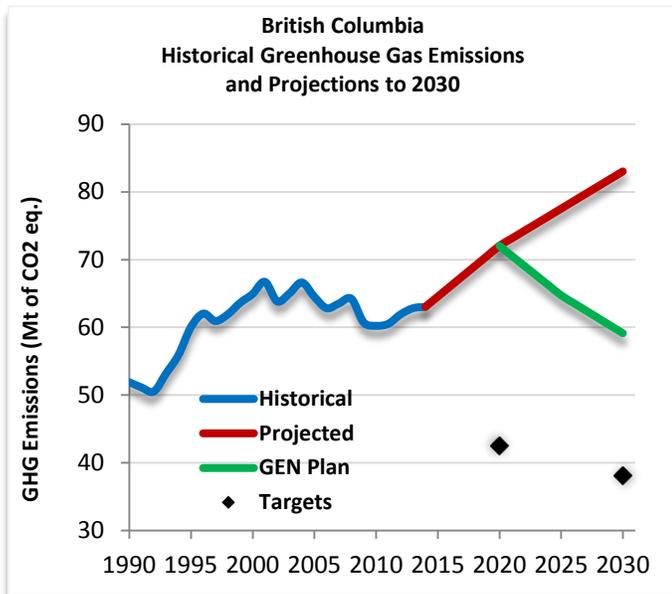


One Million Climate Jobs Challenge for Canada: 135,128 Climate Jobs in British Columbia

The Green Economy Network (GEN) has calculated that British Columbia could create over 135,000 person-years of employment over a five-year period through a total public investment of \$10.68 billion in public transit and high-speed rail, renewable energy, and energy efficiency and conservation. In addition, targeted public investment in these three priority areas will reduce BC's annual greenhouse gas (GHG) emissions by up to 12.9 megatonnes (Mt). This action plan will help to transition the province to a lower-carbon economy, create a healthier environment, and strengthen communities, while reducing poverty and inequality.



Emissions

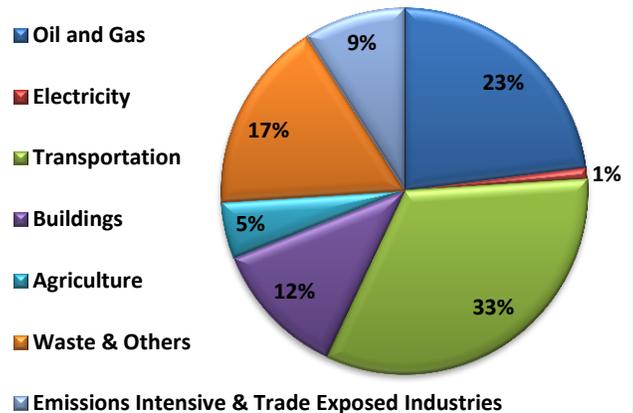
- Total GHG emissions in British Columbia were 63 Mt in 2014, representing 8.6% of total GHG emissions in the country;
- British Columbia has the fifth highest annual GHG emissions in Canada, and emissions have increased by 19% since 1990, due to increased natural gas production and processing and increased emissions from the transportation sector;
- British Columbia has set a GHG reduction target to decrease GHG emissions by 80% below 2007 levels by 2050; and
- The province's previous target was to reduce emissions by 33% below 2005 levels by 2020, but this target was bypassed in the release of BC's Climate Leadership Plan (2016).

Unemployment

In 2016, British Columbia had an annual average of 152,800 unemployed workers and an annual average unemployment rate of 6.0%, one of the lowest unemployment rates in Canada. However, BC also has one of the highest working poverty rates

For references and additional information, please see <http://greeneconomy.net.ca/>

GHG Emissions for British Columbia by Canadian Economic Sector (2014)



Summary of Calculations for BC

	\$Billions Invested Over 5-Year Period	Total Person-Years of Employment Created	GHG Emission Reduction (Mt CO ₂ eq)
Renewable Energy	\$4.4	53,888	2.3 - 5.0
Energy Efficiency (incl. building retrofits)	\$2.7	39,420	2.8 - 5.0
Public Transit (improvements and expansion)	\$2.18	27,596	1.7 - 2.2
High-Speed Rail	\$1.4	14,224	0.5 - 0.7
5-Year TOTALS	\$10.68	135,128	7.3 - 12.9

Energy Efficiency and Conservation

Targeted public investment of \$2.7 billion in energy efficiency and conservation over a five-year period, in combination with complementary workforce development policies, would generate 39,420 person-years of employment in BC and reduce annual GHG emissions by up to 5 Mt.

- Buildings account for 12% of BC's annual GHG emissions;
- Almost 45% of BC's housing stock was built before 1983, with 12% of homes built before 1960; and
- Over 80% of the province's housing stock is still in need of energy efficiency retrofits.

One Million Climate Jobs Challenge for Canada: 135,128 Climate Jobs in British Columbia

Investments in home and building retrofits will save a significant amount of energy, reduce GHG emissions, reduce energy poverty, create opportunities to complete apprenticeships, and generate employment.

Types of Jobs in Energy Efficiency and Conservation:

- Architect
- Boilermaker
- Carpenter
- Civil Structural Engineer
- Community and Social Services
- Construction Equipment Operator
- Construction Labourer
- Education and Health Services
- Electrical Engineer
- Electrician
- Energy Efficiency Auditor
- HVAC Installer
- HVAC Technician
- Ironworker
- Office and Administrative Support
- Pipefitter
- Plumber
- Roofer
- Service Industry Occupations
- Steelworker
- Weatherization Installer/ Technician

Types of Jobs in Renewable Energy:

- Boilermaker
- Community and Social Services
- Construction Worker
- Drilling Equipment Operator
- Education and Health Services
- Electrician
- Engineer
- Excavator
- Heavy Equipment Operator
- Ironworker
- Land Surveyor
- Machinist
- Mechanic
- Office and Administrative Support
- Pipefitter
- Plumber
- Service Industry Occupations
- Scientist
- Sheet Metal Worker
- Steelworker
- Surveyor
- Welder

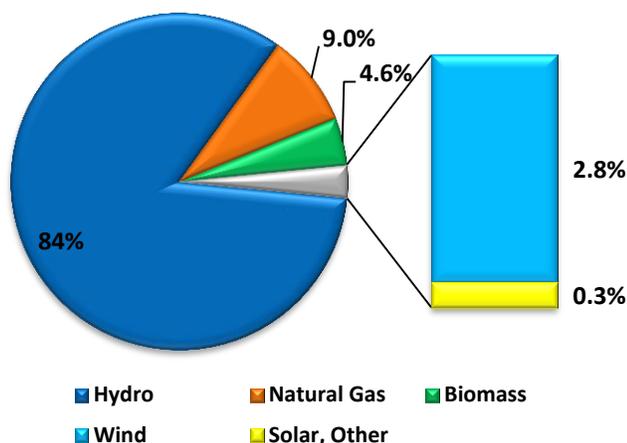
Public Transit and High-Speed Rail

A total public investment of \$3.58 billion in public transit and high-speed rail - including investments in transportation demand management - would create 41,820 person-years of employment in British Columbia over five years. Targeted public investment in public transit and high-speed rail will also reduce BC's annual GHG emissions by up to 2.9 Mt, with the potential for greater emissions reductions over time.

- The transportation sector was responsible for one-third of British Columbia's GHG emissions in 2014;
- Investing in public transit is proven to create more jobs than investing in personal automobile transportation infrastructure; and
- Developing a high-speed rail connection between Vancouver and Seattle would relieve freight congestion, create jobs, and decrease emissions.

Targeted investments in public transportation will introduce more comprehensive and accessible services while making fares more affordable for low-income families. Implementing these priorities as part of a public transportation strategy will ensure that underserved communities and individuals - including (but not limited to) women, people of colour, youth and students, Indigenous Peoples, seniors, and persons with disabilities - will benefit from increased access to health services, education, recreation, and employment, including the employment opportunities that are created through the creation and expansion of transit services.

British Columbia
Installed Capacity Mix (2014)



Renewable Energy

A total public investment of \$4.4 billion in renewable energy - including investments in modernizing electricity infrastructure, such as smart grids and microgrids, and large-scale and small-scale energy storage systems - would create 53,888 person-years of employment in BC over a five-year period. In addition, this investment will result in an annual GHG emission reduction of up to 5 Mt.

- British Columbia has Canada's second highest installed renewable energy capacity in Canada, with over 90% of installed capacity mix coming from renewable sources;
- The province has tremendous potential to develop additional renewable energy with the possibility to profit from additional energy exports; and
- British Columbia has an extensive and very diverse portfolio of renewable energy sources, including offshore wind, hydroelectricity, tidal and wave, biomass, and geothermal.

The transition to a renewable energy economy will require an increase in electrification and must be a Just Transition that respects the rights of Indigenous Peoples, revitalizes communities, and ensures that workers in carbon-intensive industries are protected and able to support their families.

Types of Jobs in Public Transit and High-Speed Rail:

- Automotive Technician
- Bus and Transit Driver
- Civil Engineer
- Community and Social Services
- Construction Equipment Operator
- Construction Labourer
- Education and Health Services
- Electrician
- Industrial Engineer
- Machinist
- Mechanic
- Mechanical Engineer
- Metal Fabricator
- Office and Administrative Support
- Rail-Track Layer
- Service Industry Occupations
- Transportation Planner
- Urban Planner
- Welder

This plan for BC lays the foundation for tackling climate change while creating jobs. It also provides a strategy to address poverty and inequality. The proposals outlined in this plan will not only serve displaced workers from polluting industries, but will also create opportunities for workers from industries suffering the impacts of climate change, the unemployed, the working poor, as well as Indigenous Peoples, racialized communities, women, youth, LGBTI individuals, and persons with disabilities. Let's act now to make this plan for British Columbia a reality, get people back to work, and give our children the future that they deserve.