

July 3, 2025

Submitted Via Environmental Registry of Ontario Public Comment Portal:

https://ero.ontario.ca/comment/reply/node/13440/comment
Ontario Ministry of the Environment, Conservation and Parks
Resource Recovery Policy Branch
40 St. Clair Avenue West, 8th floor
Toronto, ON M4V 1M2

RE: Amendments to the Blue Box Regulation

Freepoint Eco-Systems Holdings LLC ("Freepoint") appreciates the opportunity to provide comments on the Ministry of the Environment, Conservation and Parks' ("MECP" or "the Ministry") proposed amendments to Ontario Regulation 391/21 (the "Blue Box Regulation") published under Environmental Registry notice 025-0009 on 4 June 2025 (the "Proposed Amendments"). Freepoint's mission is to address the global waste plastic problem through solutions that will help create a more waste-free, circular economy.

Freepoint develops, constructs, owns and operates facilities in the United States and Europe that use "best-in-class" proven pyrolysis recycling technology to recycle a wide variety of types of plastic—many of which are not currently recycled through standard mechanical recycling methods—into liquid hydrocarbons that can be used to make new plastic and other products. Freepoint's pyrolysis process involves a thermal reaction that occurs in the absence of oxygen, which inhibits combustion (unlike incineration) to preserve the hydrocarbons that are the basic building blocks for plastic. Pyrolysis not only enables higher recycling rates through processing of hard-to-recycle plastic, such as flexible films, but it also produces a hydrocarbon feedstock that has a significantly lower carbon intensity than feedstocks created from fossil resources, while diverting waste from landfills and dramatically reducing the emissions created by incineration. Advanced recycling technologies like Freepoint's are essential for Ontario to meet its ambitious diversion targets, particularly for difficult-to-recycle plastics such as flexible films. Additionally,

as part of its efforts to help Canada achieve its plastic recycling goals, Freepoint recently became a registered processor with the Resource Productivity Recovery Authority.

The Proposed Amendments would fundamentally recalibrate the Blue Box program. While several of the changes may streamline processes and control costs, some changes, particularly if adopted without supporting measures, could undermine the program's long-term success. These concerns are (i) a five-year postponement of all recovery targets, (ii) slashing the flexible plastics target from 25% in 2026 and 40% in 2030 to a mere 5% in 2031, (iii) allowing for up to 15 percent of targets to be met through "energy recovery" without further requirements to avoid unintended consequences, and (iv) retention of the vague "best efforts" standard.

Freepoint's current and planned facility investments rely in part on the Regulation's original goals and recycling requirements. Freepoint's Hebron, Ohio plant, which intends to source plastic waste from Ontario, can recycle up to 80,000 tons of post-consumer flexible plastic each year. The proposed deferral and dilution of recovery targets create uncertainty and risk chilling additional North American investment just as new recycling facilities are being contemplated. Freepoint is concerned this could signal to markets that Ontario may not be implementing such standards now or in the future.

Freepoint urges adoption of phased, enforceable ramp-ups that keep Ontario essentially on track for the current general-material and flexible plastic goals. Freepoint agrees that energy recovery can be useful for genuinely non-recyclable material, which will be a moving target as technology and recycling infrastructure advances. However, such allowances must be tightly implemented so they do not discourage R&D, design-for-recycling initiatives, or deployment of new technologies. Finally, Freepoint supports replacing the ambiguous "best efforts" standard with a mandate that all collected material go to registered processors.

These adjustments will sustain regulatory momentum, safeguard existing private investment, give producers cost certainty, and keep Ontario aligned with national and global circular-economy goals.

I. Comment on Item 1 - Ontario Should Retain the 2030 Recovery Targets and Adopt Phased-in Interim Ramp-Up

Freepoint respectfully submits that Ontario can best achieve its dual goals of cost control and sustainability by retaining the 2030 recovery targets while implementing clear, phased interim milestones, such as those shown in the following Figure 1.

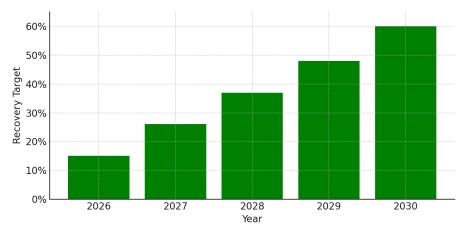


Fig. 1: Example of potential phased target milestones for rigid plastic

History shows that meaningful gains in recycling rates occur only after policymakers put aspirations into enforceable mandates. In the U.S., diversion rates began to climb in the 1990s after states adopted statutes requiring curb-side collection. Recent reports show a direct line between government mandates and higher diversion rates, ¹ and a 2024 U.S. Environmental Protection Agency report concluded that funds needed to modernize the U.S.'s material-recovery infrastructure would flow only with the help of policies that make higher recycling rates a non-negotiable obligation. ² Put simply, design-for-recycling initiatives, collection upgrades, new

For example, a 2023 study found that U.S. states with Recycling Refund programs (i.e. bottle bills) recycle approximately 34% of packaging, compared to 7% for non-Recycling Refund states. *See* The 50 States of Recycling, Eunomia Research & Consulting (2023), *available at* https://www.ball.com/sustainability/real-circularity/50-states-of-recycling.

² See An Assessment of the U.S. Recycling System: Financial Estimates to Modernize Material Recovery Infrastructure, U.S. Environmental Protection Agency (Aug. 2024), available at https://www.epa.gov/system/files/documents/2024-12/financial assessment of us recycling system infrastructure.pdf.

While these reports are focused on the U.S., the overlapping North American economic market and overlap among North American producers means that the same generally holds true for Ontario.

processing plants and breakthrough technologies emerge, and are financed, when regulation turns "should" into "must."

Capital investment in recycling infrastructure depends, above all, on clear and enforceable mandates. Infrastructure lenders and equity investors rely on predictable, multi-decade projections. Investors will not commit the substantial capital needed to develop modern recycling facilities if regulatory-driven demand is perceived as readily deferred or uncertain. Postponing material-specific targets risks permanently discouraging the very infrastructure Ontario needs, leading to fewer recycling options and higher compliance costs once targets are ultimately enforced. By contrast, keeping the 2030 targets and adding clear interim milestones would give producers planning certainty, spur timely investment, manage near-term costs, and signal Ontario's continued commitment to a more circular economy. Further, interim milestones will ensure producers remain engaged with the recycling community, fostering innovation and collaboration rather than delaying until regulatory deadlines approach.

Retaining Ontario's targets through a phased approach will clearly communicate Ontario's commitment to ongoing leadership in Canada's circular economy. Regulatory predictability gives investors the confidence needed to expand recycling capacity. Freepoint submits that expanding the supply of recycling services, not curbing demand, is the most durable and market-based way to control long-term costs. By maintaining the targets with thoughtful interim milestones, the Ministry can incentivize investment, manage compliance costs for producers, and reinforce Ontario's position as a pragmatic environmental leader.

II. Comment on Item 5 - Ontario Should Retain the Flexible Plastic Recovery Target and Implement a Phased Approach to 2035

Freepoint respectfully opposes the proposal to reduce and defer the flexible plastic recovery target. If adopted, Item 5 would replace the current 25% (2026) and 40% (2030) targets with a single 5% obligation in 2031. Although the Ministry cites technological limitations and near-term costs, Freepoint submits that existing and anticipated additional advanced plastic recycling capacity—including Freepoint's own facilities—can meet the original targets. The

proposed rollback would undermine Ontario's recycling objectives, dampen investor confidence, and ultimately increase long-term costs by hindering infrastructure development and removing incentives for technological innovation.

The Regulation's original 2026/2030 targets spurred investment in flexible plastic recycling technologies, including Freepoint's, precisely because it created a credible, time-bound demand signal. Freepoint's Hebron, Ohio facility is capable of processing at least 80,000 tons of flexible plastic per year. Freepoint, and similarly situated companies, will make decisions to construct additional facilities based in part on the 25% and 40% targets. Postponing market demand until 2031, then slashing it to only 5% (a level below the industry's *current* 10% diversion rate cited by the Ministry) could likely delay or defer new recycling projects, leaving producers with fewer options and higher costs when targets eventually do tighten.

Freepoint acknowledges that an immediate leap from 10 to 25 percent may be challenging for producers, and it takes time to permit, construct, and bring-online additional recycling facilities. However, that reality argues for graduated interim targets, not wholesale postponement. For example, a schedule of 10 percent by 2026, 25 percent by 2030, and ultimately 40 percent by 2035 would align capital investment with predictable demand.

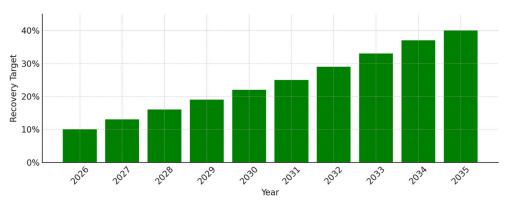


Fig. 2: Example of longer phased interim milestone schedule for flexible plastic

It would also give producers time to make necessary commercial arrangements and product redesigns, keeping Ontario on track to meet its recycling goals. Because flexible plastic diversion begins at roughly 10%, early targets are achievable through incremental collection and processing upgrades, while later goals coincide with the commissioning of new capacity.

Moreover, the Ministry's concern regarding technological availability overlooks recent commercial advancements. As noted, Freepoint's Hebron, Ohio, plant—expected to source material from Ontario—can process 80,000 tons of flexible plastic per year. Freepoint and other North American pyrolysis firms are planning additional facilities that could use Ontario material. Similarly, European rules have triggered major investments in advanced recycling facilities even before the EU's rules fully take effect. The Ministry's incorrect assessment of the available technology risks undermining industry momentum needed to further scale.

Maintaining robust flexible plastic recycling targets under a phased approach will also drive innovation in packaging design and development of new recovery and recycling technologies. Progressively stricter standards will push producers to collaborate with the recycling sector to develop packaging that improves sorting and recyclability. Equally important, meaningful yet achievable recovery targets will stimulate investment in research and development of new recycling technologies. Clear, staged targets will sustain momentum by keeping producers who rely on flexible plastic packaging engaged with the recyclers and invested in innovation.

Finally, the consultation appears to suggest that scaling flexible plastic recycling inherently raises costs, but Freepoint submits that experience shows the opposite. Waste management facilities, whether sorting, processing, or recycling, with consistent volumes achieve economies of scale, reducing per-unit recycling costs. Conversely, minimal targets such as 5% limit facility expansion, forfeit economies of scale, and ultimately raise costs. Meaningful, phased targets are therefore the best way to control costs.

For these reasons, Freepoint respectfully urges the Ministry to maintain the existing targets under a longer, phased milestone approach of 10% in 2026, rising to 25% by 2031 and 40% by 2035. Such a path sustains momentum and supports cost-reducing investment.

III. Comment on Item 6 - The Ministry Should Only Allow Energy Recovery to Count Toward Diversion Targets if Other Measures are Adopted to Ensure it Does Not Hinder Other Goals

Item 6 would allow producers to fulfill up to 15% of recovery targets through "energy-from-waste" processes, provided the material is deemed "non-recyclable." Freepoint appreciates the Ministry's goal of finding novel ways to divert truly non-recyclable materials from landfills. However, the proposal provides no guidance on who determines material is non-recyclable, how often the determination is reviewed, or how stakeholders can request changes. The proposal also fails to differentiate between incineration and fuel-production, despite the latter's significant environmental advantages.

Freepoint is concerned that, without safeguards, the proposed change could unintentionally divert plastics which are difficult—but not impossible—to recycle, such as flexible plastics, into incineration or low-value fuel applications. Moreover, the change may incentivize producers to increase their reliance on difficult-to-recycle materials instead of improving design or investing in new recycling technologies and infrastructure. Freepoint therefore recommends the following clarifications.

First, the Ministry should establish a transparent, evidence-based process for designating materials as "non-recyclable." At a minimum, the Regulation should (i) identify the decision-maker, (ii) set technical and economic criteria, and (iii) allow petitions, supported by commercial-scale performance data, to reclassify material as recycling technology and capacity continues to improve. The Ministry should also commit to periodic reviews (e.g. once every three years) to ensure the designation reflects current market and technological capabilities.

Second, to maximize environmental benefits and encourage recycling innovation, the Regulation should codify a hierarchy among recovery processes with recycling first, fuel recovery second, and incineration as a last resort, and require producers to ensure that material is managed at the highest feasible tier. Multiple studies have demonstrated that plastic-to-fuel production

offers a meaningful reduction in GHG compared to virgin fossil production.³ This savings rises even more when factoring in the GHG savings from avoided incineration of waste plastic, which is an emissions-intensive process. As an example, diesel fuel created from the pyrolysis of plastic waste provides a 90% reduction in GHG emissions when compared to traditional fossil fuel production and incineration of waste. Therefore, the following hierarchy prioritizing fuel production over incineration will best promote sustainable recovery practices.

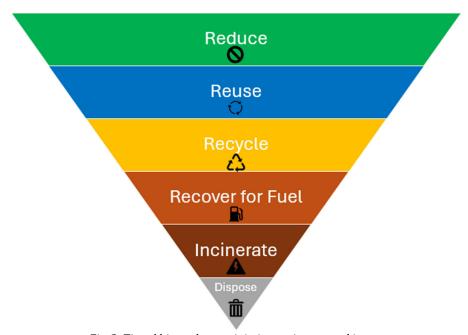


Fig. 3: Tiered hierarchy to minimize environmental impact

Under this framework, material that can be recycled (whether mechanically or via advanced technologies like Freepoint's) must be recycled, even if this prevents producers from counting it toward the 15-percent energy-recovery credit. Then, materials that cannot be recycled but are suitable for fuel production should be directed to that use before incineration is considered. Finally, producers claiming material is non-recyclable, or unsuitable for fuel production, should be required to demonstrate that alternatives that could be processed at a higher tier are not commercially feasible.

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See, e.g., P.T. Benavides, P. Sun, J. Han, J.B. Dunn, M. Wang, "Life-cycle analysis of fuels from post-use non-recycled plastics," Fuel, 203 (2017).

For these reasons, if the Ministry adopts Proposed Item 6, it should also adopt clear guidelines to determine when a material is genuinely non-recyclable, a tiered hierarchy among types of "energy-from-waste" processes that recognizes the dramatic environmental differences between fuel production and incineration, and requirements to ensure materials are processed at the highest feasible tier.

IV. Comment on Item 7 - The Ministry Should Shift Away From the "Best Efforts" Standard

The Ministry acknowledges that the "best efforts" standard creates confusion and is considering whether to "clarify that all collected materials must be sent to a registered processor and not directly to a landfill." Freepoint endorses this proposed clarification for several reasons. First, as the Ministry notes, this requirement already exists in other EPR regulations, so adopting it here will promote regulatory alignment. Second, requiring producers to send materials to registered processors will help guarantee consistent material flows, reducing investment risks in recycling infrastructure. Without such a requirement, producers may theoretically stockpile or self-dispose of material during the "best efforts" grace period, depriving new facilities of feedstock that could be processed rather than incinerated or landfilled. Finally, registered processors must report information to the Resource Productivity and Recovery Authority, which will enable Ontario and the public to track diversion rates. This information can help guide future efforts or evaluate the performance of any energy-recovery credits, if adopted. For these reasons, the Ministry should move away from the "best efforts" standard and adopt a clear regulatory requirement in its place.

V. Conclusion

Freepoint appreciates the Ministry's willingness to consider stakeholder perspectives and its efforts to improve Ontario's Blue Box program. By maintaining the existing recovery targets through a clearly phased interim approach, clarifying definitions and guidelines regarding energy recovery, and adopting a mandatory requirement to direct all collected materials to registered processors, the Ministry can ensure regulatory certainty, incentivize continued investment in

recycling innovation, and position Ontario as a leader within Canada's circular economy. Freepoint looks forward to continued collaboration with the Ministry to support the Province's ambitious environmental goals and help achieve economically sustainable recycling outcomes.