The Cost of Fossil Fuels: Is it Time for Canada to Transition to Renewables?

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Canada is a large producer of fossil fuels, and it's also an industry that is heavily subsidized by the government. Canada put 14.5 times more financing towards fossil fuels than renewable energies (Cameron & Boisseau-Bouvier, 2022). As the world gradually progresses towards renewable energies, a crucial question arises: Are renewables more cost-effective, and if they are, should Canada contemplate transitioning away from fossil fuels? In 2019, oil and gas contributed $139.2 billion to the Canadian GDP, which made up a total of 6.4% of Canada's economy (Kaplan, 2021). Some of the factors to consider here are costs, the impact on the economy, and where is Canada compared to the rest of the world with fossil fuels.

Despite previous misconceptions in the past, renewable energies have become a lot cheaper and continue to become more affordable each year. Doyne Farmer, a scientist who works at the University of Oxford, does research on the costs of renewable energies based on computer models. They predicted in 2010 that solar energy would become cheaper than coal-fired electricity in 2020; this was considered bizarre at the time, but the predictions did come true (Allen, 2023). The average cost (in USD) from Lazard, an Investment bank based in New York, found that wind power is $20/MWh, solar power costs $37/MWh, and hydropower is $85/MWh; coal on the other hand, costs $102/MWh (Cost of Renewable Energy, n.d.). From a cost standpoint, green renewable energies have become less costly and continue to become more affordable, compared to fossil fuels which cost the same as they had 100 years ago as it is an old and established technology (Allen, 2023). This would mean that a switch towards renewable energies may be less pricey for consumers, and it would also be better for the environment. The key to making renewable energy more

sustainable, however, lies in energy storage, and Canada is in the early stages of its development. Nevertheless, many renewable energy companies are taking measures to incorporate storage into their development, and as costs of storage continue to drop, more projects are bound to take place (Hornung, 2021).

Fossil fuels have long been the backbone of many economies, but their instability has led to significant economic fluctuations. Energy Monitor has highlighted the increasing instability of fossil fuel markets, citing geopolitical factors and the energy transition as significant contributors (Ferris, 2015). However, transitioning to renewable energies presents numerous economic benefits, including job creation, a sustainable economy, and a cleaner environment. The International Renewable Energy Agency (IRENA) reported that the wind and solar industries employed five million people in 2019, up from two million in 2012 (Hornung, 2021). Canada, with its abundant natural resources, has a unique opportunity to tap into renewable energies to create a stable economy. The prices of renewable energies have consistently decreased, making them an increasingly accessible option. Wind, solar, and hydroelectric power rely on readily available resources, unlike coal and natural gas, which are subject to unpredictable price fluctuations that can significantly impact the economy. By embracing renewable energies, Canada can create a more sustainable, prosperous, and resilient economy for the future.

Around the world, some of the top countries leading the way in terms of renewable energies are Iceland (86.87% renewable energy), Norway (71.56% Renewable energy), and Sweden (50.92% Renewable energy) (WiseVoter, n.d.). Canada currently ranks 13th with 29.89% of all energy being generated by renewable energies (WiseVoter, n.d.). This is not bad compared to the rest of the world but there is still room for improvement. However, considering the vast amount of natural resources in Canada, and the prices of renewable energies being much lower than in the past, Canada provides a staggering $4.8 billion in subsidies to fossil fuels. Considering the amount that is being spent on subsidies that money could be spent educating 360,000 students, providing training for 480,000 workers, and paying for the healthcare of 880,000 people (Corkal & Gass, 2020). Canada had made a commitment to end fossil fuel subsidies by 2023, and starting this year Canada has taken a stricter policy towards international fossil fuel projects however not much was mentioned about domestic subsidies (Smith, 2022). The Canadian Government seems to have taken some steps, as before this Canada was one of the biggest international fuel financers providing about $11 billion (CAD) and it will be interesting to see what Canada does in the future (Corkal & Gass, 2020).

All in all, it is economically viable and crucial for Canada to take steps towards a greener economy. Fossil fuels are clearly on the decline and with the costs associated with them they are just not economically viable nor good for the environment. Renewable energies are quite capable of providing for our energy needs, creating more jobs as well as creating a stable economy. Canada is making progress but compared to the rest of the world there is more work that needs to be done, and its 2023 commitment to end international fossil fuel subsidies is a step in the right direction. With the vast amount of natural resources that Canada possesses, it seems like a no-brainer to move towards renewable energies, paving the way for a cost-friendly, and environmentally friendly future.

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