

GEOHERMAL ENERGY WORKSHOP

The California Geothermal Energy Collaborative

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California's Energy Landscape: The Times, They Are A Changin'

- Currently consume about 25,000 MWe to 30,000 MWe everyday.
- By 2020, 33% of that must come from RE sources
- **12,000 MWe must be from distributed generation (DG) by 2020**
- **GHG emissions must be reduced to 1990 levels**

How Geothermal Can Help

- This conference is about ways in which geothermal energy can make it possible to reach those goals.
 - *Emphasis on small scale applications*
 - DG
 - Direct use
 - Geothermal heat pumps
 - *Attention to details*
 - Environmental impacts
 - Permitting and regulatory challenges
- Utility Scale generation – May 26 in Mammoth Lakes

The Key Challenge: Transformation of Our Energy System

- The energy system we currently utilize for power, heating and cooling (generation, transmission, fuel sources, management, regulation) is the product of a punctuated evolutionary process affected by the Industrial Revolution, WWI, and the New Deal.
- 21st century attention to energy security and environmental challenges have lead to state-level RPS and emissions goals – national goals to follow?
- This implies that, at the state level we need new “local” energy sources used differently.