

MEETING NOTE:**MOECC-ENERGY Deputies and Chiefs of Staff Monthly Meeting**

3:00 PM – 4:00 PM on Friday, June 2, 2017
Hearts Block, Floor 4, Executive Boardroom

PURPOSE: Discuss items of mutual interest

ATTENDEES: **Ministry of Energy**
Andrew Teliszewsky, Chief of Staff
Serge Imbrogno, Deputy Minister

Ministry of the Environment and Climate Change
Paul Evans, Deputy Minister
Mandy Maghera, Chief of Staff

FORMALIZED AGENDA ITEMS:

1. Green Ontario Fund
2. Long-Term Energy Plan
3. Free Overnight EV Charging
4. Renewable Natural Gas

OTHER POSSIBLE TOPICS OF DISCUSSION:

5. Microgrid Funding
6. Cap and Trade in First Nation Communities

NOTES ON FORMALIZED AGENDA ITEMS:

1. Green Ontario Fund (Ontario Climate Change Solutions Deployment Corporation or OCCSDC)

- a) *Update on the status of the Green Ontario Fund website and program development, and IESO involvement.*

Suggested Response:

- **I am aware that MOECC sought Treasury Board/Cabinet approval on Green Ontario Fund programs earlier this week. Could you please provide an update on the outcome of these meetings?**
- **I understand that IESO was identified as a delivery agent for several programs in MOECC's draft May 30, 2017 Treasury Board submission, and that the Ministry of Energy is engaging with IESO to understand what legal changes are required to facilitate this new role.**
- **The successful launch of Green Ontario Fund programs is a government priority. The Ministry is currently working to analyze the legal and policy implications of IESO's role as a delivery agent for Green Ontario Fund programs and will continue to work closely with IESO and MOECC to determine a path forward.**

Background:

- As per the May 2016 CCAP Cabinet Minute, ENERGY is working with MOECC to support establishment of the Ontario Climate Change Solutions Deployment Corporation (OCCSDC) (public-facing name now "Green Ontario Fund").
- On February 22, 2017, Ontario Regulation 46/17 – OCCSDC was posted to eLaws.
- On April 28, 2017, MOECC and IESO executed a Service Level Agreement for the IESO to:
 1. Design, establish and maintain a website that will provide a clear and consistent message to website visitors and provide information and resources to the Green Ontario Fund audiences.
 2. Provide client relations management services to all clients aiming to reach out to the Green Ontario Fund for assistance and information.

3. Provide early advice to the MOECC to inform the development of new programs to meet the requirements of the Green Ontario Fund mandate.
 4. Conduct any agreed upon follow-up assignments related to the above.
 5. Work together to be in a position to transfer control and operation of the website, call centre data and toll free number to Green Ontario Fund.
- On May 30 and May 31, 2017, MOECC reported back to TB and Cabinet, respectively, to seek approval for several items, including, based on the draft submission:
 - Proposed program offerings.
 - An announcement of \$378 million in 2017-18 for the Green Ontario Fund, including an immediate release from holdback of \$50 million to be transferred to the Cap and Trade vote item.
 - Ability to enter into multi-year transfer payment agreements with the IESO, and other third parties.
 - Operational requirements for the new agency (agency estimated to be comprised of 60-75 staff).
 - The following program streams were identified for delivery by IESO in the TB submission. To note, IESO had, before May 30, only had significant discussions with MOECC regarding *residential* program delivery:
 - Home Energy Concierge Service: program to offer free installation of a smart thermostat for 100,000 homes, a walk-through assessment of energy savings opportunities, and information on incentive programs for owners of single family homes.
 - Province-wide Smart Thermostat Rebate: rebate to provide \$100 off a homeowner's purchase of a smart thermostat from a retail store
 - Low Carbon Technology Incentives for homes and multi-unit residential buildings (MURBs): rebates for a variety of low carbon technologies (e.g. solar PV, geothermal, air source heat pumps).
 - Low Carbon Technology Incentives for small and medium sized commercial businesses (similar technologies as for homes and MURBs).
 - Concierge Service for Manufacturing Small and Medium Sized Businesses/Enterprises (SMEs): program to provide an on-site walk-through or audit, technical advice and outreach to SMEs.

- ENERGY also sits on the Green Ontario Fund website working group, which includes PO, CO Communications, MOECC (MO, Comms and policy staff), IESO, and Q3 (IESO's website vendor).
 - The Green Ontario Fund (GreenON.ca) website is anticipated to launch in late June/early July 2017 (TBD, once home energy concierge service sign-up is operational).
- b) *Update on IESO Whole Home Pilot and considerations for integration with Green Ontario Fund programs*

Suggested Response:

- **In response to a direction from the Minister of Energy, on May 29, 2017, the IESO, in collaboration with Enbridge Gas Distribution and Union Gas launched the province-wide Whole Home Pilot. This is a province-wide, multi-fuel program that is providing residential consumers with a simple, one-stop shop approach to home energy efficiency improvements.**
- **Whole Home can complement Green Ontario Fund programs. For example, after receiving an in-home assessment of opportunities and/or direct installation of a (free) smart thermostat, participants in the proposed Home Energy Concierge program could be encouraged to participate in Whole Home for deeper energy efficiency measures.**
- **The IESO will undertake an assessment of pilot results to determine whether to extend the pilot or transition it to a province-wide program, after its completion in December 2017. The assessment could also present an opportunity to consider whether to integrate the program with Green Ontario Fund programs.**

Background:

- On June 10, 2016, the Minister of Energy directed the IESO to centrally design, fund and deliver a residential, province-wide whole home Conservation and Demand Management (CDM) pilot.
- Launched December 22, 2014, the 2015-2020 six-year DSM Framework supports the delivery of natural gas conservation and energy efficiency programs with a planned investment of \$825 million, funded out of natural gas rates.
 - Up to \$2,100 through the Enbridge Home Energy Conservation Program and \$5,000 through Union's Home Reno Rebate in financial incentives are available to residential customers for energy audits and

energy efficient technologies like furnaces, water heaters, and insulation upgrades in the home.

- The province's \$100 million investment from the Green Investment Fund has made these programs available across the province to homes heated with natural gas, oil, propane and wood and added incentive of \$500 towards air source heat pumps.
- The DSM programs will continue to be leveraged for the Green Investment Fund enhancements to cover all applicable homes with primary heating from natural gas, propane, oil and wood in Ontario. With the inclusion of the Whole Home Pilot, these programs will now be available to homes heated with electricity and include additional incentives for assessment and installation of electricity saving measures.
- The total budget for the electricity portion of the pilot is \$18 million, which will come from the Conservation First Framework, which is funded through electricity rates. The actual amount will depend on customer participation.
- In determining whether to extend the pilot or transition to a province wide program the IESO will consider:
 - Customer satisfaction with the integrated delivery model,
 - Success at achieving deep energy savings in customer homes,
 - Levels of participation in the pilot program, and
 - Cost effectiveness of the integrated delivery model for electricity ratepayers.

2. Long-Term Energy Plan (LTEP)

Suggested Response:

- **The LTEP, like the CCAP, is an iterative process. Each plan will inform the other to help ensure alignment of government priorities.**
- **The Long-Term Energy Plan (LTEP) presents an opportunity for the government to further elaborate on Ontario's new climate change mitigation and adaptation policies as they relate to the energy sector.**
- **The 2017 LTEP and future energy plans will need to apply the lens of climate change targets and carbon pricing to energy policy development.**

- **Pending Cabinet approval, the Ministry of Energy expects to release the LTEP and Implementation Directives in the late summer of 2017.**
 - **The Ministry of Energy provided an update on the LTEP development process at an ADM's forum on May 3 2017.**
 - **The Ministry of Energy will host a third Multi-Ministry meeting on June 19, 2017. The Ministry will provide an overview of the envisioned LTEP structure and topics at this meeting.**

Background:

- The consultation and engagement phase of LTEP development was preceded by the release of technical reports on the electricity and fuels sectors.
 - Each of these reports contained a ten-year review and twenty-year outlooks to 2035 that were affected by CCAP initiatives and assumptions.
- The LTEP engagement process officially began on October 13, 2016 with the release of the LTEP discussion guide, an in-person engagement schedule, and the Environmental Registry Notice. The Environmental Registry notice closed on December 16, 2016.
 - The Ministry received over 1,500 submissions through the Environmental Registry, emails and other channels.
- Some stakeholders (e.g., ECO) noted that the energy supply outlooks in LTEP technical reports do not align with Ontario's 2030 emissions reduction target.
 - The Ministry will continue to work with partner ministries to help develop policies and incentives for areas of the energy sector that reach beyond the mandate of the Ministry of Energy (e.g., transportation, housing).
- The Ministry received a memo from MOECC on April 10 2017, recommending that Energy emphasise the following in the LTEP
 1. Energy policies should consider GHG impacts, and the Ministry should prioritize initiatives that are expected to result in a net decrease in emissions.
 2. Electricity system planning should consider the need for electrification to achieve GHG targets.

3. Given the rapid change in energy technologies, LTEP should consider multiple scenarios which reflect the impact of new technologies in shaping energy supply and demand.
 4. Policies should consider the potential impacts of climate change.
 5. Energy system planning should strive to minimize environmental impacts (including to air, water, and land).
- The Ministry shared its Premier's Office deck that outlines a number of considerations related to the points MOECC raised in its memo. These included the following:
 - Alignment between LTEP and CCAP;
 - Range of outcomes;
 - Ontario's Fair Hydro Plan (OFHP);
 - LTEP scope for the fuels sector;
 - Technology-neutral energy planning;
 - Electricity Conservation Target; and
 - Customer Choice (Pricing Plans and Net Metering).
 - The Ministry will strive to balance clean supply with the other four principles outlined by the *Energy Statute Law Amendment Act, 2016* in the next LTEP. These principles include clean energy, as well as cost-effectiveness, reliability, community and indigenous engagement, and conservation and demand management.
 - The LTEP will aim to be technology neutral. New technologies such as storage and electric vehicles were taken into account in the IESO's demand forecasts which are being used in LTEP development; however the Ministry will not promote specific technologies in its planning of Ontario's future electricity system.
 - The Ministry is considering making necessary changes to implement capacity auctions once IESO's Market Renewal stakeholder initiative is complete.
 - Capacity auctions can inject greater competition into Ontario's electricity market helping to ensure that capacity is secured at the lowest cost, leading to lower bills for consumers.

- As part of this approach, the government will need to consider how best to achieve climate change (e.g. setting carbon neutrality as an auction principle, having generators with emissions pay for allowances through the cap and trade system etc.)
- Development of the LTEP is being supported by the Ontario Planning Outlook and Fuels Technical Report, that both considered a range of electrification scenarios resulting from climate change policy.
- The Ministry is considering measures in the LTEP that will enable the sector to prepare and adapt to the effects of climate change.

3. Free Overnight Electric Vehicle Charging

- The Climate Change Action Plan committed to a four-year, free overnight electric vehicle (EV) charging program for residential and multi-unit residential customers to start in 2017. MOECC received Treasury Board approval to allocate only \$8.7 million for this program, down from the \$15 million provisionally allocated in the CCAP.

Suggested Response:

- **The program contemplated in the CCAP has two general objectives. The first is to incent the purchase of EVs with the promise of free electricity. The second is to encourage overnight charging instead of during peak times when natural gas plants are in use.**
- **With the original \$15 million allocation – and now \$8.7 million – a free overnight charging program will fall well short of achieving either of these objectives. However, the Ministry is still scoping program options, which will be described in a program design submission to MOECC.**
- **There would be added value across government and for stakeholders if the overnight charging program focused on the collection and analysis of detailed data on the driving and charging behaviour of EV owners.**

- **We recommend that this program be deployed as a small-scale time-limited program, in cooperation with a limited number of LDCs to gather analyse and share detailed data on EV behaviour.**

Background:

- Discussions between ENERGY and MOECC have been held at senior levels to discuss the challenges related to delivering on CCAP objectives for overnight charging. Ministry staff is continuing this discussion with MOECC staff.
 - At the first meeting on April 5, ENERGY provided an overview of its technical analysis and associated costs as they relate to the “free” and “overnight” concepts. MOECC provided feedback on expectations and will test some ideas / concepts with senior management.
 - More discussions are needed to address the gap between a program that fully meets the CCAP commitment and the program that can be delivered within the available funds. These may include additional ministries doing EV CCAP projects to help scope the full spectrum of incentives, which will help frame how overnight charging lines up against other activities.
- The average cost of charging an EV overnight around \$15 to \$20 per month at current Time-of-Use rates. The Ministry estimates that, using the \$8.7 million of allocated funding, credits to the expected 55,000 EV owners will be no more than \$5 per month. If administration and program operating costs are added in order to incentivise EV owners to charge overnight, the credits will be lower still.
- The Ministry has been allocated ~\$2M for the fiscal year for the EV overnight program.
- To maximize value-for-money, a targeted time-limited project on a small-scale – with no more than three LDCs – could generate valuable data on EV behaviour while addressing all of the program objectives.
 - A Transfer Payment Agreement with cooperating LDCs could be in place by late Summer 2017. Staff recommends that data is collected for at least 12 months.
 - Analysis on early and preliminary findings could be produced by the end of 2017, at which time the Ministry can assess the implications of extending the program across the province

- Data from this program could be used to optimise the location of public charging stations, the planning and reinforcement of electricity networks, and validate assumptions of the GHG reductions associated with other CCAP EV actions.
- ENERGY has extensive experience through operation of the Smart Grid Fund of contracting for and oversight of similar innovation projects and proposes to utilise this knowledge and experience to project manage this EV project.

4. Renewable Natural Gas (RNG)

- ENERGY and MOECC are in ongoing discussion to determine how best to implement RNG in Ontario. The ministries have been working together on a “hybrid /staged” approach that recognizes work already underway at Ontario Energy Board (OEB) to develop analytical tools for assessing the cost-effectiveness of RNG.
- A key consideration for further discussion with MOECC is the timing of consulting on and filing of an RNG regulation:
 - MOECC staff propose moving quickly to file by year-end 2017; and
 - ENERGY staff propose waiting until the OEB’s analytical frameworks are fully in place and the utilities have some experience with integrating RNG into their supply plans.

Suggested Response:

- **I understand that ENERGY staff continues to discuss RNG implementation and timing with MOECC staff, including the development of a “hybrid” or “staged” regulatory approach.**
- **Such an approach would recognize the work already underway by the Ontario Energy Board (OEB) to develop analytical tools to make informed decisions on the adoption of RNG by natural gas utilities.**
 - **The OEB has over 50 years of experience and well established processes to regulate the natural gas sector in the public interest.**
- **Specifically, the OEB is aiming to establish a “common understanding” of greenhouse (GHG) abatement opportunities such as conservation and RNG. The OEB is also assessing the “cost-effectiveness” of these opportunities based on a long-term outlook for carbon prices (i.e., over ten years).**

- In addition, the OEB is studying the supply availability, barriers and enablers for including RNG in the natural gas supply mix.
- The OEB's current analytical work and general experience with "system gas" customers provides a strong foundation to further inform the government and stakeholders for RNG implementation (i.e., both system gas and non-OEB regulated natural gas consumers).
- I would encourage MOECC to utilize the findings of the OEB in developing its plan to consult on and implement a fuel standard regulation (i.e., minimum RNG requirement).

Background:

OEB Regulatory Activities

- On September 26, 2016, the OEB released its *Regulatory Framework for the Assessment of Natural Gas Utilities' Cap and Trade Activities*. To support the OEB's assessment of natural gas utilities' cap and trade compliance plans, the OEB committed to developing the following analytical tools:
 - Marginal Abatement Cost Curve (MACC): 10-year generic estimate of the \$/tonne cost of GHG abatement activities (e.g., conservation, RNG) to be used by utilities and the OEB in evaluating compliance options; and
 - Long-Term Carbon Price Forecast (LTCPF): 10-year consensus forecast to be used by utilities and the OEB in evaluating the cost-effectiveness of greenhouse gas (GHG) abatement activities versus purchasing allowances.
- **Note:** In February 2017, the OEB established a Technical Advisory Group to develop the MACC and LTCPF. ENERGY and MOECC staff are participating in the group.
- On May 31, 2017, the OEB issued the LTCPF Report which presents a set of forecasts for 2018-2028. Key assumptions include:
 - Ontario's cap and trade program will be deemed to meet the requirements of the federal carbon-pricing benchmark; and
 - Ontario will join Western Climate Initiative (WCI) in 2018 with a shortage of allowances, which will cause the joint market to enter shortage sooner.
- The LTCPF ranges in real \$ are:
 - Minimum: \$17/tonne in 2018 rising to \$27/tonne in 2028;

- Mid-Range: \$17/tonne in 2018 rising to \$57/tonne in 2028; and
- Maximum: \$67/tonne in 2018 rising to \$108/tonne in 2028.
- OEB advises that the final MACC is expected by the end of June 2017. These analytical tools will help to inform the development of the natural gas utilities' cap and trade compliance plans. OEB expects the utilities to file their compliance plans by August 2017.

OEB's Role in RNG Implementation

- In December 2016, the Energy Minister wrote to the OEB on advancing RNG implementation. On March 16, 2017, the OEB announced the launch of its Framework for the Assessment of Distributor Gas Supply Plans, which includes consideration of RNG.
- On April 26, 2017, the OEB announced the establishment of a Technical Working Group to gather input from stakeholders and assist OEB staff in developing the Framework, with an initial focus on RNG.
 - Key issues for the working group will include understanding the current RNG marketplace, availability of RNG supply and key metrics for the OEB to evaluate the appropriate contribution of RNG in the gas supply mix.
 - ENERGY staff participate in this working group.
- OEB expects to finalize the gas supply framework by the end of 2017.

MOECC's Regulation Process with Respect to RNG

- MOECC staff propose the following implementation timelines:
 - Mid-August: ADM-approved MTCC materials due to Cabinet Office (CO);
 - September: MTCC meeting (TBD);
 - September/October 2017: Stakeholder consultation on regulation;
 - November/December: MOECC and ENERGY take regulation to LRC; and
 - End 2017: RNG Regulation proposed to be filed.

Note: MOECC advises that it is still interested in a regulation that would begin with a minimum RNG requirement in 2020 for regulated utilities and for marketers/direct purchases in 2025.

- In June 2016, the Climate Change Action Plan (CCAP) outlined an initiative to establish a low carbon requirement for natural gas: "Ontario intends to introduce a renewable content requirement for natural gas and provide supports to encourage the use of cleaner, renewable natural gas in the industrial, transportation and buildings sectors".
- The CCAP commitment did not specify a level of RNG content. However, the accompanying modelling assumed 2% of total natural gas demand was to be met by RNG by 2020.
 - The natural gas utilities have suggested RNG supplies of "up to" 2% of the system gas customers by 2020 (Note: System gas customers are those who buy the natural gas commodity from their utility and they account for about 50% of total demand).
 - The Fuels Technical Report noted a 2015 ICF International study undertaken for Enbridge Gas and Union Gas forecasting Ontario's potential RNG supply reaching 155 PJ (nearly 4.3 million cubic meters) per year by 2035 (i.e. about 16% of current natural gas demand).

OTHER POSSIBLE TOPICS OF DISCUSSION:

5. Microgrid Funding

- ENERGY was directed in the CCAP cabinet minute to work with Ministry of Indigenous Relations and Reconciliation (MIRR) and MOECC to develop a program to support the use of microgrids to reduce diesel use in remote First Nation communities.
- The microgrid initiative was not recommended for CCAP funding in 2017-18 fiscal year.

Suggested Response:

- **ENERGY is working to draft a cabinet submission to bring forward for policy approval for this initiative in the coming months.**
- **ENERGY has discussed the proposed approach with MIRR and MOECC, and will be seeking to organize a director-level meeting in the coming weeks to review and solicit feedback on the draft submission.**
- **The microgrid program that we are proposing will be designed to complement existing initiatives, and enable diesel reduction projects to move forward in a timely manner. Ideally, these projects will be supported (up to 100%) by both provincial and federal funding.**
- **ENERGY continues to request that MOECC consider our initiative for funding in 2017/18, to support ongoing program development activities.**
- **Since ENERGY was unable to spend the full amount of GIF funding allocated to microgrid projects, I would ask that you consider re-allocating this money to support ENERGY's ongoing work to develop a new microgrid program.**

Background:

- The Climate Change Action Plan (CCAP) states that: *Where community support exists, Ontario would work with First Nation organizations to develop advanced microgrid solutions in First Nation communities...These projects would support economic growth by reducing reliance on diesel fuel and enabling stable, predictable sources of power. Projects would focus on renewable energy such as biomass, solar, and waterpower.*

- The CCAP cabinet minute tasked ENERGY and MIRR with working with MOECC to develop and report back to Cabinet with an implementation plan to work with First Nation governments and organizations to develop a program for low or no carbon energy powered microgrids and other alternative energy projects
- ENERGY has been leading the work on this minute over the past months, and has been engaging with MIRR and MOECC to ensure that they are in agreement on the recommended approach.
- ENERGY submitted a GGRA request to support our proposed path forward on this initiative, including a request for \$500,000 in 2017-18 to support our work engaging with communities to develop the requested program/implementation plan.

6. Cap and Trade in First Nation Communities

- MOECC has been directed to consider exempting certain fuels delivered to reserves for use by First Nations from the program.
- This was proposed later in 2016 to compliment the *Climate Change Mitigation and Low-carbon Economy Act, 2016*, but is not a minuted CCAP action.

Suggested Response:

- **ENERGY is interested in keeping informed of MOECC's progress on this initiative.**
- **Given the number of rate mitigation and Indigenous energy programs that the Ministry of Energy is responsible for, it will be good for us to stay informed to ensure that our ministries are aligned in our approaches.**
- **ENERGY is happy to continue to share our knowledge and experience of legal and / or implementation issues with MOECC to assist with issues that may arise as you develop a plan for providing relief to remote communities in the face of increasing costs as a result of Cap and Trade.**

Background:

- MOECC staff have informed ENERGY staff that they are in the process of developing materials to use to consult with petroleum producers and distributors.
- There are no measures in place for 2017, and while RemoteCo serviced communities are not expected to be impacted in the short-term, communities served by Independent Power Authorities (IPAs) are expected to experience a moderate impact due increased fuel costs.
- MOECC has reached out to INAC at the staff level to discuss funding pressures in IPA communities, and are working to draft an official letter from the MOECC to Minister Bennett highlighting this issue and seeking their support.
- ENERGY staff understands that MOECC is considering regulatory amendments to compliance obligations (effectively exempting fuel distributors from buying credits for fuel that will be delivered to First Nations). However MOECC still needs to consult with industry stakeholders to understand how such an amendment would be administered (this could be challenging given that the fuel changes hands several times between producer and final destination in First Nation). Any mitigation measures would need to be in place by fall to apply in 2018.
- The Environmental Bill of Rights Registry for the final greenhouse gas cap and trade regulation proposed a complementary regulation under the *Climate Change Mitigation and Low-carbon Economy Act, 2016*. The proposed regulation would provide for First Nations impact mitigation, by excluding certain fuels delivered to reserves for use by First Nations from the cap and trade program. MOECC is currently working on recommendations for how to fulfil this direction, with a focus on the remote diesel-reliant First Nations.
 - In the long term, ENERGY's work to reduce diesel use in remote communities (both through grid connection and through a microgrid program for un-connectable communities) will serve to offset the impact of cap and trade; however, in the interim, MOECC would like to MOECC establish an alternative way of assisting First Nations with the impacts of elevated diesel prices due to cap and trade.
- ENERGY is not responsible for establishing the interim plan to protect remote First Nations from the impacts of cap and trade, but staff have been offering support and recommendations to support MOECC's work, including:

- Helping MOECC to understand how fuels are distributed to the communities;
 - Explaining the funding structures for energy costs in remote communities (in both IPAs and RemoteCo-serviced communities), and helping them to understand how remote customers might or might not experience the impacts of higher cost for diesel under the different models;
 - Explaining ENERGY's approach to applying the 8% rebate in IPA communities; and
 - Explaining ENERGY's current approach to mitigating rates in First Nations, including explaining the recommendations from the OEB regarding First Nation rates.
- ENERGY has encouraged MOECC to pursue an exemption; however, MOECC feels that there are significant complexities associated with applying such a policy.
 - MOECC has indicated that they may instead wish to provide a reimbursement to RemoteCo and IPAs at a value in line with the anticipated impact on diesel costs (approximately \$.05/L), which could be refunded to LDCs on the basis of fuel receipts remitted.
 - ENERGY has indicated to MOECC that our current suite of programs is not suitable for meeting the objectives of this initiative (including options such as relying on RRRP, or expanding the Ontario Rebate for Electricity Consumers program)