NEWS RELEASE

Ottawa's plan to decarbonize Canada's electricity by 2035 not feasible and would require equivalent of 23 Site C hydroelectric dams

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For Immediate Release

VANCOUVER—The federal government's plan to make all electricity generation in Canada carbon-free by 2035 is impractical and highly unlikely, given physical, infrastructure, financial and regulatory realities, finds a new study published today by the Fraser Institute, an independent, non-partisan Canadian public policy think-tank.

"Canada's federal government has set an ambitious, and, frankly, unrealistic target of achieving complete carbon-free electricity in ten years," said Jock Finlayson, Fraser Institute senior fellow and co-author of ***Implications of Decarbonizing Canada's Electricity Grid.***

The study finds that in 2023, nearly 81 per cent of Canada's electricity came from carbon-free energy sources, including hydro, nuclear, wind and solar. But to replace the remaining 19 per cent, which does use fossil fuels, in the next 10 years would require constructing the equivalent of:

- Approximately 23 large hydroelectric dams, similar in size to BC's Site C, or 24 comparable to Newfoundland and Labrador's Muskrat Falls, or;
- More than four nuclear power plants similar in size to Ontario's Darlington power station, or 2.3 large scale nuclear power plants equivalent to Ontario's Bruce Power, or;
- Around 11,000 large wind turbines, which would not only require substantial investments in back-up power systems (since wind is intermittent) but would also require clearing 7,302 square kilometers of land—larger than the size of Prince Edward Island—excluding the additional land required for transmission infrastructure.

Currently, the process of planning and constructing major electricity generation facilities in Canada is complicated and time-consuming, often marked by delays, regulatory challenges, and significant cost overruns.

For example, BC's Site C project took approximately 43 years from the initial planning studies in 1971 to receive environmental certification in 2014, with completion expected in 2025 at a cost of $16 billion.

What's more, the significant energy infrastructure listed above would only meet Canada's current electricity needs. As Canada's population grows, the demand for electricity will increase significantly.

"It is not at all realistic that this scale of energy infrastructure can be planned, approved, financed and built in just 10 years, which is what would be required merely to decarbonize Canada's existing electricity needs," said Elmira Aliakbari, director natural resource studies at the Fraser Institute and study co-author.

"This doesn't even account for the additional infrastructure needed to meet future electricity demand. Decarbonizing Canada's electricity generation by 2035 is another case where the government has set completely unrealistic timelines without any meaningful plan to achieve it."

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