The warnings by the United Nations' Intergovernmental Panel on Climate Change (IPCC) that the current pace of emissions is already consuming the entire global carbon budget is a clear indication that market forces on their own are not in a position to provide the kind of transition that will prevent catastrophic climate change.

Governments must step up to the plate by working and providing leadership for the common good and public interest. With a new government in Ottawa, Canada is now in a position to commit ambitious, achievable, science-based targets to significantly reduce greenhouse gas emissions.

This calls for significant industrial transformation toward a new low-to-zero carbon economy. A transformation that will eliminate or transform existing jobs, likely bringing about resistance to change, which could undermine a much needed social consensus in Canada for a way forward.

To address this resistance, we must create One Million Climate Jobs paired with a just transition strategy that is supported by workers, employers and governments. The strategy must embody social support, re-employment and compensation measures, and be devised with the participation of workers and their representatives.

These measures must also go hand in hand with efforts to deal with unemployment overall, as rising $\mathrm{CO}_{2}$ levels and job losses are the products of the same economic model. A commitment to Decent Work, as understood by the International Labour Organization (ILO), can pave the way to an economic model that addresses social injustice, poverty and inequality at the same time. In 2013, the Canadian government, employers and unions agreed, along with those of other countries, to a set of guiding principles that can do just that. Now is the time to apply these principles for dealing with climate change in Canada.


In Canada, an alliance of unions, with environment, youth, public interest, faith-based organizations and First Nations are working together through the Green Economy Network to put these principles to practice, by calling for One Million Climate Jobs in Canada within the next five years. ${ }^{2}$ Similarly, the Blue Green Canada also brings together unions and environmental groups to tackle these issues.

Creating One Million Climate Jobs can both reduce Canada's greenhouse gas emissions (GHG) and create decent paying jobs, while addressing the immediate effects of climate events, such as wildfires, floods, droughts or deforestation. Public investment must be secured to support four strategic priorities:

Clean Renewable Energy - By investing $\$ 23.3$ billion in public renewable energy (e.g., solar, wind, geothermal power) over five years, Canada could create 290,000 jobs (person job years), ${ }^{3}$ while reducing this country's overall GHG emissions between 44 and 110 million tonnes (Mt); ;

Energy Efficiencies/Green Buildings - By investing $\$ 30.0$ billion to increase the energy efficiency of Canada’s building stock (i.e. residential, commercial, public) over a five-year period, we could generate another 438,000 jobs which, at the same time, would reduce the country's overall GHG emissions between 32 and 126 Mt ;

Public Transit - By investing a further $\$ 17.6$ billion to improve and expand public transit for moving people within our cities and towns, we would create another 223,000 jobs which, in turn, would contribute to a further reduction in GHGs between 11 and 20 Mt ; and

Higher Speed Rail Transport - By investing $\$ 10.0$ billion to begin stimulating the construction of higher speed public rail to move people and freight between cities within urban corridors (e.g. Windsor to Quebec City; Edmonton to Calgary; Vancouver to Seattle), we could generate another $\mathbf{1 0 1 , 6 0 0}$ jobs, while initially reducing GHG emissions between 1 and 5 Mt .

Canada's federal government, together with the provinces and municipalities, could achieve One Million New Climate Jobs, while reducing its annual GHG emissions by 88 to 261 Mt , more than 35 percent of Canada's average annual GHG emissions. Invoking such a plan in 2016 would set the stage and create impetus for Canada to meet more ambitious climate targets by 2030. Also, Canadian industry would thus more easily bear the burden of change, in the short and medium term.

This chart summarizes these calculations:

|  | \$Billions Invested <br> Over 5-Year Period | Total Person Job <br> Years Created | GHG Emission <br> Reductions (Mt CO2eq) |
| :--- | :---: | :---: | :---: |
| Renewable Energy <br> (solar, wind, geothermal power) | $\$ 23.3$ | 290,000 | $44-110$ |
| Energy Efficiency <br> (i.e. building retrofits) | $\$ 30.0$ | 438,000 | $32-126$ |
| Public Transit <br> (i.e. improvements and expansion) | $\$ 17.6$ | 223,000 | $11-20$ |
| Higher Speed Rail <br> (between cities in urban corridors) | $\$ 10.0$ | 101,600 | $1-5$ |
| 5-Year TOTALS | $\$ 80.9$ billion | $\mathbf{1 , 0 5 2 , 6 0 0 ~ J o b s}$ | $\mathbf{8 8 - 2 6 1 ~ M t ~}$ <br> annually |

A $\$ 80.9$ billion expenditure ( $\$ 16$ billion/year) is an ambitious, but viable financial commitment to make, in the face of the challenge we face: a mere five percent of the federal government's annual budget. However, if a viable pay-as-you-save program was applied to \#2 above (energy efficiencies/green buildings), the overall cost could be reduced by almost one third. Under pay-as-you-save, loans to cover capital expenditures for retrofits are based on the local property tax base, with loan repayments being made through energy savings on bills. Moreover, the increased employment would contribute to the tax base of governments at all levels. Additional revenues could be made available by phasing out federal subsidies to the petroleum industry and from other federal and provincial sources of revenue, including carbon taxes.

This One Million Climate Jobs plan lays the foundation for tackling climate change while creating jobs. It also provides a strategy to address poverty and inequality. After all, the proposals outlined here for creating jobs should not only be made to serve displaced workers from polluting industries, but also for the industries suffering the impacts of climate change, the unemployed, the working poor, plus First Nations and racialized communities.

This platform is not a panacea or carved in stone. It must be part of a comprehensive full employment plan to ensure an equitable transition and be able to evolve in a collaborative way through negotiation, openness and full transparency. Let's act now to make One Million Climate Jobs a reality.

[^0]twork
Canada


[^0]:    Data for the graph was obtained from the Green Economy Network Common Platform, 2016.
    GEN website: www.greeneconomynet.ca
    GEN website: www.greeneconomynet.ca
    
     indirect employment in secondary industries and suppliers; and [iii] induced employment in retail and service industries.
    Calculating GHG reductions is a work in progress. The calculations cited here [Mt = one million tonnes] are based on the formula used by federal government departments for every $\$$ one billion of public
    
    

