Standing Committee on Environment and Sustainable Development **House of Commons** Sixth Floor, 131 Queen St. Ottawa ON, K1A 0A6 By email: ENVI@parl.gc.ca

May 17, 2021

Re: Canadian Electricity Association (CEA) Comments on Bill C-12, the Canadian Net-Zero Emissions **Accountability Act**

Introduction

The Canadian Electricity Association (CEA) is the National Voice of Electricity in Canada. CEA's 40 members generate, transmit and distribute electricity to industrial, commercial, and residential customers across Canada.

CEA supports the aims of C-12 and believe that a clear, focused plan is essential for Canada's ability to achieve net-zero by 2050. Holding ourselves collectively accountable for meeting targets is important, but these targets must be matched with focused policy so that we achieve them.

CEA was pleased to see that two members of Net Zero Advisory Body have extensive experience working in our sector. Given the importance of the electricity sector to meeting Net Zero by 2050, and the complexities involved in the electricity sector, we are encouraged to see these two individuals as members of the Advisory Body. CEA is interested in providing fulsome advice and information to the Minister and the Advisory Board regarding how the electricity sector can best support Canada meeting of these targets.

Electricity in Canada

Electricity is a keystone industry. It is essential to the prosperity and well-being of Canadians, providing the energy that powers homes, communications, businesses, and, increasingly, transportation and industry. Electricity companies in Canada provide safe, reliable, and sustainable electricity from coast to coast to coast. CEA members continue to be at the forefront of customer service, sustainability, and technological innovation.



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Bill C-12 creates a framework through which the Federal Government will develop, implement, and measure its pathways to net-zero. There is no doubt that electricity will be central to whatever route Canada takes. Safe, reliable, and sustainable electricity can replace higher-emitting forms of energy while facilitating innovation and improving customer experiences. Electricity can be leveraged to decarbonize other sectors, including transportation, heating, and industrial processes, through the production of low carbon hydrogen.

Canada already benefits from one of the cleanest electricity grids in the world, more than 80% of electricity produced in Canada is already non-emitting, and 2/3s from renewable sources. Since 2005, the sector has reduced GHG emissions by 47% and will further do so as Canada's remaining coal-fired power plants are retired. The sector has already done more to decarbonize Canada's economy than any other sector and will play an even larger role in the future.

A Strong Base to Achieve Net Zero in 2050

Canada's electricity grid is already growing, driven by consumer demand and evolving technology. Canada must develop policies that encourage the grid to grow even further to reach net-zero. *A Healthy Environment and A Healthy Economy*, the Government of Canada's new climate plan, projects that achieving net zero will mean two to three times as much clean power as Canada currently produces.

For this to happen, there is no time to delay. The electricity sector is a sector with long-lived assets - it is common for assets to last 30 to 50 (or even 100 years in the case of hydroelectric dams). It is also a sector with long lead times to build new infrastructure. Generation projects take years of study, permitting and approvals before construction to begin. Because of this, it is essential that long-term targets for the electricity sector be set as early as possible, at least ten years in advance to allow for the necessary infrastructure to be ready when it is needed.

Thus, a concerted effort to expand electricity generation, transmission and distribution capacity must begin immediately. This effort must focus on not just building a grid that is sustainable, but must also one that is reliable, resilient, and affordable. This is a difficult, but achievable task. There is a clear role for government to play in this process through clear and consistent policy that enables electrification.

In 2020, CEA identified a list of actions for achieving net zero. Collectively, they represent a framework for developing a focused electrification plan for Canada to help achieve net-zero. This framework should:

- Reflect regions. Canadian federalism means that we have 13 different and largely independent
 electricity systems. The needs of each are unique, as are opportunities to connect to each other.
 A flexible approach is needed.
- Ensure customer affordability. Every policy decision should be measured against how it affects the price that Canadians pay for electricity to ensure that these actions do not inadvertently impact affordability.



- Promote efficient use of energy. Engage with residential, industrial, and commercial electricity
 customers, and other stakeholders, to support energy efficiencies, including updating of energy
 efficiency codes and standards.
- Help scale-up nascent technology. Establish partnerships with industry partners to invest in
 utility-scale battery storage pilots, small modular reactors (SMRs), hydrogen fuel, micro-grids,
 and other distributed energy resources (DERs) to efficiently use low-carbon energy resources
 and prepare for the grid of the future without creating adverse impacts on electricity prices or
 reliability of the system.
- Commit to national and international emissions trading. Emissions credit trading will be critical to putting the "net" in net zero. Canada must develop national and international emissions trading regimes and establish a transparent, cost-effective, and verifiable credit creation system that conforms with 2050 goals.
- Support research, development, and commercialization. The electricity sector needs policy support and clear regulatory pathways for innovative technologies that could develop new markets for Canada, including intelligent grids, utility scale storage, carbon capture, utilization, and storage (CCUS), hydroelectricity, SMRs, hydrogen and other technologies. Accelerating research, development, and deployment (RD&D) means expanding the role for federal and provincial/territorial grants, tax credits and investments in emerging low-emissions technologies and ancillary services to enable an intelligent electricity grid of the future. Where the government has introduced implementation strategies, they should be appropriately funded.
- Modernize provincial and territorial regulatory models. Electricity markets and rates are regulated by provincial/territorial regulatory commissions. These legislative frameworks must be updated to allow for electricity industry innovation and diversification of activities in support of efficient electrification. A subsequent chapter addresses this in greater detail.
- Invest in climate resiliency. As Canada relies more on electricity to provide our energy needs,
 our country must make sure the system remains reliable. The federal government should work
 with local governments and stakeholders to accelerate current efforts to understand long-term
 climate variability projections and facilitate utility investments in climate change adaptation and
 grid resiliency.

CEA and its members are leaders in climate adaptation and resiliency. CEA recently published Climate Change & Extreme Weather: A Guide to Adaptation Planning for Electricity Companies in Canada, which helps electricity companies better understand the risks associated with climate change and how best to manage those risks.

Conclusion

CEA appreciates the opportunity to comment on this legislation. Our sector is committed to advancing decarbonization in Canada and looks forward to working with government to achieve this goal.

