

Francis Bradley- Remarks to House of Commons Standing Committee on the Environment and Sustainable Development

November 2, 2020

Good afternoon, Madam Chair.

CEA is the national voice of electricity. Our members operate in every province and territory in Canada, and include generation, transmission and distribution companies, as well as technology and service providers from across the country.

Canada's electricity sector employs 81,000 Canadians and contributes \$30 billion to Canada's GDP. Indirectly, our sector supports essentially every job and industry in Canada. Electricity is the foundation of the modern economy.

Electricity is also at the heart of Canada's transition to a low-carbon economy. Over 80 percent of Canada's electricity generation is already non-emitting, making it one of the cleanest grids in the world. In fact, the Canadian electricity sector has already reduced GHG emissions by more than 40% since 2005.

The availability of clean, reliable power will play an essential role as Canada begins to decarbonize through electrification. Our sector is uniquely positioned to help advance Canada's clean energy future and meet climate commitments in 2030, 2050 and beyond. In fact, CEA released a list of actions for achieving net zero carbon emissions; we have provided it to the clerk for your reference.

Electrification of vehicles will play an important part of Canada reaching climate targets. Light duty vehicles represent 12% of Canada's overall GHG emissions, and with focused action we believe we can reduce that to near zero.

To do so, however, there are several actions that government must take. We believe that government has done a good job thus far encouraging EV adoption by providing purchase incentives and charging infrastructure. The electricity sector supports these measures wholeheartedly. Electricity companies have been active participants in building out charging in and in between communities. As government considers recovery efforts, further investment in charging is of good value.

Alas, it's not enough to just help people buy EVs and to install more chargers. These might be the exciting, visible parts, but we can't forget about the foundations of the system. For EVs, that means modernizing the rules around electricity metering and making sure that the distribution infrastructure can support this growth.

Canada's legislation on electricity metering dates from before the internet- basically since the last time we had a Prime Minister Trudeau. As written now, overly prescriptive acts such as the *Electricity and Gas Inspection Act* (EGIA) and *Weights and Measures Act* (WMA) stifle innovative metering technology and, in turn, impede the commercial deployment of technologies dependent on these.

Outdated metering legislation holds back further deployment of charging infrastructure in public and in multi-residential dwellings. It prevents charging operators from billing customers for the power they use. Updating metering requirements will also enable other new technologies to be used. For your

reference, I've included CEA's submission to Measurement Canada on this. We've also provided a document that highlights examples of the absurdities of the current act's restrictions.

Next, we have to be sure that the grid itself is ready for electric vehicles. It's not so much a question of making sure that there's enough electricity- in fact, EV charging offers the opportunity to take advantage of surpluses of power overnight and at other off-peak times. But at a hyper-local level, an increase in EVs will need to be supported by upgrades to local distribution infrastructure, such as feeders and transformers. Even a handful of EVs on a single street could require upgrades beyond what is currently in place.

Electricity companies will need to be able to make these investments, both to build for future needs and to retrofit existing neighbourhoods. To do so will require support from provincial energy regulators. There is a role for the federal government to play in facilitating this support. Beyond EVs, expanding distribution infrastructure will also facilitate other, future expanded electricity use.

Credits generated through the Clean Fuel Standard could help offset some of these costs. Should local utilities be able to generate credits through EV charging, these revenues could help offset necessary infrastructure upgrades without having to add costs to residential bills.

Finally, I've spoken at length today about light duty cars and trucks. While electrification of these vehicles would represent a substantial carbon reduction, it is only part of Canada's transportation sector. Other parts- long distance trucking, marine uses, and aviation- seem to require solutions other than batteries.

Hydrogen may be a solution for these functions. Canada's electricity sector looks forward to the upcoming release of Canada's Hydrogen strategy. Our sector is optimistic about the opportunity of low- or no-carbon hydrogen to reduce emissions. From our perspective, hydrogen made with non-emitting electricity is basically electrification.