



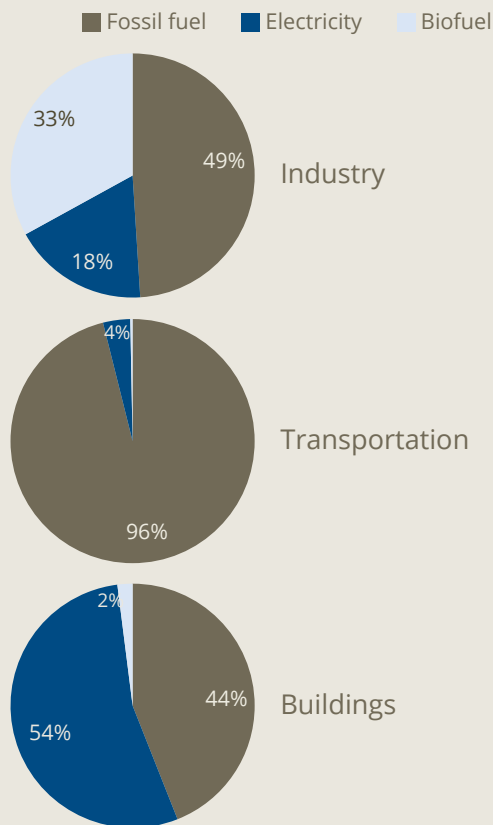
Photo: Stephen Hui / Pembina Institute

A Clean Energy Plan for B.C.

Setting a course for decarbonization by 2050

B.C. is a clean electricity powerhouse, with more than 98 per cent of electricity coming from renewable sources. However, fossil fuels still satisfy the majority of B.C.’s overall energy needs (Figure 1); B.C. uses four times as much energy from fossil fuels as from clean electricity.¹

Figure 1. Energy mix by sector.²



What are we doing about it?

B.C.’s climate and energy strategy, CleanBC, aims to shift B.C. from an economy powered by oil and gas to one increasingly powered by clean energy. Government projections suggest that clean energy consumption will increase by about 40 per cent by 2030 under this plan, while fossil fuel use will decrease by about 15 per cent. However, CleanBC is projected to get B.C. only 75 per cent of the way to its 2030 climate target (Figure 2).

To achieve our full commitments, B.C. will need to increase the absolute clean energy mix while further decreasing the use of fossil fuels — and do so without locking the province into a particular energy or policy pathway that could prevent B.C. from meeting 2040 and 2050 targets.

Given the implications of the CleanBC strategy for B.C.’s energy system, the Pembina Institute convened stakeholders at the Clean Future Forum to discuss the role of the energy sector in achieving climate objectives and reducing fossil fuel dependence across B.C.’s economy. Many challenges and solutions were identified and discussed.

The path forward

In order for B.C. to power its 2030 economy in line with climate targets, and set the province up for long-term success beyond 2030, we recommend the creation of a clean energy plan for B.C. This plan should provide a detailed pathway for implementing the vision described in CleanBC.

It should bring together the work and studies underway (such as the B.C. Hydro Phase 2 transformational review, update of the bioenergy strategy, and hydrogen roadmap). The plan should provide clear policy guidance for regulators, utilities, and energy developers, and certainty to investors and businesses about B.C.'s clean energy future. By making use of the wide range of policy levers, technologies, clean fuels and solutions available, the plan can help create a flexible and reliable energy sector in the province as it transitions to low-carbon energy supply.

For more details, see: pembina.org/pub/clean-future-forum

B.C.'s clean energy plan should:

1. Clarify future energy demand and its alignment with best-suited energy resources.
2. Focus on capacity building, especially in rural areas, to increase the province's clean energy development potential and foster economic opportunity.
3. Leverage existing infrastructure and plan and build local support for new low-carbon infrastructure.
4. Define and update the role that utilities play in supporting B.C.'s stated objective to transition to a clean energy economy.
5. Outline how made-in-B.C. technology can help achieve our climate targets and serve as a testing opportunity to prove technology readiness to global markets.

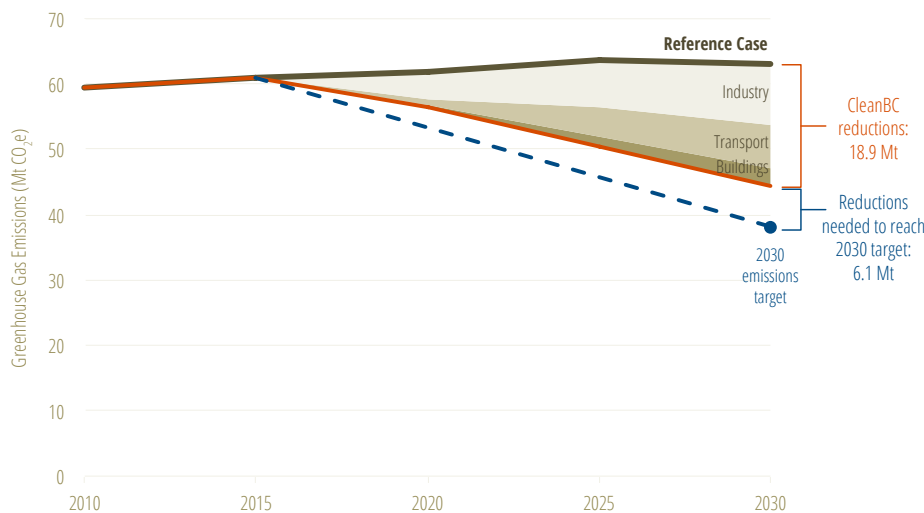


Figure 2. CleanBC commits to achieving 18.9 Mt of emissions reductions by 2030; 25 Mt of reductions are required to achieve the province's 2030 emissions target.³

Endnotes

1. National Energy Board, "Provincial and Territorial Energy Profiles – British Columbia," Figure 7. <https://www.neb-one.gc.ca/nrg/ntgrtd/mrkt/nrgsstmprfls/bc-eng.html>
2. Navis Research, *A Plan for Climate Leadership in British Columbia: Forecasting the Benefits and Costs of Strengthening British Columbia's*

3. Navis Research, *Supporting the development of CleanBC: Methodology report for assessing the impacts of CleanBC policies* (2019), Tables 36, 37 and Appendix C. https://www2.gov.bc.ca/assets/gov/environment/climate-change/action/cleanbc/supporting-development-cleanbc_methodology-report_navius.pdf



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