

Geological Survey: "Enormous geothermal energy resources" Found in Canada

Geological Survey of Canada quotes "enormous geothermal energy resources" in Canada in new report on the "Geothermal Energy Resource Potential of Canada"

In June 2011, the Geological Survey of Canada and a team of leading scientists in the field of geothermal energy have released a report detailing the geothermal energy resource potential for geothermal energy in Canada.

The Canadian Geothermal Energy Association (CanGEA) congratulates the Geological Survey of Canada and the team that worked on the report. The report confirms that "geothermal energy, as a renewable energy source, not only provides a clean and renewable option for electricity generation around the clock, but also efficient and competitive heating options for Canadians all over Canada", said Alexander Richter, Director of the Canadian Geothermal Energy Association.

In its key findings, the report highlights "enormous geothermal energy resources that could supply the country with a renewable and clean source of power", and with the high capacity factor makes it a "particularly attractive as a renewable base load energy supply" for Canada.

Other key highlights of the report:

- Geothermal energy potential is broadly distributed across Canada, however, there is only sufficient data to characterize geothermal potential for 40% of Canada's landmass.
- Canada's in-place geothermal power exceeds one million times Canada's current electrical consumption, although only a fraction of this can likely be produced.
- Remote northern communities could be the first to benefit from geothermal development in Canada.
- Canada has significant potential for EGS development, as few as 100 projects could meet a significant fraction of Canada's base load energy needs.
- Research on decreasing installation costs could make further exploitation of abundant low-temperature geothermal resources feasible.
- Environmental impacts of geothermal development are relatively minor compared to other energy developments, however there are still key issues to be addressed.
- Geothermal installations have the potential to displace other more costly and environmentally damaging technologies.
- Geoscience research and mapping is required to reduce exploration risk as well as to support regulatory development in order to attract industry investment.

CanGEA sees this report as a confirmation of its own findings that the expected resource potential of Canada, electricity generated by geothermal energy could replace approximately 10 nuclear power plants and provide up to 10% of Canada's current total electricity generation. It could provide more than 9,000 permanent jobs and approximately 30,000 temporary jobs in manufacturing and construction.

The industry represents a \$25 billion market opportunity for companies willing to participate in the growth of the industry, despite current development being scarce and small scale.

Canadian developers, technology and service firms are active globally and represent a strong share of development activities in the US, but also in South America, Europe, Australasia and elsewhere.

In its recently released "Technology Roadmap for Geothermal Heat and Power" also released in June, the International Energy Agency (IEA) highlights as well the "importance of geothermal energy in the global efforts of reducing carbon emissions, using a sustainable and reliable source of energy that is available all-over of the world, and does not fluctuate with the weather or season", said Nobuo Tanaka, Executive Director at the IEA.

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