

**Empowering Canadian Geothermal: 5000 MW by 2015!**



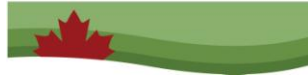
## CanGEA FACT SHEET

CanGEA is a national industry association that works on behalf of our members to promote publicly listed companies on the Canadian exchanges as well as to facilitate the responsible and sustainable growth of high temperature geothermal energy in Canada, which, we believe, can provide competitive, emissions free, renewable, base-load energy to Canadians and export markets.

CanGEA is not involved in the development of *low temperature* geothermal resources utilized for commercial and residential heating, ventilation and air conditioning systems – usually referred to as geo-exchange or geothermal heat pump systems. However, in recognition that geothermal energy has a spectrum of energy resources, CanGEA has a Memorandum of Understanding with the [Canadian GeoExchange Coalition](#) to encourage co-operative programs.

### What geothermal energy offers:

- Large amounts of power. At least 5,000 megawatts of high temperature hydrothermal potential are currently estimated to be available in BC, Alberta and the Yukon. Development of Engineered Geothermal Systems (EGS) and offshore geothermal projects would greatly increase this potential. Co-production of power from hot water in mining and petroleum applications has also increased the total resource size.
- Geothermal is a renewable, ‘green’ energy in great demand by Canadian and U.S. utilities responding to legislated requirements for Renewable Portfolio Standards that require a substantial percentage of a utility’s product must be ‘green.’
- Geothermal energy projects provide continuous ‘base load’ or ‘firm’ power which complements the hydropower storage and seasonal availability limitations of utility company systems in British Columbia and the Yukon Territory.
- Geothermal energy can bring new investment and employment opportunities. U.S. Geothermal Energy Association statistics (August 2008):
  - 1,000 megawatts = \$4 billion in capital investment
  - 1,000 megawatts = 6,000 person years of manufacturing and construction employment
  - 1,000 megawatts = 1,800 permanent jobs
- Skills are transferrable between geothermal power and other geo-science professions (drilling, geology, reservoir engineering etc.)
- The reliability of geothermal power delivery to the grid exceeds 90% on average, making it a suitable substitute for other base-load power producers such as coal and nuclear generation.



**Empowering Canadian Geothermal: 5000 MW by 2015!**

## **Membership**

CanGEA's membership roster on March 8, 2010 totaled 34 members representing geothermal development companies, academics, suppliers, and professional service providers

## **Activities**

CanGEA is actively engaged in the following activities:

- Co-operative development of geothermal-specific legislation and regulations with the Canadian federal government and provincial governments based on Global Geothermal Best Practices
- Recommending policies for exploration and research, funding, tax treatment, renewable portfolio standards and feed-in tariffs and land leases related to geothermal power.
- Direct participation with Natural Resources Canada and the Geological Survey of Canada with respect to the conduct of geothermal mapping programs to better delineate the occurrence of geothermal resources in Canada.
- Advocating for government financial incentives for geothermal project development through direct grants, production incentives and drilling insurance programs.
- Participation with Natural Resources Canada in determining the potential for Engineered Geothermal Systems (EGS). This involves injecting water into high temperature rock formations at depth and extracting the heated water to produce steam generation.
- Public education programs aimed at developing an understanding of the nature of geothermal resources and the positive economic, environmental and social impacts of geothermal energy.
- Advocating for Renewable Energy Transmission Corridors that connect this area with the vast markets for power in the U.S.

**Contact:** Alison Thompson, Executive Director  
[info@cangea.ca](mailto:info@cangea.ca)  
403-629-5922