Canadian Association for the Club of Rome (CACOR)

Recommendations for Climate Action

January, 2022

Recommendation #1

End all current subsidies to the fossil fuel industry in Canada. Make this process immediate and explicit to Canadians.

According to the International Monetary Fund, the oil, gas, and coal industries benefited from \$5.9 trillion in subsidies in 2020, including multi millions being granted to oil and gas producers in Canada. Logically, use of such subsidies works against the goal of net zero GHG emissions, and the prospects for alternatives to fossil fuels to compete and thrive on a level playing field. In ending subsidies, Canada should ignore the lack of international consensus around the definition of "inefficient" fossil fuel subsidies, and simply eliminate all such subsidies.

Recommendation #2

- A) End all use of coal for the production of electricity in Canada. Where phase-out plans already exist, such as in Alberta, advance those plans to a maximum degree and ramp up alternate means of electricity production.
- B) Immediately begin the phase out of coal exports from Canada for the generation of electricity.

Jurisdictions such as Nova Scotia, Saskatchewan, and Alberta still use coal as a source of energy, and significant amounts of coal are still exported. Alternatives to coal have been successfully deployed in other provinces (Ontario's last coal plant ceased burning coal in 2014). An aggressive coal phase-out should be undertaken in provinces still burning coal.



Recommendation #3

Develop an ecologically based roadmap for regenerative ecosystem management for Canada, complete with milestones and funding for chosen priorities.

- A) Enhance Forest Management: we urge that management practices be enhanced to ensure that forests remain (or become again in applicable areas), an effective and sustainable sink for carbon.
- B) Enhance Management of Agricultural Lands: proper and sometimes innovative techniques applied to the agricultural sector can ensure reductions in the emissions of greenhouse gasses and increase carbon sequestration as well.
- C) Develop an ecologically based National Bioeconomy Strategy: make sustainable use of our forest, agriculture, and other biomass resources to produce products and materials that replace such products currently derived from hydrocarbons.

The regeneration and protection of forests, marshes, wetlands, marine environments, and innovative agricultural practices that either store carbon or reduce emissions is vital.

Canada has 9% of the world's forests – some 348 million hectares, 60 million hectares of agriculture land, and numerous municipalities seeking alternatives other than landfill for organic waste. If properly managed by both the Crown and the private sector, these biomass resources can make a positive difference in the fight against climate change by replacing hydrocarbon derived energy and materials.

According to the McKinsey Global Institute in 2020, "The direct economic impact of the [global] Bio Revolution could be up to \$4 trillion a year over the next ten to 20 years. More than half of this direct impact could be outside human health in domains such as agriculture and food, consumer products and services, and materials and energy production."



Recommendation #4

Reconsider Nuclear Power: we urge Canada to actively consider educating Canadians about the effectiveness of utilizing new generations of nuclear power as a tool to reduce GHGs, and to consider the adaptation of such technologies if it hastens the elimination of fossil fuels wherever sufficient supplies of renewable energy are unavailable.

Safe nuclear power is now generated in Canada and newer and even safer nuclear options are now under development that produce energy without releasing greenhouse gases.

Recommendation #5

Maximize Electrification of Transport including greatly enhanced investment in electric infrastructure for both the public and private sectors: Promote the sale of electric vehicles; Develop clear market penetration targets with annual milestones; Rapidly deploy charging infrastructure nationwide; Introduce incentives, penalties and/or regulations to ensure milestones and targets are met.

Enhanced transportation incentives will still be needed to make electric vehicles more affordable for most members of the public. A national and regional electrified public transportation network should be supported. High-speed trains could reduce the tendency to fly short routes especially when supported by incentives, penalties or regulations. We recognize that very remote locations and emergency vehicles may have limited uptake of electric transportation in the short term.



Recommendation #6

Reduce GHG emissions from all buildings:

- A) Use upgraded building codes, and establish standards promoting energy efficiency in new builds and retrofits
- B) Increase financial support for the installation of highly efficient heating and cooling systems.

Enhanced development of alternative heating and cooling through such things as retrofits, municipal or district heating, use of heat pumps, solar, batteries, geothermal and biological generation of renewable natural gas solutions to reduce emissions are important building blocks in an effective climate change strategy.

Recommendation #7

Canada's federal government should develop a plan, with the provinces and territories, including clear reduction targets and milestones to phase out oil, gas, and coal production and their combustion.

So long as fossil fuel production in Canada continues, it is possible that no combination of other measures, including carbon capture and storage (CCS) or carbon capture and utilization (CCU), will be sufficient for Canada to reach net-zero. CCS is in its infancy and may not be capable of creating the degree of capture necessary for Canada to reach net-zero. Further, carbon capture at source does not reduce emissions at the end use when fuels are burned. While many new technologies and innovations will hopefully be developed rapidly, these may still be insufficient to achieve net-zero. Therefore, contingency plans about circumstances and timelines by which combustion of fossil fuels be phased out within Canada are absolutely necessary.



LIMITATIONS

The foregoing seven recommendations, dated January, 2022, are indicative only. They are not intended as a comprehensive list of required actions or supports. This list does, however, speak to some of what needs to be done *now* to ensure we are on a path toward respecting the new **Canadian Charter of Climate Change Rights and Responsibilities** proposed by CACOR.

Within the Charter itself, and in the seven Recommendations above, no attempt has been made to duplicate or reassert the need for full and adequate consultations with stakeholders and publics, nor to highlight the need to respect indigenous rights and treaties; nor has an indication of the need for policies to enhance equity for various income groups been identified – all of which require careful consideration.

CACOR intends to update, add, and revise our specific recommendations from time to time in keeping with best available knowledge and practices.

For more information on the recent CACOR Pathways Project, which provided the background data forming our recommendations, please go to https://canadiancor.com/ and scroll down to PROJECT PATHWAYS.

