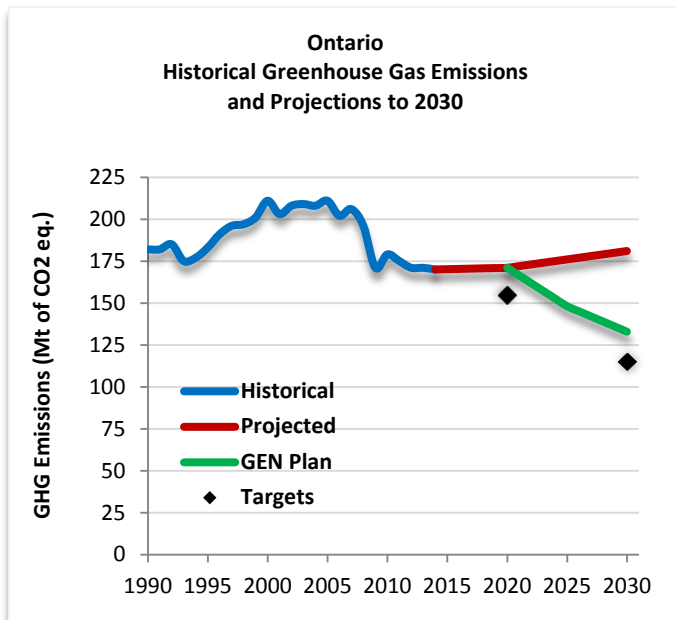


# One Million Climate Jobs Challenge for Canada: 379,296 Climate Jobs in Ontario

The Green Economy Network (GEN) has calculated that Ontario could create 379,296 person-years of employment over a five-year period through a total public investment of \$29.19 billion in energy efficiency and conservation, renewable energy, and public transit and higher speed rail. In addition, targeted public investment in these three priority areas will reduce Ontario's annual greenhouse gas (GHG) emissions by up to 38.1 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 Ontario were 170.2 Mt in 2014, representing 23.2% of total GHG emissions in the country;
- Ontario has committed to reduce emissions to 15% below 1990 levels by 2020 and to reduce emissions to 37% below 1990 levels by 2030; and
- Ontario has also set a long-term GHG reduction target, with a goal to decrease GHG emissions to 80% below 1990 levels by 2050.

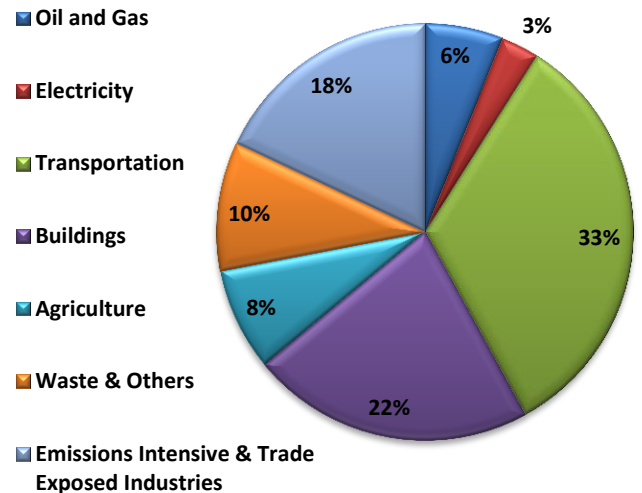
## Unemployment

In 2016, Ontario had an annual average of 489,900 unemployed workers and an annual average unemployment rate of 6.5%.

Ontario has suffered from a shrinking proportion of employed individuals, and the percentage of working poor in Ontario has grown in the past decade. In order to address Ontario's decade-long increase of working poverty, lagging economic growth, and a decline in the manufacturing sector, GEN proposes targeted public investments to create jobs, alleviate poverty, and to improve the well-being of all citizens.

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

GHG Emissions for Ontario by Canadian Economic Sector (2014)



## Summary of Calculations for Ontario

	\$Billions Invested Over 5-Year Period	Total Person-Years Created	GHG Emission Reduction (Mt CO <sub>2</sub> eq)
Renewable Energy	\$ 6.47	82, 872	4.5 - 7.7
Energy Efficiency (incl. building retrofits)	\$10.26	149, 796	11.0 - 19.0
Public Transit (improvements and expansion)	\$7.96	100, 908	5.2 - 9.1
High-Speed Rail	\$ 4.5	45, 720	1.4 - 2.3
<b>5-Year TOTALS</b>	<b>\$ 29.19</b>	<b>379, 296</b>	<b>22.9 - 38.1</b>

## Energy Efficiency and Conservation

Targeted public investment of \$10.26 billion in energy efficiency and conservation over a five-year period could generate 149,796 person-years of employment in Ontario and reduce annual GHG emissions by up to 19 Mt.

- Buildings account for 22% of Ontario's GHG emissions;
- Over half of Ontario's housing stock was built before 1980; and
- Over 80% of the province's housing stock is still in need of energy efficiency retrofits.

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.

# One Million Climate Jobs Challenge for Canada: 379,296 Climate Jobs in Ontario

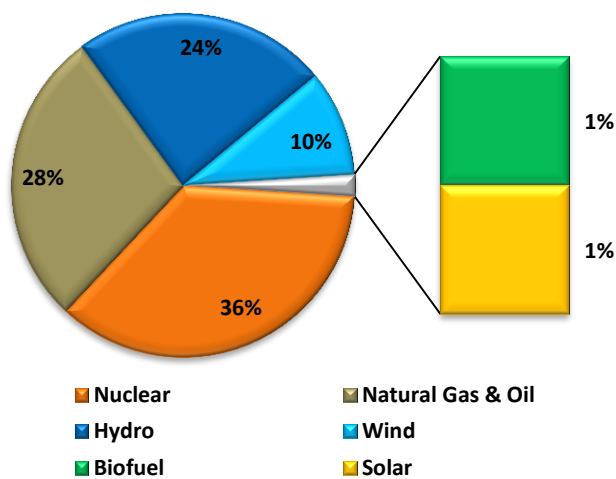
## Types of Jobs in Energy Efficiency and Conservation:

- 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

Ontario  
Installed Capacity Mix (2015)



## Renewable Energy

With a total public investment of \$6.47 billion in renewable energy, GEN has calculated that 82,872 person-years of employment could be created in Ontario over a five-year period, where the majority of employment would be in wind, solar, and biomass. In addition, this investment will result in an annual GHG emission reduction of up to 7.7 Mt.

- Over 60% of Ontario's total installed capacity comes from non-renewable sources;
- Ontario has the second highest renewable potential in offshore wind energy compared to any other province; and
- Ontario maintains the highest national renewable potential for solar farming and the second highest potential in biomass.

The transition to a renewable energy economy 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.

## Public Transit

With an investment of \$12.46 billion in public transit and higher speed rail, GEN has calculated that 146,629 person-years of employment would be created in Ontario, where the majority of employment created would be in construction and manufacturing. Targeted public investment in public transit and higher speed rail will also reduce Ontario's annual GHG emissions by up to 11.4 Mt, with the potential for greater emissions reductions over time.

- The transportation sector was responsible for one-third of Ontario's GHG emissions in 2014;
- Ontario has the longest commuting time out of all provinces;
- A study commissioned by the federal government shows it would cost Canadians 50% more to meet new travel demands by car than it would by public transit; and
- Developing higher speed rail in the Québec City - Windsor corridor 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, Indigenous Peoples, youth and students, 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.

## 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 Ontario 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 Ontario a reality, get people back to work, and give our children the future that they deserve.