

Canadian energy jobs in a net-zero 2050

Clean Energy Canada and Navius Research modelled what will happen to jobs in the clean energy and fossil fuel sectors as the world shifts to net zero.

May 29, 2023



A Pivotal Moment



Missing the Bigger Picture

Canada's clean energy sector is growing faster than the rest of Canada's economy. Why aren't we talking about it?

CLEAN ENERGY CANADA

May 2019



The Fast Lane

With smart policy, Canada's clean energy sector is poised for rapid growth as fossil fuels slow down.

CLEAN ENERGY CANADA

October 2019



The New Reality

The future of Canadian energy looks bright, with clean energy job growth projected to outpace losses in fossil fuels amid a shifting global landscape.

CLEAN ENERGY CANADA

June 2021



A Pivotal Moment

A net-zero 2050 can deliver 700,000 more Canadian energy jobs than exist today, but rolling back climate action would severely threaten this clean energy future

March 2023

CLEAN ENERGY CANADA

Which scenarios did we model?

- 1 Net zero (main scenario):** Canada reaches net zero in 2050. Delivers emissions reductions in the most cost-efficient way.
- 2 Current policy:** Assumes only current and recently announced policies are fully implemented (including the ERP).
- 3 Rollback:** Assumes a future government rolls back the federal carbon price (for both consumers and industry), the ERP, and the federal Clean Fuel Regulations.

All scenarios assume the *world* achieves net zero in 2050; uses the IEA's net-zero oil price of below US\$30 a barrel by mid-century, which the Canada Energy Regulator is also using in their upcoming net zero Energy Futures report.

Key takeaways

- 1 In a net-zero 2050, there are set to be 700,000 more energy jobs in Canada than there are today.
- 2 Rolling back climate measures will not save oil jobs, but going backwards does result in fewer energy jobs overall.
- 3 Oil job losses are mainly due to the international shift to clean energy and a corresponding decline in oil prices.
- 4 Pursuing and planning for net zero helps all provinces succeed, especially Alberta.

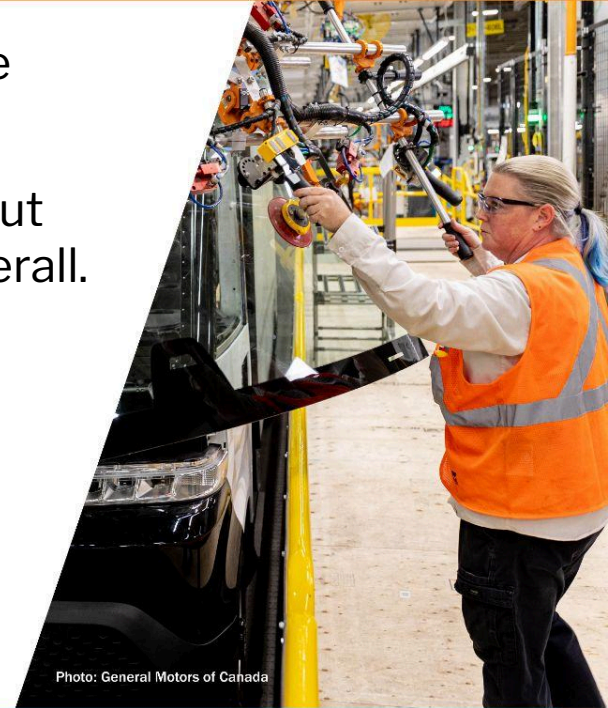
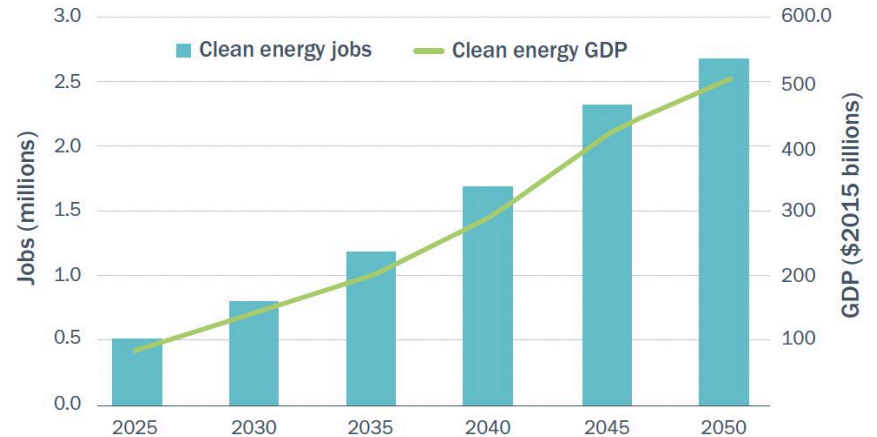
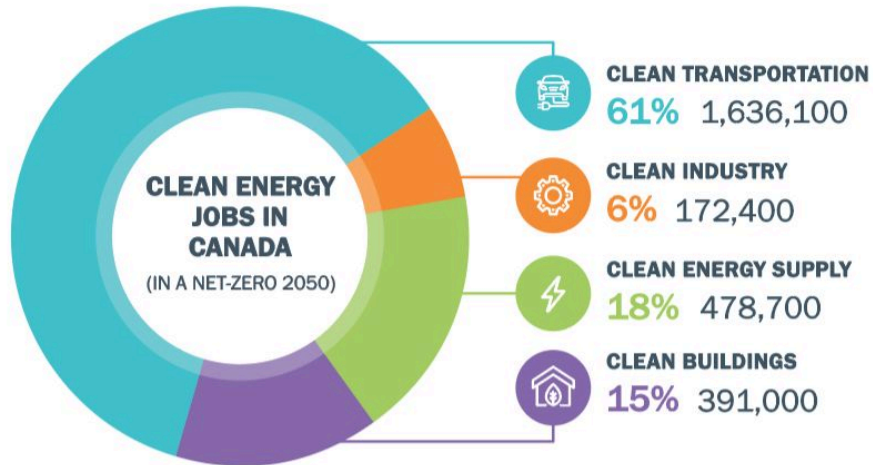


Photo: General Motors of Canada

IN A NET-ZERO 2050



IN A NET-ZERO 2050



92% of global GDP is now covered by net-zero commitments

Policy decisions today have implications for Canada's energy sector in the future

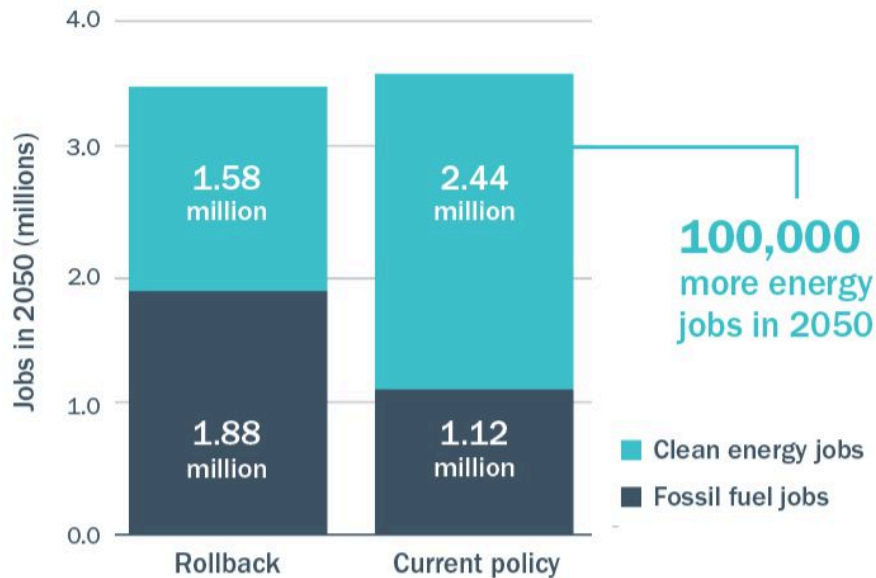


Photo: General Fusion

Recommendations

- 1 Implement policy to **rapidly drive forward the clean energy transition** of Canada's economy, retaining and expanding Canada's competitive advantages.
- 2 **Prepare Canada's workforce** for the high-skilled opportunities of a promising new energy economy.
- 3 Identify and support the growth of **key emerging sectors**: areas where Canada can leverage its unique resources and competitive advantages.
- 4 Promote a **fair, inclusive and sustainable** future for all workers as part of the energy transition.

Questions?

Each Monday we publish the Clean Energy Review, a free weekly digest of must-read climate and clean energy stories from across Canada and around the world.

Contact:

Stefan Pauer

stefan@cleanenergycanada.org

SUBSCRIBE | cleanenergycanada.org/review



FOLLOW | [@cleanenergycan](https://twitter.com/cleanenergycan)

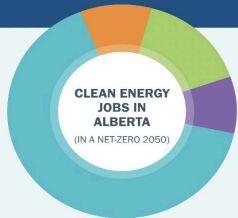
VISIT | cleanenergycanada.org

Appendix: Alberta, Ontario, and Quebec

Alberta

IN A NET-ZERO 2050

Alberta's clean energy sector is set to grow **10% per year**, from 41,500 jobs in 2025 to **460,400** in 2050—the fastest growth rate of any province in Canada.



● CLEAN TRANSPORTATION	● CLEAN INDUSTRY
66% 302,500	10% 45,400
● CLEAN ENERGY SUPPLY	● CLEAN BUILDINGS
16% 71,900	9% 40,500

Ontario

IN A NET-ZERO 2050

There are set to be **903,200 jobs** in Ontario's clean energy sector, up from 171,600 in 2025—a growth of **7% per year**.



● CLEAN TRANSPORTATION	● CLEAN INDUSTRY
63% 570,900	6% 54,000
● CLEAN ENERGY SUPPLY	● CLEAN BUILDINGS
15% 133,300	16% 144,900

Quebec

IN A NET-ZERO 2050

There are set to be **507,000 jobs** in Quebec's clean energy sector, up from 140,400 in 2025—a growth of **5% per year**.



● CLEAN TRANSPORTATION	● CLEAN INDUSTRY
57% 288,100	6% 31,800
● CLEAN ENERGY SUPPLY	● CLEAN BUILDINGS
22% 109,300	15% 77,800

Photo: Nano One Materials



Appendix: The IEA oil price

