Board of Directors Meeting Highlights
Held on June 22, 2017 at 9:00 AM
at the MRF Board Room

Bluewater Recycling Association

88% Converted to Automated Collection this Fall

On the heals of launching the last municipality in Perth to convert to automated collection, Perth East, Dawn-Euphemia commits to convert to automated collection in the fall.

On May 15th, the Dawn-Euphemia council made the decision to proceed with the conversion to automated collection. The discussions were initiated in 2016 and public meeting were held earlier this year. In the end, the life of the Dawn landfill and the need to have common services in all areas of the municipality after merging nearly 20 years ago, council opted to implement the automated collection program community wide on a biweekly basis for both waste and recycling.

The work now begins for the likely launch to take place in November. This will mean that 88% of all of our households will be converted to automated by then.

In the meantime, the Association was busy finalizing the last minute touches to the Perth East launch. The first collection was June 7th and council also chose to offer biweekly collection of waste and recycling in lieu of the old weekly service. With that launch behind us, every community in Perth is now served using the system.

Municipal Sector Launches Initiative To Help Municipalities Manage The Transition To Full Producer Responsibility For Blue Box Recycling Programs

Bill 151 – the Waste-Free Ontario Act, 2016 – was proclaimed by the Ontario Legislature on November 30, 2016. The new legislation enacted the Waste Diversion Transition Act 2016 (WDTA) and the Resource Recovery and Circular Economy Act 2016 (RRCEA), which makes producers fully responsible for end-of-life management of designated products and packaging. Existing waste diversion programs for Blue Box, Municipal Hazardous and Special Waste (MHSW), Waste Electrical and Electronic Equipment (WEEE) and Tires will be wound up and transitioned to regulations developed under the RRCEA.

This transition will have major implications for all municipalities currently managing or operating waste diversion programs. Blue Box programs will undergo many of the most significant changes as the municipal role shifts to "potential service provider" for producers who are required to manage their designated materials. Several issues will be of critical importance to municipalities. These include:

- Maintenance of current standards of service to residents
- Availability of information to help manage contracts with service providers during transition
- Appropriate management of any 'stranded assets' in the waste system
- Recovery of costs required to manage materials left in municipal waste streams
- Incentives to drive continuous improvement of waste diversion programs

- Acceleration of the transition – current plans call for transition of the Blue Box Program by 2022 at the earliest, yet each year costs the municipal sector roughly $130 million

The municipal sector must be actively involved, working very closely with the Ministry of the Environment and Climate Change (MOECC) and key stakeholders, including producers and service providers, to ensure that the outcomes of this transition are beneficial to our communities.

On February 8, 2017, AMO held a one-day workshop with elected officials and municipal staff across the Province, and was asked to support municipal involvement in the transition process and to develop an effective partnership role for the municipal sector.

On March 31, 2017, the AMO Board directed staff to engage in discussions on the formation of an appropriate entity to act as a coordinated municipal resource, to provide policy and negotiations support to the municipal sector, and to advocate for the expeditious transition of the Blue Box program to full producer responsibility.

To date, a Municipal Working Group has been established to guide and oversee the work required to respond immediately to efforts already underway by other stakeholders, and to develop recommendations for the best structure and methods for assisting municipalities during the transition. The Working Group includes representatives from AMO, the City of Toronto, the Regional Public Works Commissioners of Ontario (RPWCO) and the Municipal Waste Association (MWA), which has established links to Eastern Ontario and to rural and northern communities. Additional staff resources have been provided by AMO, the Region of Durham, the Region of York and the City of Toronto. Consultants have been engaged by AMO to provide specialized expertise.

The Municipal Working Group held a two-day retreat on May 3-4, 2017. Subgroups were formed to address

(1) strategic options for transition

(2) technical issues such as standards, targets and definitions

(3) communications to municipalities and other stakeholders and

(4) structure and governance of an entity to support municipalities.

Several members were identified to attend ongoing stakeholder meetings and serve as representatives and contacts for the larger Municipal Working Group.

Meetings are being held with Stewardship Ontario and producers to gain a mutual understanding of key issues and to determine if there is common acceptable pathway for transition to full producer responsibility under the RRCEA. Both parties are interested in accelerating the transition and starting the process immediately. Continued uncertainty benefits no one.

The transition process may move quickly. Currently, the parties are discussing a potential amendment to the Blue Box Program Plan to get on a path for transition to the RRCEA. If a rapid transition is achievable, it will be very important for municipalities to establish clear strategies for the management of contracts for collection, processing and/or depots. Early termination clauses may be required. Discussions with procurement, legal and other support staff are recommended. There could be opportunities to amend existing contracts if mutually agreeable to the municipality, your service provider and Stewardship Ontario. The Municipal Working Group is preparing further recommendations for consideration by staff and Councils.

The efforts of the Municipal Working Group will not usurp or restrict the autonomy of municipal Councils to make decisions regarding waste diversion programs and contracts. However, it will be very important for all municipalities to learn more about the transition to the RRCEA, and to stay informed.

Organic Framework

The Ministry of the Environment and Climate Change is developing a Food and Organic Waste framework to reduce the volume of food and organic wastes ending up in the disposal stream. The province's Climate Change Action Plan and the Strategy for a Waste-Free Ontario: Building the Circular Economy commits the ministry to develop an action plan. The ministry is in the process of developing a framework which will include an action plan and a policy statement to reduce food and organic wastes.

Food and organic wastes make up approximately one third of Ontario's total waste stream. This includes organic waste generated at home, such as food scraps and leaf and yard waste, as well as food waste produced by industrial, commercial and institutional (IC&I) sectors such as food processors, wholesalers, grocery stores and restaurants.

In 2014, Ontarians generated about 3.6 million tonnes of food and organic waste, of which over 60% was sent for disposal, mostly to landfill.

Although food is essential for life and organic materials are critical for healthy soils, significant amounts of organic material end up going to disposal year after year.

Reducing the amount of food and organic wastes that end up in the waste stream provides economic benefits in terms of cost savings across the supply chain and new jobs associated with organic waste processing facilities. It also results in environmental benefits in the form of greenhouse gas reductions and less reliance on landfills. Given the right conditions, food and organic waste can be recovered and re-integrated into the economy. Turning food and organic waste into valuable products recognizes the net economic benefit of a circular economy, where nutrients, energy and other resources are recovered and serve as inputs to new products.

The Strategy for a Waste-Free Ontario: Building the Circular Economy, released on February 28, 2017 commits the ministry to a Food and Organic Waste Action Plan with a key action being the possible banning of food waste from disposal. The strategy also proposes that the first policy statement under the Resource Recovery and Circular Economy Act, 2016 will focus on food and organic waste. These actions will also support the waste reduction and resource recovery objectives of the strategy and greenhouse gas reduction objectives of Ontario's Climate Change Action Plan.

The discussion paper, "Addressing Food and Organic Waste in Ontario", serves as the basis for preliminary discussions with stakeholders to inform the development of the Food and Organic Waste Framework. The Food and Organic Waste Framework will aim to:

1. Reduce the amount of food that becomes waste
2. Remove food and organic waste from the disposal stream
3. Reduce greenhouse gas emissions that result from food and organic waste
4. Support and stimulate end markets that recover the value from food and organic wastes
5. Increase accountability of responsible parties
6. Improve data on food and organic waste
7. Enhance promotion and education regarding food and organic waste

Changing Workplaces Final Report Released

Ontario Minister of Labour Kevin Flynn released the Changing Workplaces Review final report. This report recommends substantial legislativechanges to the province's *Employment Standards Act* (ESA) and *Labour Relations Act* (LRA).

The Final Report - The Changing Workplaces Review - An Agenda for Workplace Rights - authored by Special Advisors C. Michael Mitchell and John C. Murray is massive at 419 pages and contains 173 recommendations that could have significant impacts on the workplaces throughout Ontario.

A key focus of this review is the treatment of employees who do not work full-time and may be considered to have precarious employment. This includes part-time, temporary, self-employment, and multiple job employment that has grown almost twice as fast as standard employment since 1997. While private sector services account for more than half of employment in Ontario, the remainder work in the broader public service, including municipal government who are significant employers throughout the province.

Highlights of the Report's recommendations that may be of interest to municipal employers includes:

- the *Employment Standards Act*, *Labour Relations Act* and the Occupational Health and Safety Act be combined and streamlined into a Workplace Rights Act
- part-time, casual, temporary, contract and seasonal employees be paid the same as comparable full-time employees
- personal emergency leave and bereavement leave apply for all employees, not only to those employed in workplaces of 50 or more employees, and further
- bereavement leave be an independent leave for up to 3 unpaid days
- personal emergency leaves are an independent annual entitlement of 7 days
- employers be required to pay for doctor's notes if request from an employee
- vacation entitlement be increased to 3 weeks per year after 5 years of employment with the same employer
- the current ESA exemption for interns and trainees be eliminated
- the secret ballot vote process for union certification to continue with new remedies for employer misconduct
- if a union has approximately 20% support of the potential bargaining unit then the organizing union can be provided with the personal contact information of the employees of the potential bargaining unit by the employer to enable organizing
- increased enforcement and educational activities by the Ministry of Labour.

Peterbilt Showed Off An Electric Model 520 Refuse Truck

Peterbilt Model 520 electric version on test now

The Peterbilt Model 520 on display at the show was equipped with the Transpower ElecTruck drive system, which has apparently accumulated over 80,000 miles of class 8 heavy-duty use in a variety of commercial applications since 2013. The system uses high-power electric motors, inverters, and batteries to power commercial trucks weighing as much as 80,000 lb.

The ElecTruck system developed for the Model 520 refuse truck uses a 300-kilowatt/hour battery pack to enable an urban refuse truck to operate for up to 65 miles or eight hours on a single charge. It also features a 70 kilowatt onboard battery charger that can fully charge the truck's lithium-ion battery pack in two to four hours.

An electric Model 520 will be put into service for a municipal customer in California, according to Peterbilt vocational segment manager Tony Sablar. The unit will work under the same conditions as other conventional trucks in the fleet and its performance will be evaluated. Peterbilt says it will assess the customer's level of interest while also exploring government grants and other subsidies that could be a determining factor in the viability of electric refuse truck technology.

Peterbilt also showcased three new cab configurations of the Model 520 refuse truck at the WasteExpo show. It's now available in left-hand drive, right-hand drive, and right-hand stand-up drive configurations in addition to the existing dual-seated drive configuration.

AND ANOTHER ELECTRIC GARBAGE TRUCK has just been introduced by Chinese car, truck, and bus manufacturer BYD America. Working with Wayne Engineering, the company says its new class 8 refuse truck is 100% battery electric. It's now available for purchase and deployment, making it the first such truck to reach the market.

BYD's 10-ton payload refuse truck provides 76 miles of range with minimal battery degradation. The truck is a cab-and-chassis platform, which includes the batteries, high-voltage control system, all-electric propulsion system, and an electric PTO for powering the hydraulic system to operate the refuse truck bodies. The platform is designed to integrate with all of the major refuse truck body builders in North America, says BYD, and can be configured as a side loader, automated side loader, front loader, rear loader, or roll off.

Because the entire system was designed with electric propulsion in mind, the vehicle features optimized efficiency, maintenance, and usability throughout its life, according to BYD.

The BYD all-electric cab and chassis is available now

Fleet managers can expect more than $13,000 of operational cost savings annually based on service routes of 60 miles per day/five days a week, the company claims. These savings are due to high-

efficiency electric motors as well as lower maintenance on propulsion systems, fewer fluids to change, less brake wear due to regenerative braking technology, and fewer moving parts.

Assembled in California, the BYD refuse truck is compliant with FMVSS and CMVSS regulations.

The BYD battery-electric refuse truck can charge at 40 kW, 80 kW, 100 kW, or 200 kW rates, requiring between one and five hours to charge depending on the power interface used. BYD's refuse truck battery technology allows for a projected 80% capacity after 5000 cycles, or 14 years if charged every day.

MACK HAS BEEN EVALUATING an electric powertrain for refuse trucks since it showed off an LR low-cab-forward chassis retrofitted with a Wrightspeed Route 1000 turbine-electric powertrain at WasteExpo last year.

Wrightspeed is owned by Tesla Motors co-founder Ian Wright.

The company's Route powertrain is a range-extending electric system that features a plug-in-capable battery pack that, as of last year, enabled a purely electric range of up to 24 miles. When the batteries' charge runs low, an 80 kW Fulcrum turbine generator, which can operate on natural gas or diesel fuel, recharges the batteries, enabling unlimited range with refueling.

Additional recharging comes from the Route's 730 kW regenerative braking system, which produces electricity as the vehicle comes to a stop.

Mack has been testing this MR electric refuse truck

Electricity from the battery pack powers four 'geared traction drive electric motors, enabling the Route powertrain to power vehicles up to 66,000 lb on grades as steep as 40%. With full torque available from zero rpm, the Route was said to provide a driving experience comparable to diesel-powered trucks. No word from Mack on the truck's progress at this point.

JEFF SASS SEES AN ELECTRIC FUTURE. Senior vice president, North America Truck Sales and Marketing at Navistar, he was speaking at HDT magazine's inaugural Heavy Duty Trucking eXchange fleet networking conference in Phoenix, AZ last week.

Sass figures electric trucks are on their way. The cost of battery storage is rapidly diminishing, he said, and right now it's about $185 per kilowatt hour.

"If we can get it down to about $100 per kilowatt hour, you will find the inflection point where electric and diesel cross. So, at 100ish dollars per kilowatt hour that's where it will make economic sense. Elon Musk [of Tesla] says it's going to be in three years. Most people are saying around 2025."

17 million tonnes of plastic washes ashore on deserted island

It is more than 5000 km removed from civilisation and yet Henderson Island's beaches are littered with nearly 40 million pieces of plastic. According to a new study, researchers visit this uninhabited land every five to 10 years but a more regular passer-by is the South Pacific current, bringing with it the remnants of a throw-away consumer society.

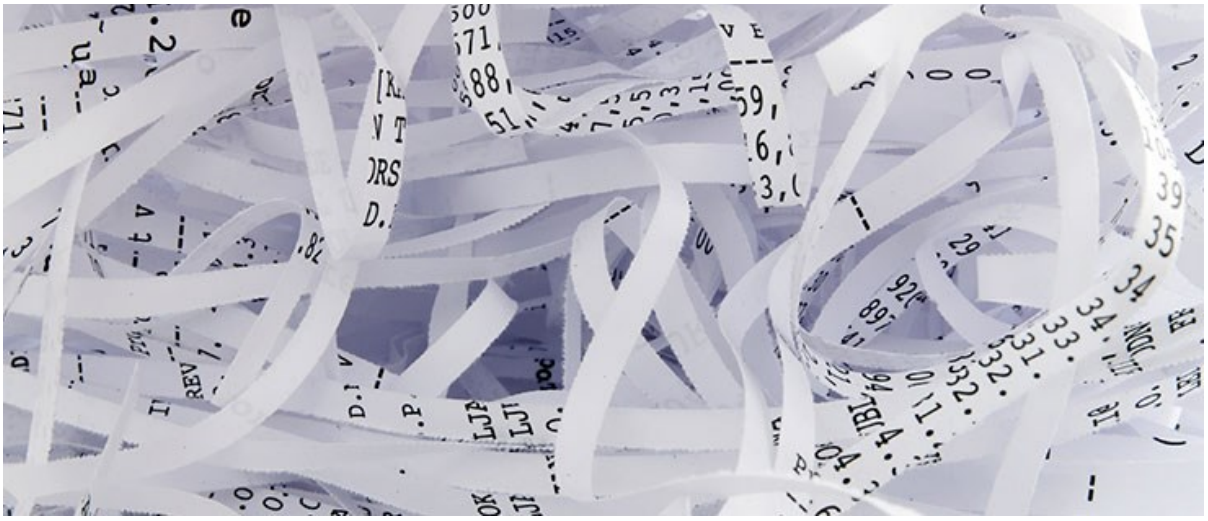
Up to 17 million tonnes of plastics has washed ashore - equal to 671 items per square metre, the highest density of ocean plastics ever recorded.

The study reveals that more than 3570 new pieces of waste plastics make their way to one of the volcanic island's beaches every day.

'Far from being the pristine deserted island that people might imagine, Henderson Island is a shocking but typical example of how plastic debris is affecting the environment on a global scale,' says IMAS researcher Dr Jennifer Lavers, who recently oversaw a scientific expedition to the area on behalf of the British nature conservation charity RSPB.

Lavers suggests that, in reality, the scale of the island's plastics problem is probably far more serious. 'We were only able to sample pieces bigger than 2 mm down to a depth of 10 cm,' she comments.

The island's cliffs and rocky coastline have prevented full mapping of the ocean current's influence. Most ocean plastics are made up of buoyant, durable packaging such as bags, wrappers and bottles.



Rhode Island Resource Recovery stops accepting shredded paper in mixed recycling

Resource Recovery says shredded paper increased contamination levels in curbside material.

To combat rising levels of contamination, Rhode Island Resource Recovery Corp. (Resource Recovery), Johnston, Rhode Island, announced shredded paper will no longer be accepted in Rhode Island's mixed recycling program. While shredded paper is being discontinued curbside, Resource Recovery will continue to accept shredded paper, secured in a bag, at its self-serve small vehicle area (SVA) in Johnston. In addition to the drop-off container, Rhode Island residents can attend shredding events, compost shreds in backyard compost bins or dispose of them in the regular trash.

When Resource Recovery launched single-stream recycling in 2012, shredded paper remained an acceptable material in the mixed recycling program. Unfortunately, the method of double-bagging shredded paper has not been sufficiently effective. While many properly prepared bags have been successfully processed, most of the shreds are not properly prepared. Even when properly prepared, overly compacted recycling trucks can cause bags to break open. When bags break, the loose shreds cover the other recyclables which lowers their value. Keeping shreds out of the mixed recycling will greatly improve the quality of the 450 tons of recyclables that Resource Recovery's material recovery facility (MRF) processes each day.

In addition, the elimination of paper shreds should also significantly reduce the volume of plastic bags in the recycling. "The two biggest contaminates in our MRF, by far, are shredded paper and plastic bags," says Krystal Noiseux, education and outreach manager for Resource Recovery. "For the safety of our workers, longevity of our equipment and quality of our recycling, our messaging going forward is clear and simple: No shredded paper and no plastic bags, bags of plastic bags or recycling inside of plastic bags ever."

To provide residents with more opportunities to properly recycle intact sensitive documents, Resource Recovery is replacing their annual shredding event with four free community shred days. Rhode Island residents who want to shred sensitive personal documents can bring up to two, 22-gallon recycling bins' worth—free of charge—to Shred RI located at 2111 Plainfield Pike in Johnston on June 17, July 8, Sept. 16 and Nov. 4 from 8 a.m. to noon.

As a reminder, a sensitive or confidential document is one that contains a unique, identifying number that can be traced directly to a specific person and which cannot be found readily through public searches. For example, a person's name and address is not considered sensitive, confidential information. Junk mail can be recycled whole.

Municipal Compensation for Tires Deflated

In late 2016, OTS began hearing from Municipalities that the requirement to maintain logs of tire drop-offs in order to be eligible for Collection Allowance (CA) was challenging for Municipalities to execute, and therefore, they should be relieved of this obligation. While OTS stands by the requirement that all Collectors (not just Municipalities) must be able to provide supporting documentation to validate the quantities and eligibility of used tires being claimed for Collection Allowance (CA), in an effort to determine if alternative procedures could be developed, OTS participated in a series of meetings with select Municipalities and Regions, to discuss the issue.

During these discussions, OTS put Municipal Collection Allowance claims, where the supporting documentation was absent, on hold as opposed to declining them outright.

The requirement that Collectors provide documentation validating the quantity and source of tires collected has been in place since the Used Tires Program launched in 2009. OTS has an obligation to ensure that program dollars are responsibly used to divert Ontario's scrap tires and to administer the program in such a way that the opportunities for misreporting are minimized. Allowing used tires to be collected without reasonable supporting documentation creates a gap in the system of controls in the program and allows used tires that may not otherwise be eligible for diversion under the Used Tires Program to become eligible not just for CA, but also for the other incentives that OTS offers, multiplying the potential financial impact.

OTS will be declining all CA claims that had been placed "on hold" pending an outcome from these discussions. Additionally, the current standards requiring all Collectors to provide support for the used tires collected by them, including logs consistent with the sample provided by OTS in the Collector Guidebook in the case of tire drop-offs, will remain in effect. Used tire volumes from drop-offs at Municipalities not supported by logs will not be eligible for CA, but will continue to be picked up at no charge by OTS-registered Haulers.

For greater clarity, any Municipality seeking to claim CA from OTS must maintain a drop-off log to document the source and eligibility of used tires. A template for this log can be found in the Collector Guidebook.

Alternatively Municipalities may elect to change their registration status to "Generators", which will remove the requirement to provide supporting documentation upfront and still allow Haulers to pick up the used tires free of charge. No CA will be paid on "Generated" tires. NOTE that for Collectors registered as Generators, OTS reserves the right to investigate variances in tire volumes collected and the obligation to reasonably demonstrate the eligibility of the tires to be included under the program remains.

Landfill Gas Offset Protocol Environmental Registry Posting

The Ministry of the Environment and Climate Change has posted a policy proposal for the Landfill Gas (LFG) Offset Protocol to the Environmental Registry for a 30 day public comment period ending June 18, 2017. The draft offset protocol covers the capture and destruction of methane gas from landfill facilities. The protocol, once finalized, will apply to landfill facilities located anywhere in Canada. Projects will be required to comply with the offsets regulation once it is also finalized and the applicable protocol to be able to receive offset credits. Protocols covering additional project types will be posted for public review and comment in the coming months.

Tire Cost Recovery Plan

On February 17, 2017, the Minister of the Environment and Climate Change directed Ontario Tire Stewardship (OTS), the organization that operates the Used Tires Program, to submit a plan to wind up the Used Tires Program and then itself. OTS must submit its proposed wind up plan to the Resource Productivity and Recovery Authority (the Authority) by October 31, 2017 for review and approval, with the Used Tires Waste Diversion Program to cease operation on December 31, 2018.

In order to support the development and implementation of a comprehensive wind up plan for the Used Tires Program under the Waste Diversion Transition Act , 2016 (WDTA), the ministry is proposing amendments to the cost recovery provisions of the Used Tires Regulation (O. Reg. 390/16). If approved, the proposed amendments would:

1. remove steward fee setting methodology provisions;
2. continue steward fees at current amounts until the Authority approves a wind up plan that would include new fee rules to govern during the wind up period proposed by OTS; and,
3. remove reconciliation provisions as of the date the regulation comes into effect.

As required under the WDTA and the minister's direction, OTS must consult with stewards, municipalities, service providers and other affected stakeholders during the development of the wind up plan, including any proposed new fee rules that are included in the plan.

In assessing the wind up plan, the Authority is required to consult with stewards, municipalities and other affected stakeholders prior to approval of the plan.

For additional details about the proposed amendments, see the Information Notice (Link: EBR Registry Number: 013-0600) under the Environmental Bill of Rights Registry.

Although this is an Information Notice, we still invite your comments by June 20, 2017.

If you have any questions, please contact Krista Friesen, Senior Policy Advisor, Resource Recovery Policy Branch atKrista.Friesen@ontario.ca or 416-314-4138.

Administrative Penalties

The Ministry of the Environment and Climate Change is continuing the implementation of the Waste-Free Ontario framework. In order to ensure the Resource Productivity and Recovery Authority (RPRA) has the appropriate compliance and enforcement tools to carry out its mandate under the Waste Diversion Transition Act, 2016 (WDTA), the ministry is proposing an administrative penalties regulation under the WDTA. If passed, this proposed regulation would provide the RPRA with the ability to issue administrative penalties to help oversee the operation and wind-up of existing waste diversion programs.

For additional details, please visit the Environmental Registry (link: http://www.ebr.gov.on.ca/ERS-WEB-External/displaynoticecontent.do?noticeId=MTMxOTE1&statusId=MjAwMjA4&language=en).

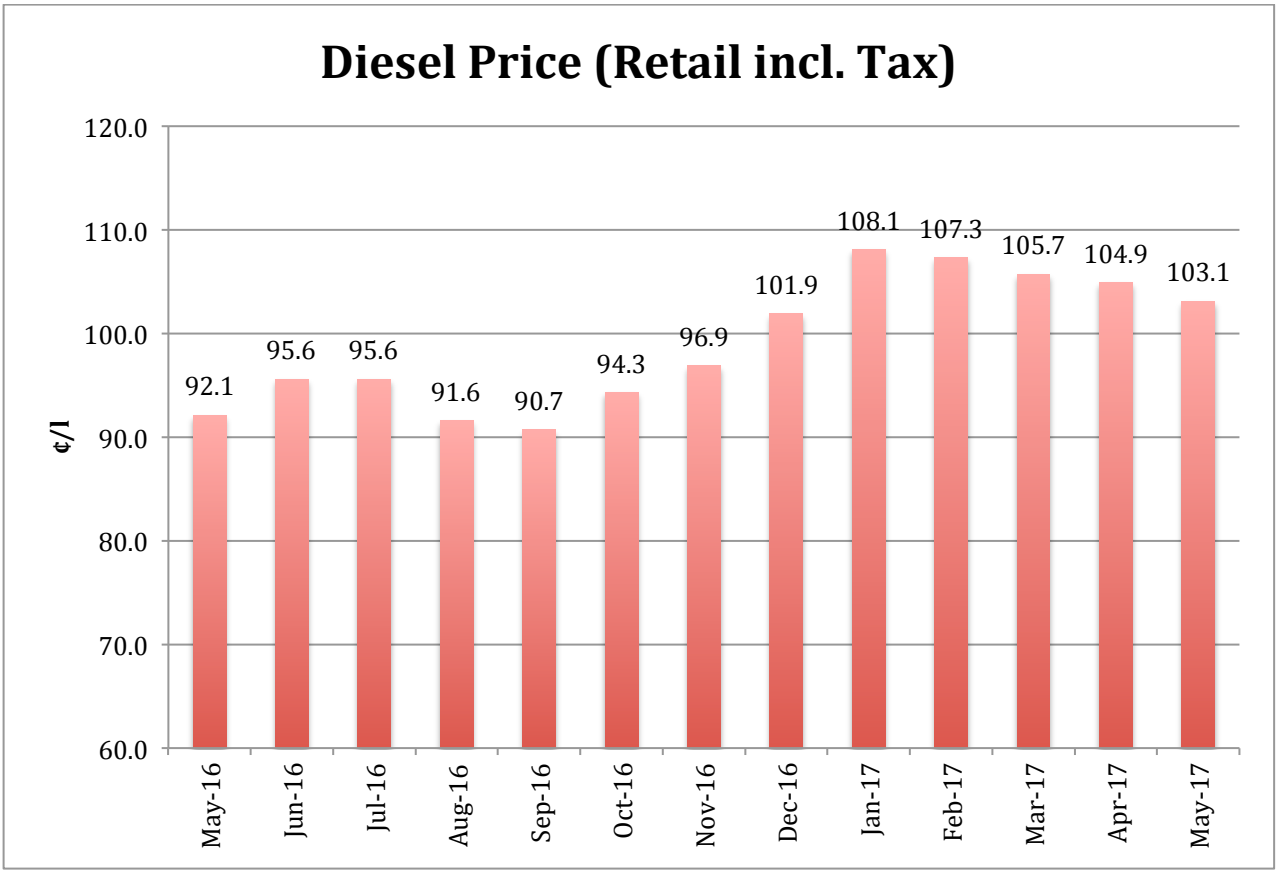
In addition, the Ministry of the Environment and Climate Change will be holding a webinar meeting on Wednesday, June 21st, 2017 to consult on the proposed regulation. Please confirm your participation with Elizabeth Soares, Senior Policy Coordinator, at Elizabeth.Soares@ontario.ca or 416-325-4431 by Friday, June 9th. We will provide further meeting details for those who confirm their participation.

Every Drops Count Report

The Environmental Commissioner of Ontario, Dr. Dianne Saxe, released Volume One of her 2016/2017 Annual Energy Conservation Progress Report, *Every Drop Counts*, to the Ontario Legislature.

Every Drop Counts: Reducing the Energy and Climate Footprint of Ontario's Water Use focuses on the connection between water and energy in Ontario's municipal water and wastewater systems. These systems are the largest energy users for most municipalities, accounting for almost 40% of the total usage, on average.

With all levels of government planning major investments in water infrastructure renewal, Ontario municipalities have a once-in-a-generation opportunity to cut the energy and environmental footprints of their water and wastewater systems.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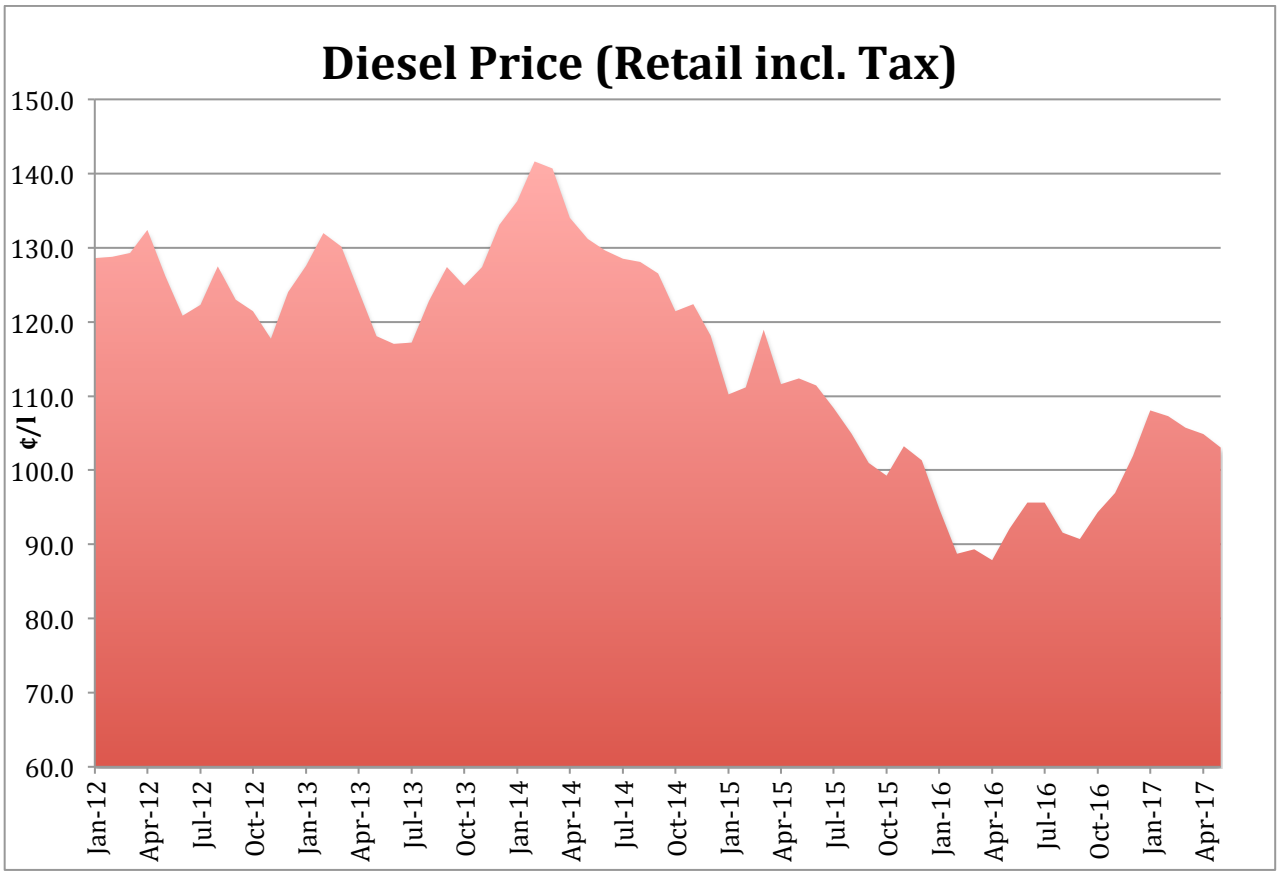
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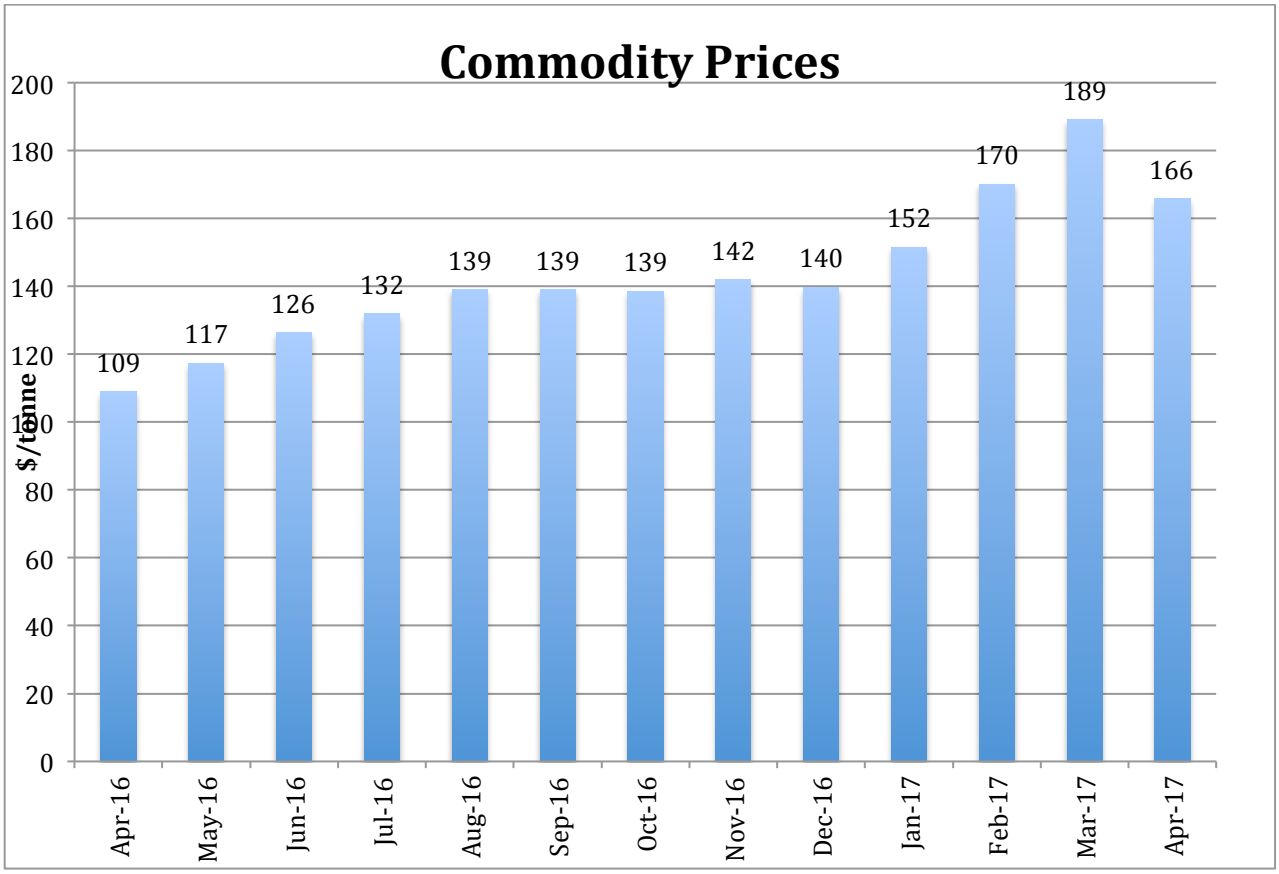
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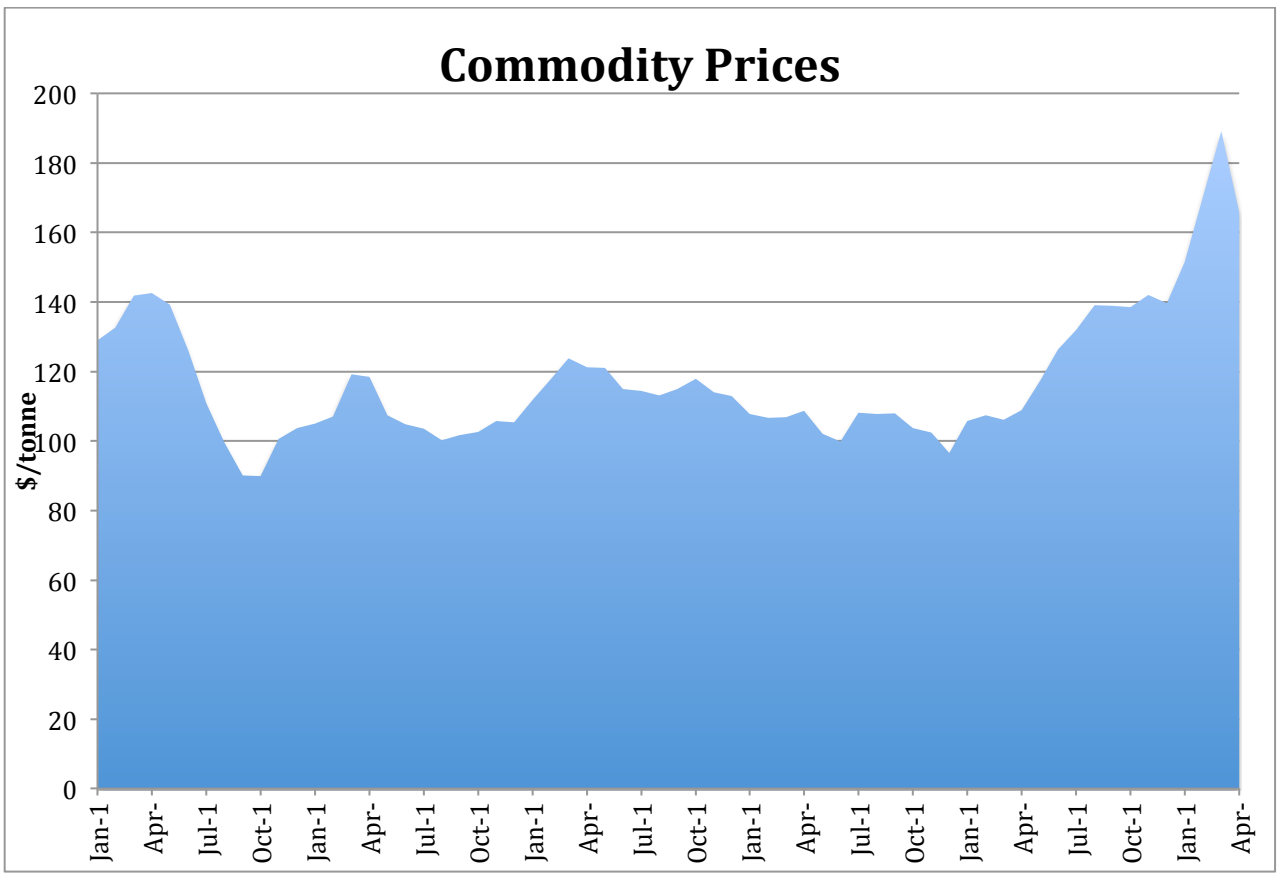
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