
International Affairs

It's time for a Green Nuclear Deal

21 January 2024

James Adair

The climate crisis does not need an extensive introduction. Reports by the Intergovernmental Panel on Climate Change (IPCC) make clear that no new oil or gas project can be approved if we are to avoid climate catastrophe (Harvey, 2021). The world is waking up to this reality, but the perceived insurmountability of the crisis paralyzes many. A policy program was needed to break this paralysis and to give clear steps and policies. The Green New Deal (GND) is that program. The GND is an all-encompassing set of progressive policy goals and objectives for transitioning away from fossil fuels while prioritizing workers and marginalized groups, public ownership, and a rapid societal transformation akin to the New Deal of World War II (Klein, 2020, pg 222). The GND has become a rallying cry for politicians, activists, and others.

It is unfortunate, then, that the most well-known model of the GND and its offspring, such as the Ontario New Democratic Party's Green New Democratic Deal (GNDD), refuse to concede the power of nuclear energy to

fight climate change. Despite being maligned and attacked by some misguided activists, nuclear energy best represents the environmentalist and worker-oriented ideals of the GND. The reality is that nuclear energy presents the most tangible and equitable way for Canada and much of the world to swiftly transition off fossil fuels, reduce emissions, and respect workers and communities, whether some activists like it or not. If we want to fight climate change, we need to embrace nuclear energy and stop the harmful decommissioning of nuclear power plants in the name of 'environmentalism' (Stafford, 2022).

Nuclear energy is environmentalist energy

If you live in Ontario, 59% of your energy comes from nuclear power (*Provincial and Territorial Energy Profiles – Ontario*, 2023). Nuclear energy is one of the reasons behind Ontario's nearly fifty-megatonne reduction in carbon emissions and the majority of Canada's progress towards the Paris Accords

(Crawley, 2023). Mixed with hydro energy, nuclear has provided Ontario with an immensely high baseline level of emission-free energy, allowing it to turn off gas and coal plants with few consequences to service or risk of black and brownouts (*Provincial and Territorial Energy Profiles – Ontario, 2023*). Allowing this major shift in energy generation has been a boon to Ontario's goal of cutting emissions, leading to greater reductions than any other province. But emissions, while tremendously important, are not the end-all and be-all for environmentalism.

Concerns about nuclear waste and the other adverse effects of nuclear energy are valid but wildly overblown, especially when compared with the known negative effects of renewable energy. In Ontario, over 98% of all nuclear waste is low-level, meaning clothing, tools, and other trash. This is stored for a short period and then disposed of, as you would any other trash (Canadian Nuclear Society, 2022). The remaining medium and high-level waste is stored permanently (Canadian Nuclear Society, 2022). While storage is tricky, the science exists to safely store spent fuel for thousands of years without ill effects on people or the environment (Canadian Nuclear Society, 2022). The mining process for uranium, used in the fission process of most nuclear reactors, is also a concern, but Canada has some of the

largest Uranium reserves in the world, allowing careful and measured mining to mitigate the effects on workers, the environment, and communities (*Uranium in Canada, 2022*). When compared with the conditions of precious metal mining operations necessary for renewable energy, and their effect on the environment, uranium mining in Canada begins to seem like the socially responsible choice, rather than offsetting our harm to developing nations (Sonter et al., 2020). Nuclear energy respects the dignity of workers throughout the process, something that cannot currently be said for other forms of energy.

Nuclear energy is worker energy

Nuclear energy creates long-term, stable employment. Nuclear is Canada's highest unionized energy sector, with a coverage rate of 84.8% (Morissette & Qiu, 2020, pg 16). Comparatively, with a union coverage rate of 13.3% (lower even than the national average), workers in the renewable energy sector are described as “[having] lower wages, lower pension coverage and ... lower unionization rates” (Morissette & Qiu, 2020, pg 7, 16). In contrast to other forms of energy production emerging now, nuclear offers unionized, long-term, meaningful employment compared to the contracted, unionized work in the

renewable energy field. Nuclear infrastructure is also publicly owned, and the companies who lease it are owned majority by unions and public pension plans in a revolutionary governance model where the worker's representative bodies themselves are responsible for governance and share in the profits (*Bruce Power: Our partners*, 2023; *Bruce Power: Delivering transparency and Trust*, 2023). Nuclear energy is worker-oriented and publicly owned; shutting it down and ignoring its role in fighting emissions has demonstrable negative effects.

Conclusion

Nuclear power plants are being decommissioned worldwide in the name of environmentalism (Stafford, 2022). In New York, when Indian Point station closed, all of New York City's emission-free nuclear energy was replaced with gas plants, and close to a thousand jobs were lost (Stafford, 2022). In Germany, nuclear energy was replaced with coal burning (Strafford, 2022). This story has been repeated globally (Stafford, 2022). When nuclear is shut down, emissions rise, and jobs are lost (Stafford, 2022). While the Green New Deal represents an incredible program for success, its exclusion of, or in some cases outright opposition, to nuclear energy is misguided. Matching the GND's principles and the programs with nuclear energy would allow for a truly

transformative political program. It is time for a Green Nuclear Deal.

References

Bruce Power. (2023, September 11), *Delivering transparency and Trust*. <https://www.brucepower.com/who-we-are/delivering-transparency-and-trust/>

Bruce Power (2022), *Meet our people*. <https://www.brucepower.com/who-we-are/meet-our-people/>

Bruce Power. (2023, February 28), *Our partners*. <https://www.brucepower.com/about-us/partners/>

(2023, August 24). *Provincial and Territorial Energy Profiles – Ontario*.

Canada Energy Regulator / Régie de l'énergie du Canada. <https://www.cer-rec.gc.ca/en/data-analysis/energy-markets/provincial-territorial-energy-profiles/provincial-territorial-energy-profiles-ontario.html#s1>

Canadian Nuclear Society. (2022, January 1). *What are the types of nuclear waste and how are they managed?*. Canadian nuclear society. <https://www.cns-snc.ca/learn-nuclear/basics-of-nuclear/what-are-the-types-of-nuclear-waste-and-how-are-they-managed/>

Crawley, M. (2023, April 17). *Ontario's carbon emissions rose only slightly in 2021 and that could be thanks to going virtual.* CBC news. <https://www.cbc.ca/news/canada/toronto/ontario-carbon-emissions-ghg-inventory-1.6809694>

Government of Canada. (2022, March 8). *Uranium in Canada.* Natural Resources Canada. <https://natural-resources.canada.ca/energy/energy-sources-distribution/uranium-nuclear-energy/uranium-canada/7693>

Harvey, F. (2021, May 18). *No new oil, gas or coal development if world is to reach net zero by 2050, says World Energy Body.* The Guardian. <https://www.theguardian.com/environment/2021/may/18/no-new-investment-in-fossil-fuels-demands-top-energy-economist>

Klein, S. (2020). *A good war mobilizing Canada for the climate emergency.* ECW Press. Social Analysis and Modelling Division,

Morissette, R., & Qiu, H., *Jobs in Electric Power Generation, Transmission, and Distribution And in Related Industries, 2012 to 2017 1–23* (2020). Ottawa, Ontario; Social Analysis and Modelling Division.

Sonter, L. J., Dade, M. C., Watson, J.

E., & Valenta, R. K. (2020). *Renewable energy production will exacerbate mining threats to biodiversity.* *Nature Communications*, 11(1). <https://doi.org/10.1038/s41467-020-17928-5>

Stafford, F. (2022, June 6). *How liberals created, then destroyed, publicly owned nuclear power.* Jacobin. <https://jacobin.com/2022/06/how-liberals-created-then-destroyed-publicly-owned-nuclear-power>