**Integrated Energy Resource Plan Consultation**

**ERO number**

019-9285

The Sarnia-Lambton Economic Partnership is the lead economic development agency for the Sarnia-Lambton area. The Sarnia-Lambton area is well known and respected as a key manufacturing centre for the development and commercialization of biochemical, petrochemical, refining, sustainable technology, and clean energy industries. Additionally, the area is positioned to be a potential leader in energy supply to support Ontario’s needs through the intended development of the Ontario’s Hydrogen Hub in Sarnia-Lambton and the potential for utilization of the former Ontario Power Generation Lambton Generation Station site as a location for small modular nuclear implementation. Expansion in any and all of these key areas will contribute immensely to the regional, provincial and national economy. Presently the region is a significant contributor to Ontario’s energy mix with more than 2688MW of installed natural gas generation capacity, 120MW of installed solar capacity, and 439MW of installed wind generation capacity, and contracts for the expansion of an additional 300MW of local energy production capacity.

**Overarching Question**

**What policy options and actions should the government consider in the integrated energy resource plan to achieve Ontario’s vision for meeting growing energy needs, keeping energy affordable and reliable, ensuring customer choice, and positioning us to be an energy superpower?**

To achieve these goals, Ontario should prioritize:

1. **Diversified Energy Portfolio**: Support a balanced mix of natural gas, nuclear (including small modular reactors, SMRs), renewable energy, hydrogen blending, and energy storage technologies to ensure reliability and affordability.
2. **Economic Development Considerations**: Allow for prebuild through the OEB. Current five year intervals are not sufficient for large scale investment attraction. To be able to be competitive in landing foreign direct investment, infrastructure must be in place prior to facility decisions being made. Minimum of fifteen to twenty years may be appropriate.
3. **Incentives for Innovation**: Create long-term, high value, non-competitive financial incentives for the development and deployment of hydrogen generation technologies, advanced nuclear innovations, and grid-scale storage.
4. **Regulatory Modernization**: Streamline permitting and approvals for energy projects to accelerate deployment and reduce costs.
5. **Enhanced Public-Private Partnerships**: Foster collaborations with industry to leverage private investment in energy infrastructure.
6. **Indigenous Partnerships**: Increase Indigenous leadership and equity participation in energy projects.

**Planning for Growth**

**What actions should be prioritized to enhance planning across natural gas, electricity, and other fuels?**

1. **Integrated Planning Framework**: Develop a cohesive framework integrating natural gas, electricity, and hydrogen systems to ensure holistic approaches across the system planning and distribution planning.
2. **Promote Cogeneration Stability**: Expand incentives for natural gas cogeneration systems, ensuring their reliability and exploring their compatibility with hydrogen blending to reduce emissions.
3. **Expand Opportunities for Natural Gas Utilization**: Support the role of natural gas both as a feedstock and as an affordable, reliable, and resilient energy solution for hard-to-abate, energy-intensive industries that rely on higher emitting fuels and where electrification is neither affordable nor practical.
4. **Support Hydrogen Infrastructure**: Build out infrastructure for hydrogen production, storage, and distribution, with a focus on low-carbon hydrogen.
5. **Proactive Growth Planning**: Base energy planning on projected areas of economic development significance and investment readiness, rather than relying on announced or proposed projects. This includes having an understanding of the industrial areas that have other core infrastructure to accommodate large-scale energy intensive industrial uses.

**Are there opportunities to enhance the province’s approach to procuring electricity generation supply?**

* Introduce competitive procurement processes for clean and reliable technologies like SMRs, renewables, and hydrogen cogeneration.
* Prioritize long-term contracts to reduce risk and ensure cost stability.
* Include combined heat and power projects.

**What actions should the government consider to promote greater access to electricity and accelerate grid-connections?**

1. **Fast-Track Approvals**: Implement streamlined processes for new grid connections in high-growth areas, or areas of high economic value in terms of investment and job creation potential.
2. **Expand Capacity for EVs and Heating**: Invest in grid infrastructure to support electric vehicles (EVs) and building electrification.
3. **Rural and Remote Access**: Enhance support for extending grid access to underserved regions, including Indigenous communities. This includes both electricity and natural gas grids.
4. **Clear Framework on Growth Targets**: Perhaps through the Provincial Planning Statement.
5. **Behind the Fence Pricing**: Allow for electricity generators who support industrial parks to provide behind-the-fence power before it is released to the grid. Especially if the use of the behind-the-fence power is to support new economic development investment and job creation, where the same power would otherwise be unallocated along the public grid. For Example: TransAlta at the Bluewater Energy Park.

**What steps can the government take to ensure transmitters have the certainty they require?**

* Offer clear policy directives, funding mechanisms, and risk-sharing agreements to encourage early investment in transmission infrastructure while maintaining competitive cost structures.

**What policy guidance should be provided to the Ontario Energy Board (OEB) regarding natural gas and low-carbon alternatives?**

1. Encourage blending hydrogen with natural gas to reduce emissions in existing systems.
2. Promote biogas and renewable natural gas as viable alternatives.
3. Develop long-term plans for transitioning to low-carbon fuels in heating and industrial applications.
4. Understand the important role of natural gas at large in a provincial energy plan such as proposed. Natural gas should not be viewed as an insurance policy for generation but as an equal.
5. Leverage curtailed renewable power and salt cavern infrastructure for the production and storage of low-carbon hydrogen, to be utilized for the purposes of power balancing at potential hydrogen-ready cogeneration facilities during periods of peak energy needs.

**How can the government best support Indigenous leadership in energy planning and projects?**

* Facilitate co-ownership and revenue-sharing models for energy projects involving Indigenous communities.
* Provide capacity-building programs and funding for Indigenous-led energy planning initiatives.

**What cooperation opportunities exist across jurisdictions to support energy trade, transmission, and electrification?**

1. Collaborate on cross-border transmission lines to facilitate energy trade with neighbouring provinces and states.
2. Align EV and hydrogen refueling infrastructure with other jurisdictions for seamless regional connectivity.
3. Recognize the export opportunities associated with ammonia, as an energy carrier, and utilization of the Great Lakes and St. Lawrance Seaway system to promote cross jurisdiction international trade.

**What types of technical information and forecasts would best support sector participants?**

* Provide granular data on demand growth, renewable generation potential, and grid constraints to enable effective planning by utilities and developers.

**Affordable and Reliable Energy**

**What steps should the government take to enable informed energy use decisions?**

1. Expand programs like time-of-use pricing and dynamic pricing to incentivize off-peak energy use.
2. Enhance digital tools for real-time energy monitoring and management.
3. Provide greater detail on the active carbon intensity of the grid, to support higher use during intervals of lower carbon intensity energy supply.

**How can the government support customers choosing EVs?**

* Invest in public charging networks, incentivize residential chargers, and offer grid capacity upgrades for charging infrastructure.

**How should government empower customers to install innovative technologies?**

1. Introduce grants and tax credits for rooftop solar, battery storage, and microgrid solutions.
2. Simplify permitting and interconnection processes for distributed energy resources (DERs).
3. Develop and promote long-term, high value, non-competitive incentive programs for the installation and/or utilization of innovative technologies.

**What actions should leverage DERs to enhance the grid?**

* Develop a DER marketplace allowing customers to sell surplus energy back to the grid.
* Implement demand response programs to optimize grid stability and reduce peak demand.

**What policy or regulatory changes should support DER adoption?**

1. Offer financing options to reduce upfront costs.
2. Mandate grid-friendly DER technologies with standardized protocols for interconnection.

**What barriers limit local distribution companies (LDCs) in adopting new roles?**

* Regulatory limitations on LDC investments in DERs.
* Lack of access to capital for innovative technologies.

**What actions can enhance collaboration between stakeholders?**

1. Create task forces to align goals and streamline communication between the OEB, IESO, LDCs, and communities.
2. Provide shared funding for pilot projects and research initiatives.
3. Establish active and on-going communication mechanisms with other key utilities and industrial lands of key economic significance, so as to collaboratively and proactively plan for the future development of priority or investment-ready land.

**How can Ontario maintain affordability during the energy transition?**

* Expand energy efficiency programs and financial assistance for low-income households.
* Subsidize emerging technologies until they achieve cost parity.

**Energy Superpower**

**What opportunities exist to capitalize on Ontario’s nuclear technology leadership?**

* Scale up the deployment of SMRs, leveraging Ontario’s expertise in nuclear safety and innovation.
* Establish Ontario as a global exporter of nuclear technology and services.
* Leverage key land assets within Provincial control for the investment in new nuclear energy production assets. This could include sites like the former Lambton Generating Station site in Sarnia-Lambton that is suitable to accommodate small modular nuclear.

**How can Ontario leverage its position as a clean energy leader?**

1. Promote hydrogen exports using surplus clean energy for electrolysis.
2. Position Ontario as a hub for manufacturing EV batteries and renewable technology components.
3. Lead global partnerships for clean energy technology development.

By pursuing these recommendations, Ontario can ensure an integrated, resilient, and forward-looking energy system that meets its growth, affordability, and sustainability goals while securing its position as a global energy leader.

Respectfully submitted by the Sarnia-Lambton Economic Partnership