



Brief submitted by Efficiency Canada to the Members of the House of Commons Standing Committee on Industry, Science and Technology

June 19th, 2020

Re: An Energy Efficient Economic Response to the COVID-19 Pandemic in Canada.

Dear Members,

The COVID-19 Pandemic has impacted every aspect of the economy and Canadians' lives, and the energy efficiency industry is no exception. The government has reacted swiftly to provide immediate relief to people and businesses. Now, there is an opportunity for the recovery from COVID-19 to be defined by building a cleaner and more resilient economy, with energy efficiency at its core.

The energy efficiency industry is robust and diverse, employing over 436,000 people in many different sectors, such as construction, professional services, and utilities.¹ Investing in energy efficiency-focused projects will provide both immediate and quick increases in jobs and aggregate demand, while increasing economy-wide productivity and laying out a trail of high-value investments in the decades to come for a durable, long-term, recovery. For example, investments in efficiency programs create 16-30 jobs per \$1million invested², and 60% of expenditure on home retrofits goes towards labour.³ Increasing energy savings in the next 14 years will also create 175,000 annual jobs, on average, and increase annual GDP by \$42.5 billion.⁴

As more Canadians are staying home, many are realizing the benefits of making their homes more efficient, which means that they will want to make upgrades and retrofits to their homes. Managing COVID-19 will also require upgrades to air ventilation (and complementary insulation and air sealing to keep the air/cool in) in commercial and institutional buildings. This presents an opportunity for increased education and programming for homeowners and businesses, and training opportunities and job creation for the industry when physical distancing measures are eased. At the same time, many Canadians are struggling to pay their bills in the midst of this recession, as many have lost jobs, or were already struggling with energy poverty. There are

¹ Eco Canada. (2018). Energy efficiency employment in Canada. Retrieved from <https://www.eco.ca/research/report/energy-efficiency-canada/>

² Dunsky Energy Consulting, 2018. The economic impact of improved energy efficiency in Canada. *Efficiency Canada*. Retrieved from <https://www.efficiencycanada.org/wp-content/uploads/2018/04/Economic-Impact-of-Pan-Canadian-Framework-Energy-Efficiency.pdf>

³ IEA. (2020). Energy efficiency and economic stimulus. Retrieved from <https://www.iea.org/articles/energy-efficiency-and-economic-stimulus>

⁴ Dunsky Energy Consulting, 2018. The economic impact of improved energy efficiency in Canada. *Efficiency Canada*. Retrieved from <https://www.efficiencycanada.org/wp-content/uploads/2018/04/Economic-Impact-of-Pan-Canadian-Framework-Energy-Efficiency.pdf>



existing government frameworks to address these challenges that can be expanded upon to provide relief, making these recommendations ‘shovel-ready’⁵, but also ‘shovel-worthy’. And in the long-term, increasing investment through green banks, or similar platforms, can help to reduce future economic uncertainty.

Energy efficiency projects offer an opportunity to boost the economy in a period of recession, in addition to addressing Canada’s environmental goals. Investing in infrastructure and jobs through energy efficiency projects is a key opportunity to recover in a truly sustainable way – impacting people, the environment, and the economy.

Framework for a Resilient Recovery

At Efficiency Canada, we have been advocating for a resilient response in funding to help Canada recover from COVID-19 in a way that also supports building a greener, more energy efficient economy. It encompasses a three-stage framework: **relief**, **stimulus**, and **recovery**, that we are encouraging the Members of this Standing Committee to consider. The details of this framework are below.

1. Relief: prepare, plan, train

The energy efficiency sector will lose capabilities if there is a prolonged period of unemployment. Yet, there is an imperative to maintain and expand this workforce to meet climate change and economic recovery goals. A way to maintain and grow capabilities is to help out-of-work and underemployed people learn new skills. Online training can take place while physical distancing, supplemented by on-site learning when it is safe. The federal government can provide support by subsidizing course fees for individuals and supporting organizations who are working to bring existing course offerings online.

Workers in the skilled trades are ageing, requiring an influx of new workers to avoid the threat of a major labour shortage. The new trades workforce is likely to look very different. Specific emphasis should be placed on engaging women in the trades, to provide higher paying and more secure employment for those who have lost their jobs in retail and service industries.⁶

According to the Canada Green Building Council, we need \$500 million for workforce development and training to meet low-carbon green building objectives.⁷ Funds can flow to existing training organizations, professional bodies, and trade unions, through relationships with Natural Resources Canada and Employment and Social Development Canada.

⁵ Curry, B. (2020, April 15). Ottawa seeks ‘shovel-ready’ projects for post shutdown stimulus plan. *The Globe and Mail*. <https://www.theglobeandmail.com/politics/article-mckenna-seeking-shovel-ready-projects-for-post-shutdown-stimulus/>

⁶ Kong, S.L. (2020, February, 3). Why we need more women in these particular careers than ever before. *Maclean’s*. Retrieved from <https://www.macleans.ca/work/women-in-skilled-trades/>

⁷ Canada Green Building Council. (2020, May 13). Ready, set, grow: How the green building industry can re-ignite Canada’s economy. *Canada Green Building Council*. Retrieved from https://www.cagbc.org/cagbcdocs/advocacy/CaGBC_Green_Recovery_Strategy_EN.pdf



Increasing the supply of training services must be combined with programs which signal that there will be increasing demand for energy efficiency skills. Thus, training in the relief phase should be coupled with a clear commitment to a clean economy driven recovery and planning to expand the scale and scope of efficiency activities during the **stimulus** phase.

2. Stimulus: expand “shovel worthy” program portfolios and upgrade public sector buildings

There is an existing infrastructure of energy efficiency program delivery in every province and territory that can provide rapid, accountable, and effective support to Canadians. Our provincial scorecard showed that provincial program budgets totaled \$1.1 billion in 2017, spanning residential, commercial, industrial, and low-income markets.⁸

However, our macroeconomic study reveals that ramping up program savings to levels similar to leading jurisdictions, such as some American states, would create 35,000 jobs in the first year, increasing to 280,000 annual jobs in year 8, and providing a \$43 billion average annual increase in GDP. Achieving these results requires an immediate investment of \$10.4 billion over three years.⁹ Expanding the scale and scope of existing portfolios can be achieved by using federal vehicles such as the Low-Carbon Economy Fund, the Green Municipal Fund, and the Climate Action Incentive Fund.

Within a portfolio approach that enables flexibility and adaptation, the federal government can place emphasis on performance criteria that prioritizes economic stimulus and greenhouse gas reductions. Including:

1. Deeper energy retrofits to create more jobs
2. Reducing energy poverty to help those most in need and increase local spending
3. Advancing building codes to lock-in savings
4. Promoting zero-carbon heating solutions to reduce emissions

The federal government can also launch immediate activities by upgrading federal buildings, and buildings in the larger public sector. Programs such as Greening Government Services that use energy performance contracts and provide clear measurement and accountability should be ramped up.¹⁰ A recent report indicated that 30% of federal-owned buildings in the National Capital Region are in “critical” or “poor” condition, which is likely indicative of the need for upgrades in other public buildings throughout the country.¹¹ Topping up funding to achieve

⁸ Efficiency Canada. (2019). Provincial energy efficiency scorecard. *Efficiency Canada*. Retrieved from <https://www.scorecard.efficiencycanada.org/>

⁹ Dunsky Energy Consulting. 2018. The economic impact of improved energy efficiency in Canada. *Efficiency Canada*. Retrieved from <https://www.efficiencycanada.org/wp-content/uploads/2018/04/Economic-Impact-of-Pan-Canadian-Framework-Energy-Efficiency.pdf>

¹⁰ Natural Resources Canada. (2018). NRCan's greening government services. Retrieved from <https://www.nrcan.gc.ca/energy-efficiency/energy-efficiency-buildings/nrcans-greening-government-services/3705>

¹¹ Stanley, A. (2020, May 5). Federal buildings in need of major repairs increasing in number. *The Globe and Mail*. Retrieved from <https://www.theglobeandmail.com/business/industry-news/property-report/article-federal-buildings-in-need-of-major-repairs-increasing-in-number/>



deeper savings in affordable housing through the National Housing Strategy is another important area.¹²

3. Recovery: achieve energy saving missions through “green bank” public investment

A durable recovery will only be achieved if we restore investor confidence and improve business expectations by providing a clear direction for future growth opportunities.¹³ An investment agenda will avoid boom-bust funding cycles and crowd-in the private sector. For this to occur, government needs to lead by building economies of scale, demonstrating the economic opportunity, and taking on initial risks.

Other jurisdictions have created “green banks” or “climate banks” that spur new markets for building retrofits.¹⁴ These banks create supporting market structures, such as common underwriting standards and systems to aggregate multiple projects into large-scale portfolios, while also making initial investments. The Canada Infrastructure Bank could play this role, but it needs a clear change in mandate to meet financing needs and develop market institutions for distributed energy solutions, such as building retrofits and solar energy. The Canada Mortgage and Housing Corporation can also play a role underwriting municipal and utility financing initiatives.

A federal “green bank” or building retrofit financing platform mandate should focus on meeting the grand challenges¹⁵ that will provide a clear direction for investment and innovation in the coming decades, including:

1. Decarbonizing the building sector by 2050, if not earlier
2. Making every new building net-zero energy ready by 2030
3. Making Canada’s industrial energy productivity exceed the US by 2040

The Expert Panel on Sustainable Finance identified a retrofit opportunity of \$250-\$300 billion.¹⁶ Assuming standard leverage rates and capital recycling, an initial capitalization of at least \$13 billion could spark this market. Coupled with the investments noted above, this would enable retrofitting 15% of the building stock in 5 years, which is consistent with the 1.5 million home retrofit goal in the Liberal Party of Canada’s election platform.

¹² Frappé-Sénéclauze, T.P. (2020, May 8). A deep retrofit of homes and buildings is the megaproject Canada needs. *Policy Options*. Retrieved from <https://policyoptions.irpp.org/magazines/may-2020/a-deep-retrofit-of-homes-and-buildings-is-the-megaproject-canada-needs/>

¹³ Haley, B. (2020, April 27). Economy and climate need more than stimulus after COVID-19. *Policy Options*. Retrieved from <https://policyoptions.irpp.org/magazines/april-2020/economy-and-climate-need-more-than-stimulus-after-covid-19/>

¹⁴ Coalition for Green Capital. (2020). What is a green bank? Retrieved from <https://coalitionforgreencapital.com/what-is-a-green-bank/>

¹⁵ Mazzucato, M. (2018). Mission-oriented innovation policies: Challenges and opportunities. *Industrial and Corporate Change*, 27(5). Retrieved from <https://academic.oup.com/icc/article/27/5/803/5127692>

¹⁶ Expert Panel on Sustainable Finance. (2019). Final report of the expert panel on sustainable finance – Mobilizing finance for sustainable growth. *Government of Canada*. Retrieved from <https://www.canada.ca/en/environment-climate-change/services/climate-change/expert-panel-sustainable-finance.html>



A sizable investment is needed to demonstrate that improving our building stock will be a major area for new investment in the post-COVID economy.

Summary of Recommendations

Each of these recommendations builds upon the other. They clearly outline that energy efficiency activities must be supported right now, that efficiency programs are available and ready to provide a rapid boost to jobs and aggregate demand, and that building a more energy efficiency economy can define a long-term trajectory for investment and innovation required for a durable and meaningful recovery. We encourage the Standing Committee on Industry, Science and Technology to consider adopting this framework in developing a plan for the recovery from COVID-19.

Relief <i>Immediate</i>	Increased availability of and support for job development and training, to expand upon existing skills and introduce an influx of new workers in the trades. \$500 million for workforce development and training.
Stimulus <i>Mid-term</i>	Expand existing portfolios to advance shovel-ready projects such as energy retrofits, reducing energy poverty, improving building codes, and promoting zero-carbon heating, which will increase energy savings and job opportunities. \$10.4 billion investment in provincial programs over 3-years
Recovery <i>Long-term</i>	Develop a federal “green bank” or similar platform that has a mandate to increase energy savings and decarbonize the economy and focuses public investment and innovation on these types of projects. \$13 billion capitalization.



About Efficiency Canada

Efficiency Canada is the national voice for an energy efficient economy. Our mission is to create a sustainable environment and better life for all Canadians by making our country a global leader in energy efficiency policy, technology, and jobs. We conduct rigorous policy analysis; communicate compelling narratives; and convene and mobilize Canada's dynamic energy efficiency sector.

Thank you for the opportunity to submit this brief. Please do not hesitate to reach out to us with any questions, or for clarification.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Corey Diamond'.

Corey Diamond

Executive Director, Efficiency Canada