

Integrated Resource Plan Consultation



An EV powering a sump pump and keeping her basement from being flooded in the Derecho. An example of DER.

Submission by Climate Network Lanark (CNL), December 2024

Introduction

Climate Network Lanark (CNL) is a non-profit organization dedicated to local, sustainable energy and environmental practices in Lanark County. We are based in a community of some 70,000 people, half living rurally and half living in small towns including Almonte, Carleton Place, Perth and Smiths Falls. Our mission is to engage our communities in taking action to address climate change, with a focus on clean energy, conservation, and local solutions. We are committed to reducing carbon emissions, facilitating a successful energy transition, and fostering a culture of sustainability.

We have had some notable successes in our five years including persuading Lanark County and some lower-tier municipalities to develop Climate Action Plans, bringing an ALUS chapter into Lanark to the benefit of area farmers, attracting attendees from across Southern Ontario to a Forum on community electricity planning, developing a regional network committed to Nature Based Climate Solutions and creating an innovative neighbourhood house retrofit program network now supported by some national organizations because of its achievements.

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Planning for Growth

Issue:

 Ontario's energy needs are growing, but focusing solely on expanding centralized energy generation will miss out on sustainability and on resilience.

Solution:

- Prioritize distributed energy resources (DERs) such as solar panels, battery storage, and microgrids.
- It's promising to see that IESO is developing DER. But CNL supports extending the
 developments so that community based entities can take advantage of DER and make
 substantial local contributions. CNL is aware that some local residents want to invest in
 such opportunities and want to provide such power to our local needs and to establish
 local micro-grids..
- These solutions can foster resilient, self-sufficient communities while reducing transmission losses and overall costs.
- Lanark County and environs is well-positioned to lead in this space with 17 solar farms already in place, more planned and a receptive community.
- Supporting distributed energy in rural areas can help ease grid pressures while creating local energy ownership.
- Therefore, CNL supports the position of OREC, the Ottawa Renewable Energy Cooperative when it says "new legislation is crucial to delivering the benefits of DERs."
- Specifically, legislative changes are required to, as OREC says:
 - "1. Open Long-Term 2 (LT2) procurement to small- and medium- scale energy producers

- Lead the development of a progressive, cost-effective, and market-driven economic model that enables small-scale producers such as RECs to be fairly compensated for clean, local capacity....
- 2. Remove the constraint that prohibits LDCs from being able to buy (renewable) energy and storage capacity
 - Direct the OEB and IESO to collaborate with both large- and small- prosumers to develop an integrated management model. This should enable time shifting while preserving resilience of the grid. Currently, only the central IESO can purchase electricity production, which limits innovation and cost efficiencies. A segregated economic model is poorly aligned with storage resources which are both consumers and producers of electricity.
- 3. Enable Microgrids and Prosumers
 - The market is evolving towards harmonized and economical generation, storage, and consumption at community scale
 - Enable the integration of storage into communities' electricity systems and billing models.
- 4. Remove constraints to pooling and sharing renewable electricity generation and consumption behind the meter
 - Facilitate Virtual Power Plants (VPPs) as shown to be effective in other jurisdictions
 - Community- or Virtual- Net Metering (VNM) enables solar net metering systems to be located where they can provide optimal value to the grid and make use of economies of scale. Current legislation prevents VNM.
 - VNM also makes renewable energy accessible to renters and those without a solar-friendly rooftop."

All Electric New Housing Developments

Issue:

• The <u>Building Decarbonization Alliance</u> in their <u>Grid Implications of Electrifying Residential New Construction | 2024 Update</u>, based on input from 22 residential developers, identified 5 fixable obstacles to electrifying new home developments and avoiding "old school"gas infrastructure. In a world committed to decarbonization with heat pumps and induction stoves in ascendancy, burying new gas infrastructure is • an immediate waste of resources, and • assessed over the long term, residential gas infrastructure is now a dead-end investment (a) destined to burden homeowners with the

cost of an eventual fuel (power) shift and (b) placing a persistent drag on home value appreciation. Obstacles in descending order of importance

- 1. Regulation and policy gaps
- 2. Financial costs *
- 3. Communication issues
- 4. Technical barriers
- 5. Local distribution bottlenecks

* The OEB has estimated the cost to increase a new home electrical panel capacity to handle EV charging and heat pump functioning to be roughly equal to the average gas line infrastructure cost/home of \$4,400. In Dec 2023 the OEB ordered Enbridge to charge the cost of gas line infrastructure to the builder and suspend the practice of 40 year amortization of these costs on monthly bills.

Solution:

 Deliberately address these systemic obstacles. This will give our local developers and homeowners in areas like Perth, Almonte, Carleton Place, and Smiths Falls the option to avoid the economic and ecological burden of regressive new gas infrastructure.

Carbon Pricing Policy - Acting Alone or Acting Together

Issue:

- The Ontario government's approach to carbon pricing reflects a refusal to act
 collaboratively, undermining worldwide decarbonization efforts and offering insufficient
 solutions to the climate crisis. This failure to address the pressing issues—like the fact
 that the Earth has exceeded six of nine planetary boundaries—puts us at risk of
 irreversible consequences.
- The six boundaries that we have already exceeded are climate change, biosphere
 integrity (genetic diversity and energy available to ecosystems), land system change,
 freshwater change (changes across the entire water cycle over land), biogeochemical
 flows (nutrient cycles), and novel entities (microplastics, endocrine disruptors, and
 synthetic chemicals that would not be on Earth if not made by humans.)
- The government's stance *claims* to prioritize affordability, but a broader, coordinated approach to decarbonization is essential. Without collective action, Ontario risks falling behind on climate goals, with long-term consequences for future generations, including impacts on human health and the environment.
- It is well understood and documented that any optional program to a carbon fee simply hides the cost of carbon. It is still there, consumers will still pay it.

Solution:

- A carbon fee and rebate system puts money back in Ontarians' pockets and therefore makes goods and services affordable.
- Advertise the costs of climate inaction, including the six planetary boundaries that we
 have let escape our control. With this transparent public discussion, Ontarians will
 understand the low cost of a climate fee and rebate in comparison.

Affordable and Reliable Energy

Issue:

 Ontario must optimize how and where energy is generated and consumed to ease the strain on the grid.

Solution:

- Encourage distributed energy solutions, like solar power, microgrids, and battery storage, to complement existing nuclear and hydro power.
- Focus on energy-saving technologies in buildings and smart grid infrastructure to reduce overall energy demand.
- In Lanark County, investing in localized energy solutions like solar farms can help ease grid pressures and improve efficiency across Ontario.

Governance

Issue:

 The Ontario Energy Board (OEB) plays a critical regulatory role, which was undermined when Minister Todd Smith overruled the OEB's December 2023 decision regarding Enbridge.

Solution:

- Protect the OEB's regulatory independence to ensure sound decisions that prioritize public interests.
- The politicization of regulatory processes can lead to poorly managed risks and delay critical transitions, like the shift to electric heat pumps in fossil fuel furnace replacements.

Conclusion

To support Ontario's energy transition, we must prioritize energy efficiency and conservation while exploring decentralized, local energy solutions like solar power, battery storage, reconductoring and microgrids. By doing so, we can reduce grid strain, keep energy affordable and reliable, and make a sustainable future possible. Leveraging Ontario's leadership in renewable resources, particularly in Eastern Ontario, should be done in tandem with efforts to reduce consumption and build resilient, self-sufficient communities.

Aligning with Lanark County's Climate Action Plan—which emphasizes eliminating fossil fuels and optimizing energy efficiency—is crucial to public support. Ontario's energy future should prioritize smart growth and localized solutions that ensure that growth does not come at the cost of environmental sustainability.