PROGRAM NOTE

ENERGY – Cap and Trade Proceeds Recycling to Keep Electricity Rates Affordable

Government Priority Outcome	**Leader on Environmental Sustainability & Climate Change Mitigation**
Program Type	**Assisting**
Ministry Linkages	**MNDM, MEDG and MNRF**

I. Program Overview

	Current Allocation				PROPOSED ALLOCATION			
$M	17-18	18-19	19-20	20-21	**17-18**	**18-19**	**19-20**	**20-21**
Operating Expense					**249**	**263**	**276**	**319**
Capital Expense								
Total Expense*					**249**	**263**	**276**	**319**
Operating Assets								
Capital Assets								

Notes:
1. Table should be presented on a fully consolidated basis. Capital assets include acquisitions of consolidated entities. Consolidation information should be consistent with information in ORBIT and information submitted to the Office of the Provincial Controller Division (OPCD).
2. See ORBIT for current allocation.
*Reflects sum of all financial impacts related to Key Operating, Capital, Climate Change and Technical Decisions.

- Ontario's cap and trade program will result in an increase in electricity prices. Recycling cap and trade auction proceeds to lower the cost of electricity would offset electricity consumers' contributions to investments/initiatives which reduce greenhouse gas (GHG) emissions (e.g., non-emitting generation, conservation programs, etc.).

- Using cap and trade auction proceeds to lower the cost of electricity would make electricity more competitive with traditionally cheaper fossil fuels. By using the proceeds to lower the cost of electricity, consumers will be incented to fuel-switch away from fossil fuels toward much cleaner grid-connected electricity.

- Lowering the cost of electricity would have the desired effect of fuel switching in building and home heating, electric vehicles and the electrification of transit, and industrial processes.

- As recognized by Ontario's Climate Change Action Plan (CCAP), "technologies that are readily available and being used today can significantly reduce energy demands and GHG emissions."

- Due to the long-term nature (i.e., typically 20 years) of electricity generation contracts and conservation programs, the associated costs are ongoing and are expected to be about $7 billion dollars annually during the first cap and trade compliance period (2017-2020). These costs will continue well beyond the timelines described in the CCAP. Auction proceeds recycling would help reduce electricity sector emissions by, directly and / or indirectly, offsetting the cost of non-emitting generation and conservation programs.

- The Ministry of Energy estimates approximately 3,300,000 tonnes of GHG emissions reductions by 2020 associated with "planned/committed" electricity sector initiatives that were developed following the 2013 Long-Term Energy Plan (LTEP). The forecast amount of GHG emissions savings is based on planned/committed electricity projects that have not yet been funded by electricity ratepayers. By using the proceeds to lower the cost of electricity, there is potential to support CCAP goals of fuel-switching and electrification.

- Fuel-switching to clean electricity supports the following CCAP goals:
    - Production or installation of renewable, low-carbon, carbon-free and net zero alternative energy;

    - Distributed renewable generation and energy management technologies to support load-shifting, energy storage, net metering and other measures to eliminate the need for grid-based electricity during natural gas peaking periods; and

    - Reduction of GHGs from land use and buildings including the adoption and use of zero emission and plug-in hybrid vehicles, and low-carbon alternative fuels.

PROGRAM NOTE

ENERGY – Cap and Trade Proceeds Recycling to Keep Electricity Rates Affordable

II. Proposed Program Changes

- Ontario's cap and trade program will result in an increase in electricity prices. Recycling cap and trade auction proceeds to lower the cost of electricity would offset electricity consumers' contributions to investments/initiatives which reduce greenhouse gas (GHG) emissions (e.g., non-emitting generation, conservation programs, etc.).

- As recognized by Ontario's Climate Change Action Plan (CCAP), "technologies that are readily available and being used today can significantly reduce energy demands and GHG emissions."

- Cap and trade auction proceeds recycling would help reduce electricity sector GHG emissions by, directly and / or indirectly, offsetting the cost of non-emitting generation and conservation programs. Due to the long-term nature (i.e., typically 20 years) of electricity generation contracts and conservation programs, the associated costs are ongoing and are expected to be about $7 billion dollars annually during the first cap and trade compliance period (2017-2020). These costs will continue well beyond the timelines described in the CCAP.

- By using the proceeds to lower the cost of electricity, CCAP goals of fuel-switching and electrification will also be supported. The Ministry of Energy estimates approximately 3,300,000 tonnes of GHG emissions reductions by 2020 associated with "planned/committed" electricity sector initiatives that were developed following the 2013 Long-Term Energy Plan (LTEP). The forecast amount of GHG emissions savings is based on planned/committed electricity projects that have not yet been funded by electricity ratepayers.

- On September 12, 2016, Cabinet directed the Ministry of Energy, working with MOECC, to report back to Cabinet on an approach to recycle cap and trade proceeds to industrial and commercial electricity consumers over the first compliance period (2017-2020).

- On September 12, 2016, Ontario announced a number of initiatives to reduce electricity bills for consumers across the province, including the intention to use a portion of the cap and trade auction proceeds to help keep electricity prices affordable for industrial and commercial electricity consumers.

- For FY 2017-18, the Ministry of Energy is requesting $249 million.

- Implementation and delivery:

  - The Ministry is refining the program design, including approach and mechanism, and is expected to report back to Cabinet in November 2016.

  - Depending on the final approach, legislation, regulation or Lieutenant Governor in Council (LGIC) regulation may be required to allow the Independent Electricity System Operator (IESO) and Local Distribution Companies (LDCs) to recycle proceeds to consumers. The program dates are subject to change.

  - ENERGY Legal Services Branch is analyzing the required changes to ENERGY's statutes (e.g., Electricity Act, 1998) and regulations.

ENERGY – Cap and Trade Proceeds Recycling to Keep Electricity Rates Affordable

- ENERGY LSB has identified some key areas where legislative and/or regulatory amendments are likely necessary depending on which mechanism to recycling proceeds is chosen.

- Such amendments could include, clarifying that the IESO can receive amounts from the GGRA and ensuring that Ontario Energy Board (OEB) and IESO have the necessary authority to address electricity pricing matters as contemplated.

- Furthermore, IESO and electricity distribution companies would need to update billing systems to reflect the recycled proceeds on bills for consumers.

III. Decisions

1) Operating Decisions

Key Decisions

Greenhouse Gas Reduction Account Decisions

A. APPROVE an expenditure increase of $249,000,000 in 2017-18, $263,000,000 in 2018-19, $276,000,000 in 2019-20, $319,000,000 in 2020-21 in the transfer payment line entitled "Cap and Trade Proceeds Recycling to Keep Electricity Rates Affordable Initiative" under Vote/Item 2905-04, Electricity Price Mitigation.					GGRA#: 91
$M	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**Docket #**
Operating Expense	**249**	**263**	**276**	**319**	D0042197
GGRA Offset	**249**	**263**	**276**	**319**	

- The funding for this GGRA item will be flowed out through a new TP line. This funding is for the first compliance period (2017-2020).

Non-Financial Decisions

Docket #	D0042330

- APPROVE the creation of a new Operating Expense item entitled "Cap and Trade Proceeds Recycling to Keep Electricity Rates Affordable" under Vote/Item 2905-04, Electricity Price Mitigation.

- APPROVE the creation of a new transfer payment line entitled "Cap and Trade Proceeds Recycling to Keep Electricity Rates Affordable Initiative" under Vote/Item 2905-04, Electricity Price Mitigation.

PROGRAM NOTE

ENERGY – Cap and Trade Proceeds Recycling to Keep Electricity Rates Affordable

IV. Outcome Measures

Outcome Measures	Docket #	N/A

Desired Outcomes/Outputs

Measure	Outcome
Proceeds from Cap and Trade / Greenhouse Gas Reduction Account	• $ million per year
Electricity Commodity Price ($/MWh)	• Estimated cost-savings to consumers relative to what they otherwise would have paid

- Keep electricity prices affordable for industrial and commercial electricity consumers to incent fuel-switching away from more GHG intensive fossil fuels to clean electricity.

- Electricity prices have increased over time when electricity sector emissions have decreased. Since 2003, Ontario has invested more than $30 billion in over 11,000 megawatts (MW) of new and refurbished clean generation, including nuclear, hydro, wind and solar – this represents about 30% of our current supply. Ontario eliminated coal-fired electricity generation, replacing it with cleaner sources of energy, which has decreased electricity sector emissions by approximately 80% since 2003.

- The costs associated with ongoing investments in the electricity sector to ensure a clean, low-GHG-emitting system are significant and continue to be borne by electricity consumers. Due to the long-term nature (i.e., typically 20 years) of electricity generation contracts and conservation programs, the associated costs are ongoing and are expected to be about $7 billion dollars annually during the first cap and trade compliance period (2017-2020). These costs will continue well beyond the timelines described in Ontario's Climate Change Action Plan (CCAP). Auction proceeds recycling would help reduce electricity sector greenhouse gas (GHG) emissions by, directly and/or indirectly, offsetting the cost of non-emitting generation and conservation programs.

- Using cap and trade auction proceeds to lower the cost of electricity would make it more competitive with traditionally cheaper fossil fuels, providing an incentive to fuel switch from fossil fuels to electricity. Ontario's electricity sector is now approximately 90% emissions-free. Ontario's grid electricity currently has an emission factor which is far lower than the carbon content of natural gas or diesel.

- During off-peak periods, Ontario's current mix of electricity resources typically emits low levels of emissions. This puts Ontario's electricity sector in a strong position to support fuel switching as a GHG-reducing activity. Recycling proceeds to consumers by lowering electricity prices would help to maintain the emission reductions achieved thus far and encourage further reductions in the future.

- By using the auction proceeds to lower the cost of electricity, consumers will be incented to fuel-switch away from fossil fuels toward much cleaner grid-connected electricity. Lowering the cost of electricity would have the desired effect of fuel switching in building and home heating, electric vehicles and the electrification of transit, and industrial processes. Fuel-switching to clean electricity supports the following CCAP goals:

- Production or installation of renewable, low-carbon, carbon-free and net zero alternative energy;
- Distributed renewable generation and energy management technologies to support load-shifting, energy storage, net metering and other measures to eliminate the need for grid-based electricity during natural gas peaking periods; and
- Reduction of GHGs from land use and buildings including the adoption and use of zero emission and plug-in hybrid vehicles, and low-carbon alternative fuels.

- On September 12, 2016, Cabinet directed the Ministry of Energy, working with MOECC, to report back to Cabinet on an approach to recycle cap and trade proceeds to industrial and commercial electricity consumers over the first compliance period (2017-2020).
- On September 12, 2016, Ontario announced a number of initiatives to reduce electricity bills for consumers across the province, including the intention to use a portion of the cap and trade auction proceeds to help keep electricity prices affordable for industrial and commercial electricity consumers.

Approach:

- A decision has not been made on the mechanism to enable proceeds recycling to industrial and commercial electricity consumers. As directed by Cabinet on September 12, 2016, the Ministry of Energy is to report back to Cabinet (and Treasury Board) on the approach to recycle proceeds.

V. Additional Considerations

Implementation

- See above for the rationale.
- A decision has not been made on the mechanism to enable proceeds recycling to industrial and commercial electricity consumers. As directed by Cabinet on September 12, 2016, the Ministry of Energy is to report back to Cabinet (and Treasury Board) on the approach to recycle proceeds. Cabinet report back is expected in November 2016 (TBC).
- Depending on the final approach, legislation, regulation or LGIC may be required to allow the IESO and LDCs to recycle auction proceeds to consumers. Dates are subject to change. ENERGY Legal Services Branch (LSB) is analyzing the required changes to ENERGY's statutes (e.g., Electricity Act, 1998) and regulations.

ENERGY – Cap and Trade Proceeds Recycling to Keep Electricity Rates Affordable

- ENERGY LSB has identified some key areas where legislative and/or regulatory amendments are likely necessary depending on which mechanism to recycling proceeds is chosen.

- Such amendments could include, clarifying that the IESO can receive amounts from the GGRA and ensuring that OEB and IESO have the necessary authority to address electricity pricing matters as contemplated.

- Furthermore, IESO and electricity distribution companies would need to update billing systems to reflect the recycled proceeds on bills for consumers.

Communications/Stakeholder Engagement Plans

- Stakeholders include all non-residential electricity consumers and LDCs (i.e., billing system changes to facilitate proceeds recycling).

- Work with ENERGY Communications to develop communication plan and key messaging.

- Key Messages could include:
    - Ontario has been taking strong climate-positive actions for years, such as successfully eliminating coal as a source of electricity generation and developing a long-term energy plan that focuses on a safe, clean, reliable and affordable energy future.

    - Since 2003, Ontario has invested more than $30 billion in over 11,000 megawatts (MW) of new and refurbished clean generation, including nuclear, hydro, wind and solar – this represents about 30% of our current supply. Ontario eliminated coal-fired electricity generation, replacing it with cleaner sources of energy, which has decreased electricity sector emissions by approximately 80% since 2003.

    - The Climate Change Action Plan (CCAP) indicated a desire of using cap and trade proceeds to keep electricity rates.

    - Ontario intends to use cap and trade proceeds to keep electricity rates affordable for commercial and industrial electricity consumers.

    - Keeping electricity prices affordable for industrial and commercial electricity consumers to incent fuel-switching away from more greenhouse gas (GHG) intensive fossil fuels to clean electricity.

PROGRAM NOTE

ENERGY – Cap and Trade Proceeds Recycling to Keep Electricity Rates Affordable

Risks	**Docket #**	N/A

Risk	Likelihood (L/M/H)	Impact (L/M/H)	Mitigation Strategy
Legal	L	L	ENERGY LSB is analyzing the required changes to ENERGY's statutes (e.g., Electricity Act, 1998) and regulations. ENERGY LSB has identified some key areas where legislative and/or regulatory amendments are likely necessary depending on which mechanism to recycle proceeds is chosen. Such amendments could include, clarifying that the Independent Electricity System Operator (IESO) can receive amounts from the GGRA and ensuring that Ontario Energy Board (OEB) and IESO have the necessary authority to address electricity pricing matters as contemplated.
Timing	H	M	The recovery of cap and trade costs from natural gas consumers is set by the Ontario Energy Board (OEB) could begin as early as the beginning of 2017. This means that natural gas-fired generators would pass on the cost of carbon at the same time. Billing for the cost of cap and trade is expected to begin as of January 2017. While the impact of cap and trade would be added to electricity bills as of January 2017, the offsetting effect of proceeds recycling may not occur immediately depending on implementation and potential alignment with the first auction expected in March 2017. Furthermore, IESO and electricity distribution companies would need to update billing systems to reflect the recycled proceeds on bills for consumers.

PROGRAM NOTE

ENERGY – Cap and Trade Proceeds Recycling to Keep Electricity Rates Affordable

VI. Proposed Minute

Proposed Minute

- APPROVE the creation of a new Operating Expense item entitled “Cap and Trade Proceeds Recycling to Keep Electricity Rates Affordable” under Vote/Item 2905-04, Electricity Price Mitigation.

- APPROVE the creation of a new transfer payment line entitled “Cap and Trade Proceeds Recycling to Keep Electricity Rates Affordable Initiative” under Vote/Item 2905-04, Electricity Price Mitigation.

- APPROVE an expenditure increase of $249,000,000 in 2017-18, $263,000,000 in 2018-19, $276,000,000 in 2019-20, $319,000,000 in 2020-21 in the transfer payment line entitled “Cap and Trade Proceeds Recycling to Keep Electricity Rates Affordable Initiative” under Vote/Item 2905-04, Electricity Price Mitigation.

Approve the following multi-year resources for the program:

Financial Decisions $M	2017-18	2018-19	2019-20	2020-21
Operating Expense	**249**	**263**	**276**	**319**
Capital Expense				
Total Expense	**249**	**263**	**276**	**319**
Operating Assets				
Capital Assets				

In this regard:

- APPROVE the creation of a new Operating Expense item entitled “Cap and Trade Proceeds Recycling to Keep Electricity Rates Affordable” under Vote/Item 2905-04, Electricity Price Mitigation.

- APPROVE the creation of a new transfer payment line entitled “Cap and Trade Proceeds Recycling to Keep Electricity Rates Affordable Initiative” under Vote/Item 2905-04, Electricity Price Mitigation.

- APPROVE an expenditure increase of $249,000,000 in 2017-18, $263,000,000 in 2018-19, $276,000,000 in 2019-20, $319,000,000 in 2020-21 in the transfer payment line entitled “Cap and Trade Proceeds Recycling to Keep Electricity Rates Affordable Initiative” under Vote/Item 2905-04, Electricity Price Mitigation.