

## New study finds extensive undeveloped geothermal resource in Oregon, other Western states

by Bend Weekly News Sources

A new report released yesterday finds extensive undeveloped geothermal resources in fourteen Western states -- Oregon, Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Texas, Utah, Washington, and Wyoming. The new report, *An Assessment of Geothermal Resource Development Needs in the Western United States*, written by Dan Fleischmann for the Geothermal Energy Association (GEA) is the most in-depth study we've ever undertaken into the specific barriers and challenges to geothermal energy in the US.

A new GEA report finds extensive undeveloped geothermal resources in Oregon and 13 other western states.

Key conclusions of the 140 page report are:

• The West's geothermal resources appear to be more extensive than most people believe;

• The unidentified resource base is a significant near-term target of opportunity with up to 150,000MW;

• Federal and State policies need to be complementary and support a clear path for new project development;

• Federal programs and tax incentives will make a significant difference; and

• Federal efforts should be tailored to support the specific needs in each state.

The report documents efforts in each state to develop geothermal resources and defines challenges and opportunities for expanding geothermal energy production in the US. The cross-cutting recommendations made in the report are based upon the feedback received from over 150 different experts including consultants, engineers, project developers, utilities, regulators, clean energy advocates, researchers and geologists.

Oregon's geothermal resource base has been well-documented. Numerous geothermal direct use projects have been constructed and a small-scale geothermal power project ran in south-central Oregon in the mid-1980s. Conventional wisdom had been that Oregon's geothermal resources sufficient for power production were only available near the Cascade volcanoes and in remote regions in the eastern part of the state. The problems with these projects have been a lack of transmission access and regulatory hurdles (similar

to those experienced in California) associated with development on federal land, USFS land in particular.

While several large-scale geothermal power projects are currently under development in the state, their success is contingent upon coordinated efforts by federal and state land agencies to conduct environmental impact statements. In the near-term, however, it is clear that small power and direct use projects can be developed without much conflict.

Researchers in Oregon are currently experimenting with geothermal heat and power technologies for alternative fuel production and expansions are planned for several direct use facilities in the state. Most agree that these projects can succeed as long as they continue to receive federal and state support.

"If federal and state policies address the issues identified in this report, the potential for geothermal development is incredible," says Daniel Fleischmann, the author of the report. "While the U.S. geothermal industry already has close to 60 projects and over 2000 megawatts in the pipeline -- the development of which will double current capacity -- much, much more is possible."

According to the report, "If policymakers are serious about energy independence and reducing the emission of greenhouse gases and toxic pollutants, they must develop a comprehensive approach supporting geothermal development as one of several resources that can help meet these goals." According to the report, such an approach requires that policymakers:

- Â· Extend the production tax credit (PTC) so that geothermal facilities have the time they need to comply;
  
- Â· Provide incentives for geothermal distributed generation and direct use projects;
  
- Â· Fully fund and diversify the USDOE Geothermal Technologies Program;
  
- Â· Facilitate strong interagency coordination on transmission issues, environmental reviews, leasing, and permitting for geothermal development on federal lands; and
  
- Â· Update reconnaissance for both direct use and power purposes.

"The geothermal industry is now in a position to make significant progress, take advantage of ongoing momentum and invest in new technologies," the report states. "With high energy prices, growing populations requiring additional energy supplies, and new technological advancements and applications the industry is heading towards a tipping point where what was theoretical will become standard."

To download the report free of charge, please visit the GEA web site. An Executive Summary (12 pages) and Full Report (140 pages) are both available at <http://www.geo-energy.org/publications/reports.asp>.

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