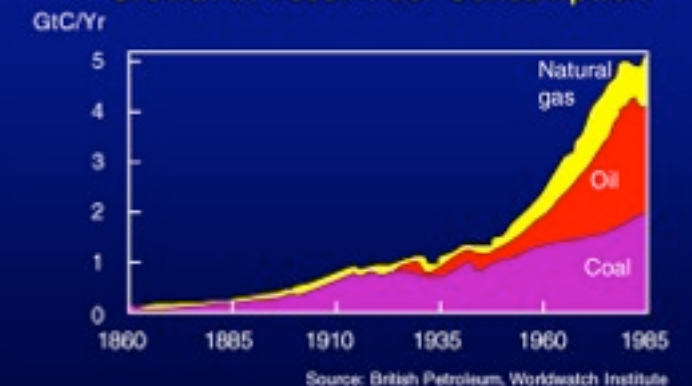
Growth in U.S. Geothermal Power



U.S. Energy Use 1996 (94 Quadrillion Btu)



Growth in Fossil Fuel Consumption



Benefits of Geothermal Power: Provides clean and safe energy using little land. Is renewable and sustainable. Generates continuous, reliable "baseload" power. Conserves fossil fuels and contributes to diversity in energy sources. Avoids importing fuels and benefits local economies. Offers modular, incremental development and village power to remote sites.

Before & After



Reykjavik Using Fossil Fuels



Reykjavik Using Geothermal

Thank You For Your Consideration

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