

## Summary of Pathways Alliance's Submission on the <u>Proposed Clean Electricity Regulation</u>

Submission Dates: September 29 and November 2, 2023

In the Canada Gazette, Part I, August 19, 2023, the federal government published draft Clean Electricity Regulations ('CER') which, if enacted, would require fossil fuel power generation units to meet an emissions performance standard of 30 t /GWh or operate for less than 450 hours/yr.

Pathways recognizes that achievement of net zero GHG emissions (scope 1 and 2) by 2050 from Pathways members' oil sands operations will require the reduction of GHG emissions associated with electricity production. However, the proposed CER have the potential to result in significant impacts to Pathways members' oil sands operations and plans for carbon capture projects. Pathways is concerned with the proposed CER and the potential cumulative impact of climate-related compliance costs, regulatory risks and increased operating costs, which undermine the competitiveness of the oil sands industry.

Pathways' foundational project, consisting of a carbon capture and storage network, requires access to stable and affordable electricity. The Pathways foundational project is sensitive to electricity prices and operating costs could increase substantially due to the proposed CER impacting provincial electricity supply. Furthermore, if stable baseload electricity, which cannot be technically or affordably abated, is removed due to the proposed CER, reliability of the grid will be threatened. This would result in operational impacts to Pathways' proposed carbon capture and storage network.

The proposed CER could impact emission reductions within the oil sands sector compared to Pathways' current net zero plan. The proposed CER could cause operators to re-prioritize carbon capture and storage (CCS) deployment to meet the compliance timeline of 2035 potentially resulting in lower emission reductions.

The proposed CER could cause loss of stable baseload electricity supply due to cogeneration units scaling back or shutting down. Current technologies (e.g., CCS) may not be able to meet the proposed emission performance standard for electricity generation. This may lead to cogeneration units coming offline in 2035 and future years. Oil sands operators may shut-in their cogeneration units and fulfill steam demand using boilers and imported electricity from the grid. In this scenario, electricity supply will decrease, and demand will increase, causing prices to rise further and decrease reliability of the grid.













The proposed CER could have impacts to grid reliability particularly in provinces where options for stable baseload supply is limited. It is essential for regulators to maintain swift responses to upset conditions, protect the grid from vulnerabilities, and maintain the safety and security of everybody that relies on provincial grids.

Pathways has proposed several solutions that can address these concerns, such as:

- Establish an achievable emission performance standard for operation of CCS on natural gas-fired electricity generation, and acknowledge technology readiness, regulatory timelines, supply chain and labour issues.
- **Provide flexibility for cogeneration operators** by recognizing that cogeneration units are integrated within the central processing facility at oil sands operations.
- Adjust regulatory requirements to exclude or limit exposure to cogeneration.

  Revisions to heat-to-power ratios and net export thresholds can reduce the impact of the proposed CER on cogeneration units.
- Reduce administrative burden and ensure public safety by simplifying exemptions for emergency operations provisions.