

AB 2339 (Williams & V. Manuel Pérez)

Renewable Thermal Energy Deployment Act

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SUMMARY

AB 2339 requires the California Energy Commission (CEC) to identify and address existing barriers to the deployment of geothermal heat pumps and geothermal ground loop technologies.

BACKGROUND

Geothermal heat pump (GHP) systems use the renewable energy of the earth and the sun, to provide heating and air conditioning (HVAC) and domestic hot water (DHW) more efficiently than other HVAC and DHW technologies without consuming fossil fuels on site.

According to data supplied by the U.S. Department of Energy (DOE) Office of Geothermal Technologies, nearly 40% of all U.S. emissions of carbon dioxide are the results of using energy to heat, cool and provide hot water for buildings.

A study by the U.S. EPA comparing the major heating, ventilating, and HVAC options for residential applications determined that GHPs was the most energy-efficient and environmentally benign option (EPA 1993).

GHPs reduce the energy consumed by residential heating and air conditioning systems by an average of 44% according to preliminary findings of the California Geothermal Energy Collaborative in an ongoing California Energy Commission (CEC) PIER Program study.

GHPs use the only renewable energy resource that is available at every building's point of use, on-demand, which cannot be depleted. The GHP industry contends that they are the most affordable renewable energy resource, especially considering the investments in electrical transmission that will be necessary to deliver many of the best wind, solar, and geothermal power generation resources to market.

Increased deployment of GHPs will reduce the need for fossil fuel powered peak generation, improve utility load factor, provide on-site consumer energy savings without the need for rebates and provide all of the benefits that drive the desire for renewable energy standards without putting pressure on electric rates or ratepayers energy bills.

According to a recent CEC report, California houses 12.1% of the country's population yet represents only 2.3% of national GHP activity.

Some work to identify barriers has already been done. For example, these technologies face some regulatory obstacles which include:

- Overlooked by regulatory agencies as highly effective energy conservation technologies;
- Not recognized in California as a renewable energy source despite recognition by federal agencies such as US Department of Energy and US General Services Agency;
- Disincentivized by current California utilities' tiered rate structure that penalizes use of technology in winter heating mode and encourages continued reliance of fossil fuels;
- Outdated and inconsistent well protection standards that add unnecessary cost and time delays to permitting of wells.

NEED FOR THE BILL

There should be a statewide effort to identify and address why such readily available, efficient and cost effective technologies are not widely used in California.

AB 2339 directs the CEC to evaluate, and recommend policies and implementation strategies to address the barriers impeding the use of geothermal technologies in California.

SUPPORT

- California Geothermal Heat Pump Coalition (Sponsor)
- Air Connection
- Bergerson-Caswell Inc.
- Bosch Thermotechnology Corp.
- California Groundwater Association
- Climate Control Heating & Cooling Company, Inc.
- ClimateMaster
- Colorado Geo Energy & Heat Pump Association
- Crystal Air
- Desert GeoExchange
- EarthHeat
- Energy Control Inc.
- Enertech Global, LLC
- Environmental Defense Center
- EPD Consultants
- Gaia Geothermal, LLC
- Geothermal Exchange Organization
- Geothermal National & International Initiative (GEO-NII)
- Geothermal Resource Group
- Gregg Drilling & Testing, Inc.
- Ground Source Energy NW
- Grundfos Pumps Corporation
- HeatSpring Learning Institute
- ISCO Industries
- John Geyer & Associates
- Martin Energetics

- Meline Engineering Corporation
- Modine Manufacturing Company
- Plumas-Sierra Rural Electric Cooperative
- Polar Bear Services, Inc.
- Roth Industries
- Sierra Club California
- USGBC California
- WaterFurnace
- One individual

OPPOSITION

- Department of Finance

FOR MORE INFORMATION

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