

Information about the Climate Leadership Plan in British Columbia

British Columbia has begun public consultations for their [Climate Leadership Plan](#). Right now you have the opportunity to let the panel, and the BC government know that geothermal energy:

- Is the most affordable renewable energy with a per-kWh cost ½ of hydroelectric or wind¹.
- Is the best base load generator of electricity and heat with an average capacity factor of 92% compared to 25% for solar¹.
- Creates 11X more jobs than hydroelectricity and 17X more jobs than natural gas plants².
- Supplies heat to whole communities via district energy thereby offsetting thousands of tonnes of greenhouse gas emissions from furnaces³.
- Increases food security for remote BC communities by enabling otherwise impossible agriculture in cold weather conditions as Iceland has demonstrated^{4,5}.
- Allows for massive aquaponic fish farms that do not harm native fresh or saltwater fish species⁵.
- Is perfect for BC because of the province's world leading geothermal resources, which include remote northern communities⁶.
- Synergizes with BC's established subsurface talent and infrastructure⁷.
- Minimizes the amount of a beautiful province that will be used for industry or drowned for dams because geothermal has the smallest project footprint for equivalent generation requiring only 1.1% of the area needed for Solar photovoltaic, and 3.4% of the area used by a Wind Farm⁸.
- Can deploy gigawatts of energy in only few years⁹.

Table 1. Growth in Geothermal between 2010 and 2014

Country	MWe	GWh
Turkey	306	2637
Germany	20	136
Kenya	392	1418
Nicaragua	72	182
New Zealand	243	2945

The Canadian Geothermal Energy Association (CanGEA) is the collective voice of Canada's geothermal energy industry. As a non-profit industry association, we represent the interests of our member companies with the primary goal of unlocking the country's tremendous geothermal energy potential. Geothermal energy can provide competitively priced, renewable, round-the-clock energy to the Canadian and U.S. markets.

Canadian Geothermal Energy Association
P. O. Box 1462 St. M, Calgary, Alberta, T2P 2L6, Canada
Phone: (403) 801 6805, info@cangea.ca - www.cangea.ca



- Meets all of the Climate Change Plans requirements: Clean Tech and Clean Energy, Efficiency Improvements, Competitive Industries, Healthy and Resilient Communities, Strong Ecosystems and Leadership.

Please take 10 minutes to let the Climate Leadership Panel know why geothermal is important to you, and how it can help British Columbia prosper without damaging the environment via the [online form](#) or at climateleadershipplan@gov.bc.ca. Feel free to use any information in this email as well as anything else you think the panel should know about geothermal energy. Also, please get your friends and coworkers involved as well. Pass this email onto anyone you think might be interested because the more people who message the panel about the good geothermal can do for BC the better. Thank you for your time.

Sincerely,

Alex Kent
Policy Manager Intern, CanGEO

The Canadian Geothermal Energy Association (CanGEO) is the collective voice of Canada's geothermal energy industry. As a non-profit industry association, we represent the interests of our member companies with the primary goal of unlocking the country's tremendous geothermal energy potential. Geothermal energy can provide competitively priced, renewable, round-the-clock energy to the Canadian and U.S. markets.

Canadian Geothermal Energy Association
P. O. Box 1462 St. M, Calgary, Alberta, T2P 2L6, Canada
Phone: (403) 801 6805, info@cangea.ca - www.cangea.ca



Citations

1. United States Department of Energy. (2015) Levelized Cost and Levelized Avoided Cost of New Generation Resources in the Annual Energy Outlook 2015. p. 6.
2. Canadian Geothermal Energy Association. (2014) Geothermal Energy: The Renewable and Cost Effective Alternative to Site C. p.6-7, 26
3. Global District Energy Awards. (2015) Deep Geothermal Energy | Kirchweidach, Germany. Retrieved from <http://www.districtenergyaward.org/deep-geothermal-energy-kirchweidach/> on January 28, 2016.
4. National Energy Association of Iceland. (N.D.) Greenhouses. Retrieved from <http://www.nea.is/geothermal/direct-utilization/greenhouses/> on January 28, 2016.
5. Ragnarsson, Á. (2005). Geothermal Development in Iceland 2010-2014. Fish farming, 4, 9.
6. CanGEA. (2014). CANADIAN NATIONAL GEOTHERMAL DATABASE AND PROVINCIAL RESOURCE ESTIMATE MAPS. Retrieved from <http://www.cangea.ca/bc-geothermal-resource-estimate-maps.html> on January 28, 2016.
7. Harvey, C. (2011) Oil and gas wells find new life with geothermal. Retrieved from <https://www.newscientist.com/article/mg21228394-100-oil-and-gas-wells-find-new-life-with-geothermal/> on January 28, 2016.
8. Islandsbanki Geothermal Energy Team. (2011) United States Geothermal Energy Market Report. p.9
9. Bertani, R. (2015) Geothermal Power Generation in the World 2010-2014 Update Report. p 12.

The Canadian Geothermal Energy Association (CanGEA) is the collective voice of Canada's geothermal energy industry. As a non-profit industry association, we represent the interests of our member companies with the primary goal of unlocking the country's tremendous geothermal energy potential. Geothermal energy can provide competitively priced, renewable, round-the-clock energy to the Canadian and U.S. markets.