

Geothermal potential already there, now for the support . . .

Re: "Oilsands energy misplaced; dig deeper," by D. Ryane, Letters, Sept. 19.

D. Ryane raises the excellent point that geothermal energy has the potential to provide Canada with a significant amount of energy with minimal environmental impact.

The subsurface temperature data he mentions is archived by the provincial government, and was care-

fully analyzed in the 1980s at the University of Alberta by Prof. Walter Jones and his research group.

Their studies showed that Western Canada has significant geothermal potential.

In British Columbia, a number of locations have high enough temperatures close to the surface, and enough water is present to extract heat and generate electricity directly.

In Alberta temperatures are lower and heat extraction may require artificial fracturing of the rocks and the injection of water, probably at depths of three to five kilometres in an engineered geothermal system.

In addition to generating electricity, this could provide a significant proportion of the heat required by the oil and gas industry.

As part of the recently funded

Helmholtz Alberta Initiative, the University of Alberta is investigating if geothermal energy could be used to provide heat for oilsands extraction and processing.

This heat is currently obtained by burning huge quantities of valuable natural gas, with significant carbon emissions.

One of the major factors holding back the development of geothermal

energy is the economics.

Wind power became established through major government subsidies when large, high-risk investments were needed.

Geothermal energy could follow the same path with similar support.

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