Made-in-Ontario Electricity Lights the Way for our Environment and Economy



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The Canadian Net-Zero Emissions Accountability Act, which became law in June 2021, enshrines in legislation Canada's commitment to achieve net-zero carbon emissions by 2050. The United Nations recently warned that countries around the world are not yet reducing their reliance on oil, gas and coal at a pace required to reach goal. This is clearly a monumental challenge, perhaps the most formidable humankind has faced. It is difficult to comprehend how the world can be weaned off fossil fuels while developing and transitioning to abundant, affordable and carbon free energy sources. However, that is our imperative, or else our children and future generations will face the calamitous consequences.

Electrification of our economy is the single largest opportunity fuels displace fossil and to dramatically reduce emissions. Ramping up carbon-free electricity production in Canada will require different approaches from province to provide the most benefits to people in each province.

According to the recently released report Ontario's annual of Independent Electricity System Operator (IESO), the province's demand for electricity is forecast to increase by 75 per cent by 2050, which, in the IESO's estimate, is the equivalent of adding four and a half cities the size of Toronto to the grid. This is indicative of the need for a massive increase in electricity generation capacity by 2050. Ontario's challenge is compounded by the need to replace existing generation infrastructure that will be retired from service before 2050. Furthermore, Power Workers' Union analyses suggest that demand growth could be more than double the 75 per cent IESO forecast.

Demand is already getting well ahead of clean electricity supplies and that has left Ontario in a position that significant natural gas generation will be relied upon to secure supply for longer than many had hoped – well beyond 2035.

Clean 24-7 baseload supplies will become even more valuable as Ontario transitions from our current high demand in summer, driven by air conditioning, to higher winter demand due to increased reliance on electric heating systems.

The large carbon-free baseload infrastructure required will take a well-planned and coordinated build strategy spanning several decades. The good news is that both the provincial and federal governments have begun to do the extensive planning and preparatory work needed in advance of the boom to Approval processes for essential nuclear, hydroelectric and transmission projects are being reengineered to provide efficient and effective outcomes. To successful. this massive transition must be achieved in a timely manner while maximizing good Canadian jobs and other economic benefits.

There is encouraging progress at the federal and provincial levels in financial establishing critical instruments like clean energy investment tax credits, green bonds and other policy necessities to both attract investment for these large projects and to keep electricity rates as low as possible for consumers. Transmission and distribution companies will also need access to low-cost financing for infrastructure

upgrades to withstand the increasingly volatile weather and to power electrification essentials such as electric vehicle charging and the transition to heat pumps.

These are exciting times in the electricity sector. The already substantial number of people working in good jobs in the electricity generation and delivery sector will increase exponentially and offer rewarding life-long careers with opportunities for advancement. These high-skill jobs range across the spectrum including engineers, scientists, high-skilled construction maintenance and trades, technicians, planners. managers, trainers, labour relations specialists, HR, IT, payroll specialists, administrative support and the list goes on. These are the kinds of opportunities many young people and their parents dream of.

Ontario recently announced it will develop a new integrated energy resource plan that will coordinate electricity, natural gas and other energy resources over the long term. The right energy choices and investments made today will have a profound impact on carbon emission reductions, energy security and economic growth in Ontario for generations to come. Ontario has world class carbon-free electricity assets and know-how to build on for success. Let's get to work.

