

Environmental Commissioner of Ontario's Long-Term Energy Plan (LTEP) Report

Issue

The Environmental Commissioner of Ontario (ECO) released a Special Report on Developing the LTEP in December 2016. The Special Report includes 14 recommendations (see *Appendix*), specific recommendations to release a draft LTEP, and an assertion that the energy supply outlooks in LTEP technical reports do not align with Ontario's 2030 emissions reduction target.

SUGGESTED RESPONSE:

- The Ministry appreciates the ECO's analysis with some considerations.

Principles and Policy Alignment

- The process for developing the Long-Term Energy Plan is outlined in the Electricity Act, 1998. The legislation states that future LTEPs will be developed consistent with the following principles:
 - Cost-effectiveness;
 - Reliability;
 - Clean energy;
 - Air emissions from the energy sector, including greenhouse gases (GHGs);
 - Community and Indigenous engagement; and
 - Emphasis on conservation and demand management.
- The Ministry of Energy will balance these principles, including the goal to limit emissions from the energy sector as it develops the next and future LTEPs.
- The 2017 LTEP and all future plans will apply the lens of climate change and carbon pricing to energy policy development.
- The Climate Change Action Plan (CCAP), released in June 2016, includes forecasted emissions reductions in 2020 by action area and investment. Under CCAP, Ontario will define post-2020 program guidelines and sector-specific targets following consultations.
- Given the linkages, the CCAP and the LTEP should be viewed as iterative planning processes that will inform each other over time.
- Outlooks in the next and future LTEPs will be updated regularly to ensure flexibility and alignment with the CCAP.

Technical Reports

- The LTEP presents an opportunity for the government to further elaborate on Ontario's new climate change policies and initiatives as they relate to both the electricity and fuel sub-sectors.
- The outlooks in the IESO's Ontario Planning Outlook and the Fuels Technical reports (collectively known as the technical reports) reflect initiatives in the 2016-2020 CCAP. For projections beyond 2020, different outlooks - driven by varying degrees of electrification - were developed for the technical reports.
- The technical reports were meant to be a starting point to inform the LTEP engagement process and solicit engagement feedback from the public as well as stakeholders such as the ECO.
- The final outlooks in the LTEP may differ from the technical reports as the Ministry will consider the feedback it received during the LTEP engagement phase.
- New outlooks will be required to reflect policies in the next LTEP as well as developments in the sector since the technical reports were released in September 2016.
- The final LTEP and its outlooks will be approved by Cabinet, along with implementation directives to the Independent Electricity System Operator (IESO) and Ontario Energy Board (OEB).

Draft LTEP

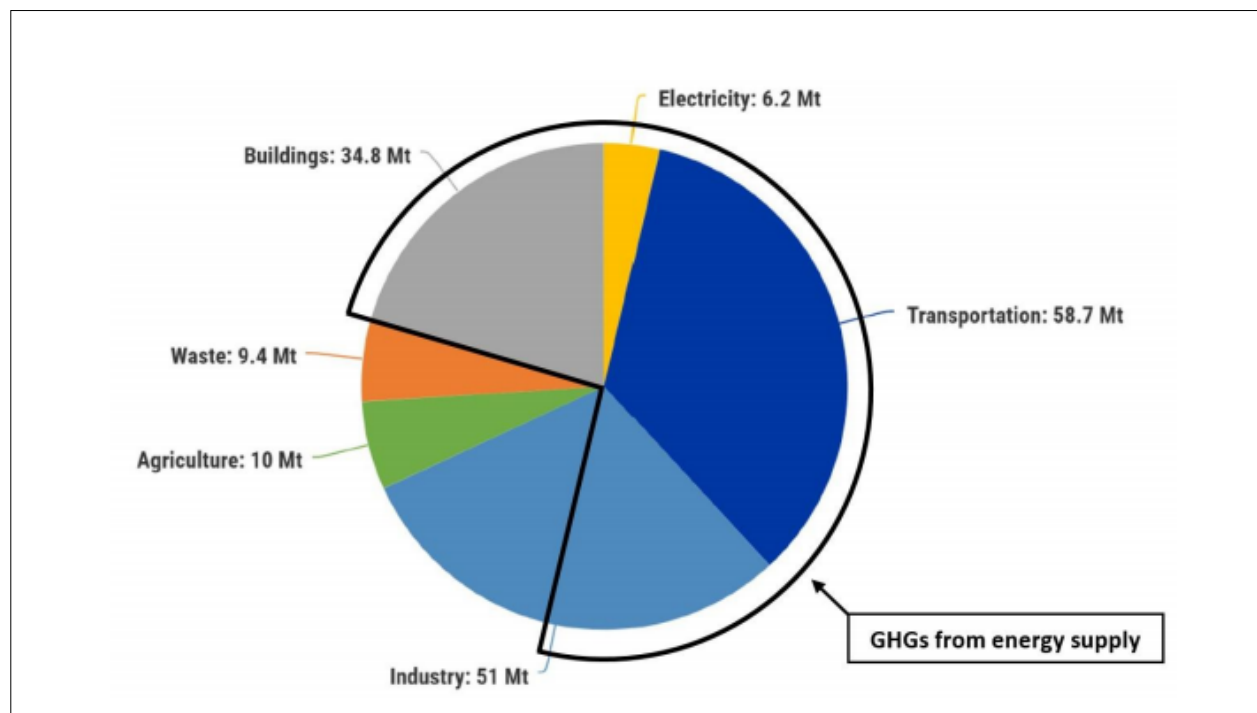
- The ECO's special report recommends the Ministry of Energy release and consult the public on a draft LTEP prior to finalizing the plan.
- The Ministry does not recommend this approach as the Ministry already completed a comprehensive engagement process as required in the *Electricity Act* and this proposal would lead to delays in the release of the plan.
- *Additional engagement opportunities:* The IESO and OEB Implementation Plans that are part of the existing legislation can serve as tools for further engagement. Both agencies have significant public outreach experience. The Ministry could also embed additional engagement requirements in the Implementation Directives as it pertains to certain policies and programs.
- *Summary of Engagement Feedback:* The Ministry is developing alternatives – including potentially releasing visualisations depicting summaries of in-person engagement sessions and feedback on the Environmental Registry posting.

Critique of the ECO's Analysis

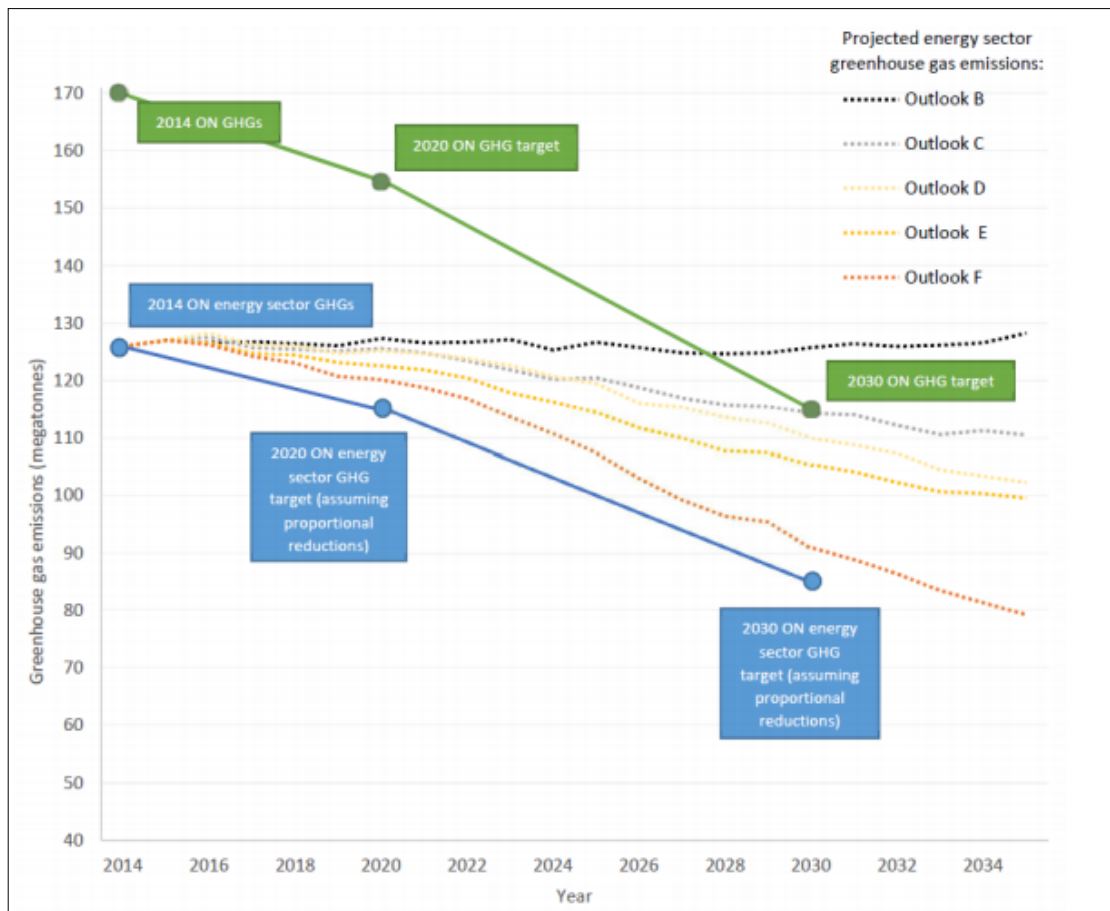
- *Allocation Assumption:* Consistent with Environment Canada's methodology, the ECO attributed 50% of 2014 industry GHG emissions and 100% of transportation to the energy sector. Consequently, the ECO assumed 74% of Ontario's GHG emissions stem from the energy sector and allocated the 74% to derive an energy sector specific GHG target.
 - It may not be suitable to allocate a constant 74% of GHG reductions to be achieved solely by the energy sector for the purposes of the Ministry of Energy's Long-Term Energy Plan.
 - This is particularly in the case of the transportation fuels where incentives and policy development reach beyond the Ministry of Energy, and will depend on customer choice and behavior. Some emissions from the transportation sector (e.g., domestic aviation; railways) fall under federal jurisdiction.
 - This 50% attribution will not be constant over the forecast period and, as such, the assumption may be overstated.
 - Based on the ECO's application of the GHG targets, only Outlook F in the technical reports comes close to meeting the proportionate reduction by 2030.
 - Outlook F includes the greatest amount of electrification in the buildings and transportation sectors; fuels conservation and shift from conventional to alternative fuels.
- *Offsets:* Under a framework of cap and trade, using proportionate emissions may not appropriately capture the ability of some sectors to emit more relative to their current emission contributions, through the purchase of offsets.

BACKGROUND

- In December, the ECO released a special report on the LTEP process. The report includes 14 recommendations for the Ministry to consider as it develops the 2017 LTEP.
- The ECO found the supply outlooks in the LTEP technical reports do not achieve the energy sector's proportional share of Ontario's 2030 greenhouse gas reduction target.
- The ECO presents data from Environment Canada that showing that 74 percent of Ontario's emissions are from the energy sector. The Fuels Technical Report presented similar data.



- The ECO takes 74 per cent of the economy-wide Ontario GHG reduction targets and overlays it on emission profiles for the combined outlooks provided in the two technical reports.
- Based on the ECO's application of the climate targets, only outlook F comes close to meeting the proportionate reduction by 2030.



- While developing its technical report, the IESO worked with the Ministry of the Environment and Climate Change to ensure its outlooks aligned with initiatives in the 2016-2020 Climate Change Action Plan.
 - These assumptions also informed the Fuels Technical Report, prepared by Navigant Consulting.
- The Ontario Planning Outlook included four demand outlooks driven by different electrification assumptions.
 - **Outlook A** (or “low demand outlook”), explores the implications of lower electricity demand;
 - **Outlook B** (or “flat demand outlook”), explores a level of long-term demand that roughly matches the level of demand that exists today
 - **Outlook C** (or “high demand outlook”), which explore higher levels of demand driven by different levels of electrification associated with policy choices on climate change (e.g., fuel switching in transportation and buildings)
 - **Outlook D** (or “higher demand outlook”) explores higher demand than Outlook C, driven by greater electrification.
- The Fuels Technical Report assessed the impact of the outlooks developed by the IESO on the fuels sector. It also added two additional outlooks driven by changes in the fuels sector:
 - **Outlook E:** Uses the same electrification assumptions as the IESO’s Outlook C, but layers on incremental demand-side management (fuels conservation) initiatives and a shift from conventional to renewable and alternative fuels.
 - **Outlook F:** Uses the same electrification assumptions as the IESO’s Outlook D, but layers on greater demand side management and shifting to renewable fuels.
- In her special report on the development of the 2017 LTEP, the ECO makes 14 recommendations in five different areas:
 1. **Alignment with Climate Targets**

- **Recommendation 1:** Plan for an energy supply mix that enables Ontario to achieve its greenhouse gas targets.
- **Recommendation 2:** Address the risk of increased greenhouse gas emissions from customers choosing natural gas over electricity for cost reasons

2. Protecting the Environment

- **Recommendation 3:** Minimize the environmental impacts of Ontario's energy system.
- **Recommendation 4:** Commit the government of Ontario to meaningfully participate in the federal approvals process for energy projects with a significant impact on Ontario's environment.

3. Putting Conservation First

- **Recommendation 5:** Demonstrate to the public that all feasible conservation opportunities are exhausted before building new energy infrastructure.
- **Recommendation 6:** Improve the methodology for comparing energy conservation with energy supply.
- **Recommendation 7:** Set conservation targets for all energy sources
- **Recommendation 8:** Ensure that regional electricity planning puts conservation first and is effectively integrated with other levels of energy planning

4. Evidence-Based Decision Making

- **Recommendation 9:** Provide detailed plans to hedge against energy supply risks associated with nuclear refurbishment and licence extension
- **Recommendation 10:** Compare all options to balance supply and demand in the electricity system, not just natural gas
- **Recommendation 11:** Before subsidizing expansion of the natural gas distribution system, publicly compare the costs and benefits of alternatives such as conservation and clean energy technologies

5. Public and Stakeholder Participation

- **Recommendation 12:** Consult the public on a detailed draft Long-Term Energy Plan
- **Recommendation 13:** Consult the public on implementation directives/plans
- **Recommendation 14:** Do not override the Long-Term Energy Plan and its approved implementation plans, in between the three-year review cycle

