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Ministry of the Environment, Conservation and Parks

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Mercredi 11 mars 2020

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#### LEGISLATIVE ASSEMBLY OF ONTARIO

#### ASSEMBLÉE LÉGISLATIVE DE L'ONTARIO

# STANDING COMMITTEE ON PUBLIC ACCOUNTS

Wednesday 11 March 2020

# COMITÉ PERMANENT DES COMPTES PUBLICS

Mercredi 11 mars 2020

The committee met at 1230 in room 151, following a closed session.

# 2019 ANNUAL REPORT, AUDITOR GENERAL MINISTRY OF THE ENVIRONMENT, CONSERVATION AND PARKS

Consideration of volume 2, chapter 3, Climate Change: Ontario's Plan to Reduce Greenhouse Gas Emissions.

The Chair (Ms. Catherine Fife): Good afternoon, everyone. I would like to call this meeting of the Standing Committee on Public Accounts to order. We are here to begin consideration of Climate Change: Ontario's Plan to Reduce Greenhouse Gas Emissions, volume 2, chapter 3 of the 2019 Annual Report of the Office of the Auditor General of Ontario.

Joining us today are officials from the Ministry of the Environment, Conservation and Parks. Thank you for being here to answer the committee's questions. You will have 20 minutes, collectively, for an opening presentation to the committee. We will then move into the question-and-answer portion of the meeting, where we will rotate back and forth between the government and the official opposition caucuses in 20-minute intervals.

I would invite you each to introduce yourselves for Hansard, please, before you begin speaking. You may begin when you're ready. I just want to thank you in advance for your opening comments; they are very helpful to the committee members. Please start.

Mr. Serge Imbrogno: Thank you for the invitation to speak to you today. I'm Deputy Minister Serge Imbrogno, and I'm joined by members of my senior executive team, who will provide more detail on our climate change programs. At the table with me: to my immediate right, Alex Wood, assistant deputy minister, climate change and resiliency division; to the right of Alex is Craig Golding, director, environmental economics branch; and to my left is Charlotte Beckett, director, communications branch.

The Chair (Ms. Catherine Fife): Could you please just move the microphone closer so the audience may also hear? Thank you very much, Serge.

Mr. Serge Imbrogno: We appreciate the chance to answer questions on the Auditor General of Ontario's 2019 annual report; specifically, the chapter on climate change. I want to thank the Auditor General for her recommendations on how the government can best move

forward with its greenhouse gas reduction initiatives. We take the Auditor General's comments seriously, and we see this process as a way to improve and enhance Ontario's plan to fight climate change.

The Auditor General points out ways that the government can strengthen the plan by ensuring that emission reduction efforts are based on current and best available information, public reporting, and improving collaboration on emission reduction efforts across the government. The ministry will consider the report and these recommendations carefully as we continue to consult and collaborate with stakeholders and other governments to evolve and implement the plan.

I'm pleased to say that we've already addressed one of the Auditor General's recommendations by establishing a new advisory panel on climate change, with a focus on resilience. We've outlined how the panel will provide expert advice on how Ontarians can prepare for the costs and impacts of climate change. The panel's first meeting took place on January 20 of this year; the next meeting will take place on March 23.

We are in the process of acting on additional recommendations from the Auditor General's 2019 report. We welcome the opportunity to discuss the government's work, respond to the Auditor General's report, and answer any questions you may have.

I'd now like to provide you with an update on the actions the government has taken to address climate change and protect the environment. Ontario has an important role in fighting climate change, and the actions the government has taken have reduced greenhouse gas emissions significantly since 2005. This represents almost all of Canada's progress towards its 2030 Paris agreement targets.

The Ontario government released its Made-in-Ontario Environment Plan in November 2018 to build on this record. The environment plan is the road map for the actions the Ministry of the Environment, Conservation and Parks will take to preserve and protect land, air and water; address litter and waste; and support the people of Ontario as we work towards reducing greenhouse gas emissions.

In the lead-up to the release of the draft plan, Ontario launched a digital consultation forum, inviting the public, businesses and other interested parties to provide early input on some of the key areas of focus for climate change in the upcoming plan. We received more than 8,000 comments and ideas. We also had a series of four round table

discussions which included key players in the industry, food and organic waste, energy and finance sectors.

We posted the draft environment plan on the environmental registry for a 60-day public review and comment period that closed on January 28, 2019. The government received more than 1,400 submissions from companies, local governments, organizations and individuals during the posting period.

The environment plan proposes to address climate change by focusing on six areas:

- —setting a new greenhouse gas reduction target of 30% below 2005 levels by 2030, which is aligned with Canada's 2030 greenhouse gas emissions target;
  - —making Ontario communities resilient;
- —making polluters accountable for their greenhouse gas emissions;
- —activating the private sector to unlock private sector capital to give Ontario businesses and residents new and more affordable ways to invest in energy efficiency and clean technologies that save money and reduce greenhouse gas emissions;
- —using energy and resources wisely to develop climate solutions that will save energy and money and improve waste and resource management; and
- —doing our part by supporting effective climate leadership across the provincial government and Ontario's local governments, businesses, organizations and communities.

We will continue to engage the people of Ontario in environmental decision-making processes, including ongoing consultation on the environment plan. We are considering all feedback as the ministry moves forward with developing specific initiatives.

Several external factors and decisions could affect the government's approach to addressing climate change. These include a decision from the federal government on whether to remove Ontario from the federal output-based pricing system as well as a ruling from the Supreme Court of Canada on the constitutionality of the federal carbon tax.

I would now like to turn it over to assistant deputy minister Alex Wood, who will talk about the action being undertaken within our own ministry's climate change and resiliency division as well as by several partner ministries.

**Mr. Alex Wood:** Thank you, Deputy, and thank you to the committee for the chance to come and present today.

As the deputy mentioned, we appreciate the analysis and recommendations provided by the Auditor General and her staff. We look forward to ongoing engagement with them on our work.

The Auditor General highlighted that while the Ministry of the Environment, Conservation and Parks has the responsibility to coordinate Ontario's actions on climate change, many of the emission-reduction initiatives in the environment plan are not within our control and are the responsibility of other ministries. What I propose to do with my introductory remarks is to focus on government coordination and the role of the Ministry of the Environment, Conservation and Parks and also to highlight some of the actions taken by our partner ministries in support of the plan.

To begin with, the Auditor General's recommendation number 17 is that "the secretary of cabinet, in conjunction with the Ontario deputy ministers' council, require ministries to use the guidance tools developed by the climate change leadership team." The context for that recommendation is that, following the release of the environment plan, the government established a multi-ministry climate change leadership team to make climate change a cross-government priority.

The leadership team, which is co-chaired by the Ministry of the Environment, Conservation and Parks and the Treasury Board Secretariat, has focused its work on developing options and recommendations for how ministries and central agencies can best integrate climate change in policy and operational decision processes. This includes work to develop information and tools to support climate change considerations in government decision-making. Consistent with the Auditor General's recommendation, the climate change leadership team will be providing its first update to the deputy ministers' council this spring. We will continue to support the climate change leadership team in its work and their engagement with the deputy minister's council in the months and years ahead.

I am also pleased to advise that, following the Auditor General's report, the Cabinet Office updated templates for policy submissions to cabinet to include consideration of climate change. The new templates were distributed to all ministries in December 2019.

Finally, the ministry is also collaborating with other ministries on several of the Auditor General's recommendations that suggested cross-ministry collaboration on a number of specific initiatives. For example, in December 2019, the Ministry of the Environment, Conservation and Parks and a number of partner ministries established an interministerial working group on low-carbon vehicles, which is working to identify and assess opportunities that could support the adoption of zero-emission vehicles in Ontario. MECP has also engaged with the Ministry of Agriculture, Food and Rural Affairs to identify agriculture-specific initiatives that could be included in future iterations of the climate plan.

I'd now like to turn to the actions and progress of our ministry and other ministries in delivering on some of the government's key climate change commitments to date, beginning with the Ministry of the Environment, Conservation and Parks.

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In addition to establishing, as the deputy mentioned, a 10-member advisory panel on climate change, the ministry has proposed beginning a transition to 15% renewable content in regular-grade gasoline as early as 2025 and finalized Ontario's emissions performance standards for large industrial emitters to ensure polluters are accountable for their greenhouse gas emissions. This approach recognizes the unique circumstances of our economy and considers specific industry and facility conditions while allowing for economic growth. Discussions are ongoing with the federal government to establish that our program meets the federal benchmarks set for such programs and

to allow the emissions performance standard to replace the federal output-based pricing system.

We have also posted four bids for a third-party expert to undertake the first-ever broad, multi-sector provincial climate change impact assessment. This will identify where the province is vulnerable to climate change. It will help decision-makers better understand the impacts so that they can protect communities and the environment.

Turning now to some of the other initiatives undertaken by other ministries: Our colleagues at the Ministry of Finance have announced the Ontario Job Creation Investment Incentive, which will make technology investments in clean energy generation and energy conservation equipment more attractive. The Ministry of Finance has also, through the Ontario Financing Authority, successfully issued green bonds at a total of \$2.2 billion, with the latest offering just last month raising \$500 million to capitalize on the province's ability to raise funds at low interest rates and to help finance public transit initiatives, extremeweather-resistant infrastructure, and energy efficiency and conservation projects.

The Ministry of Municipal Affairs and Housing has consulted on proposed changes to the provincial policy statement, which sets out the province's policies for how land is used and developed in Ontario, including proposed changes to build resilience and support municipalities in preparing for the impacts of a changing climate. The Ministry of Municipal Affairs and Housing has also announced a \$1-million pilot project for the Municipal Disaster Recovery Assistance Program to provide financial assistance to eligible communities that face extraordinary emergency response and repair costs after a natural disaster.

The Ministry of Natural Resources and Forestry named a special adviser on flooding, and he has delivered a report on ways that all levels of government and individuals can make Ontario more resilient to flooding. That report was released earlier this week.

Finally, consistent with the AG's recommendation, we are also engaging in ongoing discussions with the Ministry of Agriculture, Food and Rural Affairs to identify specific agriculture initiatives that could be included in future iterations of the climate plan.

The Auditor General made 19 recommendations on how we can best move forward with our greenhouse gas reduction initiatives; 17 of these recommendations are for the Ministry of the Environment, Conservation and Parks. The ministry has provided a comprehensive response in the summary status report. As a number of these recommendations touch on the ministry's modelling and analysis, Craig Golding, the director of the ministry's environmental economics branch, will touch briefly on the relevant Auditor General recommendations.

Mr. Craig Golding: Thank you, Alex. I will echo your sentiments and say thanks to the committee for having us here today. I am Craig Golding, the director of the environmental economics branch at the Ministry of the Environment, Conservation and Parks. I'm here today to speak to you primarily about the modelling that we have under way.

The auditor had several recommendations related to anticipated GHG emission reductions expected as a result of the environment plan. We take those recommendations seriously, and we're considering them as part of our ongoing work to refine and implement the climate change plan.

We understand how important it is to use accurate modelling to forecast how effective the environment plan and its recommended policies will be in reducing greenhouse gas emissions in Ontario. That's why the ministry signed a contract in October of 2018 with an independent research company to use its comprehensive energy economy model. The model can be used to forecast the environmental and economic effects of various policy options for combatting climate change.

When the environment plan was released in November of 2018, we had just received the emissions economy model from the vendor. At that time, the model was not yet calibrated to generate results for all the initiatives in Ontario's plan and, more importantly, to show the interactions between policies in the plan.

The ministry is making progress, improving the model so that it can accommodate a wider variety of GHG mitigation measures, such as increased electric vehicle and compressed natural gas truck uptake, renewable natural gas, renewable content in gasoline, and clean fuel standards. We're doing some additional work so that the model can incorporate other approaches considered in the environment plan, such as natural gas conservation initiatives, financing tools for an emissions reduction fund and cost-effective fuel switching.

It's important to note that the model is not static. As new information becomes available, we will incorporate it into the model. For example, in January this year, the Independent Electricity System Operator released its annual planning outlook, which is a 20-year forecast for Ontario's electricity system. The new outlook included revised estimates for electricity demand in Ontario for the next several years, and these are being fed into the model.

Another example is the National Inventory Report that Environment and Climate Change Canada releases every year in mid-April. It provides detailed historical GHG emissions at the national and provincial-territorial levels from 1990 onwards. Each year, the full data set of historical emissions is recalculated to incorporate new data and methodological revisions. Updates to the historical emissions are fed into the model as they become available. Ontario uses the National Inventory Report to track progress towards the 2030 emissions target.

As we have continued to refine the modelling, we're meeting with partner ministries such as the Ministry of Energy, Northern Development and Mines to make sure that we're aligned and that we have the right information and assumptions about the various programs and initiatives they are leading.

Also, following on the Auditor General's recommendation, we've committed to reviewing the Intergovernmental Panel on Climate Change Guidelines for National Greenhouse Gas Inventories when calculating emissions reductions associated with industrial, commercial and institutional sector organic waste diversion. As a part of that review, we've adjusted our modelling so that our estimates no longer include emissions reductions occurring in the United States.

This ministry is committed to using the best available science and data to support the actions in our climate change plan. We're constantly working to ensure our modelling is as robust, integrated and accurate as possible, and we'll continue to update and improve our emission reduction estimates based on new data and policy assumptions as they become available.

I'd now like to turn it over to Charlotte Beckett, the director of our communications branch, who will discuss some of our public reporting and engagement initiatives.

**Ms.** Charlotte Beckett: Thank you, Craig, and thank you for inviting me here today.

To help keep Ontarians updated on the status of our efforts, the environment plan includes a commitment to effectively measure our progress through key indicators and report publicly on it. In her report, the Auditor General recognized that commitment and provided recommendations to report annually in a way that clearly identifies how we're measuring progress across all key sectors.

The auditor also recommended we report on the outcomes of all initiatives and provide updates on the overall progress in meeting the 2030 target. The ministry is considering these recommendations as it finalizes its approach to public reporting, monitoring and evaluating progress against the commitments in its plan. Part of this work is to develop a climate change plan implementation strategy that will clearly identify performance metrics and set the criteria for reporting on outcomes.

With respect to public engagement, as mentioned earlier, the ministry is strongly committed to ongoing collaboration and consultation with the public, stakeholders, ministries and other governments as we evolve and implement the environment plan.

I'd now like to ask Deputy Minister Imbrogno to provide a few closing thoughts.

Mr. Serge Imbrogno: Thank you, Charlotte. In closing, let me restate the government's commitment to dealing with the challenge of climate change. Climate change is a serious, human-caused global problem that presents challenges for our air, water, lands, homes and businesses, locally grown food and crops, our infrastructure and our technologies. The government recognizes both the threat posed by climate change and its responsibility to act. The fact is, Ontario has already been a leader on climate action, especially in the last two decades, with Ontario companies and the energy sector leading the way; and Ontario remains committed to reducing emissions by 30% below 2005 levels by 2030.

As the Auditor General has noted, more work needs to be done. We take the Auditor General's comments seriously, and we are committed to working with all our partners to improve our modelling, public transparency, accountability and engagement, and to developing and implementing policies and programs that will be effective in helping Ontario reach its 2030 greenhouse gas emissions reduction target.

#### 1250

With this in mind, we will continue to work together with people across Ontario to evolve the plan in a way that will work for our diverse communities, including rural, northern and Indigenous communities.

We'll be happy to take any questions the committee may have.

The Chair (Ms. Catherine Fife): Thank you very much, and thanks for containing your enthusiasm so effectively.

That's sarcasm.

**Mr. Serge Imbrogno:** It's okay. I'll take it as a compliment.

The Chair (Ms. Catherine Fife): I don't know what it is, but when people come to this committee, they all talk in the same tone.

Hopefully we can get into this report. This round of questions moves to the government side. I'm looking toward MPP Parsa to begin.

**Mr. Michael Parsa:** Thank you very much, Chair. Unfortunately, I'm not going to impress you with that. As you know, I'll always speak in that one tone.

I want to thank all of you for being here today. I want to thank, as always, the Auditor General and her team for the work that they do.

My first question is about progress. It's important to realize that Canada is responsible for about 2% of the worldwide annual GHG emissions. That's as of 2017. Ontario is responsible for just 0.4% of the global GHG emissions. If it weren't for Ontario's actions, Canada's greenhouse gas emissions would have been about 6% higher in 2017.

Our government—this government—promised the people of Ontario that we would make life more affordable and bring an end to the ineffective, job-killing cap-and-trade program. Our Made-in-Ontario Environment Plan details our actions to reduce greenhouse gas emissions without imposing a carbon tax on Ontario families.

Once again, I just want to ask you about the progress that has been made on this environment plan since it was released in November 2018.

**Mr. Serge Imbrogno:** Chair, I'm going to disappoint you; it's going to be a low-key answer.

Ontario has played an important role—in fact, a leading role—in fighting climate change, and is taking significant steps to reduce our greenhouse gas emissions, with the province's emissions down significantly since 2005. Almost all of Canada's progress toward its 2030 Paris agreement target has been driven by Ontario, as you mentioned already.

In 2014, Ontario closed its last remaining coal-fired generating plant, eliminating all coal-fired electricity in the province. The closures helped Ontario to achieve its 2014 emissions reduction target of 6% below 1990 levels.

The Ministry of the Environment, Conservation and Parks drafted the environment plan in 2018, knowing that

Ontario had already made and achieved significant reductions and knowing that the government does not support carbon pricing.

In 2018, we reached across ministries to gather input and ideas for the environment plan, focusing on policies that would be cost-effective and cost-efficient. The Madein-Ontario Environment Plan was posted for public comment on the Environmental Registry for 60 days, between November 29, 2018, and January 28, 2019, and over 1,400 comments were submitted regarding the plan.

The ministry continues to consult and collaborate with stakeholders and other governments to evolve and implement our plan. The ministry has reviewed the public feedback from the consultation period, and we will consider that feedback as we update the plan.

The government put forward solutions that support both a healthy environment and a healthy economy over the past year, and the government has made progress on key commitments in the plan.

The government's position is that there is no single environmental approach or solution that fully addresses the needs of all provinces, regions or communities. The government has stated that the environment plan will continue to evolve as a living document to address the environmental priorities of Ontarians as new information, ideas and innovation emerge.

The environment plan is a road map for the actions the government will take to preserve and protect our land, air and water; address litter and reduce waste; and work toward reducing greenhouse gas emissions.

Mr. Michael Parsa: Can you give me some of your accomplishments? The plan was released in November 2018. I just want to know, specifically, when it comes to MECP, what you've done to address greenhouse gas emissions since releasing the plan—some key accomplishments, if you don't mind.

Mr. Serge Imbrogno: Alex will walk you through that. Mr. Alex Wood: Sure; thanks. Climate change is one of those classic all-of-government approaches, obviously, but the answer that I'll provide is really just about the Ministry of the Environment, Conservation and Parks.

#### Mr. Michael Parsa: Yes.

Mr. Alex Wood: If you look at the plan, our ministry is directly responsible for 15 of the 56 climate change initiatives in the plan. But we believe our ministry will be able to continue to work effectively with other ministries, because we play a key coordination role across other ministries to help refine the plan and develop and implement key initiatives.

But just to your question about the accomplishments, one of the most significant accomplishments of the ministry has been the release and the finalization of the emissions performance standard for Ontario. It was committed to in the environment plan. Ontario's emissions performance standard essentially is designed to ensure that polluters are accountable for their greenhouse gas emissions, and to help Ontario achieve its share of Canada's 2030 reduction target.

We developed that emissions performance standard as an alternative to the federal output-based pricing system that is now in effect in Ontario. In doing so, and to support that, we released, back on July 4, 2019, the Greenhouse Gas Emissions Performance Standards regulation under the Environmental Protection Act.

I'll spend a minute or two just on the environmental performance standard and what it looks like.

Basically, the emissions performance standard recognizes the unique circumstances of Ontario's economy, and considers specific industry and facility conditions while allowing for economic growth. Right now, only the registration and records-retention-related provisions of that regulation are in effect, just because we are awaiting that decision from the federal government on whether we meet the federal benchmark. We set a deadline for facilities to register into the EPS program. That deadline was December 1, 2019.

Some of the other key provisions that are in that regulation will not apply, as I mentioned, until Ontario's program is assessed by the federal government as meeting that benchmark for such programs, and until such time as the federal government removes the output-based pricing system from its application in Ontario.

Ontario is committed to working with the federal government to recognize our program consistent with the benchmark instead of the federal output-based pricing system.

Consistent with that, in 2019, the ministry also proposed, consulted on and finalized regulatory amendments to the greenhouse gas quantification reporting and verification regulation, which exists to support the implementation of programs like the EPS. The changes were proposed and then put in place to harmonize with the federal regulatory requirements. These changes eliminate duplication and reduce unnecessary cost and regulatory burden for facilities, saving them an estimated total of almost \$25 million over the next several years.

Among those regulatory amendments that I can point to is the fact that we aligned Ontario's definition of "facility," under the regulation, with the definition existing under the federal Greenhouse Gas Reporting Program.

We aligned quantification methods and requirements for Ontario facilities with the federal program where possible. In some cases, Ontario requires certain parameters to be reported, in addition to what is required under the federal program.

We also provided the ability for the director, under the regulation, to require a revised greenhouse gas report from a facility under certain circumstances.

Finally, we delayed verification of production parameters, which is one of the key inputs into the implementation of the program until Ontario is removed from the federal output-based pricing system regulation.

These amendments that I have mentioned apply to facilities' reports for the 2019 emissions year, which will be due in June 2020.

Some of the other accomplishments, to go back to your question: The plan also proposes to begin transitioning to a 15% renewable content in gasoline as early as 2025,

through amendments to the Ontario fuels regulations. We have been working with stakeholders on some of the options related to that. The focus of that policy is to reduce greenhouse gas emissions from transportation without increasing the price at the pump. Since 75% to 80% of the ethanol that is used in Ontario is made in Ontario, renewable content in gasoline supports economic development and job growth in Ontario and helps keep some of the money that Ontarians pay for gasoline right here in the province.

#### 1300

On February 12, 2019, Ontario posted a proposal, in fact, to increase renewable content in gasoline to 15% as early as 2025. So that has been posted on the environmental and regulatory registries for a 45-day comment period. We are currently in that period, which expires on March 29.

That proposal really is about supporting the clean fuels commitment in the made-in-Ontario plan. Our job right now is to review comments, to continue to meet with stakeholders and to collect data from stakeholders to inform the eventual development of the final development of that proposal. I hope that answered your question.

Mr. Michael Parsa: Thank you very much. Could you also tell me more about what MECP has accomplished, since releasing the environment plan, to help Ontarians adapt to a changing climate? As you know, our government has made adaptation and resilience an important priority in the environment, to protect Ontarians from the impacts of climate change.

Mr. Alex Wood: Yes; thanks for that question too. As we mentioned at the outset, setting up an advisory panel on climate change was one of the key commitments of the environment plan. That commitment was fulfilled back in November through the establishment of the 10-member advisory panel on climate change to provide expert advice on the implementation of the province's climate change actions, especially on how Ontarians can prepare for the cost and impacts of climate change.

The advisory panel on climate change, which includes Paul Kovacs as the chair and Lynette Mader as the vice-chair, consists of experts on climate change resiliency who have experience in a variety of sectors, including the not-for-profit, agriculture and insurance sectors. The ministry recognizes the importance of gathering expertise to make more informed decisions and to protect and prepare communities and the environment from its impacts. Ontario needs that advice on the climate impacts that the province is facing and how the province's businesses and communities can build resilience from those impacts. The ministry may broaden the focus of the panel to consider other aspects of climate change in the future.

Another key commitment in the environment plan relating to your question is to help Ontarians prepare for the cost and impacts of climate change and to strengthen climate change resiliency through the issuing of the first-ever province-wide, multi-sector climate change impact assessment. The purpose of that is to help inform Ontarians on the impacts of climate change and to help prepare communities for extreme weather events.

As a first step in that, the ministry will procure consulting services to conduct this assessment, which will enable us to better understand and identify where and how climate change will impact Ontario. A request for bids for the impact assessment was posted for this procurement on the government tender portal on November 7, 2019, and remained open for bids until January 13 of this year. Now that the bid period is closed, a multi-ministry evaluation team is evaluating the bids and conducting vendor interviews to help determine the preferred bid and to award the contract. We anticipate that the contract will be awarded in the early spring of 2020 and that the assessment will take place over two years. The release of the final impact assessment is slated for 2022.

This project really is designed to use the best available scientific information to help us better understand where the province is vulnerable to climate change and which regions and economic sectors are most likely to be impacted. The assessment results will help the province, including municipalities, Indigenous communities and other local partners, to make more informed, timely decisions to help them keep those communities and people healthy and safe—for example, when making local planning on infrastructure investment decisions.

Mr. Michael Parsa: Okay. Thanks. Going forward, can you tell me some of the external factors that could affect the government's approach to addressing climate change—the external factors?

**Mr. Serge Imbrogno:** No, I'll take that question. I touched upon it in some of the opening remarks as well, and I'll just go into a bit more detail on it.

There are several external factors and decisions that could affect the government's approach to addressing climate change. These include a decision from the federal government on whether to remove Ontario from the federal output-based pricing system that Alex just walked you through, as well as a ruling from the Supreme Court of Canada on the constitutionality of the federal carbon tax. This would have direct implications for the work of the Ministry of the Environment, Conservation and Parks.

The ministry will take these external factors into account as we continue to further develop the environment plan to include the most effective and affordable ways to protect our environment and reduce greenhouse gas emissions. We'll do that through continued collaboration with all levels of government, government agencies and the private sector, as the environment plan continues to evolve.

As mentioned earlier in our introductory statement, it's important to remember that the environment plan is an all-of-government plan. Several ministries also have moved forward with important items highlighted in the environment plan. The Ministry of the Environment, Conservation and Parks will continue to work effectively with other ministries to help refine the plan and develop and implement key initiatives.

Each ministry will remain responsible for doing detailed policy and program analysis and costing, and each ministry will conduct public and stakeholder consultations around those policies and programs, as required.

As we move forward, we're going to look at actions that reflect all parts of our province, because what works in larger cities may not work in other parts of the province. To that end, the government has committed to working together with people across Ontario to evolve the plan in a way that will work for diverse communities, including rural, northern and Indigenous communities.

**Mr. Michael Parsa:** Thank you. How much time do we have?

The Chair (Ms. Catherine Fife): You have four minutes.

Mr. Michael Parsa: Okay. Thank you very much. I appreciate you describing the good work that the government has already accomplished to reduce greenhouse emissions. I wonder if you can please describe how the environment plan goes beyond climate change, with actions and commitments to preserve and protect our air, land and water.

Mr. Serge Imbrogno: Thank you for the question. I'll walk you through and highlight some of the key parts of the environment plan, which is broader than the climate aspects in chapter 3. The Made-in-Ontario Environment Plan provides a holistic approach to protecting the environment, with commitments to protect land, air and water, to address litter and reduce waste, to protect species at risk and their habitat, and conserving and managing parks and green spaces.

Some of the progress the ministry has made to protect land, water and air includes the following commitments from the environment plan. The ministry jointly released, with Environment and Climate Change Canada, a draft of a proposed new Canada-Ontario Agreement on Great Lakes Water Quality and Ecosystem Health for consultation. Once finalized, this new agreement will help to protect the Great Lakes from threats such as waste water overflows and bypasses, stormwater, excessive nutrients, invasive species and the effects of climate change.

The ministry established the Muskoka Watershed Advisory Group as part of the \$5-million initiative to better identify key risks and issues facing the Muskoka region and its watershed.

The ministry is developing and has consulted with the public on an enhanced air pollutant emissions testing program for the biggest polluters on our roads, such as commercial trucks and buses, to help reduce smog-causing pollutants.

We have also posted for public comment changes to make it safer and easier for excess soil to be reused locally and properly, and penalize those who dump soil illegally.

In addition, some of the progress the ministry has made to build a world-class Ontario Parks experience includes appointing a special adviser for Ontario Parks to provide advice on how to improve programs and increase revenue opportunities, supporting the government's target of increasing the number of Ontarians visiting—

The Chair (Ms. Catherine Fife): You have two minutes left.

Mr. Serge Imbrogno: —Ontario parks by 10%, which is about one million more visitors each year, while continuing to protect the natural environment.

We are also conducting a Healthy Parks, Healthy People consultation, which is about how to ensure that the health benefits of nature are fully realized for all Ontarians. The feedback from the public and stakeholders will help Ontario Parks develop more effective programs, policies and partnerships.

Mr. Michael Parsa: Thank you very much, Deputy. We may not have enough time in this, but if you don't mind, when we do come back, I would like to ask this question. I just want to know what the ministry has done to address litter and reduce waste, basically.

**Mr. Serge Imbrogno:** Yes. That would be great, because we have litter day coming up, so we're looking for everyone to support litter day, and we'll have a lot more detail when we come back with our next answer.

Mr. Michael Parsa: Do I have time?

The Chair (Ms. Catherine Fife): Yes, it's under a minute. Would you like to talk about litter?

**Mr. Serge Imbrogno:** Yes, we could start to talk about litter.

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Ms. Charlotte Beckett: Sure, let's talk about litter.

Mr. Serge Imbrogno: We could focus a bit on litter day and the day of action that the government has announced. Actually, Charlotte is leading the litter day campaign for the ministry, so she'll have a lot to say about litter day.

The Chair (Ms. Catherine Fife): Charlotte, you have 30 seconds.

**Mr. Michael Parsa:** I don't mind it being broad right now, but I would want specifics when we come back, if you don't mind, please.

Mr. Serge Imbrogno: Yes, absolutely.

**Ms.** Charlotte Beckett: Okay, do you want me just to talk a little bit about—

**Mr. Michael Parsa:** Just very roughly because I don't want specifics of—

**Ms. Charlotte Beckett:** Of the day of action on litter?

**Mr. Michael Parsa:** Yes. I know we're not going to have enough time, so I don't know if you want to wait until we come back.

**Mr. Serge Imbrogno:** We can start a little bit then get right back into it.

Ms. Charlotte Beckett: It was proclaimed in legislation late last year. We've been actively working towards the first day, which will be May 12 of this year. It was proclaimed in legislation for the second Tuesday of May—

The Chair (Ms. Catherine Fife): Charlotte, I'm sorry to interrupt you. You're going to have to come back to that because you guys talked a lot about whether or not you wanted to talk about litter, and then you ran out of time to talk about litter.

Ms. Charlotte Beckett: Apologies.

The Chair (Ms. Catherine Fife): No, it's not your fault. I'm blaming MPP Parsa.

Ms. Charlotte Beckett: We'll come back to that question.

The Chair (Ms. Catherine Fife): Okay. So we are going to move to the official opposition. MPP Tabuns, please.

**Mr. Peter Tabuns:** Thank you, Chair. Mr. Imbrogno and members of senior staff: very good to see you here today. Thank you for taking the time.

It's a good thing that you're here, but it's unfortunate that the minister isn't here because I think that a lot of the questions that need to be answered are more political than technical. But I appreciate you taking the effort, and hopefully we'll get some information out of this that will be useful to the committee and to the Legislature.

I have to say right off that I thought the climate plan was a disgrace when it came forward. It was a rollback of targets; it was vague; it didn't deal with substantial issues that had to be dealt with; and it didn't take the seriousness of the situation we're facing into account.

You comment about the big impact that Ontario has made to roll back greenhouse gas emissions, and I just point out that, yes, that was done, but we are now ramping up our emissions from our gas-fired power plants. They were two megatonnes in 2017 and they're looking to hit 11 in 2030, and on up to 13 or 14 by the mid-2030s. So in fact, we are going back to a level of greenhouse gas emissions that we were dealing with almost a decade ago. This plan doesn't deal with that.

This plan has been found to be even more hollow than what the Liberals brought forward. I thought what they did was inadequate and it was weak, and I was astounded that it was rolled back even further.

That being said, the first question I have is: Who wrote this plan? And before you get into that, I was going through the Auditor General's report, and time after time:

- —Page 122: "Our audit found that the ministry's projected emissions forecast, and the estimated emissions reductions for all eight areas, are not yet supported by sound evidence." That is extraordinary to me;
- —Page 124, similar commentary: "The plan estimates emissions reductions from natural gas customers switching to renewable natural gas, though evidence shows that the higher cost of renewable natural gas means that few customers would switch.... Ministry staff estimated there would be 'negligible' emissions reductions.... Instead of using the staff analysis, the emissions reductions in the plan are based on a submission to the ministry from the Ontario Energy Association," which was illustrative, not based on analysis;
- —Page 125: "The plan states that future innovation will reduce emissions, but no emission-reduction programs have yet been identified." I'll quote the Auditor General: "The ministry was unable to provide any evidence to support this estimate";
- —Page 126: "The ministry did not fully estimate costs for more than half of the emission-reduction areas included in the plan"; and
- —Page 127: "Ministry staff estimated that implementing initiatives in the plan could achieve about 10.9 megatonnes in emissions reductions. Additional, unidentified policies would be needed to fill the gap."

In other words, your staff, Deputy Minister, were continuously showing the reality, and that did not get reflected in the plan. So I have to ask: Who ignored ministry staff? Who wrote a plan not based on evidence or analysis?

**Mr. Serge Imbrogno:** Thank you for that question. There's a lot to unpack in that question.

**Mr. Peter Tabuns:** There is. So who wrote the plan? Why don't we start there?

Mr. Serge Imbrogno: Absolutely. This was an all-of-government plan, led by my ministry. What we did, as you do with any other plan, is that you would develop proposals and options for the minister to consider. The ministry has a long history on the climate file and a lot of expertise on the climate file.

As you look at what needs to be done, it's focused on a number of areas. You've got the transportation sector. You have buildings. You have industry. Those are the major players.

With the decarbonization of the electricity sector, we made progress there. So we knew where we had to focus. Then it's a matter of, "What are the initiatives that you can use? What are the policy levers available?"

Mr. Peter Tabuns: Mr. Imbrogno, you and I have had many opportunities to work at this table in the past. Who ignored the staff analysis as to what was and what was not evidence-based? Who decided to throw out the staff numbers that showed that the emissions projected were not going to be met with what had been brought forward? Who ignored ministry staff and said, "Put that in"?

Mr. Serge Imbrogno: I'll say that nobody ignored ministry staff. When you develop these plans, you have options. You have different scenarios. You have scenarios where you have different levers that you can push. You can dial that up or dial it back. The plan presented various options for the government and for the minister to consider. If you pull that lever, and you want to go harder, you'll get more emissions. If you don't want to pull that lever—so what we did, in our scenario-building, is that we said, "Here is the status quo. If you move a little bit more, you can achieve these reductions. If you commit to going further, then you'll achieve more reductions."

The government committed to the 2030 target. It committed to a plan that would evolve over time, and you don't want to lock in too early. I think it recognizes that you want to have flexibility. It's a 10-year horizon. You want to allow for innovation technology to develop. The plan was always meant to be reassessed. If you need to go harder on certain initiatives or if you need to make things mandatory, then you would do that.

So, it wasn't ignoring the ministry input. We're saying, "Here are different scenarios. If you're willing to go further in terms of the levers, then you can achieve a higher GHG emission reduction."

**Mr. Peter Tabuns:** I think my colleague wants to get in, and then I have a follow-up on what you just said.

The Chair (Ms. Catherine Fife): MPP Arthur?

**Mr. Ian Arthur:** I'm actually going to follow up on that. You said that these were submitted to the minister to

consider. At some point, there is a judgment call between the information that was being submitted to you by staff in your ministry and other information that was coming from outside, and they contradicted each other. Who was responsible for that judgment call between using information provided by the ministry or choosing to use that outside information?

Mr. Michael Parsa: Madam Speaker, point of order. The Chair (Ms. Catherine Fife): Point of order, recognizing MPP Parsa.

Mr. Michael Parsa: Madam Speaker, the question is purely on speculation, asking ministry staff to speculate on something that happened with a minister who was there at that time. Can we—

The Chair (Ms. Catherine Fife): All questions must be pertaining to the Auditor General's report. He's following up on the accountability piece in the report. This is finding a balance between ensuring that members have the right to put their questions, even if you don't like the questions.

Mr. Arthur, can you please proceed and keep your comments to the report?

**Mr. Ian Arthur:** Absolutely. Did that judgment call fall under your purview as the DM?

Mr. Serge Imbrogno: The process is a little bit more complicated than just numbers coming up and then people making decisions. We would have several policy papers on what the options are available in the transportation sector. Staff would prepare analysis and do the modelling. There would be a policy deck that said, "Here are the options. Here's where we could go." We would have interaction with the minister's office staff, the minister and ministry staff. It would be an iterative process; it wouldn't be, "Here it is; make a decision one way or the other."

The other thing you have to remember, and we've talked about, is the modelling, which is important, as we had just acquired the model. In terms of making the modelling and taking into account all the interactional effects, some of those things weren't available. We looked at what other credible sources are out there in terms of the OEA, which may have hired ICF to do some modelling on natural gas. That's why we looked at outside to supplement what we didn't have internally.

Going forward, what we're saying is, now we've had time to recalibrate the model, the Auditor General and her staff made excellent recommendations on the need to do that. We'll be able to run that analysis internally, so we won't have to rely on the external sources.

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So it wasn't as if we said, "No, ignore what we're doing. Let's go to the outside." It was a way of supplementing the work that we're doing internally. That's the process we followed. Whether you're doing a budget, a fiscal update or a long-term energy plan, that's the process we follow, where staff come forward with policy options and then we have a discussion. We look at the analysis and then we pick a lane in the end.

Mr. Peter Tabuns: I understand that— The Chair (Ms. Catherine Fife): MPP Tabuns. Mr. Peter Tabuns: Thank you, Chair. I understand that people will be presented with options, but I also expect that on a business-like basis, they'll be provided with costs and evidence. No one on that side of this room would make a decision about major spending initiatives without asking how much it costs and how much it will achieve. It wouldn't happen.

I find it very bizarre that you talk about pressing further—and I understand that. You can say, "Okay. If you are willing to spend this much more money and put in this kind of law, you can get this result," which is very different from saying, "We're going to achieve a whole bunch of stuff for which we have no evidence or cost or analysis."

We have an illustrative comment by the Ontario Energy Association, for whom I have great respect, but they didn't actually provide analysis; they just provided an illustration.

I'm going to move on, though, because my guess is and someone will correct me some day—somewhere between your pay grade and a ministerial pay grade a decision was made to take numbers that the Auditor General has found were not backed by evidence.

So, now that we know we've got a whole bunch of numbers that are not backed by evidence, not backed by analysis, have no costing, when will we get a restatement showing, "This is what's actually achievable, this is what it will cost and this is when we will get it done"? When is that scheduled to land in this Legislature?

**Mr. Serge Imbrogno:** I don't want to leave it at that last comment that we didn't—

**Mr. Peter Tabuns:** Fair enough, Deputy Minister. Fair enough.

Mr. Serge Imbrogno: We are working internally to upgrade the model, and that's a continuing process. As we mentioned, there's some major updates coming that we'll need to integrate into the model. We've set the national inventory GHG emission forecast—well, it's kind of a backcast. It gets updated every year, and that's a major input into the model, so we need to do that.

We're also working with Minister Yurek on what additional levers he wants to take, what additional actions he wants to take. So we're not committing to a particular date at this point. We're working on the auditor's recommendations as well. She made a number of recommendations for us to consider, and we're doing that. We're working with our partner ministries. We will return with an update to the plan, return to cabinet and have that approved, and that will be the plan.

Mr. Peter Tabuns: I'll come back—sorry. I was at the press conference with the minister in 2018, and I have to tell you, he said it was a plan. When asked by reporters, "What have we got here?" he said, "We've got a plan." There was no, "This is an iterative document." There was no, "This is the draft. This is our first shot at it." No, "This is our plan. This what we're going to do."

I'm going to set that aside and just say, can you not tell me, now that you've had your draft for a year and a half, roughly, when we will actually have a plan? What's the timeline for an actual plan based on evidence with costing and timelines? When will we have a plan?

**Mr. Serge Imbrogno:** Maybe I'll clarify. We have a plan—

**Mr. Peter Tabuns:** I thought we had a draft that's being worked on.

**Mr. Serge Imbrogno:** We have a draft plan that's evolving, but the plan will always evolve; right? We don't foresee a time where you say, "The plan is locked, and that's it for the next 10 years."

Mr. Michael Parsa: Point of order, Madam Speaker. The Chair (Ms. Catherine Fife): Yes, MPP Parsa?

Mr. Michael Parsa: I understand these are exciting times. We get to have officials and we get to ask our questions. I know that my colleague across has extensive experience in the area, but can we stick, please, to the report and ask questions that are relevant to the report as opposed to speculating and leading with questions—

The Chair (Ms. Catherine Fife): Well, I have to tell you, MPP Parsa, that the members from the official opposition are addressing the recommendations around the implementation of a plan. In fact, some of these questions are directly from the auditor's briefing this morning. So you'll have your time to ask the questions, and the official opposition have their time. You have six minutes left on the clock.

**Mr. Peter Tabuns:** I will just note that I am following the comments of the deputy minister in his statement that he made in the first 20 minutes, that the plan is evolving and that he'll be coming back.

I'm just asking, given that 2022 is only a few short years away: Will we actually have a plan in place before 2022, with numbers?

Mr. Serge Imbrogno: I can't commit to when the government will move forward with the updates that we're proposing, but maybe it might help if Alex just runs you through a bit about the work that his group is doing. That might help give you a sense of what work needs to be done in order to move forward with—

**Mr. Peter Tabuns:** I may come back to that later. No offence, Alex.

I want to go back to a few other questions. The ministry selected a scenario for reductions from gas use that assumed that all cost-effective gas conservation measures would be carried out. That's page 151. Your staff estimated the cost at about \$6.6 billion over a decade. Did anyone talk to Enbridge to see if they would actually be doing that? Did Enbridge come into a meeting and say, "We are going to do all cost-effective demand-supply management initiatives and projects that come forward and we will fund that"?

Mr. Serge Imbrogno: I'll start, and I'll let Alex maybe give you a bit more detail on that. But that's based on an achievable potential study. In the end, that would be part of an OEB discussion, whether Enbridge would bring forward that plan and whether the OEB would approve it. It's about how much the OEB would allow Enbridge to recover on rates for these enhanced programs. That is a

discussion, probably ongoing, and happening right now at the OEB. But I'll let Alex give you a bit more, since—

Mr. Peter Tabuns: But even before we go to Alex: Did you talk? Did you sit down with the company that will be doing this work and say, "Hey, we want you to do all cost-effective DSM that comes forward in the province, and we'll talk about the rates later?" Did they say, "Yes, Deputy Minister, we're going to cut the use of natural gas in Ontario by a lot. We're bought in. We're going to go forward"? Did you actually have that discussion with them?

**Mr. Serge Imbrogno:** Well, I personally didn't have that discussion—

Mr. Peter Tabuns: Did the ministry have that discussion?

Mr. Serge Imbrogno: Part of that discussion that Alex will talk about is that they do that now. They come forward with conservation measures that are approved by the OEB. The question for the OEB is: How much of those conservation measures do you allow? For the company, they will cover their costs, so it's in the interest of Enbridge to go forward to the OEB to have these programs. The more programs they can provide for the company, they'll be paid for that service. So it's not a negative for the company.

But maybe Alex can give you a bit of—

Mr. Peter Tabuns: I'll just note that the company doesn't seem really enthusiastic in their most recent filing with the OEB around the Hamilton pipeline, about ramping up their demand-supply management. Not really enthusiastic, if you read it—

**Mr. Mike Harris:** Madam Chair, a point of order.

The Chair (Ms. Catherine Fife): Point of order: Mr. Harris.

**Mr. Mike Harris:** I'm fairly certain that this line of questioning does not pertain to the Auditor General's report.

The Chair (Ms. Catherine Fife): I don't know if you noticed, but the member actually referenced the page in the annual general report, chapter 3, which is before this committee.

**Mr. Mike Harris:** This specific line of questioning.

The Chair (Ms. Catherine Fife): Okay, we're going to move on. There are two minutes left, and I know Mr. Arthur would like to address—

**Mr. Peter Tabuns:** Maybe, Mr. Wood, you can answer. Did you sit down with Enbridge, and did they say, "Yes, we want to do this," so that you could count it as an item in your plan?

Mr. Alex Wood: My answer would be that this is a classic example of the dynamic nature of some of the policy making around this. As we were developing the broad ideas in this plan, we were very aware of the work that our sister ministry on the energy side was doing with the OEB, in terms of looking at the overall conservation framework and the ongoing consultation and work that they do in that area, knowing that this kind of idea is one that would have to be implemented through that kind of process that they control. We reflected that in the plan

when we described in our plan on page 23, that the natural gas conservation reductions that we were describing here would be subject to discussions with the Ontario Energy Board. Those discussions were part of the initial—

**Mr. Peter Tabuns:** So did the Ministry of Energy buy in and say, "Yes, we're going to make that a requirement for approving Enbridge rates in the future, that they have all fully realizable emission reductions put in place"?

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The Chair (Ms. Catherine Fife): Last minute.

Mr. Alex Wood: I'd say that that's an ongoing conversation with our colleagues at—

Mr. Peter Tabuns: So they didn't.

Mr. Serge Imbrogno: I can just add on that. We're stressing that this is a 10-year horizon. It's where you are in 2030, and when those initiatives come into play and how much you have to turn that lever up. Whether you do it in 2020, 2022, 2024—those are discussions to have with the OEB, the company, the Ministry of Energy. What we did in the plan was say, "Here is a credible, achievable potential study that is available to the government. And where you are on that spectrum—you have a 10-year period to think about how aggressively you move towards that."

Mr. Peter Tabuns: You know, Deputy Minister—

The Chair (Ms. Catherine Fife): Okay, thank you very much. That concludes that 20-minute session.

I would like to acknowledge that we have former Speaker Warner in the audience with some students. Welcome, students, to a very exciting public accounts committee.

Applause.

The Chair (Ms. Catherine Fife): There have been three points of order from the government side, pertaining to the question set. I want to remind all members that we are examining Climate Change: Ontario's Plan to Reduce Greenhouse Gas Emissions. Please keep your comments focused on this report and then we won't have any issues.

Who are we going to on the government side?

The Chair (Ms. Catherine Fife): MPP Parsa, do you want to continue your question set?

Mr. Michael Parsa: Thank you, Chair.

We had started, and you were going to give me some examples, please, specifically on the reduction of waste.

**Mr. Serge Imbrogno:** Yes, I know everyone has been waiting for this, the litter day update from Charlotte.

Mr. Michael Parsa: Oh, I have.

Mr. Serge Imbrogno: So I'll hand it over to Charlotte.

Ms. Charlotte Beckett: Yes. The Provincial Day of Action on Litter was proclaimed in the Legislature last year. It's to fall on the first Tuesday of May of every year. This year, it will be May 12. It was developed to help raise awareness about the impacts of litter and waste—

Mr. Peter Tabuns: Point of order.

The Chair (Ms. Catherine Fife): I'd like to recognize MPP Tabuns.

**Mr. Peter Tabuns:** I don't see the waste matter being part of this report. This is climate change, is it not?

The Chair (Ms. Catherine Fife): Is it there—I mean, you called the opposition members on this—

**Mr. Michael Parsa:** Yes, yes. I'd like to address this, please, because I can simply do exactly what my colleague did, which is reference a page, read a segment of a page, and then tie it back to my question. I just was up front in asking the question that I wanted to ask.

The Chair (Ms. Catherine Fife): I'm going to respect all members to ask the questions that they want. I have full confidence in the deputants who are before you, but I want to make it really clear that sometimes in these accounts committees, government members and opposition members don't agree. Members have the right to put questions, as they pertain to the chapter. If you want to pursue litter, then you can reference a page in this report that talks about litter, but I do not see it in there, MPP Parsa.

Mr. Michael Parsa: Upon your ruling, Madam Speaker, even through the continuation of my colleague speaking, still I did not interrupt and I allowed him to continue without coming in with a point of order, so I'll leave that up to you. If you feel like it's out of line, then you can ask them to not answer it. I'll leave that up to you as the Chair.

The Chair (Ms. Catherine Fife): Does anyone on the government side have an additional question? MPP Miller.

Mr. Norman Miller: Thank you—

**Mr. Michael Parsa:** So that was ruled out, Madam Chair? That question was ruled out?

The Chair (Ms. Catherine Fife): No, I thought you were deciding that you didn't want to pursue—

Mr. Michael Parsa: No, I'm asking you—

The Chair (Ms. Catherine Fife): Would you like to pursue—

Mr. Michael Parsa: —if you think that was ruled out—

The Chair (Ms. Catherine Fife): I'm not going to argue. Waste reduction, are you—

**Mr. Michael Parsa:** No, I'm asking you if that was ruled out. Is that what it was—that question was ruled out so they can't answer?

The Chair (Ms. Catherine Fife): No, you stopped talking, and so I thought that you had completed your thought.

**Mr. Michael Parsa:** So I had asked the question, but I'm saying that if it's being ruled out, I will respect that and I will move on.

The Chair (Ms. Catherine Fife): MPP Parsa, you can pursue this line of questioning as long as you don't take exception to the opposition members from doing exactly what you're going to be doing.

**Mr. Michael Parsa:** Okay. Please answer the question, if you don't mind.

Ms. Charlotte Beckett: So as I was saying, the Provincial Day of Action on Litter was developed to help raise awareness about the impacts of litter and waste, and also to encourage local action to help keep our communities clean. This is just one part of the many other things that we're doing as a government to combat waste and to work towards a producer responsibility framework.

This year, we're very excited. Again, it's going to be on May 12. We're working really closely with businesses and NGOs and industry associations to encourage participation. You'll be learning more about the Provincial Day of Action on Litter in the coming weeks.

As I said, there is more that we've been doing to address litter and waste, especially through our environment plan.

Mr. Ian Arthur: Point of order.

The Chair (Ms. Catherine Fife): Point of order, MPP Arthur.

**Mr. Ian Arthur:** I was just in the washroom. I think this has already been raised once, but will you indicate where in the Auditor General's report it talks about litter?

The Chair (Ms. Catherine Fife): You missed part of this conversation. MPP Parsa has agreed that we're not going to reference every single item in this report, which gives the opposition greater flexibility in asking questions about future plans, for instance. So we're not going to do this point-of-order business. We're going to let people ask the questions that they want to of the deputation. I think that is a fair way to move forward.

**Mr. Michael Parsa:** Just when you stepped out—sorry, Madam Chair, I just want—

The Chair (Ms. Catherine Fife): Charlotte, will you please continue? I'm sorry for the interruption.

Ms. Charlotte Beckett: No problem. I'll just talk a little bit more about some of the progress the ministry has made to reduce litter and waste, which includes releasing a discussion paper on reducing plastic litter and waste, diverting and reducing food and organic waste from households and businesses, and increasing opportunities for Ontarians to participate in waste reduction efforts.

The ministry has also launched a working group to set clear rules for compostable packaging materials in Ontario and to ensure that these materials are accepted by existing and emerging green bin programs across the province.

The government has also announced next steps to transition the blue box recycling program to full producer responsibility, as I mentioned earlier, to save taxpayer money, promote innovation and improve recycling across the province. The ministry is engaging with a wide range of producers, municipalities and waste management stakeholders to support this government initiative so we can ensure that regulations are in place to establish full producer responsibility.

As I mentioned, in addition—which was a commitment in our environment plan—we are moving forward with the Provincial Day of Action on Litter, again, to really raise the awareness of this issue and the impacts that waste has on our communities and environment, and to encourage everyone across the province to do their part to take action, and also to talk about all the various other aspects and importance of waste reduction and waste prevention.

The Chair (Ms. Catherine Fife): Thank you very much. I just want to note that the auditor would like to make a comment as it pertains to this topic.

**Ms. Bonnie Lysyk:** I just wanted to comment that I do have my audit team on this report at the back of the room today.

The report that was done on climate change is a report that we think is very significant and very important. I have to admit, I'm kind of surprised that we're talking about litter. It isn't a subject of our report, but it is a subject that we will be looking at in a report that will be reported in December 2020.

This report specifically deals with emission reduction, and so my staff is here to see that the work that they've conducted over the last year brings value to the Legislature and brings value to this committee, and that the focus of it is on determining whether the recommendations we have in the report have merit and are addressed as the Legislature would see fit.

So I'm just a little surprised about the process. In theory, this is a non-partisan committee of the Legislature, and the objective is to address the work of the Auditor General's office, which is an independent office of the Legislative Assembly.

I felt the need to comment on that, given the amount of work and effort that has gone into a product where we're really not discussing litter.

The Chair (Ms. Catherine Fife): MPP Miller.

Mr. Norman Miller: Thank you for coming in today. I appreciate you taking the time and preparation to be here. Certainly, we had the auditor's report, and we listened to your comments about this being a non-static, living document, with things changing. Even at the time of doing the draft plan, there were things you didn't know about, like the federal clean fuel standard, for example, which could have a significant effect on greenhouse gas reductions.

I'll start with following up on the litter part, only because I have a personal interest in it in that the government is bringing extended producer responsibility, which I think will have an effect on greenhouse gas reductions. I bring that up because I had a private member's bill 10 years ago, a product stewardship bill—which is essentially what the government is doing.

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Also, they mentioned organics. I had another private member's bill to do with coffee pods, trying to get certified compostable coffee pods accepted into the composting system. I know that there are efforts being made toward getting them—I hope there are efforts being made to get them accepted into the system. That, again, that would have an effect on reducing greenhouse gases. So I just comment on that.

I want to just briefly talk about the low-carbon vehicles uptake because, in the draft plan, I think you were planning a 2.6-megatonne reduction in carbon emissions based on people taking up electric; I assume that means hybrid vehicles as well. Then the auditor came back and said, "No, we're counting zero," which I gather from reading from the report means that in 2030—there would be 250,000 electric or hybrid vehicles on the road, is what her assumption is. Frankly, I don't mean to question the auditor, but I am a little surprised about that number.

I think if I were in the automotive business, I'd love to have a crystal ball to know how quickly the uptake is going

to be for both pure electric and hybrid vehicles. I know that one of the best-selling vehicles made in Ontario is the Toyota RAV4, and 22% of them that are being sold are hybrid vehicles, with very little provincial enhancement to it. I know that Ford Motor Co. has just come out with their new Ford Mach-E Mustang, of which they have nine variants, so I can't help but think that they must be expecting big sales in that.

In your comments, you mentioned that you've created a ministerial working group to do with low-carbon vehicles. I wondered if you could talk a bit about that, because my feeling is that that 250,000 number in 2030—I think we're going to far surpass that. But that's just my hunch, and I know it's something—it's looking into the future, so it's very hard to predict how quickly this uptake is going to happen.

Could you talk a bit about that interministerial working group that you have put in place, and what else you're doing to encourage both hybrid and pure electric vehicles?

**Mr. Serge Imbrogno:** Okay. I'm going to let Alex give you a bit, because he's leading the group, but maybe I'll just make a general comment.

The challenge with modelling over the next 10 years what the electric uptake is going to be—it's very hard to predict technology changes. As technology evolves, battery technology evolves and the cost of plug-in hybrids, electric vehicles will come down. It's pretty hard to plug in and capture that dynamic. So I think that reflects a low—if you just go by what the model says, the projection of a low take-up. But I think we all know that two years ago, you probably didn't have much choice. Now if you go into a showroom, you'll see 20 or 30 models, and next year, there will be even more choice and the price will come down. So that's hard to capture in a model.

Mr. Norman Miller: In that, I read an article recently by the president of Toyota. Toyota sold millions of hybrid vehicles. He was arguing that it made more sense, with the available resources, to promote hybrid technology versus pure electric just because of the size of the batteries etc., and probably the economics of it as well. As you're looking forward, are you looking into that as well, that aspect?

Mr. Serge Imbrogno: We try to look at what the technology is. We try to look ahead, as you have. Plug-in hybrid technology reduces range anxiety. A lot of people aren't making that switch, but as you have more of these options—so I think these are scenarios we'll build out in our model, and it will be more dynamic going forward. As we said before, we didn't have that integration when we acquired the model early, as we were doing the plan. We're recalibrating. We'll have a better sense. We can plug in different scenarios to say, "Well, what if technology increases at a greater pace? What if the cost comes down? What is going to be the uptake in Ontario?" And that would be without an incentive, because people, we feel, will be making that switch for economic and social reasons.

But part of that is working with this inter-ministry group to say it's not just the technology; it's the infrastructure. It's the regulations that are in place that the government has control of, and that's what this group that Alex is leading—

Mr. Norman Miller: So I would assume it would be things like charging stations. For example, if I was to drive a pure electric vehicle from Parry Sound to Toronto, it's about 231 kilometres, I think. I'd obviously have to plug in in the condo building that I rent in Toronto to make that a viable option for myself, or if you're a condo owner in Toronto then that would be something.

**Mr. Serge Imbrogno:** Right. And that's what this group that Alex is leading across ministries is saying: "What can we do to reduce regulations or put regulations in place to allow that infrastructure?" But I know Alex is dying to give you an update.

The Chair (Ms. Catherine Fife): Get in there, Alex.

Mr. Alex Wood: I thought it would be useful maybe to illustrate with some numbers because you put some numbers on the table in preparation for this meeting. I had staff give us some update in terms of what's happening out there right now.

What we know as of January 2020 is that there are over 42,000 electric vehicles registered in Ontario—

Mr. Norman Miller: That's pure electric?

Mr. Alex Wood: That's pure electric. From 2015 to 2018, that kind of registration doubled almost every year. We've seen kind of a tail-off since then, but now there is a federal incentive that is starting to show an uptick again in those numbers.

What we're seeing now is that we've basically got 3% across the country—so that's a Canada number—of new registrations being electric vehicles. That's actually zero-emission vehicles, so that includes plug-in hybrids as well. That number goes as high as 8.6% in British Columbia. There is some substantial uptake that is starting to happen across the country.

Just to your question about this working group: The working group really is meant to bring together all the different ministries that have something to say about this kind of issue. As you might expect, it's a pretty broad range of stakeholders even within government: my colleagues at the energy ministry; certainly economic development, given the interest in the potential economic opportunities around EVs; the Ministry of Transportation, obviously; even government and consumer services; and then municipal affairs.

So the work and the mandate of that group is really, as the deputy said, to basically coordinate government action in support of what is found in the plan that will touch on areas related to the vehicles themselves. One of the things may be to inform Ontarians on the kinds of choices that are available out there.

As the deputy was saying, one of the striking things, certainly sitting in my job, has been the very dramatic uptick in the options available to consumers. When we were first looking at these things back in 2015, there were maybe two or three electric vehicles in the province that would have qualified for any kind of credit or incentive. That number is now well into the double digits, and I saw last week, or the week before, that GM had basically rolled

out a plan saying that over the next 10 years, two new models every year—

**Mr. Norman Miller:** My brother is a Ford dealer, so I noticed Ford has a new Ford Escape hybrid, which is really competitive and competitively priced, and of course, the new Ford Mach-E coming out next year, of which, my brother informed me, he gets three, two of which are already sold, so I could put my name on one.

**Mr. Alex Wood:** So that's one of the interesting features. That's one of the things that this group may in fact look at. What we now understand about that marketplace is—

The Chair (Ms. Catherine Fife): Two minutes left.

Mr. Alex Wood: —that manufacturing capacity around these vehicles around the world is still fairly limited, although it's ramping up very rapidly, as you might expect. One of the interesting things you learn about this marketplace is that, essentially, dealers—or Ford Canada, for example—will need to, at their headquarters, say, "We want X number for Canada for this model year." Then provinces will basically have to fight amongst themselves to see how many can be—and so, one of the things we want to look at, for example, is to ensure that the kind of availability that is starting to pick up—that consumers are in fact given all of the options that they should be given there.

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That's just an example of some of the things we may be looking at, and that's engagement with the manufacturers—

**Mr. Norman Miller:** And were you also, in your modelling, counting the hybrids as well? Because a hybrid vehicle is 30% less emissions than—

Mr. Alex Wood: Right, and there's a particular advantage, as you or the deputy mentioned. Certainly, we know there are a couple of hybrid models, if not three, being built in Ontario right now. Craig, for example, owns one of the Chrysler Pacifica Hybrid models, manufactured in—

Mr. Craig Golding: Windsor.

**Mr. Alex Wood:** —Windsor. So, that's certainly part of wanting to pull more of those into the marketplace.

But the deputy mentioned that there are usually two sides to this, right? There's not only the vehicle itself, but there's the charging infrastructure, because that tends to be one of the barriers to adoption by people—or the range anxiety that the deputy referenced.

Looking at the opportunities that exist for private sector investment in that kind of charging infrastructure across the province is certainly an area that we will be looking at as a working group.

The Chair (Ms. Catherine Fife): Thank you very much. That concludes the time for the government side.

Moving to the official opposition: MPP Arthur.

Mr. Ian Arthur: I'd like to address the innovation section of the AG's report there. You've identified a few areas with some emissions reductions. Just for context, the UK Energy Research Centre put out a paper, Innovation Timelines from Invention to Maturity. They looked at 14

different innovations with an average time from invention to widespread commercialization of 39 years. At the very front end of that was lithium-ion batteries, at 19 years.

In the innovation section, you've actually eliminated two of the areas where these technologies are advancing the fastest, which are energy storage, and fuel-switching from high-carbon heating to electricity.

Then you've left a further 2.2-megatonne reduction, and the AG's comment on this was, "The ministry was unable to provide any evidence to support" the 2.2-megatonne future-innovation emissions reductions estimate.

Given that you were unable to elaborate at the time that this report was written, and given that time has now elapsed and this is an evolving document, can you please identify which innovations you are factoring into this 2.2-megatonne reduction?

**Mr. Serge Imbrogno:** Maybe I can start, and then I guess Alex might have some comments as well.

I think it's part of the discussion that we're having today about innovation and how difficult it is to capture in any modelling exercise—

Mr. Ian Arthur: Just to interrupt you there—if it's incredibly difficult to capture in a modelling exercise, what place does it have being modelled and being used as part of future reductions for the province of Ontario?

Mr. Serge Imbrogno: There are innovations that you can potentially see in the future. For example, the government has talked a lot about small modular reactors. Small modular reactors—

Mr. Ian Arthur: —which has a time frame for introduction of, at the earliest, 15 years. So, given that you are—

Mr. Serge Imbrogno: Well, it depends on who you talk to.

**Mr. Ian Arthur:** No, no. I'm sorry—

The Chair (Ms. Catherine Fife): We're not going to argue here.

Mr. Ian Arthur: Okay.

The Chair (Ms. Catherine Fife): Let's let the people answer the question, and then move on, please.

Mr. Serge Imbrogno: You asked me for an example, and the one example I gave you was an SMR technology. It's not that technology isn't known or available; it's that it has to go through a process where it gets through a regulator—the CNSC, for example. So that is an example of a technology that could be adopted in the future.

I think what we're noting is that if you look back in time, innovation and technology innovation have been key drivers for emissions reductions. We think that even though it's hard to model, if you think about looking forward over 10 years, there are a lot of opportunities for innovation to come in.

So how do you get that precise estimate? We could have given a range of GHGs with innovation.

It's also not that Ontario has to develop new innovations; it's Ontario importing innovations from around the world. We have carbon capture-and-storage technologies that are evolving. We always have industry coming in and telling us about where they are very close to commercial introduction of new innovations.

We've also talked about introducing not just Ontario funds, but the federal government has funds that promote innovation among industry.

It's not as precise as some people would want, but I think in modelling, it gives the illusion of being precise in all these other areas. We know over time that these things evolve. The day you log in an assumption in a model—if you look at it two or three weeks later, things change. It's meant to be a guidepost. You shouldn't take it as an exact measurement over the next 10 years.

Mr. Ian Arthur: Okay. What other tech would be on this list, potentially? You've said it's evolving and it's continuing to grow. The Auditor General said that you were unable to provide any evidence to support it. Have we evolved beyond that position? Are you able to provide any more evidence at this point in time of specific technologies that would account for this reduction?

Mr. Serge Imbrogno: Other than what I've mentioned? That's part of the plan, to say, "Here's the policy lever that's available." Some of these we have more control over; others, we don't. It's just recognizing that innovation will be a key part of any plan, whether it's our plan, Quebec's plan or the government of Canada's plan. That innovation is a key part of that plan.

**Mr. Ian Arthur:** Okay. I think my colleague has some questions.

Mr. Peter Tabuns: I do.

The Chair (Ms. Catherine Fife): MPP Tabuns.

Mr. Peter Tabuns: Mr. Imbrogno, ministry staff calculated that there would be negligible emissions reductions from renewable natural gas. That's on page 149 of the Auditor General's report. Why did you use a figure of a 2.3-megatonne reduction? That's the first question. The second question is, do you still think that people will pay six times more for renewable natural gas in any but negligible numbers? First of all, why did you use a number that the staff didn't think was credible?

Mr. Serge Imbrogno: It's a common theme that I'm going to talk about. I talked about how you can dial up the rigour of how you want to implement. You can initially start with a voluntary program. There are a lot of consumers out there that want to provide a benefit to the economy and to the environment, and they may be willing to pay extra. There's also financing that you can provide to individuals who may want to sign up for RNG so that they have clean natural gas.

Over time, if you find that you're not getting the uptake that you would desire, you can make RNG mandatory. You could require, through the Ontario Energy Board, a 5% RNG content, and that would drive that greenhouse gas reduction.

If you assume that it's voluntary throughout the next 10 years and there's no desire to make it mandatory, then you're probably at the lower end. If you believe, over time, that you want to make it a larger contribution to GHG reductions, then you can move to a mandatory incentive. It gives you that opportunity, over time, to see how things go. You don't want to lock in on day one into something when, over time, you might have success with a voluntary program.

Mr. Peter Tabuns: So am I to understand that you think that this government would tell people that they would increase their gas bills by six times to meet this target? Do you think that that's credible? This is a government that's opposed to a carbon tax, which would not increase people's gas bills by six times. You're saying that an option for them is to go from—what was it?—three dollars per gigajoule for fossil natural gas up to \$18 per gigajoule for renewable natural gas.

Did the minister say, "Yes, I think I'm going to have mandatory renewable natural gas at six times the current cost to meet this goal"? Does that strike you as at all realistic?

Mr. Serge Imbrogno: That upper amount is what is potentially achievable, but you can achieve that in different ways. Like I said, if you have people who want to do voluntary, if you provide financing—there are different levers, and then, over time, you can adjust. It's not saying that on day one this government is deciding to increase prices by that amount, but it is saying that it's achievable if, over time, you want to move in that direction.

Mr. Peter Tabuns: Well, your staff said that by 2030, with what you had proposed, there would be negligible emissions reductions of 0.0049 megatonnes, which is in line with what the experience is in British Columbia, where they have voluntary renewable natural gas. I don't think renewable natural gas is a bad thing. I think it's a useful thing; I just think it's very limited. For you to use this whopping big number to suggest for a moment that this government would increase people's gas bills by six times—I can't see that as a credible policy option that you'd put before them. So I ask, why would you do it?

Mr. Alex Wood: If I could maybe add, Mr. Tabuns: I think, as the deputy suggested, the way the policy has been described is with an initial period of a voluntary program and some recalibration at some point, if necessary, towards something more mandatory, but what we're really looking at right now—and again, this is going to be my recurring theme: just the dynamic nature of this stuff—is to use a pilot-type program around voluntary, for example, to help understand what those price points would be.

Part of the information that we had available to us when we were developing the plan was a certain number of economic assumptions about what the cost premium of RNG would be. Through a pilot program, one of the things that you get to do is a bit of price discovery to look at, what the market could deliver to you for that RNG and what the cost would be of putting in place the kind of infrastructure to scrub that RNG before you inject it into the gas pipelines, the gas infrastructure or that kind of thing.

The point is that we look at that and we use the best available information when we make that proposal, but the reason we propose to roll it out the way we do is to allow for that kind of discovery to happen, for the market to provide us with some feedback on what the consumer is willing to pay on one side but also what the market is in a position to deliver in terms of that commodity since it is that—

Mr. Peter Tabuns: I will just note that you actually looked; your staff did look. There's a company in Ontario that does sell renewable natural gas, and it has sold six petajoules since 2005, as opposed to 1,051 petajoules of conventional natural gas that was sold in one year in Ontario—so, negligible. In British Columbia, where Fortis is selling renewable natural gas, only about 0.3 petajoules of their 292 were renewable natural gas.

I don't know what a petajoule is. It's a measurement of energy—

Interjection.

**Mr. Peter Tabuns:** It's big, it's big. I understand that. No one who's watching this show today, except for total policy nerds, will know what I'm talking about. I just express it in terms of scale, and the scale is miniscule.

If you're talking about injecting renewable natural gas into the gas system—it's intriguing to me. Has anyone done the cost-benefit analysis? How much will it change the cost of gas? My colleagues may follow up when it's their turn. How much will that change the cost of gas, who's doing those calculations and are you moving ahead on this now?

**Mr. Alex Wood:** Well, as part of the answer that we provided earlier, this is one of those areas where there are very active conversations with our colleagues at the energy ministry, just because most of the policy levers in that area are obviously ones that they control.

But again, the point is that we do see some potential around RNG just because the province and the people of the province really have made a substantial investment in the existing natural gas infrastructure that exists across the province. To the degree that we know that one of the big emissions drivers ongoing in our province is the building sector and the fact that we—most of us, at least—heat our homes or businesses with natural gas, one of the challenges we face is essentially decarbonizing or lowering the carbon intensity of natural gas, and that's why there was this interest.

It's not to say that there aren't some big economic questions around just how we get from A to Z, but I think the intent is there to start to answer some of those questions in the kind of incremental fashion that the deputy highlighted.

**Mr. Peter Tabuns:** My colleague has a question, but I just want to follow on. So conversations are going on. Is there actually a pilot project scheduled to happen before the next election?

Mr. Serge Imbrogno: I know there are existing pilots related to RNG. I think the point—unless I misunderstood you—is that the injection into the natural gas system is what this is all about, right? It's not just having RNG on its own; it's producing RNG and injecting it into the natural gas system, and that becomes your clean, renewable natural gas.

Those discussions have been ongoing in the past with companies like Enbridge, because you need to make sure it's pure enough that you don't have any impact on the natural gas system. They have been doing tests, and, I

think, up to a 5% injection is appropriate. Those infrastructure pieces are there. It's a matter of how you scale that up, and at what pace, and how that is done.

**Mr. Peter Tabuns:** And what are the cost implications? Has that assessment been done?

Mr. Serge Imbrogno: That's part of, as we go forward costing these, getting more insight into what the benefits are, what the costs are of these various technologies. What's happening is, Quebec is doing a lot of RNG injection into—I think they ship it out to California through the system. So there's a lot going on not just in Ontario, but in other provinces related to RNG.

It also links to what we are doing with Ontario farmers and biodigesters, so there's an integration of farming, RNG injection into the system and reducing GHGs. So it's not just a GHG reduction; it's also a potential economic development tool that we could use.

Mr. Peter Tabuns: No, I understand that, totally.

The Chair (Ms. Catherine Fife): Okay, MPP Arthur.

**Mr. Ian Arthur:** I have to say, I feel a bit like I'm in the musical Annie. Everything's progressing and evolving, and, "Tomorrow, tomorrow. I will have answers tomorrow."

I want to talk a little bit about some of those changes in the modelling that you have done. You said that you had added updated IESO projections into your modelling for electricity generation in Ontario and the emissions related to that. You specifically referenced that it was an increase in the projected use of electricity. Do those modelling changes include the changes that are going to be coming to the generation mix as well? Have you already factored those in as we ramp up natural gas generation and bring nuclear offline for refurbishment?

Mr. Serge Imbrogno: I'll let Craig give you a bit more detail on that, but I'd say it's difficult to just change one variable, right? You'll get new information on the IESO; you'll factor that in, but you'll also get changes in economic growth. You'll get changes in population, changes in weather. You could hold every other variable constant and say, "What's the change because of this?", but—it's a very dynamic model.

I'll let Craig, as the expert, give you a bit more detail on that.

Mr. Craig Golding: Yes. Thanks for your question. As I mentioned in my opening remarks, the Auditor General made a number of recommendations regarding the modelling, and one of them was to make sure that the modelling was brought up to date and reflected the most up-to-date analysis, and that would include us incorporating the most recent forecasts from the Independent Electricity System Operator. Like I said, the most recent outlook came out in January, and that is something that we are currently working into the model as we speak—just as we had worked into the model, when it came out, the 2019 version of the outlook.

This is just another example of how this model is not static. It's always being kept up to date, and as new information comes out, we work that into the model, and the forecasts as well.

**Mr. Ian Arthur:** But are you aware of the coming changes in the generation mix? Are you aware if those are factored into the numbers going into the model?

Mr. Craig Golding: Well, we have the IESO outlook from January 2020, just a few months ago, and we're working right now to incorporate that into the model so that the model can show how that change might interact with all the other different changes that are happening in the economy, changes to past emissions and how that affects the forecast going forward, changes to the economic outlook—

**Mr. Ian Arthur:** But specifically, are you able to say whether the coming changes in the generation mix are included? Are they captured in what you have been provided and are feeding into your model?

Mr. Craig Golding: What we take from the outlook primarily is the demand. That has the greatest influence on what the model will be saying about emissions from the electricity sector, but at the same time, we do look at the emissions forecast, which is dependent on the generation mix. So we look at the emissions forecast in the IESO's outlook and calibrate our model to make sure that it's generating an emissions forecast that's commensurate or in line with that, so the actual generation mix doesn't make its way—

The Chair (Ms. Catherine Fife): It's the last minute. 1410

Mr. Craig Golding: I'll just close off. The actual generation mix doesn't necessarily make it into the model, but the demand and emissions forecast influence what the model says, yes.

**Mr. Ian Arthur:** Do your forecasts for EV adoption include the decrease that happened in 2019 after the cancellation of the incentive by the Ontario government?

Mr. Alex Wood: The estimate, at least, related to the EVs, as we said earlier, was kind of a global—we don't actually have a forecast, or at least a forecast that was used.

As the AG pointed out in her report, when we did the analysis, when we did the modelling for the 2019 plan, what we had in terms of inputs was, I think, a 2017 IESO document that had a certain number for EV penetration based on assumptions at that point. We have not gotten a new forecast for EV penetration, but that would be part of what we would do as part of the work that—

The Chair (Ms. Catherine Fife): Thank you very much. You may get another chance to fully complete that sentence

In this last round, there is 14 minutes to the government side and 14 minutes to the official opposition. We'll start with MPP Hogarth.

Ms. Christine Hogarth: Thank you all for being here today.

My question is with regard to the Auditor General's report, on pages 144 and 145, and this panel. When she wrote the report, it was September 25; there wasn't an advisory panel in place. In your remarks, you mentioned the panel being in place now, as of, I think you said, the end of November.

I'm just wondering if you could talk a little bit about the panel and the experiences that the panel members bring to the table to help this living document.

Mr. Alex Wood: I'll answer that question. We did commit, in the environment plan, as you referenced, to create a climate change advisory panel. The government announced back in November, just earlier, in 2019, the creation of that panel. The panel is designed to help us, and help Ontarians, prepare for the costs and impacts of climate change.

What we have done in terms of that panel is we have gone out and identified a number of experts in Ontario society who have something to contribute to that particular set of questions. As we mentioned, that panel has had its initial meeting, in which the discussion was largely about the mandate and the work program that they would undertake. My staff work as the secretary, essentially, for that group, to help support the work that they do—because they're drawn from society, so they have their day jobs, basically. They come together on a bimonthly basis to provide advice to the minister and to government on what it can do to help prepare Ontarians for the coming impacts of climate change.

I'll go through some of the areas that we've identified with them already that they might want to look at. We're looking, for example, at their advice on how to address impacts to infrastructure, to communities, to the economy, to people in the environment—that's the general question on raising awareness and facilitating access to climate data and other information on the impacts, so it's the data side, how we get information into the hands of Ontarians so they can act accordingly; advice on collaboration with the federal government and provincial partners, including municipalities, Indigenous communities, associations, health and social service providers and the voluntary sector; advice on the implementation of our provincial impact assessment, which I referenced earlier; and advice on the development and the implementation of the online tool that the government committed to making available. That tool is really designed to make information on the local climate impacts more accessible to the general public, which, as I said, is one of the commitments made in that plan.

Ms. Christine Hogarth: Just one follow-up. The Chair (Ms. Catherine Fife): MPP Hogarth.

**Ms.** Christine Hogarth: You talked about the impact assessment. My question is about the procurement process for that impact assessment. Can you tell us a little bit about that?

Mr. Alex Wood: Yes. I want to find the right information, because I've got some dates on that that I need to be very clear on. As I said, the impact assessment was a commitment made in the environment plan.

The first step that we took was essentially issuing a request for bids. That was posted back on November 7, 2019, and it closed on January 13, 2020. Where we are right now with that is in the middle of an evaluation process. What we've done for that is to bring together experts from across government, from different ministries,

to help us evaluate the bids. We are also now conducting vendor interviews, based on that initial screening, to help us finalize, essentially, the successful candidate for that work.

That's part of our usual procurement process. We work through Supply Chain Ontario to make sure that all of the procurement rules are followed to do so.

We expect the contract, as I said earlier, to be issued in the early spring of 2020. Again, the plan is to have the final impact assessment conducted by the end of 2022.

Ms. Christine Hogarth: In 2022?

Mr. Alex Wood: Yes.

Ms. Christine Hogarth: Okay. Thank you.

The Chair (Ms. Catherine Fife): MPP Crawford.

**Mr. Stephen Crawford:** Thank you to the guests for coming here today. It has been very informative. I have a lot of questions that I'd like to get started.

Just a couple of short questions to get started, and I guess they would be directed to the deputy: Is it fair to say that Ontario has been a leader in Canada with respect to GHG emission reductions?

**Mr. Serge Imbrogno:** Absolutely. In the environment plan, we highlight that with the coal phase-out, Ontario has led Canada in terms of helping it to achieve its GHG reduction targets.

**Mr. Stephen Crawford:** What currently is the main source of energy for Ontario?

Mr. Serge Imbrogno: We have a mix of fuels. We have natural gas, oil and petroleum, and we also have electricity. Fortunately, our electricity sector has basically been decarbonized, and that allows us to use electricity, going forward, as a way to decarbonize other sectors. We've talked about transportation, for example, as a way that we can use the money that the people of Ontario and businesses invested to remove coal mines—

**Mr. Stephen Crawford:** But with respect to energy, what is the actual number one source of energy for Ontario?

Mr. Alex Wood: I think we can probably talk about transportation-related energy and then heating, or buildings-related energy. Certainly, in the buildings sector, it would be natural gas. On the transportation side, it would be liquid fuels: gasoline and diesel. Those are the two dominant sources.

Mr. Stephen Crawford: Okay. My background: Before coming into the political world, I was a partner in an investment firm that did investing in renewable companies, and companies that are involved in sustainable development. I know the importance of having business as well as government involved in any greenhouse gas emission reductions in the province and in the country.

I just wanted to get your take on this. I know you touched on the green bonds that the government has put forward with our Made-in-Ontario Environment Plan. I'm wondering if you could shed a little more light on the structure of those, how they work, and how they can benefit business, consumers and government, and reduce GHG emissions.

Mr. Alex Wood: Sure. As I mentioned, the green bonds offering, or the green bonds program, is a program run by the Ontario Financing Authority. The financing authority, as you well understand, is the government's player, essentially, in the marketplace to raise money for government purposes. It has, for three or four years now, I believe, had a green bond program where, on at least an annual cycle, it has gone into the marketplace and offered to the marketplace what is considered a green bond. We should probably spend a bit of time defining what that means.

Just to remind us of the numbers: Through that program, over that period of time, the OFA has raised \$2.2 billion for use in different projects, different programs, that the government or government partners are undertaking.

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A green bond, typically, is a financial instrument like any kind of government bond, but it has identified as part of the offering a certain number of projects a government commits to, using the revenues to invest in. Those programs, under a green bond, would obviously be programs that deliver particular environmental benefit to the province in this case. With what we know now of the money that has come in—you've seen the kinds of projects—up until now, largely focused on transit-related and transportation-related projects, a lot of the green bond money being earmarked for investments, for example, on some of the transit projects being undertaken in the GTA and so on and so forth. There is interest, I think, in looking at how that ongoing program might be used to look at what other kinds of projects might be undertaken. Transit obviously delivers substantial economic and environmental benefits to the province and they've been giving it priority, but I think there's an interest in maybe looking at some other opportunities related to that.

Mr. Stephen Crawford: You also mentioned, aside from the green bonds, that there was a rebate with companies that are putting forward and advancing technologies, beyond the green bond. Could you explain that?

Mr. Alex Wood: Right. The Ministry of Finance has put in place—I'm trying to remember the exact name—the Ontario job creation incentive, I believe, or something related to that. It's an incentive provided both by the federal government and the provincial government. What the provincial government has announced is that it will align with an existing or announced federal incentive. Essentially, it's a way for industry, for business, to write down the investment that they make in clean technology. Again, the idea is to create conditions whereby the private sector business is investing in these kinds of technologies to reduce their emissions.

Just to go back to some of the earlier questions around electric vehicles, as an example, that's another area where there has been some work done around tax policy, for example. The federal government and our government have aligned their incentives when it comes to the writedown of purchase of fleets by commercial operators of electric vehicles. So that's the one that you were referring to, I believe.

**Mr. Stephen Crawford:** Yes. Have there been quite a few companies that have participated in this?

Mr. Alex Wood: I'd have to get back to you on that. Mr. Stephen Crawford: Okay. That's all right.

I know you touched a little bit on the cross-ministry sharing of information to create policy development. Can you give everybody here an update on how that's going, working with the other ministries to fulfill this plan?

**Mr. Alex Wood:** I referenced the climate change leadership team, which is—

The Chair (Ms. Catherine Fife): Two minutes left.

Mr. Alex Wood: —the group that was created within the Ontario public service, essentially, to help coordinate and manage the all-of-government response to climate change. As I mentioned, our ministry chairs—that, along with Treasury Board, just reflecting again the importance of people like some of the central agencies and helping drive implementation across government. It's through that process, that table, essentially, that we are able to coordinate with our sister ministries on some of the initiatives that they are bringing forward. I reference, for example, some of the work that we're doing right now with the Ministry of Agriculture, Food and Rural Affairs. The Auditor General had made a very good recommendation to us about looking at the opportunities that might exist in that sector for emission reductions. That's a classic example of the work that goes on between my staff and staff at OMAFRA to help coordinate and to bring forward new ideas within that context.

Mr. Serge Imbrogno: Sorry, could I also add to that? One of the auditor's recommendations was that this committee would come forward to the Deputy Ministers' Council. The Deputy Ministers' Council is a meeting of all the deputies; we usually meet once a week. The auditor recommended that this committee be briefed by Alex's team. That first session is going to be set up this spring, and there will be ongoing sessions where it gives senior deputies a chance to hear from Alex and his team about whether some of the recommendations that they're putting forward we can use in all the ministries.

The Chair (Ms. Catherine Fife): Okay. Thank you. That's actually a good reminder, because this committee will also be writing their own report, following up on the Auditor General's recommendations, and we'll make sure that you have a copy of that as well.

Mr. Serge Imbrogno: Okay. Thank you.

The Chair (Ms. Catherine Fife): Okay. Last session, 14 minutes to the official opposition: MPP Tabuns.

**Mr. Peter Tabuns:** Thank you, Chair. Mr. Imbrogno, can you tell us what reductions in GHGs we've had under this plan so far, and can you tell us what you project to be the reductions by 2022?

Mr. Serge Imbrogno: Well, we are updating the model. We're updating based on the recommendations of the auditor, so it's premature for me to give you a forecast of where we're going to be in 2022. We have told you what we've accomplished to date, but we need to, as you can imagine, update our forecast, update our model and move forward with revisions to the plan.

But I don't know, Alex, if you have any additional thoughts.

Mr. Peter Tabuns: Just before we go to you, sir—you're not in a position to do projections to 2022: Fair enough; you're working on your model. In all the reports you've made so far on progress, I haven't seen anything that looks like projects under way that are actually reducing emissions. Have there been any projects under way that have reduced emissions in any significant way in the last year and a half or that will have reduced them by the mid-point of this year?

Mr. Serge Imbrogno: Well, we can go into details. As Alex has said, one of our major accomplishments has been to move forward on regulations for our EPS. We are actively negotiating and discussing with the federal government to remove Ontario from the federal system and allow Ontario to move forward with our own EPS.

I think there are two things about the EPS that are important for why Ontario should lead it: One—

**Mr. Peter Tabuns:** Sorry, could you pull your microphone a bit closer?

Mr. Serge Imbrogno: I'm sorry; yes. One is, we understand Ontario industry and we believe our EPS could be more aligned to the needs of the Ontario industry. The other part of that is the revenues that we get from imposing the EPS from large industry, that we can use those and target reductions going forward. So—

**Mr. Peter Tabuns:** I think you're diverting from my question, which was—

**Mr. Serge Imbrogno:** You're asking what progress we've made, and that was an important—

Mr. Peter Tabuns: No, I asked what GHG reductions had been accomplished since this plan came forward. When I listened to your comments at the beginning and when I look at your "progress so far" report on the web, I don't see anything that says that there has actually been a reduction.

Have there been any reductions since June 2018?

Mr. Alex Wood: If I could step in, Mr. Tabuns—

**Mr. Stephen Crawford:** Point of order: I don't know where June 2018 was. That was the time of the election. How is that relevant to the report?

The Chair (Ms. Catherine Fife): Excuse me; excuse me. He's referencing page 133 of the report, and the Auditor General and her team did an analysis of the greenhouse gas emissions. So he's following up on the report.

Go ahead, Mr. Tabuns.

Mr. Alex Wood: Thanks. One of the points that Craig had made earlier was about this annual process of the national inventory report. As you may know, that national inventory report has always got a lag to it, and so we're not actually in a position to know what emissions look like in the province in 2020. We're always facing a two-year lag. For us to kind of construct an analysis that would point to different numbers and then have a federal number show up two years later that may be different—you don't want to get into the business of that apples-and-oranges comparison.

Mr. Peter Tabuns: I understand your concern, and I know that the national inventory has a lag. But as I read through your accomplishments and as I listened earlier, you've written regulations, you've been negotiating, you are planning to transition to 15% renewable content in regular-grade gasoline by 2025, and you borrowed \$1.7 billion in green bonds. Have there actually been investments that you could point to and say, "That has been cutting greenhouse gas emissions in Ontario"?

Mr. Alex Wood: Well, we talked about the green bonds projects earlier on. Those are projects that, in some cases, predate this government anyway. So how you get into the question of that—I wave my hands around too much. But how we get into this question—

Mr. Peter Tabuns: Because I used your list of accomplishments, that's why.

**Mr. Alex Wood:** Fair enough, but it's a question of attribution. Where and when did those reductions take place? Those green bond projects, to the degree that they're invested and have been invested in transit projects, are contributing to reductions in the province. That is one example that I would give.

Mr. Serge Imbrogno: I'd also say, Mr. Tabuns, that it is a 2030 target, and we want to put in place those policies over time. You can't put everything in place on day one, and it's recognized that we have clean fuel standards that we need to put in place, or EPS that we'll be putting in place. All these things—you need to make those structural changes to achieve that target. There are going to be ups and downs on emissions over time, but it's that target and the downward trend that we want to maintain.

**Mr. Peter Tabuns:** I understand. That's about 1.7 megatonnes of reductions per year over the next 10 years, just being really—

Mr. Serge Imbrogno: But that's on average—

Mr. Peter Tabuns: That's on average.

Mr. Serge Imbrogno: But things don't happen on average, and you'll have big changes once you have those structural changes in place.

Mr. Peter Tabuns: But other than overlap from the previous government, there don't seem to be any initiatives that are in place today actually reducing greenhouse gas emissions. Unless you can point to one that has been brought forward as part of this government's initiatives, I don't see reductions going forward, and I'll just note that every year that goes past, you're going to have to have more than 1.7 megatonnes of reductions every year—which you already know; I'm just making things clearer in Hansard for future readers.

I think my colleague wants to follow on this, but I find it odd that a year and a half in, there don't seem to be initiatives that are actually in place. I note that the Advisory Panel on Climate Change—in the fall of 2018, you had a list of 28 people, and it took a year to appoint a panel to advise on climate change. Well, at that rate, I don't know how you're going to get anything else done.

But I'll give it to my colleague, who has a question.

The Chair (Ms. Catherine Fife): MPP Arthur, you have six and a half minutes left.

Mr. Ian Arthur: Just following on that line of thought: If there was a steady decrease—you plateaued a little bit as you develop new policies—and the plan is to decrease later, and following up on the point that each year that we don't actually meet that continuing decrease, it's going to be harder and harder—given that, and given the Auditor General's recommendations and the updated modelling that you are incorporating, do you remain confident in the ability of this government to meet its 2030 targets?

Mr. Serge Imbrogno: The government is committed, and we've said that in our environment plan. The minister and the Premier have said we're going to meet the 2030 target. We know there are going to be dips over time, but the focus is on maintaining and meeting that 2030 target.

Mr. Ian Arthur: But are you confident, as the deputy minister, with this plan and with the updated numbers that are coming in and the adjustments and the elimination of overlapping numbers, numbers that were used twice in those changes? Do you, as the deputy minister, remain confident in this ministry's ability and this government's ability to meet those targets with this plan, even as it is being updated?

Mr. Serge Imbrogno: Absolutely. We have committed to meet that target. There's a lot of heavy lifting. We don't want to give the impression that things are going to be easy. There will be dips. Weather is a big factor. If you have a very cold winter, we're going to have changes in our natural gas and we'll have more GHGs during that year. There are going to be times when things are going to move in a different direction, and it could be overwhelmed by economic factors. But we're focusing on, "Can we make and put in place those structural changes that will withstand that variation over time?", and that's what we're moving forward with, with a lot of the things that are in the plan.

Alex might want to add a few comments.

The Chair (Ms. Catherine Fife): There are four and a half minutes left.

Mr. Alex Wood: If—sorry.

Mr. Peter Tabuns: Go ahead.

Mr. Alex Wood: If I could maybe just underline the point that, really, the intent of a plan like this one is to create a framework that allows us to assess where we are at any given point in time to recalibrate as necessary, and I'll give a specific example. Our Emissions Performance Standards regulation, as an example, is a regulation that takes us out to 2022. This plan is a plan that goes out to 2030. And so, in 2022, we are going to be in a position to look at that regulation to see exactly what needs to be done to that regulation to help keep us on the trajectory that the government is committed to doing.

My point is that the plan, by necessity, is a flexible plan to allow us essentially to calibrate and to adjust based on the policy instruments, the policy choices that have been made and are reflected in the plan, but also is flexible enough to bring in potential new ideas that come from other ministries, that come from external stakeholders. It's a plan that is flexible that allows us to stay on track to that

target. But as the deputy said, the job is to take us to that point in 2030 and, as we go along, to look at where we are and to adjust accordingly.

Mr. Peter Tabuns: Thank you for that.

I'm going to go back to a point in the plan that was presented by Minister Phillips in 2018. It says: "Ontario will commit to ensuring funding of \$400 million over four years. These funds will complement penalties paid into the Ontario Carbon Trust by polluters. This will ensure that over the next four years, the Ontario Carbon Trust should be able to leverage over \$400 million to unlock over \$1 billion of private capital."

In the Auditor General's report, on page 177, we look at the emission reduction fund. How much has been disbursed out of the emission reduction fund to date?

**Mr. Serge Imbrogno:** I can start, and then Alex can give a bit more detail.

We are in the process of creating the infrastructure on the fund. We've been looking at other jurisdictions, other provinces, on similar types of trust that have been set up. To this point, we are in that process right now of making sure that infrastructure is in place to accept the money into the funds.

**Mr. Peter Tabuns:** So it isn't functioning yet?

The Chair (Ms. Catherine Fife): Last two minutes.

Mr. Peter Tabuns: Sorry?

The Chair (Ms. Catherine Fife): Last two minutes.

Mr. Peter Tabuns: So it is not functioning at this point; you're expecting it will be functioning at some point. What year do you expect it will be functional?

Mr. Serge Imbrogno: Well, the allocation would come to the ministry through the budget process, so we will see when that allocation comes forward. What we're doing is to prepare and make sure we're using best practices in terms of setting up that trust. There are different ways of funding that trust, so I think we need to think about that as well.

Mr. Peter Tabuns: I guess what I find odd is that actually in the plan presented by the minister—the commitment of \$400 million, \$100 million a year over four years, and leveraging \$1 billion from private capital—and yet, it's almost a year and a half later and it hasn't even been designed yet. When I look at a variety of comments that you've made and that you've posted, it doesn't look as though many of these measures will actually be in place until one to two years from now, which doesn't leave a lot of time left in the term of this government to actually deliver on this plan.

I don't understand why things are moving at such a glacial pace given the scale of the crisis that faces this province and this society. Why does it take a year to appoint a panel to advise on climate change, let alone deal with these other things?

The Chair (Ms. Catherine Fife): You have 30 seconds to answer that question.

Mr. Peter Tabuns: Why?

Mr. Serge Imbrogno: Maybe I'll just let it linger.

The Chair (Ms. Catherine Fife): Yes, that's a theme.

Mr. Serge Imbrogno: We have, Mr. Tabuns, been doing a lot of work at the ministry, and we feel we're moving the plan forward. So I don't think we feel we're delaying; I think we're trying to focus on meeting the government's priorities. We will redouble our efforts, but I think we're moving forward on a plan.

The Chair (Ms. Catherine Fife): Thank you very much. That concludes the time for questions from the public accounts committee members. I'd like to thank Mr. Wood, Mr. Golding, Mr. Imbrogno and Ms. Beckett for appearing before the committee today.

This committee will now go into an in-camera session for recommendations and discussion. I would ask members of the public to leave the gallery. Thank you very much for your attention today.

The committee continued in closed session at 1440.

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Mr. Peter Tabuns (Toronto–Danforth ND)

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