

MANITOBA ECO-NETWORK

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Environment and Climate Change Canada (ECCC) ECD-DEC@ec.gc.ca

Re: Proposed Frame for Clean Electricity Regulations

The Manitoba Eco-Network (MbEN) appreciates this opportunity to comment on the Government of Canada's proposed Frame for the Clean Electricity Regulations (CER). Since 1988, MbEN has promoted positive environmental action by supporting people and groups in our community. MbEN's programming focuses on policy advocacy, engagement in consultation processes and developing capacity building tools that benefit the environmental non-profit sector and our member groups. We are a public interest environmental organization seeking to promote and facilitate good environmental governance and the protection of Manitoba's environment for the benefit of current and future generations.

MbEN welcomes the Government of Canada's commitment to achieving a net-zero electricity system and net zero emissions by 2050. We think the development and implementation of the CER is an important step in this process. MbEN supports the three principles the CER are being developed around: achieving net-zero emissions from the electricity grid by 2035, ensuring grid reliability, and maintaining electricity affordability. However, we think that a fourth core principle of "environmental justice" should be added to ensure systemic environmental racism, support for vulnerable populations, and reconciliation with Indigenous governments and communities are addressed in the CER and other laws and policies supporting Canada's journey to achieving net-zero emissions.

MbEN also feels the <u>Canadian Net-Zero Emissions Accountability Act</u> is vague on identifying the ways anthropogenic emissions¹ of greenhouse gasses can be balanced by anthropogenic removals². Therefore, we are concerned about the efficacy of the complementary measures indicated in this proposed Frame for the CER and <u>Canada's 2030 Emission Reduction Plan</u>. In particular, carbon capture and storage has been shown to have limited success unless necessary policy and legal changes are effectively implemented, significant financial costs are

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¹ Anthropogenic emissions are "Emissions of greenhouse gases (GHGs), precursors of GHGs and aerosols caused by human activities. These activities include the burning of fossil fuels, deforestation, land use and land-use changes (LULUC), livestock production, fertilisation, waste management and industrial processes." [IPCC, "Special Report: Global Warming of 1.5°C, Glossary", (2018) online: https://www.ipcc.ch/sr15/]

² Anthropogenic removals refer to "the withdrawal of GHGs from the atmosphere as a result of deliberate human activities. These include enhancing biological sinks of CO2 and using chemical engineering to achieve long-term removal and storage. Carbon capture and storage (CCS) from industrial and energy-related sources, which alone does not remove CO2 in the atmosphere, can reduce atmospheric CO2 if it is combined with bioenergy production (BECCS)." [IPCC 2018, Glossary]

addressed, and potential environmental impacts are meaningfully considered and mitigated.³ We also have concerns with the promotion and deployment of Small Modular Reactors (SMRs). Environmental organizations, civil society groups, and Indigenous communities across Canada have many concerns with SMRs. For example, SMRs are perceived as too slow to address the climate crisis, are too expensive and create fewer jobs than renewable energy developments, and are dirty and dangerous, especially since Canada does not have an effective policy or strategy to deal with radioactive waste.⁴ While there are many potential applications for the use of hydrogen, its efficacy in the transition to net zero emissions is highly dependent on how it is produced, and the CER should ensure that the carbon intensity of the hydrogen production process be captured in the emissions intensity requirements of regulated units. Hydrogen production technology and adoption is still in its infancy, and it is critical that development be guided expeditiously toward low carbon intensity hydrogen in line with the 36.4 gCO2e/MJ threshold suggested by the Hydrogen Strategy For Canada⁵, produced without a fossil fuel feedstock.

MbEN also has concerns about the establishment of an intensity based emissions performance standard (e.g., t/GWh) for electricity generating units. For example, when this approach is applied to a hydroelectric dam, the generation output can be irrelevant with respect to potential emissions, environmental, and social impacts. Some small dams have had very significant impacts and some large dams have had relatively low impacts. There is also the possibility that new proposed developments will seek to build just below the regulatory threshold so as not to trigger the Regulations. MbEN recommends seeking a better mechanism for determining the applicable scope of the proposed Frame and Regulations.

We also want to highlight the need to move away from extensive regulatory phase-in periods that will allow new and existing units to avoid compliance with the CER and its performance standards until 2035. The Government of Canada owes a duty to current and future generations to address climate change in a meaningful way now, not 10+ years in the future. The CER and associated performance standards should be applicable to industry as soon as possible and instead of phasing down natural gas production and use, a moratorium should be placed on any new developments, with the focus of phasing out natural gas. Natural gas should not be used as a bridge transition energy source from coal.

In terms of how cogeneration will be addressed by the CER, MbEN feels that all units generating electricity that are producing emissions, regardless of who is consuming such electricity, should

³ Charles Harvey and Kurt House, "Op-Ed: Every Dollar Spent on This Climate Technology Is a Waste" (New York Times, August 17, 2022); E. Martin-Roberts et. al., "Carbon Capture and Storage at the End of a Lost Decade" (2021) *One Earth*, 4(11), 1569; A. Babin, C. Vaneeckhaute, & M.C. Iliuta, "Potential and challenges of bioenergy with carbon capture and storage as a carbon-negative energy source: A review" (2021) *Biomass and Bioenergy*, 146, 105968.

⁴ For example, see CELA, "Statement on Small Modular Reactors" (2020) online: https://cela.ca/statement-on-small-modular-reactors/

⁵ NRCAN, "Hydrogen Strategy For Canada", (2020) online: https://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/environment/hydrogen/NRCan Hydrogen-Strategy-Canada-na-en-v3.pdf

have to comply with and meet the same standards. Industrial units should be required to comply with CER and associated performance standards as soon as possible and should not be exempt for any reason.

Finally, MbEN feels that any emergency exemptions allowed by the CER (e.g. unabated natural gas usage during emergency circumstances) should be time limited. For example, exemptions should be associated with particular seasons or linked with specific temperature thresholds (i.e., below 0 degrees, above 28 degrees) in addition to being extraordinary, unforeseen, and irresistible.

MbEN appreciates your consideration of our comments and recommended changes to the proposed Frame for the Clean Electricity Regulations. We welcome future opportunities to engage with the Department of Environment and Climate Change to ensure the highest level of environmental protection measures are enacted to help us protect Manitoba's environment for the benefit of current and future generations.

Sincerely,

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