CLEAN ELECTRICITY

Electricity generation currently accounts for 9% of Canada's greenhouse gas (GHG) emissions. Across Canada, electricity generation has been getting much cleaner, in large part through the retirement of coal-fired power plants to comply with federal and provincial regulations. From 2005 to 2018, GHG emissions from the electricity sector were reduced by approximately 46%. In 2018, 82% of Canada's electricity came from non-emitting sources, including hydroelectricity (60%), nuclear (15%), and non-hydro renewables such as wind and solar (7%). Looking forward, Canada proposes to achieve a net-zero emissions grid before 2050, and to expand clean electricity supply to ensure electricity generation increasingly transitions towards non-emitting sources. Under a scenario with significant electrification in all economic sectors (i.e. doubling of today's percentage of final energy use from electricity), by 2050 Canada will need to produce up to two to three times as much non-emitting power as it does right now. Moving forward, emphasis will be placed on ensuring that Canada is prepared for the accelerated electrification of key sectors and can meet this projected increased demand with new sources of non-emitting electricity.

KEY MEASURES TO DATE

- Put an escalating price on carbon pollution across Canada, including on fossil fuel-fired electricity generation.
- Regulated the accelerated phase-out of conventional coal-fired power plants by 2030. Developed equivalency agreements with impacted provinces to reflect individual circumstances but also assuring the equivalent environmental outcome is maintained.
- Established new regulatory performance standards for new natural gas units and converted coal-to-gas units to ensure efficient technology is used.
- Established the Task Force on Just Transition for Canadian Coal Power Workers and Communities to engage communities that rely on coal production and combustion as an important source of employment and recommend a path forward.
- Committed $185 million to support impacted communities, including $35 million for the Canada Coal Transition Initiative to support skills development and economic diversification, and $150 million for a dedicated infrastructure fund beginning in 2020-21.

- Investing over $485 million in clean energy and clean technologies in the electricity sector (e.g., clean energy sources, grid modernization, and RD&D) through programs including Emerging Renewable Power, Smart Grid, Clean Energy for Rural and Remote Communities and investment in Small Modular Reactor (SMR) technology through the Strategic Innovation Fund.
- Working with provinces to build new strategic electricity interties via initiatives such as the Regional Electricity Cooperation and Strategic Infrastructure (RECSI) Initiative and the Clean Power Roadmap for Atlantic Canada, accompanied by the $2.5 billion investment under the Canada Infrastructure Bank's Growth Plan.
- Invested in new transmission infrastructure, including $86.3 million for clean energy in the Peace Region in British Columbia, $21.3 million to integrate more renewables in Prince Edward Island, and $18.7 million to bring Manitoban hydroelectricity to Saskatchewan.

KEY FACTS

- The Government of Canada has established a target to achieve 90% non-emitting electricity generation by 2030.
- Through regulations to accelerate the phase out of conventional coal-fired electricity generation, expected cumulative GHG reductions are 94 million tonnes (2019 – 2055). These regulations will achieve 12.8 million tonnes of emissions reductions in 2030.
- The Government of Canada is supporting over 130 off-grid and Indigenous communities to switch from diesel and other fossil fuels to cleaner sources of heat and power like biomass and solar (Indigenous Off-diesel Initiative, Clean Energy for Rural and Remote Communities, and Northern Responsible Energy Approach to Community Heat and Electricity programs).

A HEALTHY ENVIRONMENT AND A HEALTHY ECONOMY CONTAINS NEW MEASURES FOR THE ELECTRICITY SECTOR

- Investing an additional $964 million over four years to advance smart renewable energy and grid modernization projects to enable the clean grid of the future. This includes support to increase renewable power generation capacity such as wind and solar, and the deployment of grid modernization technologies such as power storage.
- Investing an additional $300 million over five years to advance the Government's commitment to ensure that rural, remote and Indigenous communities that currently rely on diesel have the opportunity to be powered by clean, reliable energy by 2030.
- Working with provinces and territories to help build key intertie projects with support from the Canada Infrastructure Bank. The Bank has a long-term investment target of $5 billion for clean power, which includes renewables, storage, and transmission lines, and has committed to invest $2.5 billion in clean power projects over the next three years e.g., "Atlantic Loop" intertie project and the Clean BC Plan.

- Further supporting necessary intertie project predevelopment work by providing $25 million in 2021-22 to help some proponents complete engineering assessments, community engagement, and environmental and regulatory studies. This work will help inform and complement the Canada Infrastructure Bank's efforts to identify and address financial gaps in the projects.
- Launching a Small Modular Reactor (SMR) Action Plan by the end of 2020, building on the SMR Roadmap released in 2018, to lay out the next steps to develop and deploy this technology. Numerous provincial partners, including New Brunswick, Ontario, Alberta and Saskatchewan are supportive of this work.
- Consulting with investors and other stakeholders in developing tax measures to ensure Canada has a competitive investment environment for the commercialization of technologies to help meet and exceed Canada's Paris Agreement target.
- Working with provinces, territories, utilities, industry and interested Canadians to ensure that Canada's electricity generation achieves net-zero emissions before 2050. The Government of Canada will explore the role of a clean electricity performance standard in the context of the full set of measures in place and proposed by this plan.
- Positioning Canada as a global leader in the production of batteries and other clean technologies. Through a 'mines to mobility' approach, the Government will leverage Canada's competitive advantage in mining to build the Canadian battery and critical mineral supply chains needed to supply the electric vehicle market, aerospace sectors and support the wider clean energy transition.
- Completing the current Strategic Assessment on Thermal Coal to provide guidance on how future new thermal coal mining projects will be assessed under the *Impact Assessment Act*.