



**Canadian
Environmental Law
Association**
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The Low-Income
Energy Network



Submissions on the Long-Term Energy Plan Consultation - EBR # 012-8840

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A. Introduction

Please accept the following as the joint submission of the Canadian Environmental Law Association and the Low-Income Energy Network in response to Ontario's Long Term Energy Plan ("LTEP") review, EBR number 012-8840.

The Canadian Environmental Law Association ("CELA") is a non-profit, public interest organization established in 1970 for the purposes of using and improving existing laws to protect public health and the environment. Funded as a legal aid clinic specializing in environmental law, CELA represents individuals and citizens' groups in the courts and before tribunals on a wide variety of environmental matters. In addition, CELA staff members are involved in various initiatives related to law reform, public education, and community organization. CELA is one of the founding members of the Low-Income Energy Network.

The Low-Income Energy Network ("LIEN") was formed in March 2004 to raise awareness of the impact of rising energy prices on low-income consumers and to work with policy-makers and the utility sectors on solutions to energy poverty. LIEN's energy poverty strategy involves a province-wide, comprehensive approach to low-income energy conservation and assistance. It places the greatest emphasis and resources on long-term, environmentally sustainable measures to reduce energy consumption and costs for low-income households.

CELA has endorsed the vision for an Ontario powered by 100 per cent renewable energy.¹ Both LIEN and CELA urge the Ministry of Energy to ensure that LTEP 2017 supports Ontario meeting its greenhouse gas ("GHG") reduction targets by prioritizing conservation and renewable energy sources, reduces reliance on unsafe and costly nuclear power plants, and effectively addresses energy poverty in Ontario. LTEP 2017 has the potential to set Ontario on the path towards a resilient electricity grid that is reliable even in the face of extreme weather events, an energy system that enables citizen and communities to participate as more than just consumers, and an energy mix that is cleaner and more affordable. We urge the Ministry of Energy to consider the long-term low-emissions future that the upcoming energy policy decisions build towards.

B. Meaningful Review of Energy Policy

(1) Engagement with non-traditional players

The participation of Ontario communities, First Nations, businesses, schools and families is essential if we are to achieve the vision for a low-carbon economy outlined in Ontario's *Climate Change Action Plan* ("CCAP"). These actors may not have been well-represented in Ontario's energy system in the past, but shifting to a low-carbon economy will require a re-framing of traditional energy consumers as active and essential players who also generate, conserve, and store energy. The energy planning process has to reflect the need for engagement with non-traditional actors.

¹ See Appendix A, "100% Renewable Ontario Declaration" <<http://www.100reontario.org/>>.

Recommendation 1: The Ministry should empower non-traditional public stakeholders, such as communities, First Nations, businesses, schools, and families to participate in developing energy policy.

(2) Transparent public engagement on specific policy decisions

We support the Environmental Commissioner of Ontario in calling for meaningful public and stakeholder participation throughout the development of the LTEP.² The *Discussion Guide*,³ along with the *Planning Outlook* and the *Fuels Technical Report* do not provide specific policy proposals. The reports also do not provide background for important assumptions that are used throughout the Discussion Guide.⁴

In order to facilitate meaningful public and stakeholder engagement, the specific policy actions that the Ministry is proposing should be subject to public participation, in addition to the current LTEP consultation process. The Ministry's implementation directives or implementation plans should also be subject to public consultation. Stakeholders must be able to respond to actual supply mix decisions, and be provided sufficient background information to be able to evaluate the Ministry's plans.

Recommendation 2: In addition to the current LTEP 2017 review, the Ministry should subject specific implementing policy actions to public review, and provide sufficient background information as part of the consultation process.

(3) Environmental Assessment

Under the current legislative framework, energy planning decisions in Ontario are not subject to an independent review. The Ministry of Energy is charged with reviewing the LTEP with a view to a number of objectives, including cost-effectiveness, conservation, and air emissions.⁵ This is an inadequate substitution for a full environmental assessment, to which energy planning decisions should be subject. Currently, decisions are made to prioritize reductions of one type of pollution (greenhouse gas emissions, for example) without examining the effects of other pollutants harmful to human health and the environment.

Without a thorough environmental assessment, Ontario's planning decisions contribute to the environmental and health risks associated with nuclear waste, radionuclides, and habitat loss for species at risk, just to name a few examples. The Ministry of Energy is required to uphold its

² Environmental Commissioner of Ontario, *Developing the 2017 Long-Term Energy Plan, ECO Special Report to the Legislative Assembly of Ontario* (Toronto: Office of the Environmental Commissioner of Ontario, 2016), <<http://docs.assets.eco.on.ca/reports/special-reports/2016/LTEP-2016-Special-Report.pdf>>, ["ECO Special Report"] p. 25-27.

³ "Planning Ontario's Energy Future: A Discussion Guide to Start the Conversation," Ministry of Energy, 2016, <<http://www.energy.gov.on.ca/en/files/2016/10/LTEPDiscussionGuide.pdf>> ["Discussion Guide"].

⁴ For example, see ECO's discussion on nuclear-related risks and assumptions surrounding the use of natural gas, *ibid.*, p. 22-24.

⁵ *Electricity Act*, 1998, S.O. 1998, c. 15, Sched. A, s. 25.29.

Statement of Environmental Values (“SEV”) when making decisions that “might significantly affect the environment.”⁶ Under the SEV the Ministry is called to “consider and evaluate environmental benefits and risks when planning future initiatives.”⁷ Without a thorough environmental assessment, the Ministry is unable to uphold this duty.

Recommendation 3: Energy planning decisions in Ontario must be subject to environmental assessment, and all alternatives, including conservation, must be considered in light of their environmental footprint and public health impacts.

C. Planning for Climate Change in LTEP 2017

As part of the *Climate Change Mitigation and Low-carbon Economy Act*, Ontario adopted a legislated greenhouse gas reduction target of 37 per cent reduction by 2030, and 80 per cent reduction by 2050.⁸ The *Climate Change Action Plan* outlines the actions that will enable Ontario to meet these targets and develop a low-carbon economy by 2050.⁹ Since Ontario’s energy use accounts for more than 70 per cent of our greenhouse gas (GHG) emissions,¹⁰ the Long-Term Energy Plan must drive these GHG reduction targets and facilitate Ontario’s transition to a low-carbon economy.

(1) Demand outlooks

The *Ontario Planning Outlook* provides four options for Ontario’s electricity demand projections.¹¹ The *Fuels Technical Report* outlines a further two demand outlooks that include a decrease in natural gas and transportation fuels. We are concerned that none of the six scenarios provide the share of GHG emission reductions that the energy sector needs to undertake to meet Ontario’s legislated target for 2030.¹²

Recommendation 4: LTEP 2017 must be responsive to Ontario’s greenhouse gas reduction commitments, and provide an evidence-based roadmap to achieve the necessary reductions.

⁶ *Environmental Bill of Rights*, 1993, SO 1993, c 28, s. 11.

⁷ “Statement of Environmental Values,” Ontario Ministry of Energy, <<http://www.energy.gov.on.ca/en/statement-of-environmental-values/>>.

⁸ *Climate Change Mitigation and Low-carbon Economy Act*, SO 2016, c 7, s. 6(1).

⁹ “Ontario’s Five Year Climate Change Action Plan: 2016-2020,” Ministry of the Environment and Climate change, 2016 [CCAP].

¹⁰ ECO Special Report, p 10.

¹¹ “Ontario’s Planning Outlook: A Technical Report on the Electricity System,” Independent Electricity System Operator, September 1, 2016, <<http://www.ieso.ca/Documents/OPO/Ontario-Planning-Outlook-September2016.pdf>>, p. 5.

¹² ECO Special Report, p. 10-13.

(2) Roadmap towards 100 per cent renewable Ontario

In light of the urgent need to address climate change, Canada's commitment to the Paris Agreement, and Ontario's passing of the *Climate Change Mitigation and Low-carbon Economy Act* emphasize the need to invest in renewable energy sources. During the recent United Nations climate change talks in Marrakesh, forty-seven of the most vulnerable developing nations committed to 100 per cent domestic renewable energy production by 2030-2050 at the latest.¹³ In comparison, Ontario recently cancelled 1000 MW of renewable energy procurement, before the LTEP public consultation period began.¹⁴

Ontario must invest in research and deployment of new technologies, such as energy storage, to emphasize a speedy transition away from fossil fuels in line with the GHG emission reduction targets. The cost of renewable technologies is rapidly decreasing. The LTEP must plan to take advantage of the declining costs, as well as facilitate the participation of non-traditional actors.

Renewable energy technologies hold great potential for community-based energy systems. More than 1,000 communities world-wide are committing to shift to 100 per cent renewable energy.¹⁵ In Ontario, Oxford County has pledged to make this transition by 2050, following the example of Victoria and Vancouver in British Columbia. Ontario should support communities like Oxford County through becoming innovators in energy independence, and establish a process that allows other communities to learn from their experience.

Recommendation 5: LTEP 2017 must prioritize Ontario's transition to 100 per cent renewable energy production.

Recommendation 6: LTEP 2017 must support the active participation of consumers in renewable energy markets.

Recommendation 7: Ontario must prioritize storage technologies that do not contribute to GHG emissions, facilitate Ontario's transition to 100 per cent renewable energy sources, and do not cause additional negative environmental impacts.

Recommendation 8: The Ontario government should support communities like Oxford County in transitioning to 100 per cent renewable energy by 2050.

¹³ Zahra Hirji, "Climate Change's Most Vulnerable Nations Vow to Run Entirely on Renewable Energy," November 18, 2016, Climate Vulnerable Forum, <<http://www.thecvf.org/climate-changes-vulnerable-nations-vow-run-entirely-renewable-energy>>.

¹⁴ "Major Setback on Road to Renewables - CELA Decries Ontario Government Cancellation of 1000 MW of Renewable Energy Procurement" Canadian Environmental Law Association, Sep 27, 2016, <<http://www.cela.ca/newsevents/media-release/major-setback-on-road-to-renewables>>.

¹⁵ See Appendix A, "100% Renewable Ontario Declaration."

(3) Support for distributed energy systems

The shift to a 100 per cent renewable energy will also require a transition towards distributed energy systems. Distributed, or decentralized, energy systems generate energy close to demand, in addition to deploying storage technologies and demand management tools. The traditional centralized energy system consists of large power plants that generate electricity, extensive infrastructure that transports it, and distribution utilities that sell it to consumers. In contrast, by meeting the demand close to where it is needed, distributed energy systems are less susceptible to infrastructure failure, and they avoid the efficiency losses of the power grid.

Distributed energy systems also place more control in the hands of communities, allowing them to develop generation and demand management programs that best suit their needs. Consumers can also become producers by making use of small-scale renewable projects connected by micro-grids.

Distributed energy systems are more resilient, and will facilitate the changes that are needed to transition to 100 per cent renewable energy. Electricity planners should evaluate the affordability, cost-effectiveness, and the benefits to the system on the distribution level when making supply mix decisions, in order to weaken the bias towards centralized generation options.

Recommendation 9: The LTEP must include provisions for encouraging and supporting distributed energy systems across the province, including analyses of the possible supply mix options.

(4) Benefits of conservation

Conservation is the cleanest and most cost-effective option for meeting our energy needs. Conservation must be considered before new procurement of energy supply or energy infrastructure, and the Minister should bear the onus of justifying new procurements against the benefits of conservation.

The method of evaluating the costs and benefits of conservation must reflect the true value more accurately. As outlined in the Environmental Commissioner's Special Report, the following assumptions must be adjusted:¹⁶

- The cost of new energy procurement must reflect the most up-to-date values and projected costs, especially with regards to projects that are known for surpassing expected costs, such as nuclear refurbishment.
- To better reflect the true benefit of conservation, the avoided cost measure must be based on an energy demand outlook that is founded on assuming significant electrification of Ontario's energy system. In order to meet the GHG reduction targets, electrification of the transportation, industry, and buildings sectors will increase future demand on electricity in the long term. The benefit of conservation will therefore be higher than

¹⁶ ECO Special Report, p. 17-18.

today, as additional electricity demand from electrification will need to be accommodated.

- The effect of a steadily increasing carbon price must be accurately reflected in the value of conservation. This includes a projection of expected carbon pricing into the future, in addition to the carbon pricing already established in the short-term.
- The benefits of conservation must account for the environmental costs that are avoided. In addition to reducing greenhouse gas emissions, conservation can also reduce release of environmental toxins, impacts to species at risk habitat, and other environmental concerns associated with energy production and distribution infrastructure. The environmental footprint of each energy source should be compared to conservation in order to more accurately gauge environmental benefits.
- The social benefits of conservation must be included. For example, increased energy efficiency of appliances and weatherization programs can decrease energy costs for consumers. Conservation programs have a significant impact especially on low-income and marginalized communities, who do not have the financial resources to pay for the upfront costs of retrofits that will reduce their consumption. The health impacts of a more comfortable weatherized home provide benefits to the individual families, as well as a decrease in public health spending.

These principles must be taken into account when comparing the benefits of conservation to energy infrastructure and generation alternatives.

In addition, government conservation and energy efficiency programs must take into account the potential health risks of renovations or energy efficiency retrofits, especially in households where children and other vulnerable individuals are present. The *Healthy Retrofits* report provides further recommendations to ensure that retrofits are a win-win scenario in terms of impact on human health.¹⁷

Recommendation 10: The evaluation of benefits of conservation must include environmental and social co-benefits, and be compared against updated costs of energy production and infrastructure, including the costs of GHG emissions and other environmental impacts.

Recommendation 11: Conservation programs must avoid the potential health risks associated with renovations and energy efficiency retrofits, especially with regards to indoor health for households that include children and other vulnerable populations.

(5) Aggressive conservation targets for all energy sources

The need for electricity conservation in Ontario must reflect the future electrification of the transportation, industry, and building sectors, which is necessary to meet the province's GHG reduction targets. The Independent Electricity System Operator (IESO)'s 2016 *Achievable*

¹⁷ *Healthy Retrofits: The Case for Better Integration of Children's Environmental Health Protection into Energy Efficiency Programs*, Canadian Environmental Law Association, <<http://www.cela.ca/publications/healthy-retrofits-full-report>>, p. 49-50.

Potential Study shows that there is potential for Ontario to cost-effectively reduce electricity demand by 31 per cent by 2035.¹⁸ The conservation targets must be strengthened accordingly.

In addition, aggressive conservation targets that reflect the full range of economically beneficial demand reduction must be established for all other energy sources. This is especially important to low-income Ontarians who use alternatives such as propane, wood or oil for heating, and may not be able to afford demand-reduction strategies without the support of government programs.

Recommendation 12: LTEP 2017 must include aggressive conservation targets that reflect the full cost-effective conservation potential for all energy sources and fuel types.

(6) Contingency planning for nuclear offramps

Recent decisions to rebuild and extend the operational lives of ten reactors at the Bruce and Darlington nuclear power plants were undertaken without requirements to publicly review the sustainability or prudence of reactor life-extensions. The government indicated that “offramps” have been put in place to cancel reactor life-extensions if the projects run over budget. Since every nuclear project has been subject to cost over-runs and delays, it is likely that these offramps will have to be used. The current LTEP consultation process has not shown how the decisions to take the offramps will be made. The criteria must be transparent, and offramp decisions must be subject to independent review mechanisms.

The LTEP consultation process has also failed to show what contingency plans are in place to supplement the planned electricity generation that may be no longer available once an offramp decision is made. We are concerned that no low-carbon alternatives are in place to meet this need. Given the likelihood of offramps being used in the next ten to fifteen years, the LTEP must provide for a reasonable low-emission alternative to expensive reactor life-extensions.

Without alternatives in place, the offramps decision process will put electricity consumers at risk of either facing unexpected cost over-runs, or increased GHG emissions. This lack of contingency plan is not addressed in the LTEP. CELA has filed an application for review under the Environmental Bill of Rights, along with Greenpeace, Lake Ontario Waterkeeper, and the Ontario Clean Air Alliance, requesting enactment of provisions for transparent and independently reviewed offramp decisions.¹⁹ The LTEP must plan for these alternatives.

Recommendation 13: Future reactor life-extension decisions must be publicly and independently reviewed against a suite of low-carbon alternatives, and LTEP 2017 must provide for such alternatives to be available, in order to protect consumers from risks to Ontario’s electricity supply.

¹⁸ Rush Childs et al., *Achievable Potential Study: Long Term Analysis*, submitted to the Independent Electricity System Operator, 2016, <<http://www.ieso.ca/Documents/consult/APS/APS-Long-Term-Analysis-2016.pdf>>, Figure 1-1, p. 3.

¹⁹ “Application for Request for Review to the Ministry of Energy,” December 14, 2016, CELA <<http://www.cela.ca/publications/nuclear-reactor-life-extensions-request-review>>.

(7) Ontario's "pipeline principles"

The Discussion Guide refers to six principles that Ontario and Quebec agreed to use to evaluate pipeline proposals, adding a need to also take GHG emissions into account.²⁰ The agreement, as reported by the Government of Ontario Newsroom, lists seven principles that "must be applied" by proponents, including a project's contribution to GHG emissions.²¹

Given that Ontario has legislated emissions reduction targets, the province's ability to meet these targets needs to be central to the evaluation of any oil and natural gas pipeline project.²² The consideration of GHG emissions must include upstream and downstream emissions associated with the extraction, processing, handling, transportation, and the end use of the fuel. The costs and benefits of proposed pipeline projects must be weighed against the benefits of conservation, following the principles of accurate valuation as outlined in section C4 – Benefits of Conservation, above.

Recommendation 14: Ontario's "pipeline principles" must include the province's ability to meet its GHG reduction targets in light of the upstream and downstream emissions associated with each project.

Recommendation 15: The costs and benefits of pipeline proposals must be weighed against conservation, using the updated valuation principles outlined in Recommendation 10.

D. Energy Poverty

Individuals and families are experiencing energy poverty when their utility costs affect their ability to pay for basic necessities like housing, food and medicine.²³ As discussed above, Ontario will have to make significant changes to how it produces, distributes, and conserves energy in order to meet our GHG reduction targets. Low-income and marginalized communities will bear the most of the negative impacts of climate change, as well as the regressive impacts of a price on GHG emissions. All energy policy decisions must therefore be made considering the impacts on these communities.

Electricity conservation and efficiency retrofit programs must be adequately funded to effectively reduce consumption and bill costs for low-income consumers. As conservation targets are developed for all energy sources, it is essential that demand management programs put in place to meet these targets are able to show how much the consumption and costs to low-income consumers will be reduced.

²⁰ Discussion Guide, p. 26.

²¹ "Agreements Reached at Québec-Ontario Joint Meeting of Cabinet Ministers," Government of Ontario Newsroom, November 21, 2014, <<https://news.ontario.ca/opo/en/2014/11/agreements-reached-at-quebec-ontario-joint-meeting-of-cabinet-ministers.html>>.

²² *Climate Change Mitigation and Low-carbon Economy Act*, SO 2016, c 7, <http://canlii.ca/t/52qsz>, s. 6.

²³ "Working to End Energy Poverty in Ontario: A Tool Kit," Low-Income Energy Network, online: <<http://www.lowincomeenergy.ca/energy-assistance/toolkit/>>, at 10.

Recommendation 16: All energy policy decisions must consider and address the impacts they will have on low-income and marginalized communities.

Recommendation 17: Price mitigation programs must be responsive to rising energy costs, and show that they are effective in ensuring affordable energy for low-income consumers.

E. Nuclear

(1) Keep the commitment to close Pickering before 2020

The 2013 LTEP commitment to close the Pickering nuclear station before 2020 should be reinstated. Almost all of Pickering's output is surplus, and its continued operation is not beneficial to rate-payers.

The decision to continue operating Pickering was not balanced against increased conservation measures or renewable energy alternatives. Pickering's continued operation for up to ten years past its lifespan exposes the population surrounding the Great Lakes to unnecessary risk to public safety.²⁴ The surplus electricity Pickering currently produces is hindering Ontario's shift to 100 per cent renewable energy at a time when investment in renewable energy is necessary to meet Ontario's GHG reduction goals, and the cost of renewables continues to decrease.

Recommendation 18: Ontario should reinstate the 2013 LTEP commitment to close Pickering before 2020 in order to protect rate-payers and facilitate the transition to 100 per cent renewable energy.

(2) No new reactors

The growth of electricity demand has continued to decline, and, as IESO's 2016 *Achievable Potential Study* shows, conservation can economically reduce demand by another 31 per cent by 2035.

Despite the government of Ontario's announcement that no new nuclear reactors will be built, the OPG maintains its license to build new reactors at the Darlington site, at a cost to consumers. This is unnecessary, and burdens rate-payers with additional costs at a time when new demand should be met by investing in renewable energy and conservation, both of which are less expensive alternatives to building new nuclear reactors.

Recommendation 19: The LTEP should direct OPG to abandon its license to prepare a site for a new reactor at Darlington.

²⁴ John Spears, "Pickering nuclear units among the most expensive, least reliable in the world," May 15, 2012, The Toronto Star, <https://www.thestar.com/business/2012/05/15/pickering_nuclear_units_among_the_most_expensive_least_reliable_in_the_world.html>.

(3) Emergency planning

Significant portion of Ontario's nuclear energy is produced in areas of high population density. In fact, Ontario's land use planning regime encourages increased population growth near the sites of both Darlington and Pickering nuclear power plants. Siting nuclear power plants in such close proximity to major urban centres is unsafe. In addition, Ontario's emergency response plans only deal with smaller-scale nuclear accidents, and do not address the possibility of a Fukushima-type disaster. Current evacuation plans are inadequate given the population density surrounding the power plants.

Recommendation 20: LTEP 2017 must reduce or omit its reliance on nuclear capacity in high-density urban areas, and the cost of emergency planning must be included when evaluating the cost of electricity production.

(4) No further investment in Small Modular Reactors

Reducing reliance on diesel generation is an important initiative, but Small Modular Reactors (SMRs) should not be the focus of investment and policy support. SMRs are not likely to be available in the twenty-year planning horizon, if ever, and the history of nuclear development in Canada suggests that they are not likely to be cost effective even if commercially developed. The LTEP should plan for investment in renewable-based micro-grids instead: the cost of renewables continues to decrease, while micro-grid technology use is on the rise. Investing in SMR development is not beneficial to rate-payers when technology already exists to meet the demand with renewables.

Recommendation 21: Ontario should not provide further policy or financial support for the development of SMRs.

Recommendation 22: The Ministry of Energy should commission a study on the cost-effectiveness of renewable-based micro-grids to replace diesel generation.

F. Indigenous Energy Policy

Ontario must continue to support First Nations and Métis communities in their transition towards energy security met by renewable sources. The LTEP must show how First Nations and Métis communities were included in energy planning decisions, as well as provide for partnerships with Indigenous producers. Deployment of new storage technologies and micro-grid options should prioritize remote communities. LTEP's reliance on long-distance transmission systems should be evaluated in comparison with more resilient distributed energy systems.

Recommendation 23: The LTEP must include First Nations and Métis communities in energy planning, and prioritize support for remote communities as part of the transition to 100 per cent renewable energy.

G. Summary of Recommendations

Recommendation 1: The Ministry should empower non-traditional public stakeholders, such as communities, First Nations, businesses, schools, and families to participate in developing energy policy.

Recommendation 2: In addition to the current LTEP 2017 review, the Ministry should subject specific implementing policy actions to public review, and provide sufficient background information as part of the consultation process.

Recommendation 3: Energy planning decisions in Ontario must be subject to environmental assessment, and all alternatives, including conservation, must be considered in light of their environmental footprint and public health impacts.

Recommendation 4: LTEP 2017 must be responsive to Ontario's greenhouse gas reduction commitments, and provide an evidence-based roadmap to achieve the necessary reductions.

Recommendation 5: LTEP 2017 must prioritize Ontario's transition to 100 per cent renewable energy production.

Recommendation 6: LTEP 2017 must support the active participation of consumers in renewable energy markets.

Recommendation 7: Ontario must prioritize storage technologies that do not contribute to GHG emissions, facilitate Ontario's transition to 100 per cent renewable energy sources, and do not cause additional negative environmental impacts.

Recommendation 8: The Ontario government should support communities like Oxford County in transitioning to 100 per cent renewable energy by 2050.

Recommendation 9: The LTEP must include provisions for encouraging and supporting distributed energy systems across the province, including analyses of the possible supply mix options.

Recommendation 10: The evaluation of benefits of conservation must include environmental and social co-benefits, and be compared against updated costs of energy production and infrastructure, including the costs of GHG emissions and other environmental impacts.

Recommendation 11: Conservation programs must avoid the potential health risks associated with renovations and energy efficiency retrofits, especially with regards to indoor health for households that include children and other vulnerable populations.

Recommendation 12: LTEP 2017 must include aggressive conservation targets that reflect the full cost-effective conservation potential for all energy sources and fuel types.

Recommendation 13: Future reactor life-extension decisions must be publicly and independently reviewed against a suite of low-carbon alternatives, and LTEP 2017 must provide for such alternatives to be available, in order to protect consumers from risks to Ontario's electricity supply.

Recommendation 14: Ontario's "pipeline principles" must include the province's ability to meet its GHG reduction targets in light of the upstream and downstream emissions associated with each project.

Recommendation 15: The costs and benefits of pipeline proposals must be weighed against conservation, using the updated valuation principles outlined in Recommendation 10.

Recommendation 16: All energy policy decisions must consider and address the impacts they will have on low-income and marginalized communities.

Recommendation 17: Price mitigation programs must be responsive to rising energy costs, and show that they are effective in ensuring affordable energy for low-income consumers.

Recommendation 18: Ontario should reinstate the 2013 LTEP commitment to close Pickering before 2020 in order to protect rate-payers and facilitate the transition to 100 per cent renewable energy.

Recommendation 19: The LTEP should direct OPG to abandon its license to prepare a site for a new reactor at Darlington.

Recommendation 20: LTEP 2017 must reduce or omit its reliance on nuclear capacity in high-density urban areas, and the cost of emergency planning must be included when evaluating the cost of electricity production.

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Recommendation 22: The Ministry of Energy should commission a study on the cost-effectiveness of renewable-based micro-grids to replace diesel generation.

Recommendation 23: The LTEP must include First Nations and Métis communities in energy planning, and prioritize support for remote communities as part of the transition to 100 per cent renewable energy.

Appendix A:

100% Renewable Ontario Declaration



THE FUTURE IS RENEWABLE

SWITCH ONTARIO TO

100%

RENEWABLE ENERGY

PHOTO CREDIT: GREENPEACE

IT IS TIME FOR ONTARIO TO JOIN THE GLOBAL MOVEMENT TOWARD 100 % RENEWABLE ENERGY:

More than 1,000 cities around the world, including Vancouver and Oxford County in Ontario, have already committed to transition their communities to 100% renewable energy by 2050. We want the Ontario government's next energy plan to ensure citizens and communities are empowered to make the shift to 100% renewables.

Meeting Ontario's electricity, heating, and transportation energy needs with sustainable renewable energy is achievable. We currently produce more than a quarter of our electricity with renewable sources like water, wind, solar and biogas, and with costs falling and technologies improving we can quickly add more.

A 100% renewable future will eliminate the damage being done by our current dirty energy system. Ontario's fossil plants contribute to climate change and air and water pollution at a time when the province is committed to reducing carbon pollution and showing leadership on climate change. Our nuclear plants produce long-lived radioactive waste and put our communities and the Great Lakes – the source of drinking water for tens of millions of people - at risk of a nuclear accident. Nuclear is expensive and dangerous – which is why plans for nuclear power are being mothballed around the globe.

The Ontario government needs to remove barriers to the fast adoption of renewable energy while also helping us make the best use of this clean green energy, through enhanced efforts to increase efficiency, conservation, storage, district heating and electric mobility.

SWITCHING TO 100% RENEWABLES MEANS:

PUTTING CONSERVATION FIRST - Efficiency and conservation are the cheapest source of energy and have the lowest impact on the environment. They also help to ensure the green energy we produce goes further. According to government studies, we have the technical potential to cut our electricity demand by half before 2040.

EMPOWERING ONTARIANS – A switch to renewable energy will also mean a switch to a more decentralized energy system where everyone from citizens, co-ops and schools to municipalities, small businesses and Indigenous communities can become energy producers. A more localized system, with opportunities for community-ownership and participation, will also increase public support for renewables, and provide more jobs – and more importantly, local jobs in communities across Ontario.

BUILDING RESILIENT COMMUNITIES - Climate scientists predict increasingly erratic weather in the coming decades – everything from ice storms and flooding to severe heat. We need to strengthen our local power production and distribution systems and rely less on a small handful of giant power plants in order to reliably keep the lights on. To do that, we need to give communities the tools they need to go 100% renewable.

SEIZING OPPORTUNITIES - The cost of renewable energy and smart grid technologies is declining rapidly. Ontario’s energy plan needs to ensure we are ready to take advantage of innovation in the clean energy sector to lower our energy bills, reduce greenhouse gas emissions, strengthen system resilience and increase the number of Ontario citizens, businesses and communities who benefit from generating zero emissions energy.

KEEPING THE NUCLEAR INDUSTRY RESPONSIBLE FOR RISKS AND COSTS – The biggest barrier to making the switch to 100% renewable energy is the government’s plan to spend billions to keep Ontario’s aging nuclear reactors operating. To ensure Ontario can make the switch to safer 100% renewables and take advantage of innovation in the clean-tech sector, we need to replace reactors with renewable energy. To do that, we need a full and fair comparison of the total costs of nuclear with alternatives and an opportunity for the public to have a say about which approach they prefer.

LESS POLLUTION: Communities fought big gas plants for good reason – they pollute. We need cleaner air in our communities, and renewable power can provide it.

CUTTING CARBON: Ontario has shown leadership by getting rid of coal – and we’re all better off because of it. Now - as the province gets serious about climate change - is no time to turn back, and increase our reliance on natural gas instead. Gas is better than coal, but no matter how you slice it, gas is a fossil fuel and it contributes to climate change. Renewables don't.

ENDORISING PARTNERS:



For more information or if your organization would like to endorse this statement, please visit 100REOntario.org