

**Key Points from GEN’s Assessment of the
Federal Government’s Actions on Climate Change**

The federal government has demonstrated a commitment to reducing greenhouse gas (GHG) emissions through the announcement of several policies and regulations. These priority actions for reducing emissions include phasing out coal-fired electricity, regulatory measures to reduce hydrofluorocarbons (HFCs), pricing carbon pollution, reducing methane emissions, and committing to develop a new clean fuel standard.

Table 1. GHG Emission Reductions from Recently Announced Federal Policies

	Coal Phase Out	HFC Regulations	Carbon Pricing	Methane Regulations	Clean Fuel Standard	Total Reductions
Total Reduction (Mt CO₂eq)	-5	-8	-18	-20.7	-30	-81.7

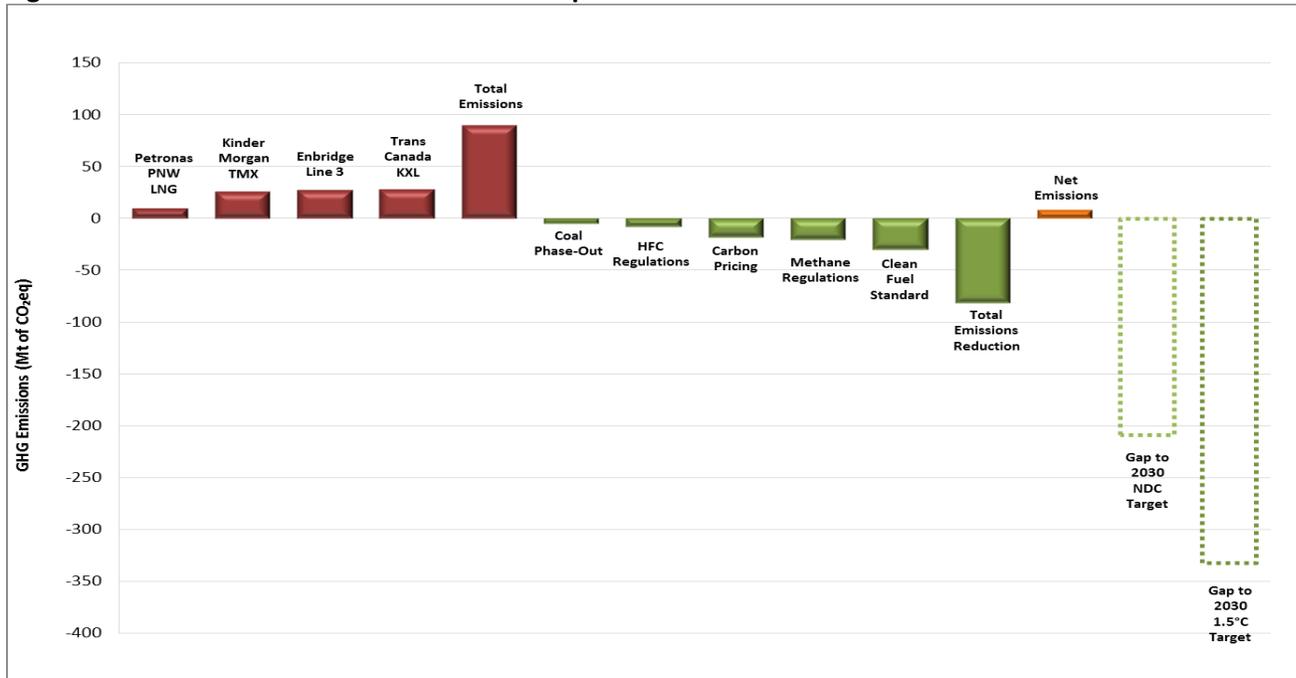
The federal government has also approved three major fossil fuel infrastructure projects in addition to the previously approved Keystone XL. These infrastructure projects include Pacific NorthWest Liquefied Natural Gas (LNG), Trans Mountain Expansion, and Line 3 Replacement. The projections for GHG emissions increases for each project include the upstream emissions from current capacity and the projections for the additional upstream emissions that will be created from new and increased capacity. Depending on pipeline capacity, as well as the type and density of the fuel being transported, the upstream emissions from an oil or gas project may account for only 20 percent of total lifecycle emissions, while 80 percent of emissions occur midstream and downstream. The Canadian Environmental Assessment Agency only measures upstream emissions.

Table 2. Upstream Emissions from Four Approved Fossil Fuel Infrastructure Projects

	Petronas PNW LNG	Kinder Morgan TMX	Enbridge Line 3	Trans Canada KXL	Four Project Total
Existing Upstream Emissions	-	11	14	-	25
Additional Upstream Emissions	9.3	15	13	27.6	64.9
Total Emissions (Mt CO₂eq)	9.3	26	27	27.6	89.9

The emissions impact of the total projected upstream emissions from these four fossil fuel infrastructure projects is illustrated in Figure 1 on the next page. These emissions are compared to recently announced federal policies and regulations to decrease GHG emissions. The net emissions from comparing these federal actions are also presented in relation to the emissions reductions required to meet Canada’s 2030 Nationally Determined Contribution (NDC) and the target for Canada’s fair share to limit warming to 1.5°C. The emission reduction gaps presented in the graph are measured in megatonnes of carbon dioxide equivalent (Mt CO₂eq) and represent the difference between Canada’s total annual emissions in 2014 (732 Mt CO₂eq) and Canada’s 2030 NDC target (524 Mt CO₂eq, -209 Mt CO₂eq from 2014) and 1.5°C target (400 Mt CO₂eq, -332 Mt CO₂eq from 2014).

Figure 1. Annual Greenhouse Gas Emissions Impact of Federal Actions



The total investment for the four fossil fuel infrastructure projects will be \$60.3 billion. A generous estimate of the direct, indirect, and induced person job years of employment that will be created from this investment would be 380,900 jobs over five years, which is illustrated in Table 3 below. The job estimates for the fossil fuel infrastructure projects are provided by the proponents and do not necessarily reflect person job years, as many of the jobs counted in these estimates are part-time and/or short-term. It is important to note that the job creation numbers provided by the proponents of these projects have repeatedly been criticized. It is equally important to realize that many of the jobs created by Enbridge Line 3 Replacement, and the majority of the jobs created by Keystone XL, will be located in the United States, not in Canada.

The same investment of \$60.3 billion in the One Million Climate Jobs plan would create 784,570 person job years of employment over five years while reducing annual GHG emissions by up to 190 Mt after ten years. A comparison of the employment and emissions impact of each investment option is presented in Table 3 below.

Table 3. Comparison of Job Creation by Infrastructure Project Type

Infrastructure Project Type	Total Investment	Jobs Created Over Five Years	Annual Emissions Impact
Fossil Fuel (pipelines and associated infrastructure for oil and natural gas)	\$60.3 Billion	380,900	+89.9 Mt CO ₂ eq
One Million Climate Jobs Plan (renewable energy, energy efficiency and building retrofits, public transportation, and higher speed rail)	\$60.3 Billion	784,570	-190 Mt CO ₂ eq

**Key Points from GEN's Analysis of the
Pan-Canadian Framework on Clean Growth and Climate Change (PCF)**

- **The emission reduction strategies in the PCF are insufficient for Canada to do its fair share to limit warming to 2.0°C, let alone 1.5°C.** The PCF quantifies the expected emissions reductions from announced measures and regulations as of November 1st, 2016 (-89 Mt CO₂eq) and expected emissions reductions from the measures in the PCF (-86 Mt CO₂eq). These actions still leave a gap of 44 Mt CO₂eq to Canada's 2030 NDC of a 30% reduction below 2005 levels, and a gap of 167 Mt CO₂eq to Canada's 2030 fair share target to limit warming to 1.5°C. The PCF does list "additional measures" to achieve the remaining 44 Mt CO₂eq of reductions, but the details of these measures are vague, and the specific reductions from each measure are not quantified. The beginning of the PCF states a commitment to "meeting or exceeding Canada's 2030 target," yet all of the measures included in the PCF are insufficient to meet this goal.
- **Many of the proposals included in the PCF are aligned with the pillars of the One Million Climate Jobs plan**, including updating building codes; increasing energy efficiency and retrofitting buildings; renewable energy and upgrading electrical grid infrastructure; reducing reliance on diesel for remote, northern, and Indigenous communities; electrifying transportation and increasing public transportation; and pricing carbon pollution. However, the PCF allows for several significant measures to be put off for years, which is no longer an option, as urgent action is required immediately.
- **The measures in the PCF would be strengthened with incremental timelines for implementation and targets for greenhouse gas (GHG) emission reductions.** The PCF outlines actions to reduce emissions but does not have a timeline for implementation for many of the measures. GEN recommends that in addition to a timeline for implementation, benchmark targets for emission reductions are created to assess the efficacy of the proposed measures and to provide opportunities for additional reductions. Establishing concrete incremental targets for emissions reductions from each policy recommendation is essential to ensure that meaningful progress is being achieved.
- **Calculations for job creation from each of the proposed measures are completely absent from the PCF.** While the word 'jobs' appears 30 times in the document, specific linkages between the proposed measures and the creation of employment are missing. GEN recommends that job creation targets be established to complement emission reductions targets and demonstrate Canada's commitment to reducing emissions while creating decent jobs. The absence of this information is concerning because the PCF is intended to explain pathways for clean growth in addition to reducing emissions and mitigating climate change.
- **The PCF contains one reference to Just Transition**, "It will also be important to ensure a commitment to skills and training to provide Canadian workers with a just and fair transition to opportunities in Canada's clean growth economy." **However, there are no specific measures outlined to ensure that workers and their families are supported in the transition to a low-carbon economy.** The Framework also misses a significant opportunity to demonstrate how major public infrastructure projects can be designed to include Just Transition measures, including skills training and integrating mandatory requirements for contractors to sponsor apprenticeships, which will aid in increasing apprenticeship completion rates and ensure that our workers have the skills that they

need to build the new low-carbon economy. Further, the PCF does not address occupations that will be transformed or eliminated in the transition to a low-carbon economy. This is a major shortcoming of the PCF and the implementation of a Just Transition strategy must be recognized as a top priority.

- **Without proper planning, including a Just Transition strategy, policies and regulations to tackle climate change have the potential to cause massive social and economic destruction.** Just Transition cannot simply be added at the end; it needs to be integrated from the beginning, with voices from labour and under-represented groups, including Indigenous Peoples, involved from the outset.
- **Establishing a clean technology data strategy is included as a ‘new action’ in the Framework,** which emphasizes generating more comprehensive data on Canada’s clean technology capacity and potential, as well as developing clear metrics for measuring the impacts of government initiatives. **However, the collection of labour market data is not mentioned as a component of this strategy.** In order to anticipate the future demands for skills and occupations, we will need a more complete understanding of labour market trends in the emerging low-carbon economy. The Canadian Labour Congress recommends that the federal government invest \$45 million in a new Green Economy and Skills Survey to collect accurate, reliable, and timely labour market information about the green economy. This information will also clarify areas for improvement and aid in the development of policies, as well as guiding investment priorities as we transition our workforce and our economy.
- **Carbon pricing cannot be examined in isolation from subsidies given to the fossil fuel sector, which exceed \$3 billion annually.** Fossil fuel subsidies undermine putting a price on carbon pollution, as well as preventing the renewable energy industry from realizing its full potential. The Liberal Government’s election platform promised to fulfill Canada’s G20 commitment to phase out subsidies to the fossil fuel industry, but they have yet to eliminate these subsidies, which currently equate to paying polluters \$19 per tonne to emit greenhouse gases. Reallocating these subsidies to the renewable energy sector would increase the competitiveness of renewables, reduce GHG emissions, and create more jobs than if the subsidies remained in fossil fuels. The G7 has called for fossil fuel subsidies to be eliminated by 2025, but we need to see a scaling back and redirection of those subsidies starting now in order to achieve that target.
- **It is unclear how the emissions from federally approved fossil fuel infrastructure projects are factored into the PCF.** The Framework contains no mention of the four federally approved fossil fuel infrastructure projects. This omission is out of step with messaging from the federal government, which has made linkages between the recently announced pipelines and the emissions cap of 100 Mt on the oil sands, going so far as to say that the fossil fuel projects are “part of our plan to reduce greenhouse gas emissions” and that Alberta’s 100 Mt emissions cap on the oil sands is “built into our climate plan.” While the oil sands cap is referenced several times, the specific pipelines and how they fit into the oil sands cap are not mentioned at all. Further, it appears that the PCF includes the expected emission reductions from B.C.’s Climate Leadership Plan in its calculations for the pathway to meet Canada’s 2030 target, but does not include the predicted increase in emissions from the approved LNG terminal.

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