

December 1, 2020

Dear Members of Parliament on the House of Commons Standing Committee on Environment and Sustainable Development

I would like to submit the Canadian Nuclear Association's views on the Committee's study of the Zero- Emissions Vehicle Study that may be useful in outlining a path forward in meeting Canada's net zero emissions targets by 2050.

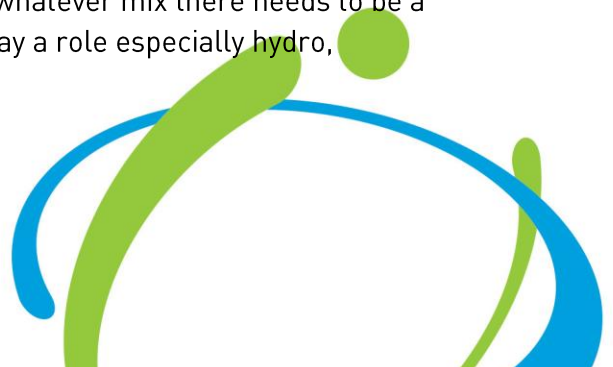
We see increased use of electric vehicles as another important step in meeting the climate change objectives while creating jobs and investments that are also so important – even more so in the negative economic impacts associated with the COVID-19 pandemic.

On behalf of the Canadian Nuclear industry, I would like to commend the work done by all parliamentarians in meeting the COVID crisis. Like all Canadians, our member companies and employees are supporting all efforts in this common fight against the virus and to rebuild the economy.

Our member companies and individuals that make up the Canadian nuclear industry have worked tirelessly to ensure the continuous, safe, and efficient operation of electricity infrastructure for this country's first responders, hospitals, and Canadian families during this challenging period.

At the same time, the nuclear industry has contributed significantly in fighting COVID- 19. This includes donating millions of masks and other personal protective equipment. It has also made significant financial contributions to community efforts and investments in research and development to produce medical devices, such as ventilators. We remain on standby for any other ways in which we may support your government and the Canadian public during this difficult time.

On the question of enabling greater opportunities associated with Zero- Emissions Vehicles the CNA would suggest that it represents the increased electrification of key sectors – such as the transportation sector to reduce emissions. However, the electricity and energy to enable that electrification will need to be from non- emitting energy sources. Each region and each community will have its own mix of those non emitting technologies. This will be based on regional capabilities, costs and market forces. However, in whatever mix there needs to be a clear recognition that all non – emitting technologies will play a role especially hydro, renewables and nuclear.



Canada is one of the few countries in the world uniquely positioned to move toward and beyond a 90% non-emitting electricity supply. Leveraging this clean electricity advantage to power Zero Emissions Vehicles will bring significant environmental, economic, public health, and consumer benefits.

Demand growth from the electrification of transportation, combined with stringent and stable long-term climate policy, is critical for our sector to maximize our investments in the coming years.

As parliamentarians discuss the opportunities associated with Zero- Emissions Vehicles, the discussions should also recognize the important link to stimulating the economy in order to create jobs and investments especially as a result of the negative impacts resulting from the COVID pandemic.

Now is the time to consider how to build back better and cleaner in terms of greenhouse gas emissions.

The Canadian Nuclear association views that greater electrification in transportation, natural resource development and especially in high carbon regions will be key in meeting net zero emissions targets by 2050. Our industry's efforts in developing opportunities for small modular reactors provides a unique opportunity to meet economic, social and environmental objectives to reduce emissions and to provide clean energy for potentially as an option for northern and indigenous communities.

The Canadian nuclear industry envisions a future that is characterized by cleaner, quieter, more efficient machines, vehicles, technologies and industrial processes. A future where Canadians have easier access to environmentally friendly, cost effective options in their lifestyle choices. A future that supports social and economic development opportunities for rural, remote and indigenous communities. And a future where Canada is leading the world in emission reductions and meeting climate change goals. **This future is achieved with a rapid shift to clean electricity generation that would enable clean technologies such as electric vehicles to assist in reducing emissions.**

The Conference Board of Canada estimates that \$1.7 trillion in electricity infrastructure will be needed by 2050 to meet existing climate targets. Canada is well-positioned to make this change, with abundant sources of clean electricity, including hydro, a wide selection of renewables, and nuclear. Nuclear power delivers carbon-free, reliable energy 24 hours a day, and has historically been one of the largest contributors of carbon-free electricity globally. Because of the small land and mining footprint, emissions free power, and waste management standards, nuclear power is the most environmentally friendly energy source on earth.

In Canada, the nuclear industry generates more than 30 per cent of New Brunswick's and 60 per cent of Ontario's clean electricity. The climate benefits of adopting nuclear power are tangible; a look at the reduction of smog days in the greater Toronto area since the closure of coal plants and expansion of nuclear are just one such example.

At the same time, the economic benefits of nuclear are felt across the country. The industry generates 76,000 direct and indirect jobs and contributes more than \$17 billion to the Canadian economy annually. With the introduction of new nuclear technology in the form of small modular reactors, we expect that Canada will tap into an anticipated global market of \$150 billion, creating more secure jobs, intellectual property and supply chains.

Along with wind, solar, water and energy storage, nuclear has a vital role in our electric, carbon-free future. To achieve this clean electricity future, the Canadian Nuclear Association recommends the inclusion of the following first steps in the governments' economic stimulus efforts:

1. A pan-Canadian electrification strategy to support all clean energy technologies, including wind, solar, water and nuclear. This would ensure a holistic approach and direction from the federal government to electrifying key sectors such as transportation, natural resources, and industrial processes, where possible. The CNA would be pleased to lead or support this initiative as needed.
2. Continued support for development in the critical clean nuclear sector. This includes continued support for one of the largest infrastructure projects in Canada – the \$26 billion refurbishments of the Bruce Power and Darlington Nuclear plants, which have downstream impacts on the several-hundred firms that make up the Canadian nuclear supply chain. It is worth noting that within this supply chain is a unique Canadian capability in uranium production that provides opportunities for northern, remote, and Indigenous communities. The uranium industry requires particular attention through appropriate regulatory regimes and financial support to address economic and labor stabilization needs due to COVID-19.
3. Urgent attention to the needs of the industry as it relates to small modular reactor development. As outlined in the June 16 letter to your office from the heads of Canada's major electricity utilities in New Brunswick, Ontario and Saskatchewan, a clear signal of commitment from your government is required to progress this vital technology, which will support clean advancements in Canada's natural resources sector, bring clean electricity generation to remote regions, help this country meet its emissions targets and position Canada as a leader on the global stage.

4. Now broadly accepted as such, the clear articulation of nuclear as “clean” and “non- emitting” across all government departments and policy frameworks and the inclusion of nuclear in export development and climate change policies. Nuclear provides a reliable, safe and clean baseload that enables the further development of renewable technologies. The industry must have access to clean funding through various energy, environment, and infrastructure programs to ensure further development and the creation of vital, high-skilled jobs. A clear articulation of nuclear as “clean” will ensure this.

With the recommendations we outlined above, we feel that it will assist Canada in meeting its net zero emissions targets. We know that parliamentarians are facing difficult choices on the road ahead in fighting the pandemic and enabling a clean economic recovery.

Thank you for your time and attention to this important matter.

Please feel free in contacting me if there are any further questions.

Sincerely,



John Gorman

President and Chief Executive Officer
Canadian Nuclear Association