

Gabriola: How green is windpower anyway?

Dear Editor,

BC Hydro estimates that the annual amount of energy provided by a dam at Site C on the Peace River would be 4600 GWh. A fairly large, but small scale, wind turbine has a rated power output of, say, 50 kW. Given that the wind, in other than a very windy area, would only provide this power for 25% of the time, we can calculate that the annual amount of energy harvested from the wind by such a turbine would be about 110 MWh. To match the output of a Site C dam, we would therefore require forty-two thousand such wind generators. Assuming a hectare per turbine (a guess), these would occupy an area about eight times larger than the area of the lake associated with a dam at Site C (5340 ha).

The notion that we can extract huge amounts of energy from the environment with no impact on the environment is really a myth, no matter whether the generation means is wind, tidal, solar, or hydroelectric. Most "green" methods call for the use of batteries which in turn calls for mining of what in most cases are toxic metals, and this of course causes pollution of the air, soil, and water. The only real way of lessening the environmental impact of energy extraction is to use less of it.

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