

GEOHERMAL ENERGY IN CALIFORNIA

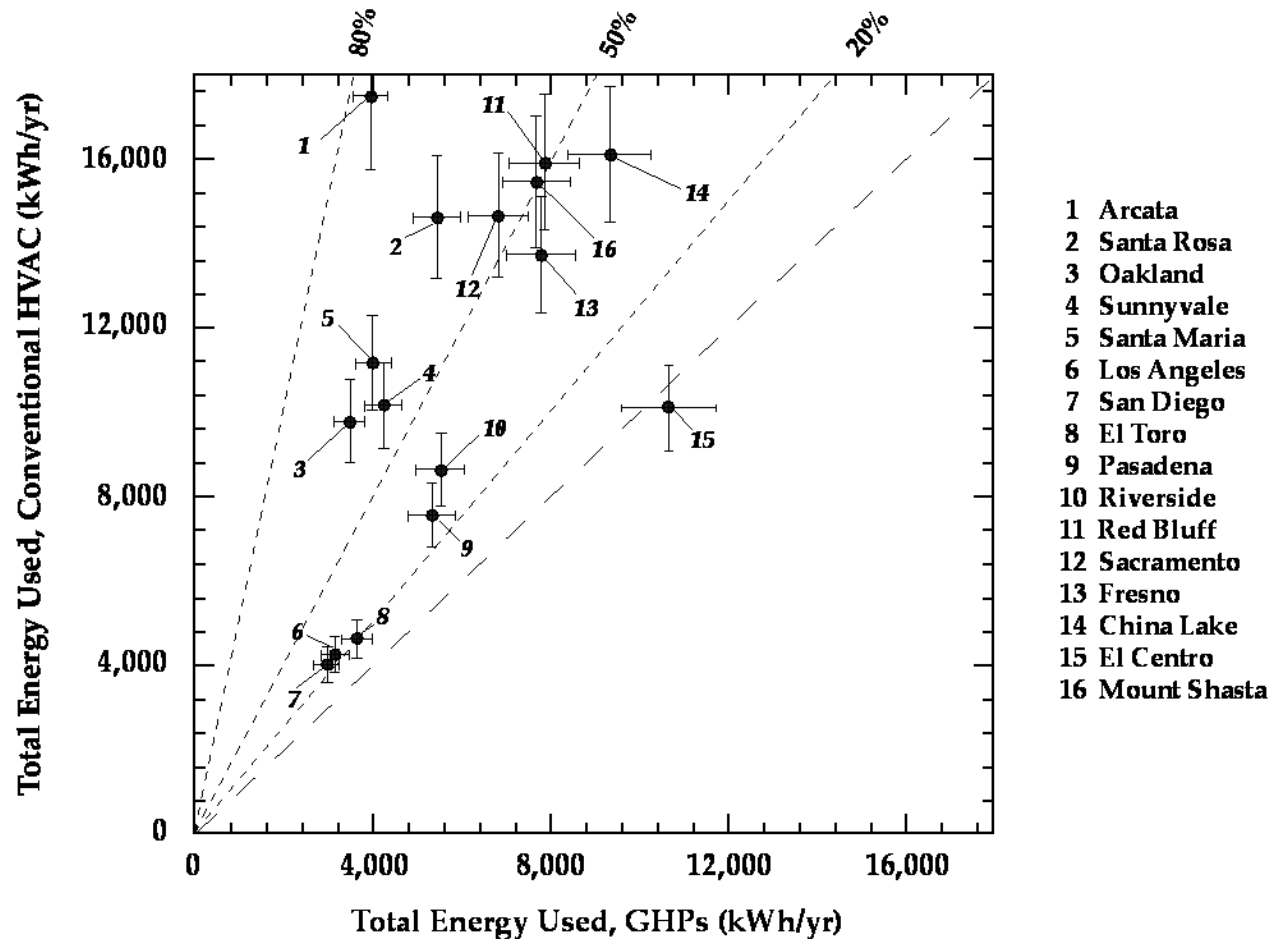
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Geothermal Heat Pumps for HVAC

An existing technology that:

1. Provides substantial reduction in energy use (44% statewide).
2. Needs incentives for market growth to offset upfront costs.



Innovations for Geothermal Power Production

Technological advances in geothermal power :

1. Hybrid geothermal/solar thermal and geothermal/PV.
 - Improved efficiency; seasonal responsiveness; firming
 - Maximize transmission line use, land use
2. Combined technologies for Distributed Generation.
 - Optimize the mix of RE for local use at lowest cost
3. Enhanced geothermal systems.
 - Major advances in improving flow with minimal impact
 - Potential for CA is between 32 GW and 67 GW (USGS)

How to advance commercialization:

1. Improve efficiency of permitting process
2. Make more flexible the PPA system
3. Develop incentives that encourage multiple or hybrid technologies