

**Board of Directors Meeting Highlights
Held on January 20th, 2022 at 8:30 AM
as a Virtual Meeting**



Waste Collection Delays Possible due to Rising Covid 19 Cases

With Ontario seeing an average of over 10,000 new cases of COVID-19 infection per day, the Association is advising municipalities and customers of potential delays in waste and recycling collection due to staff shortages.

According to the Solid Waste Association of North America (SWANA), solid waste officials and haulers in the United States have been dealing with worker shortages, increased residential waste, and evolving COVID risks. The increased transmissibility of the Omicron variant could also result in collection delays in some Ontario communities, and elected officials and the general public are urged to be patient if waste service providers and haulers are forced to adjust collection schedules.

Impact of Cross Border Vaccine Mandate on Waste Management

In December 2021, the Canadian trucking industry raised important concerns regarding the impact of imposing both a cross border vaccine mandate as well as a domestic mandate on federally regulated truck drivers/industry.

The industry provided examples of what would happen to the supply chain should the industry lose 10-20% of its workforce because of these mandates. Even carriers that have 90% to 100% vaccination rates among their workforce will lose drivers due to increased demand.

We share these concerns and supports the position of the Ontario Trucking Association that the commercial truck driving industry, including waste haulers and transporters, should be deemed an essential service and be exempt from the cross border and domestic vaccine mandate for truck drivers.

Over 27% of Ontario's solid waste, or 3.5 million tonnes annually, is transported across the Canada-U.S. border. Significant amounts of waste materials are also imported into Ontario for environmentally sound processing, recycling and disposal. The waste systems flow relies on seamless, time-sensitive logistics to ensure the protection of public health and the environment during the transport of waste.

We stand committed to helping the government fight COVID-19. Unfortunately, the grave threat to industry supply chains and the flow of materials by truck transport is serious. The critical role of commercial truck drivers, including all those who haul waste materials, necessitates designating trucking as an essential service with exemption from cross border vaccine mandates.

Draft Landfill Guide

The MECP is drafting a Guide for Hydrogeological Vulnerability and Site Suitability for Landfilling Sites. The stated purpose of this Guide is to provide the Ministry's expectations for the assessment, identification, and engineering considerations to address landfill siting and design in hydrogeologically vulnerable environmental settings in the approvals context.

Authority Sets 2022 Blue Box Steward Funding Obligation Using New Simplified Methodology

The Resource Productivity and Recovery Authority has set the 2022 Blue Box Steward Funding Obligation at \$171.9 million using a new simplified methodology that will ensure higher payouts to municipalities, First Nations and recycling associations participating in the Blue Box Program; reduce stewards' administrative costs; and eliminate the complexities and contention associated with the previous methodology.

The new simplified methodology sets the Steward Obligation at 50% of reported net costs and eliminates the cost-containment and non-obligated formulas. The calculation of the Net Cost to determine the Steward Obligation now only has three inputs:

1. The Gross Cost incurred by participating communities as reported in the 2020 Datacall
2. The Prior Year Adjustments (PYAs), limited to two prior years, and
3. The Three-Year Average Revenue

The simplified methodology is based on a joint recommendation made to RPRA by the members of the Municipal-Industry Partnership Committee (MIPC) Transition Sub-Committee, which is comprised of representatives of the Association of Municipalities in Ontario, the City of Toronto, and Stewardship Ontario. The new methodology will be used starting in 2022 and through to the end of the Blue Box Program transition period in 2025.

The new approach agreed to in the joint recommendation will ensure municipalities, First Nations and recycling associations receive 50% of reported net costs compared to the historic average of 48% and allow stewards to realize administrative savings. All parties will benefit from the elimination of a complicated and adversarial process that will allow them to focus on transitioning the Blue Box Program to the new producer responsibility regulatory framework.

Separately, a one-time adjustment was also applied to the 2022 Steward Obligation due to a past change in the 2006 Datacall that undercalculated eligible municipal amortization expenses for capital assets.

2022 Steward Funding Obligation (2020 data year)	
Total Gross Cost	\$403,004,112
Three-year Average Revenue	-\$61,029,715
Prior Year Adjustments	\$1,102,020
Total Net Cost	\$343,076,418
50% of Net Cost	\$171,538,209
Amortization Adjustment*	\$445,401
2022 Steward Funding Obligation	\$171,983,609
*Adjustment only applies to the programs: Peel; Barrie; Bluewater Recycling Association; Bruce Area Solid Waste Recycling; Kingston; Kenora and Southgate.	

Municipal Open Letter to Rule Making Producer Responsibility Organizations

Municipalities want to ensure the transition of the blue box happens in smooth manner and leads to improved environmental, economic and social outcomes.

Municipal governments have identified five key objectives that they want the transition of the blue box common collection system to:

1. Ensure a smooth transition of municipal-led servicing to producer-led servicing.

This will be a major change in how residential recycling is managed in Ontario and consideration is necessary to:

- reduce unnecessary expenses and minimize system costs,
- reduce risks to the existing market,
- reduce the potential for stranded municipal customers,
- leverage existing contracts and infrastructure, where possible, and
- provide greater certainty for current participants (e.g., service providers, customers).

This is not meant to say that change should not happen, nor producer beholden to municipal decisions. However, we should seek to evolve the system not upend it.

2. Encourage collective action/collaboration between PROs and producers and ensure accountability.

Municipal governments have advocated for a common collection system that is standardized across the Province for items such as what materials are collected, how they are collected, and the messaging provided to residents and all eligible sources. There should be an opportunity to promote collective / collaborative action in these areas while at the same time ensuring fair competition. However, lower costs to producers should not be achieved by delivering a reduced level of service or by measuring against their obligations in a different manner than their peers.

3. Protections to ensure stability of the common collection system.

It is also important to ensure the stability of the common collective system so that if one PRO fails or if a producer switches PROs it doesn't disrupt the entire system. Additionally, it will be important to have mechanisms to fairly address changing market shares of PROs and any other factors that could re-allocate responsibility for the system amongst producers and their PRO(s). All producers should have a responsibility to ensure the functioning of the entire system.

4. Rules should enhance customer service and environmental protection

As the common collection system is standardized, there should be a priority on customer service and protecting the environmental (e.g., reducing the potential for litter, reducing the potential for disposal of packaging as waste, etc.).

5. Preserve and/or enhance competition.

Municipalities have strongly advocated that all producer responsibility regulations should support a fair, open and competitive market for both PROs and service providers. It is important to ensure no PRO or waste management company is provided an unfair advantage initially or moving forward. In the case where a PRO is given an advantage or holds a dominant position, the rules should be written in a way that ensures they don't abuse that position. All rules should be vetted by the federal Competition Bureau and comply with Canadian competition laws.

Minister Encourages Collaborative Approach to Blue Box Rule Creation Process

To implement the new Blue Box common collection system, all producers and their PROs will be assigned collection responsibilities through an allocation table, ensuring that Blue Box materials are collected from all eligible communities across the province. The Minister of the Environment, Conservation and Parks has issued a letter to all currently registered Blue Box producer responsibility organizations (PROs) encouraging a collaborative approach to the rule creation process, the next key phase in the transition of Ontario's current Blue Box Program to the new producer responsibility framework.

EPA releases National Recycling Strategy

The strategy marks a shift toward a circular economy approach to materials management.

The U.S. Environmental Protection Agency (EPA) released its "2021 National Recycling Strategy" Nov. 15, which also kicks off America Recycles Week. The strategy is designed to address major recycling challenges, including contamination, to create "a stronger, more resilient and cost-effective municipal solid waste recycling system," the agency says, with the goal of achieving a 50 percent national recycling rate by 2030. The strategy also addresses the climate impacts of producing, using and disposing of materials and the human health and environmental impacts of waste and waste-related facilities in overburdened communities.

According to the strategy, "The National Recycling Goal and the National Recycling Strategy are integrated and support the ultimate goal of improving recycling and increasing circularity within the United States. The methodology to measure the recycling goal and its key metrics is under development and expected to be finalized later this year. In the development of the implementation plan, EPA will bring the recycling goal and National Recycling Strategy together into a comprehensive plan. As EPA moves beyond recycling to develop additional strategies, EPA also will develop a new goal to reduce the climate impacts from materials production, consumption, use and disposal that will complement the focus on a circular economy approach. This new goal will complement the National Recycling Goal, as well as the U.S. goal to halve food loss and waste by 2030."

In 2018, in response to recent international policy changes and other challenges, EPA focused on U.S. recycling, hosting the inaugural America Recycles Day Summit in 2018. That was followed by publishing the "National Framework for Advancing the U.S. Recycling System," in 2019, a collaborative effort by stakeholders from across the recycling system that highlighted the need to promote education and outreach, enhance infrastructure, strengthen materials markets and enhance measurement. The "2021 National Recycling Strategy" adds environmental justice and circular economy focuses.

The EPA says among the challenges the U.S. recycling system faces are reduced markets for recyclables, recycling infrastructure that has not kept pace with today's changing material stream, confusion about what materials can be recycled and varying methodologies to measure recycling system performance. The "2021 National Recycling Strategy" identifies actions designed to address these challenges under its five strategic objectives:

1. improve markets for recycled commodities through market development, analysis, manufacturing and research;
2. increase collection of recyclables and improve recycling infrastructure through analysis, funding, product design and processing efficiencies;

3. reduce contamination in the recycled materials stream through outreach and education to the public on the value of proper recycling;
4. enhance policies and programs to support recyclability and recycling through strengthened federal and international coordination, analysis, research on product pricing and sharing of best practices; and
5. standardize measurement and increase data collection through coordinated recycling definitions, measures, targets and performance indicators.

The strategy also focuses on how the EPA will address environmental justice, climate change and the circular economy:

- EPA says it recognizes the burden that living near waste and waste-related facilities can have on communities when waste is not properly managed, potentially leading to higher levels of chronic health issues. The strategy is designed to increase equitable access to recycling services, reduce environmental impacts in communities, stimulate economic development and ensure overburdened communities meaningfully participate during the strategy's implementation.
- The strategy includes a commitment from the EPA to create a new national goal to reduce the climate impacts from the production, consumption, use and disposal of materials, which make up approximately 50 percent of global greenhouse gas emissions, according to the United Nations Environment Programme's International Resource Panel. This new climate goal will help achieve President Biden's commitment to achieve a 50 to 52 percent reduction from 2005 levels in economywide net greenhouse gas emissions by 2030, according to the EPA.
- While this initial strategy focuses on the recycling of municipal solid waste, additional work is necessary to create a "circular economy" where materials (e.g., plastics, food waste, electronics and industrial materials) are managed sustainably throughout their life cycle. EPA, in coordination with other federal agencies and interested stakeholders, intends to release subsequent strategies that will encompass other activities beyond the recycling of MSW, reflecting the need for sustainable product design, reducing waste generation and materials reuse activities critical to realizing circularity. Subsequent strategies will address other key materials, such as plastics, food, cement and concrete, as well as electronics.

The EPA says it will work with stakeholders, including communities, local, state, federal and Tribal partners, to develop a plan to implement the strategy.

The circular economy approach to materials management represents a change in how the nation currently mines resources, makes them into products and then disposes of those products. This approach would reduce material use, redesigns materials and products to be less resource-intensive and recaptures "waste" to use in manufacturing new materials and products, according to the EPA.

Alberta Proposes Bill That Enables Creation Of Extended Producer Responsibility Framework

The Minister of Environment and Parks Alberta has proposed Bill 83, The Environmental Protection and Enhancement Amendment Act that would enable the creation of an extended producer responsibility (EPR) framework for the province. If passed, the Bill will make producers of paper, plastics, and hazardous materials take responsibility for their products to help Alberta tackle their waste problem. As the only Canadian province without an EPR framework, read how the framework will help Alberta transition to a plastic's circular economy that ensures plastics are kept out of landfills.

ISRI Applauds New Jersey Passage of Recycled Content Legislation

Following months of advocating on behalf of recyclers in New Jersey along with its New Jersey Chapter and Plastics Division, the Institute of Scrap Recycling Industries (ISRI) released the following statement on the passage of bill S2515/A4676 by the New Jersey State Assembly. The bill establishes post-consumer recycled content requirements for rigid plastic containers, glass containers, paper and plastic carryout bags, and plastic trash bags; and prohibits sale of polystyrene loose fill packaging.

“The passage of bill A4676 by the New Jersey State Assembly reflects a strong commitment to not only increase the use of recycled content in packaging materials, but to develop a sustainable program with quantifiable metrics and realistic goals. This will help increase stakeholder commitment throughout the supply chain to ensure plastics are responsibly manufactured, collected, and recycled into new products. ISRI is excited about the opportunity the passage of A4676 presents for the state of New Jersey, and we stand ready to provide essential third-party advice and technical expertise in plastics recycling and manufacturing.”

Used Wind Turbine Blades Being Cut Up and Hauled to Tennessee

They had been piled there for over a year, about 400 huge wind turbine blades removed when their turbine was “repowered,” and when the original solution to dispose of them didn’t work out, MidAmerican Energy took action to clear the stockpile.

When wind turbines are “repowered” the blades, mostly fiberglass, have been a problem. MidAmerican wants them recycled and now that is going to happen. Working with Carbon Rivers, a Tennessee company that has developed a new recycling technique, the tons of fiberglass will become a raw material that can be used in a variety of products. A company brochure lists injection molding pellets and 3D printer filaments as well as glass that can be used to make new fiberglass.

A Texas company is using a saw mounted on a modified excavator to cut the blades down to a size that will fit on a regular truck. Those trucks haul the pieces to Knoxville where Carbon Rivers recycles them. The work at the Ellsworth site is about 3/4 done and will be wrapped up in early 2022.

OWMA Less is More Campaign

The OWMA has launched the Less is More Campaign urging MPPs on behalf of their constituents to commit to the following pledge:

We pledge to consume less whenever we can, while recycling more whenever we can’t. We know that when it comes to garbage, consuming less helps more, and recycling more means less waste in our communities and less greenhouse gas in our atmosphere.

Ask your MPP to sign the #LessIsMore pledge at <https://www.bheard.ca/owma/>.



Complaint regarding Misleading Advertising

Municipal governments remain extremely concerned about the environmental claims companies are making in the market and the direct impact these claims have on municipal or municipally contracted infrastructure (e.g., wastewater treatment facilities, contamination in recycling facilities and/or organics processing facilities) and in turn property taxpayer costs. The use of ‘recyclable’, ‘compostable’ and ‘flushable’ on products and packaging that existing systems cannot manage properly is leading to major cost increases for municipal governments. We simply do not have the same advertising budgets as some of these companies.

We note that the Ellen MacArthur Foundation has addressed some of these claims related to compostable packaging:

“A packaging or packaging component is compostable if it is in compliance with relevant international compostability standards, and if it’s successful post-consumer collection, sorting, and composting is proven to work in practice and at scale.” (emphasis added).

The guidance is clear that “Compostable packaging needs to go hand in hand with appropriate collection and composting infrastructure in order for it to be composted in practice. Therefore, when claiming compostability in the context of a specific geographical area (e.g., on-pack recycling labels, public communications), it is important to take into account the local context and available systems in place as outlined in ISO 14021 ...” To be reported as compostable, it must be proven to work in practice and at scale.

The federal government has a key role to play in enforcing its own rules (e.g., Canadian Standards Association’s environmental claims: A guide for industry and advertisers from 2008). We urge the federal government to undertake an investigation related to misleading practices about the proper management of products and packaging at the end-of-life.

To this point, Reckitt Benckiser Group PLC has introduced Lysol brand biodegradable wipes to the Canadian market. These wipes are positioned as being suitable for municipal green bin collection services and/or backyard composting units as a way to minimize disposal requirements and improving sustainability of the product.

Municipal governments in Ontario have established and financed a collection and processing system for household organic wastes (mainly food and leaf/yard waste) that services approximately 85-90% of the Ontario population. Lysol wipes to our knowledge have not completed any testing of their claims that these wipes can be included in municipal green bin programs ahead of the launch to the market. We are aware that some testing is currently underway, however the product is already in the marketplace and being used by consumers who presumably are disposing of it in green bin programs where it may properly compost/break down successfully; or could be a contaminant to the system that does not breakdown and adds more cost to an expensive, complex waste diversion system.

We are also unaware of any work has been done in advance to prove the infrastructure in place in Canada has the ability to deal with this material at scale. It is not enough for the package to simply provide a provision to ‘Check locally as appropriate municipal composting facilities may not exist in your area.’ This is clearly explained in both guidance provided by the Canadian Standards Association’s environmental claims: A guide for industry and advertisers from 2008 as well as by the US Federal Trade Commission’s Green Guides.

We believe the Competition Bureau should investigate the claims of Reckitt Benckiser and take a more proactive stance in addressing issues like this.

Keurig Canada To Pay \$3 Million Penalty To Settle Competition Bureau's Concerns Over Coffee Pod Recycling Claims

Keurig Canada Inc. reached an agreement with the Competition Bureau to resolve concerns over false or misleading environmental claims made to consumers about the recyclability of its single-use Keurig® K-Cup® pods.

The Bureau's investigation concluded that Keurig Canada's claims regarding the recyclability of its single-use coffee pods are false or misleading in areas where they are not accepted for recycling. The Bureau found that, outside the provinces of British Columbia and Quebec, K-Cup pods are currently not widely accepted in municipal recycling programs.

The Bureau also concluded that Keurig Canada's claims about the steps involved to prepare the pods for recycling are false or misleading in certain municipalities. Keurig Canada's claims give the impression that consumers can prepare the pods for recycling by peeling the lid off and emptying out the coffee grounds, but some local recycling programs require additional steps to recycle the pods.

Keurig Canada's recyclable claims are made on its website, via social media and on text and logos on the K-Cup pods and packaging. The settlement also covers recyclability claims made on packages of K-cup pods for brands marketed in partnership with Keurig Canada.

As part of this settlement, Keurig Canada agreed to:

- pay a \$3 million penalty and donate \$800,000 to a Canadian charitable organisation focused on environmental causes
- pay an additional \$85,000 for the costs of the Bureau's investigation
- change its recyclable claims and the packaging of the K-Cup pods
- publish corrective notices about the recyclability of its product on its websites, on social media, in national and local news media, in the packaging of all new brewing machines and via email to its subscribers
- enhance its corporate compliance program as necessary to promote compliance with the laws and prevent deceptive marketing issues in the future

The Bureau acknowledges Keurig Canada's voluntary cooperation in resolving this matter.

Quick facts

The agreement registered with the Competition Tribunal has the force of a court order and will be binding for a period of 5 years.

The deceptive marketing practices provisions of the Competition Act forbid companies from making false or misleading claims about a product or service to promote their business interests.

In 2017, the Competition Bureau issued a business alert to warn businesses of issues related to making environmental claims that are misleading or likely to result in misinterpretation.



Keurig Agrees To Settle Coffee Pod Recyclability Suit In The US

Keurig Green Mountain has reached a tentative class-action settlement with a consumer who is suing the company over its coffee pod recyclability claims.

The case, which was first filed in U.S. District Court for the Northern District of California in November 2018, alleges that the company is deceiving consumers by claiming its polypropylene K-Cups are recyclable.

Details of the deal, which is the second major settlement over brand owners' recyclability claims in recent months, haven't been made public yet.

Lafayette, Calif. resident Kathleen Smith sued Keurig Green Mountain, alleging that Keurig instructed consumers to remove the metal foil from the used K-Cups, compost or discard the coffee grounds, and then recycle the cup and filter, while urging consumers to "check locally to recycle empty cup."

But the lawsuit alleges the cups fall through sorting screens at materials recovery facilities (MRFs) because of their small size – especially after they're compacted in collection trucks – and they're disposed of. If they're not disposed of by the MRF, the cups can contaminate other recyclables, the suit alleges. And even if they are sorted, baled and sold to a plastics reclaimer, the residual metal and food contaminants render them non-recyclable or difficult to recycle, according to the lawsuit, which also emphasized a lack of markets for even non-contaminated K-Cups.

Keurig asked the case to be dismissed, citing a host of reasons. Among them, Keurig claimed the plaintiff failed to differentiate between the company's original coffee pods and its recyclable PP pods, which were introduced in 2017 after testing with recycling companies to ensure their recyclability. KW Plastics and Merlin Plastics were among the companies involved in the K-Cup recycling trials.

In its motion to dismiss the case, Keurig also insisted its marketing language is compliant with the Federal Trade Commission's Green Guides, which are referenced in California statutes, because Keurig discloses to consumers that the cups aren't recyclable in all communities and instructs them to "check locally."

Keurig was dealt a legal setback in June 2019, when Judge Haywood Gilliam, Jr. declined to dismiss the case. And in September 2020, over Keurig's opposition, Gilliam approved an order certifying the class represented by the plaintiff. The class includes "all persons who purchased the Products for personal, family or household purposes in California (either directly or through an agent) from June 8, 2016 through the present," according to his ruling.

Keurig Green Mountain acquired Dr Pepper Snapple Group in 2018. The company is now part of Keurig Dr Pepper, one of the largest beverage companies in North America.

Details of agreement not yet public



SWANA Launches New Project for Canadian Landfill Managers

SWANA has launched a project to develop a Canadian adaptation of its new Manager of Landfill Operations (MOLO) course and exam. This effort ensures managers of Canadian landfills can take a MOLO course that reflect the standards and requirements for managing Canadian landfills today and are certified against those standards and requirements. “The ‘Canadianized’ course and exam will retain the industry best management practices appropriate for landfills in the US and Canada—as found in the newly redeveloped MOLO course and exam—and will incorporate Canadian specifics appropriate for Canadian audiences,” said Arminda Valles-Hall, SWANA Director of Education.

Dillon Consulting, a well-respected and employee-owned professional consulting firm, was selected to lead this important effort. With more than 20 offices and 900 employees across Canada, Dillon handles projects in every province of Canada. “Dillon’s national reach was an important consideration in selecting a team to manage this project since the Canadian adaptation of the MOLO course and exam must reflect national standards, not those specific to a particular province or region,” noted Valles-Hall.

Working alongside Dillon are Canadian-based subject matter experts who will help identify and incorporate Canadian-specific references to add to or replace the US-specific MOLO material.

This exciting project continues SWANA’s new approach to the development of training. “With this project, SWANA continues its emphasis on developing more personalized and customized learning experiences,” said Valles-Hall. “Like the MOLO-US course, the MOLO-CA course will be available to students and SWANA’s chapters as a series of individual learning modules, each of which will provide a stand-alone educational experience about the primary topic covered within a module. Depending on their educational needs, students may choose to access one or multiple modules to fill knowledge gaps selectively or consume the modules as a set for a comprehensive education on the management of landfill operations.”

Recycle BC Suspends Collection Of Glass Containers And Foam Packaging Following Floods

With transportation corridors compromised due to road closures, Recycle BC cannot move glass from its receiving facilities to its glass end markets.

Due to the unprecedented flooding event in British Columbia, in early November, Recycle BC reports it was forced to take the following measures:

- Suspend collection of non-deposit glass bottles and jars and foam packaging (white and coloured) from Recycle BC depots.
- Suspend collection of all glass bottles and jars from curbside and multi-family



As of November 22, Recycle BC is requesting that people do not take these materials to a depot or set out for curbside or multi-family collection, and hold on to glass and foam packaging to set out or drop off later, once collection of these materials resumes.

Recycle BC says that with transportation corridors compromised due to road closures, and the primary glass end market currently under water, it cannot move glass from receiving facilities to glass end markets. In addition, the flooding has affected the availability of trucks for hauling materials, further compounding these challenges.

How an Ottawa, Canada Company Diverts Food Waste from Landfills

An Ottawa-based company is trying to change the way households across the country dispose of food waste with innovative technology that speeds up the composting process to a matter of hours. Food Cycle Science has signed up about 20 municipalities across Canada to pilot its FoodCycler, a small food waste recycling machine the company claims can reduce the weight and volume of food waste by 90 per cent.

CEO Bradley Crepeau says the company tries to help communities that don't have easy access to some of the more traditional organics programs, such as curbside pick-up available in more densely populated cities. "We're working with remote, rural and Indigenous communities at this time, but we really aim to scale that to be a solution, or at least part of the solution, for any municipality and community across Canada," Crepeau said.

Each FoodCycler unit can easily fit on a kitchen countertop and comes equipped with a 2.5-litre bucket for food waste. Through a process of drying, grinding and cooling, the FoodCycler aerates food waste without producing methane gas and turns it into compost within four to eight hours. "The unfortunate reality is that food waste is very harmful to the environment. It's one of the largest emitters of greenhouse gas emissions," Crepeau said.

Ontario Not Recovering Spills Costs

There were more than 73,000 hazardous spills reported in Ontario between 2011 and 2020, but the Ministry of the Environment, Conservation and Parks attempted to recover its response costs just three times.

Even in those three, it went after only about half of the \$1.3 million spill response cost it incurred, said Auditor General Bonnie Lysyk, in her Annual Report of Environment Audits. When looking at just 30 other spills where the government did not attempt any cost-recovery, the audit report estimated those spill responses cost taxpayers, and not polluters, about \$4.5 million.

The total amount of unrecovered costs is potentially tens of millions of dollars more.

"The Ministry of the Environment can do more to encourage spillers to prevent and reduce the risks from spills, report spills promptly, and improve their response and clean-up practices," said Lysyk.

"If the Ministry does not improve on its compliance and enforcement, it is very likely that these spills will continue, with their related impacts on people and wildlife, and the air, land and water, of the province."

A hazardous spill is a discharge of a substance to air, land or water that can pose a threat to human health and the environment. The responsibility for protecting Ontario's air, land and water falls to the Environment Ministry. It is responsible for ensuring regulated industries have plans in place to prevent and respond to hazardous spills, and that they comply with provincial rules.

The Ministry is also responsible for overseeing spill response and clean-up, taking action when spillers fail to clean up, and recovering the costs it incurs.

The audit found that the Environment Ministry's work with industries that spill hazardous substances is too weak to prevent and reduce the risks from spills. It also found that information about these spills and potential impacts on nearby people, communities and the environment are not publicly disclosed in a transparent or timely way.

This audit report includes 13 recommendations for improvement.

Waste Management Survey

OWMA through Pollara Strategic Insights conducted an online survey of 1,000 residents across Ontario and found there is high public support for provincial government investments, regulations, and support to increase recycling rates, help divert waste, and implement mandatory composting programs and single-use item bans.

Almost all Ontarians (92%) feel that reducing litter and waste is important, with 59% of Ontarians seeing it as very important.

There is high public support (75-85%) for provincial government investments and regulations to increase recycling rates, divert waste into energy, and fight climate change. The ideas they support include:

- Additional surcharges on households with more garbage (56%), personally paying more in taxes to support stronger waste diversion policies (40%)
- Mandatory composting programs (69%) and single-use item bans (67%)
- Almost three-quarters of Ontarians want higher product recycling targets for producers of electronic equipment
- Almost six in ten Ontarians want higher household hazardous waste product recycling targets for companies – with a plurality preferring targets that are as close to 100% as possible

There is high public support for Ontario-based companies to do the following:

- A strong majority of Ontarians (88%) want companies to do more to make their products recyclable
- Three quarters (77%) of Ontarians want companies to introduce composting programs where applicable
- Seven-in-ten Ontarians surveyed support making companies shoulder costs for disposal of their products, while less than 10% oppose this

At least seven-in-ten Ontarians feel all entities – private-sector, public-sector, and individuals – should do more to reduce waste and litter, but clear majorities feel companies and individuals should do a lot more

- There is high public support (75-85%) for provincial government investments and regulations to increase recycling rates, divert waste into energy, and fight climate change
- Seven-in-ten support making companies shoulder costs for disposal of their products - less than 10% oppose
- A majority supports additional surcharges on households with more garbage, although only 40% support (32% oppose) personally paying more in taxes to support stronger waste diversion policies
- At least two-thirds support mandatory composting programs and single-use item bans

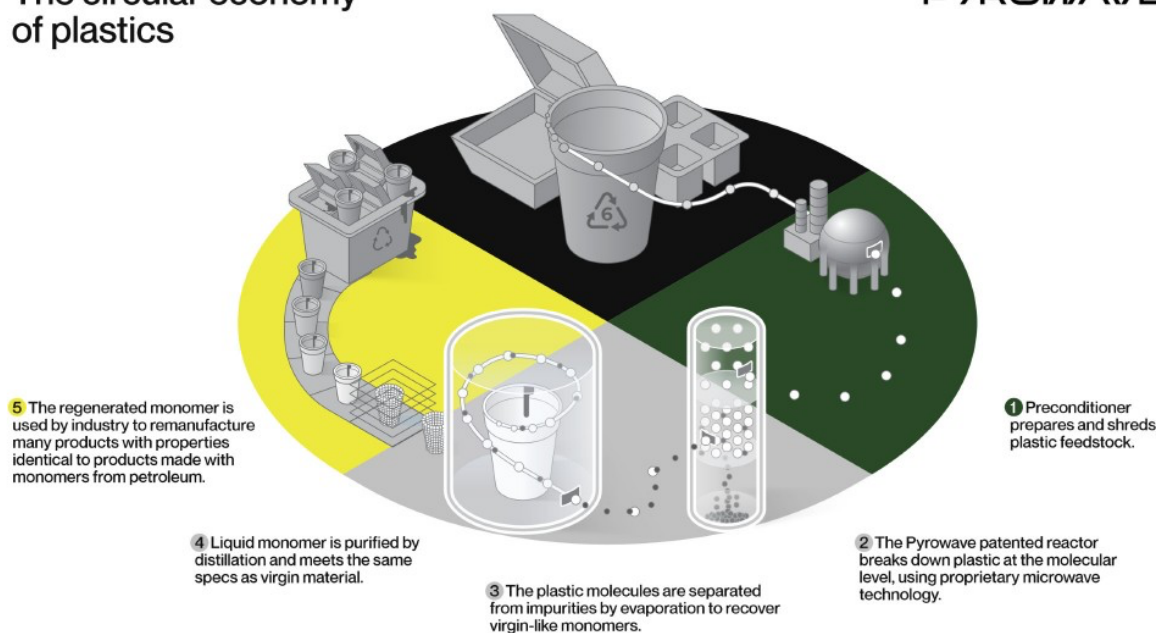
Proposed Amendments to Batteries, Electrical and Electronic Equipment, and Tires

On November 26, 2021, the MECP posted proposed amended versions of the Batteries Regulation, Electrical and Electronic Equipment Regulation, and the Tires Regulation. The consultation period for these proposed amendments was open for 45 days until January 10, 2022.

\$7 Million In Government Support To Pyrowave's Microwave-Based Recycling Technology

The circular economy of plastics

PYROWAVE



The Pyrowave technology platform uses microwaves to manufacture chemicals more efficiently and with a lower carbon release than traditional processes.

Pyrowave, a specialist in chemical recycling, and pioneer in the use of microwave-based technology for the recovery of post-consumer and post-industrial plastics, has announced \$7 million in financial support from the Quebec Government's ESSOR Program, administered by Investissement Québec. Pyrowave says this financial support will help expand its pilot plant and Centre of Excellence in Microwave Technologies facility located in Salaberry-de-Valleyfield, Quebec, as well as hire new talent, and continue to develop and improve its unique and patented technologies. The purpose of the ESSOR Program is to accelerate the growth of promising Quebec companies like Pyrowave to help them become leaders in tomorrow's low-carbon and circular economy.

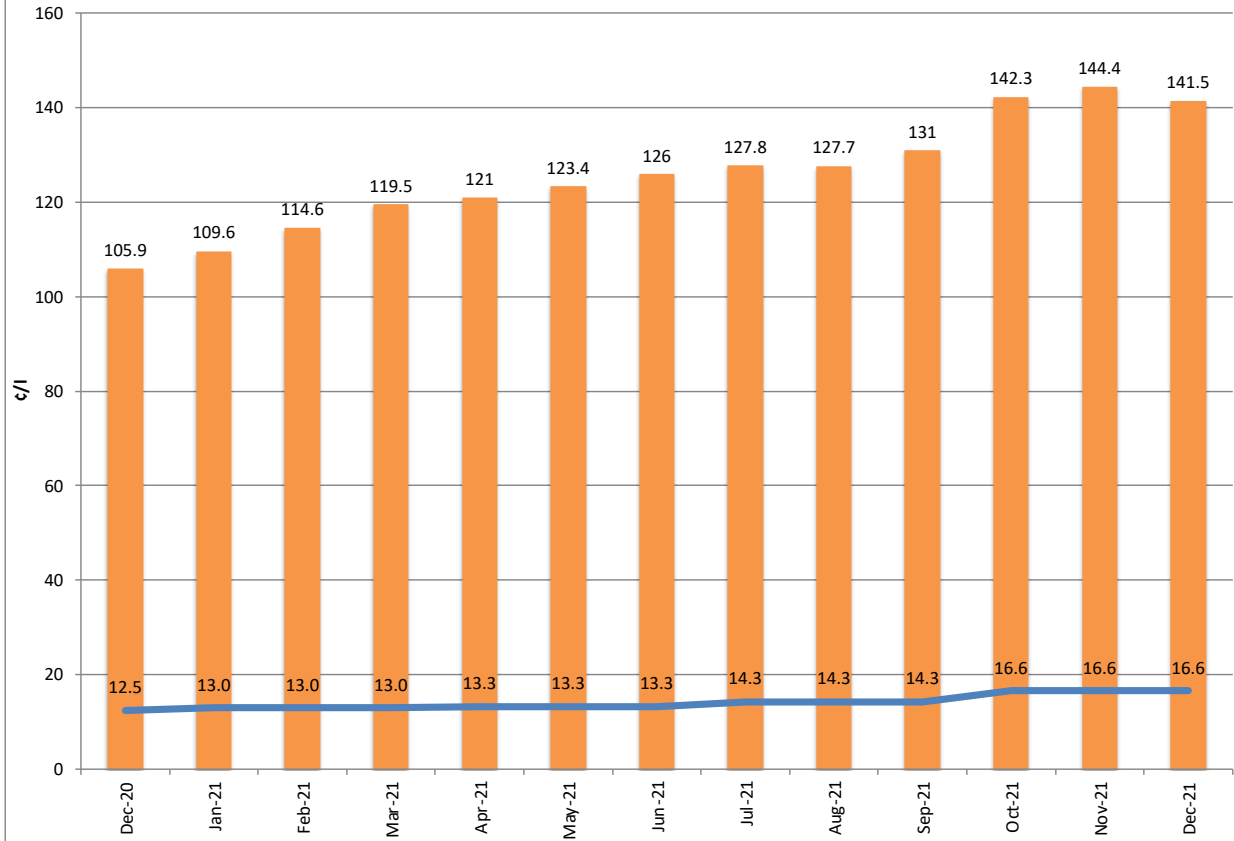
The Pyrowave technology platform is the result of innovation using microwaves to manufacture chemicals more efficiently and with a lower carbon release than traditional processes because it uses electricity which can be entirely renewable. This innovation reduces the environmental impact of products and reduces the waste generated by traditional processes.

One of its applications is to return plastic waste to its original form, monomers, which can then be reused in original applications identical to those using virgin materials. This approach avoids the extraction of virgin raw materials and therefore avoids all the environmental impacts associated with the transformation of these virgin materials into finished products.

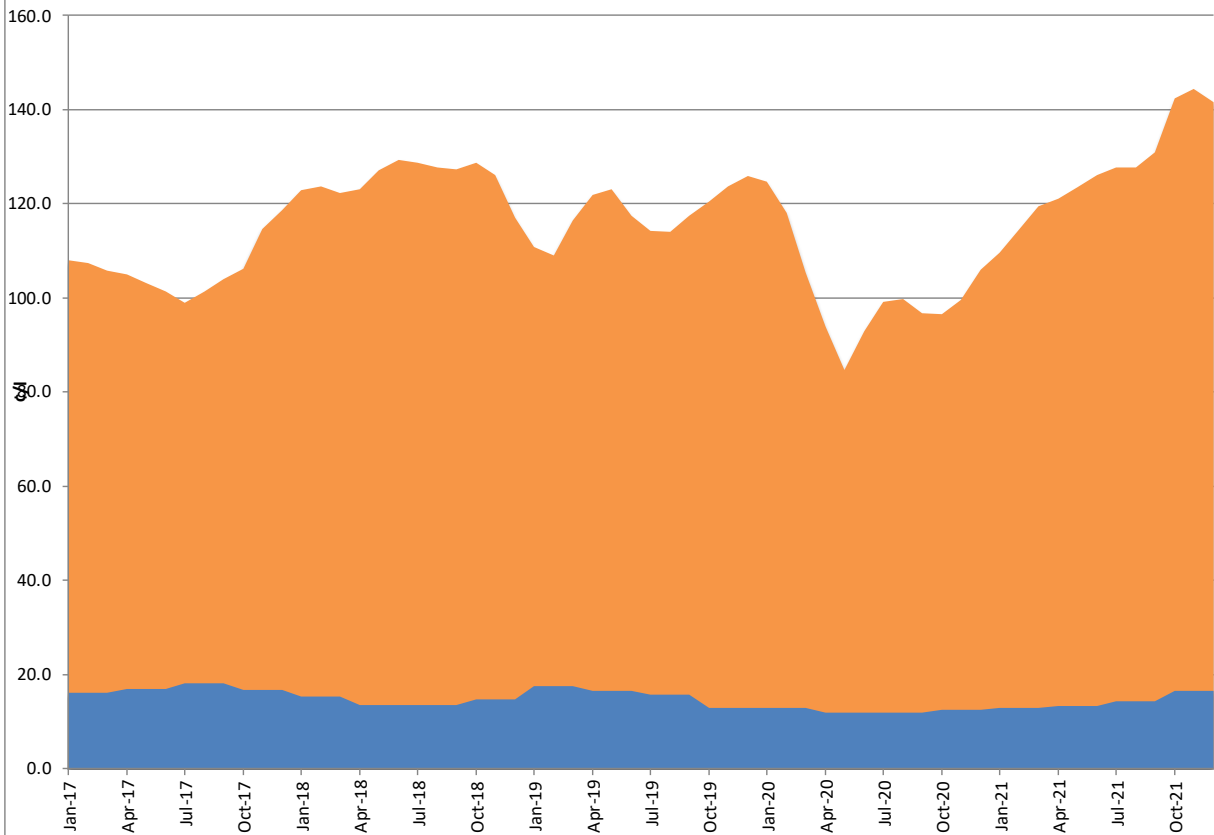
Iceland Opens Its First Self-Checkout Tool Library

Residents of Kópavogur in Iceland can borrow tools and equipment at the local library through their Hringrásarsafn initiative, based on a circular economy approach to consumption. For a biannual or annual fee, patrons can rent items from wire strippers to car battery chargers, to digital projectors. By sharing everything with the community, it helps save resources, raw materials, space, and money while also making things more accessible.

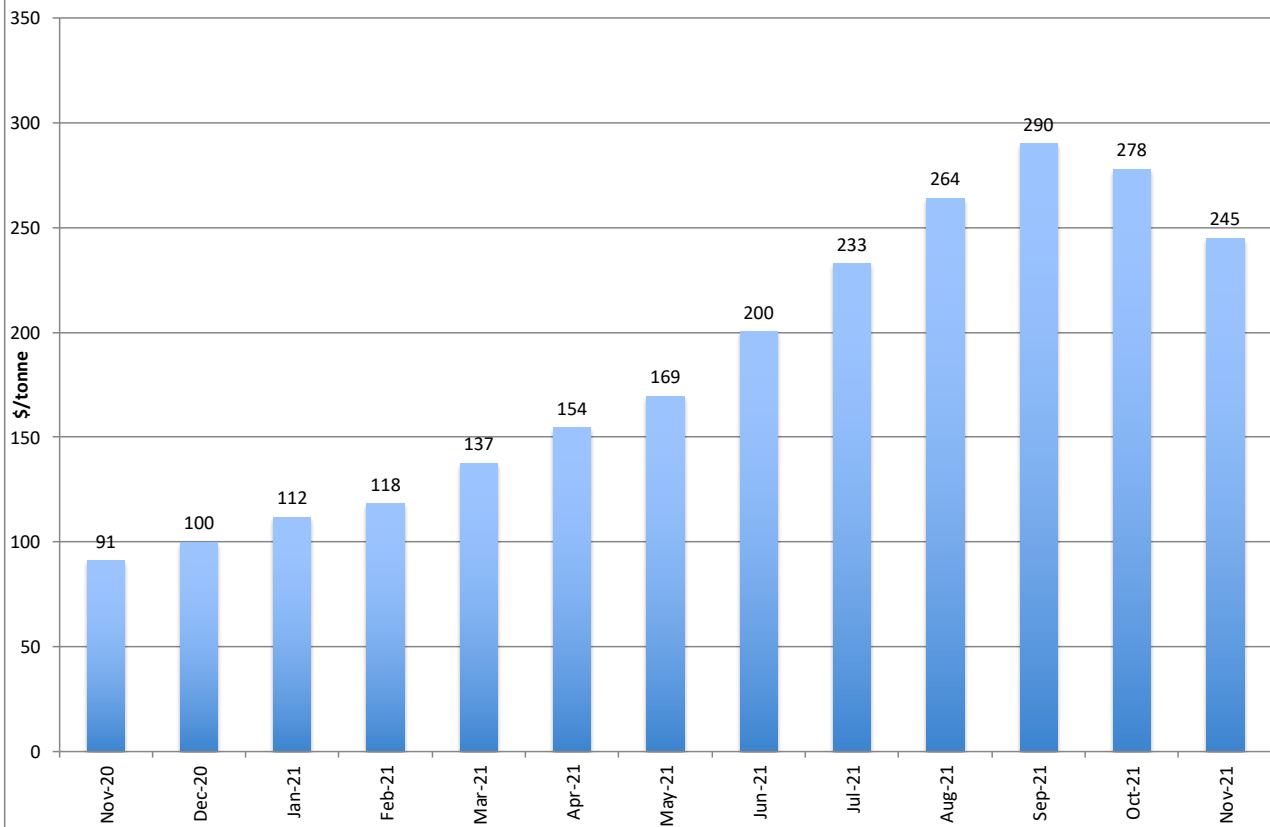
Diesel vs CNG Price (Retail incl. Tax)



Diesel vs CNG Price (Retail incl. Tax)



Commodity Prices



Commodity Prices

