



THE FUTURE OF CANADA'S ELECTRICITY SYSTEM

At a Glance

VISION 2050.ca



The Canadian Electricity Association is pleased to present the electricity industry's vision for the evolution of Canada's electricity system between now and 2050. Vision 2050 proposes practical and proactive strategies and actions aimed at advancing three objectives:

- Renewing the electricity system;
- Delivering maximum value;
- Contributing to a low carbon economy.



renew



value



low carbon

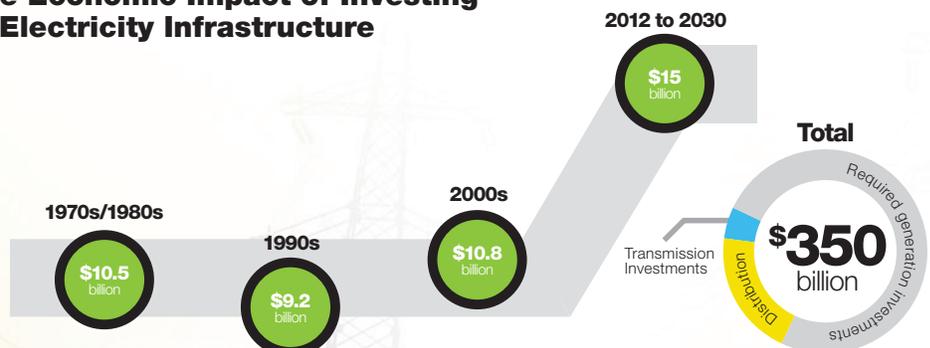


The Case for Action Now

Vision 2050 sheds light on the urgent need for action both in policy development and infrastructure investment.

Electricity infrastructure must be maintained and renewed just to sustain the reliability of what we have today. This will require substantial new capital investment at unprecedented levels.

The Economic Impact of Investing in Electricity Infrastructure



Long lead times for planning for refurbishment and new construction suggest that we do not have the luxury of many years of assessment before making decisions.



VISION 2050: The Future of Canada's Electricity System

Vision 2050 centers on four key recommendations that are likely to produce the greatest transformations. These recommendations are intended for the federal and provincial governments, regulators, electricity companies, and ordinary Canadians in support of the vision.

**WHILE IT MAY SEEM
LIKE WE HAVE YEARS
TO DECIDE ON THE
SYSTEM WE WANT,
2050 IS AN ELECTRIC
HEARTBEAT AWAY**

It's time to decide.



RECOMMENDATIONS

VISION 2050 – A SUMMARY OF RECOMMENDATIONS AND STRATEGIES FOR ACTION

Recommendation One – Accelerate Innovation and Customer Management of Energy

Electricity regulations were developed in a different era. Increasing consumer management of energy and grid modernization are blurring traditional distinctions between utilities, the grid and the customer. By 2050, if not much earlier, there is potential to be operating an electricity system in which electric vehicles, energy efficiency, integrated renewables, and energy storage are all in a constant state of dynamic, demand-supply interaction, tailored to the preferences of households and individual customers. Vision 2050 recommends accelerating this transformative innovation and customization.

Recommendation Two – Implement Financial Instruments for Carbon Reduction

Electricity investments in Canada will unavoidably entail significant costs to ratepayers and taxpayers in the coming decades. It is important that economic policies be well-coordinated to ensure costs are considered in the proper context and weighed against the benefits of the investments, in light of the alternatives and over the long-term. A North American carbon price that is implemented across the economy holds potential for very significant carbon reductions at lower cost than alternatives. Vision 2050 recommends implementing financial instruments that support carbon reduction at multiple levels: for households, for the electricity sector, for electricity in conjunction with transportation and for the economy as a whole.

Recommendation Three – Enable Electric Vehicles (EVs)

Electric vehicles may grow to very high levels of market penetration, with corresponding environmental benefits and opportunities for electricity providers, or they may fall far short of their full potential. Vision 2050 recommends proactive steps to accelerate the electrification of the transportation sector through policy support and collaboration, coalition building, and implementation of enabling infrastructure.

Recommendation Four – Expand Collaboration Across Borders

The electricity grid is already very much a shared resource between Canada and the United States, yet additional opportunities for integration and collaboration abound. Vision 2050 recommends optimizing electricity assets from a more integrated North American approach and expanding scope for electricity storage and export of low-carbon electricity to the United States.

**THE DECISIONS THAT CANADA MAKES TODAY,
AND OVER THE NEXT FIVE TO 10 YEARS, WILL
HAVE A HUGE IMPACT ON WHAT OUR SYSTEM
WILL LOOK LIKE IN 2050**

To access Vision 2050 visit www.vision2050.ca.



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