

July 10, 2023

Commissioner Loyzim
Maine Department of Environmental Protection
17 State House Station
Augusta, ME 04330

RE: Maine EPR for Packaging Stakeholder Meetings– Readily Recyclable, Program Goals,
Municipal Reimbursements

Dear Commissioner Loyzim,

Thank you for the opportunity to provide comments on the implementation of Maine’s Extended Producer Responsibility (EPR) law. These comments are submitted on behalf of Conservation Law Foundation’s (CLF) Zero Waste Project.

CLF’s mission is to conserve natural resources, protect public health, and build healthy communities in Maine and throughout New England. Through its Zero Waste Project, CLF aims to protect communities and our environment from the toxic dangers of unsustainable waste practices and advance waste reduction, diversion, and recycling. CLF is thrilled to see Maine lead the nation with the State’s new Extended Producer Responsibility (EPR) Program for Packaging pursuant to 38 M.R.S. § 2146.

We recognize that building a strong EPR for packaging program marks a huge advancement for recycling and packaging reduction statewide, and we were staunch proponents of LD 1541. Implementing the EPR for Packaging Program through clear, enforceable rules is critical to the program’s success. If implemented well, Maine’s EPR for Packaging Program will shift the financial burden for managing the end-of-life disposal and recycling of packaging from residents to the producers who make the packaging. By shifting the financial cost of recycling to producers, the program will incentivize environmentally superior behavior—incorporating post-consumer recycled content, reducing both the toxicity and the quantity of packaging, utilizing more reusable packaging, and creating packaging that is readily recyclable in Maine. The potential impact of a successful EPR for Packaging Program is tremendous.

Our comment focuses on three subjects discussed in stakeholder meetings over the past months: (1) defining “readily recyclable,” (2) setting concrete performance targets, and (3) using producer fees to invest in reuse. Ensuring that the definition of “readily recyclable” creates a list of materials that is both anchored in market realities and sustainable is core to the success of this program. Similarly, the program goals determine the success or failure of the law—a low bar will yield poor results, while setting the bar high will result in greater change toward a more sustainable future. As such, the criteria for readily recyclable should be set in rule and the program goals for recycling, reduction, and reuse should include numeric targets, increasing over time. Finally, the producer fees should be used to reimburse municipalities for reuse programs, which are core to the creation of a circular economy.

I. Readily Recyclable

As this law is meant to increase the recyclability of materials used in packaging, what counts as “readily recyclable” must be explicit but also alterable in response to changes in recycling technology and market realities. To create consistency for municipalities and producers and help build a steady market for materials to be recycled, the criteria for readily recyclable should be defined by rule. The annual process in which the criteria are applied to materials, as referenced in statute, will allow for needed flexibility to adapt to changing market circumstances.¹

The rule should include four criteria to define what is “readily recyclable”: that the material can be sorted by facilities that process post-consumer materials generated in Maine; that there is a consistent and regional end-market for the material; that there is minimal yield loss in the recycling process; and that materials destined for chemical recycling are not considered “readily recyclable” for the purposes of this program.

The first criterion for readily recyclable should be whether the material can be **sorted by entities that process post-consumer materials generated in the state**. For the purposes of this rule, any statutorily applicable packaging sold and used in Maine becomes a post-consumer material generated in the state. This criterion is so important that it was written into the laws of all three other states—California, Colorado, and Oregon—that have now passed EPR for packaging legislation.² Recycling requires infrastructure, and regardless of a material’s recyclability elsewhere, a piece of packaging in Maine will not be turned into a new product unless applicable facilities in Maine can sort and process that material.

The second criterion for readily recyclable should be whether there is a **consistent and regional market for the material as input into a new product**. A material without value on the market will not be bought and turned into a new product. Therefore, a material cannot be considered readily recyclable unless there are commodities buyers ready to do just that. This criterion, in tandem with the post-consumer recycled content mandates for plastic beverage containers in 38 M.R.S. § 1615, will help advance the circular economy the program envisions. To ensure this criterion is met, the Department should seek to verify where packaging material is sent to understand if it was truly recycled into a new product. The rule should look to the regional, rather than national or international, market to ensure that the carbon footprint of recycling is less than that of landfilling. Minimizing environmental harm and ensuring the economic feasibility of recycling are critical priorities defining readily recyclable; requiring a consistent and regional market will help ensure these priorities are realized.³

¹ Me. Stat. tit. 38 § 2146(13)(A)(2)

² California’s EPR law states that materials are suitable for curbside recycling if “[t]he category of covered materials can be made suitable for curbside collection and can be effectively sorted by the facilities receiving the curbside collected material for recycling or composting.” Cal. Pub. Res. Code § 42051.1 (l) (1) (A) (West 2023). The Colorado EPR law includes in its recyclability criteria, “availability of recycling services” and “recycling collection and processing infrastructure.” H.B. 22-1355, 2022 Leg., Reg. Sess. (Colo. 2022). Lastly, the criteria in Oregon’s EPR law for categorizing materials include, “[t]he material’s compatibility with existing recycling infrastructure,” and “[t]he practicalities of sorting and storing the material.” Or. Rev. Stat. 459A.914 (2022).

³ The other current EPR for packaging laws in the U.S. also emphasize consistency and sustainability of recycling markets. California’s law states that material must be sent to an end market such that the recycling process “benefits

The third criterion for readily recyclable should require that the material can be recycled with **minimal yield loss** during collection, processing and manufacturing. This consideration is necessary to promote the circular economy the program strives for, and to avoid incorporating unsustainable and harmful chemical recycling technologies into the program.⁴ Because chemical recycling technologies are, at best, recycling a fraction of what they are processing, this criterion would also exclude such detrimental and false solutions from the program.

The fourth criterion must establish that so-called **chemical recycling, otherwise branded as advanced recycling, is not recycling**. The plastics industry touts chemical recycling as the solution to the plastics problem, but in practice chemical recycling mostly entails using an enormous amount of energy to turn plastic into fuel while creating hazardous waste materials and toxic air pollutants that harm public health.⁵ Selling plastic components for conversion into fuel or energy has no effect on the consumption of virgin materials and should not be considered recycling. Maine’s definition of recycling already reflects this, excluding “energy recovery or energy generation by means of combust[ion].”⁶ While chemical recycling facilities do not burn fuel onsite, they do predominately produce feedstock for fuel that must be burned to be used.⁷ When a chemical recycling facility *does* employ plastic-to-plastic technologies, only a fraction of the plastic waste is used to make new plastic. In fact, with pyrolysis and gasification plants, only 1 to 14% of the plastics processed are retained and used to manufacture new plastics.⁸ The rules should clarify that a material is NOT “readily recyclable” if the only feasible way to “recycle” it is for it to be processed through advanced recycling, chemical recycling, combustion, gasification, incineration, pyrolysis, solvolysis, thermal desorption, waste-to-energy, waste-to-fuel, or any other chemical or molecular conversion process. Given the emerging and unproven nature of chemical recycling processes, the wide array of toxics produced by these technologies, and the potential for these toxics to result in air, water, and soil pollution that is harmful to public health and the environment, the Department should ensure that materials destined for such processes are not included in the regulatory definition of “readily recyclable”.

the environment.” Cal. Pub. Res. Code § 42041 (ad) (West 2023). The Colorado EPR law includes “recycling end markets” among its recyclability criteria. H.B. 22-1355, 2022 Leg., Reg. Sess. (Colo. 2022). Similarly, Oregon’s law includes in its criteria for categorizing materials, “[t]he stability, maturity, accessibility and viability of responsible end markets,” “[e]nvironmental factors from a life cycle perspective,” and “[e]conomic factors.” Or. Rev. Stat. 459A.914 (2022).

⁴ As a model, Oregon’s criteria for categorizing materials include “[t]he anticipated yield loss for the material during the recycling process.” Or. Rev. Stat. 459A.914 (2022).

⁵ Conor McGlone, *Is chemical recycling greenwashing?*, INST. OF ENG’G & TECH., (NOV. 7, 2022) <https://eandt.theiet.org/content/articles/2022/11/is-chemical-recycling-greenwashing/>; *Recycling Lies: “Chemical Recycling of Plastic Is Just Greenwashing Incineration*, NRDC, (Feb. 2022) <https://www.nrdc.org/sites/default/files/chemical-recycling-greenwashing-incineration-ib.pdf>.

⁶ Me. Stat. tit. 38, § 1771 (7).

⁷ Conor, *supra* note 4; Other U.S. EPR for packaging laws exclude using material as feedstock for fuel from “recycling” in their programs. California excludes “the production of energy or fuels.” Cal. Pub. Res. Code § 42041 (j) (2) (A) (West 2023). Colorado excludes “use as a fuel” from its definition of recycling. H.B. 22-1355, 2022 Leg., Reg. Sess. (Colo. 2022). Lastly, Oregon’s criteria for categorizing materials include “[t]he anticipated yield loss for the material during the recycling process.” Or. Rev. Stat. 459A.914 (2022).

⁸ James Bruggers, Inside Climate News, *Advanced Recycling of Plastic Using High Heat and Chemicals is Costly and Environmentally Problematic, a New Government Study Finds*, Jan. 19, 2023, available at <https://insideclimatenews.org/news/19012023/plastic-advanced-recycling-cost-environmental-impact/>.

By setting the above criteria into rule, the readily recyclable list can remain flexible enough to adjust to changing technological and market circumstances while also giving due notice to municipalities and producers about potential changes and ensuring the false solution of chemical recycling does not undermine the program's goals.

II. Program Goals: Clear, Numeric Recycling, Reduction, and Reuse Targets

The program goals will determine the success of this program. Clear goals will push producers to stop saddling Mainers with their trash, whereas vague goals will result in no change to the status quo. As such, the recycling rate, reduction, and reuse goals need to include numeric targets on a clear timeline to guide the program to success. While the other goals and performance targets should not be neglected, these performance targets are the most vital for preventing packaging waste from continuing to pile up in our landfills and burden our communities.

A. Recycling Rate and Recyclability Targets

As we know, a huge part of Maine's recycling rate success has been its nation-leading bottle bill. Maine should continue to lead by setting high recycling rate targets for packaging, with specific targets set for different kinds of materials.

In jurisdictions with longstanding EPR laws, EPR has been shown to increase recycling rates over time, with jurisdictions often meeting their targets for most materials. These success stories show that it is possible for Maine to set targets that are both ambitious and achievable. In 1991, before Germany's EPR law went into effect, the country's recycling rates were between 3-53%, depending on material.⁹ By 2016, Germany's recycling rates were 53-76.2%.¹⁰ Germany's 2022 targets were even higher, 80-90%, and the country achieved all but the plastics target.¹¹ Furthermore, Germany is poised to hit its 2025 90% recycling rate target for most materials.¹² British Columbia and Quebec's EPR for packaging programs have seen similar success, as shown in Appendix A¹³

Maine can use the recycling targets in other jurisdictions as guides for setting our own. California's law requires all plastic packaging to be recyclable or compostable by 2032 and that 65% of plastic packaging actually be recycled by that same year.¹⁴ Oregon's recycling targets for plastic and food service ware are 25% by 2028, 50% by 2040, and 70% by 2050.¹⁵ The European Union has set similar recycling rate targets, which are included in Appendix B.¹⁶

⁹ *Id.* at 27. For a list of materials and their recycling rates, see Appendix A.

¹⁰ *Id.*

¹¹ *Id.*

¹² *Id.*

¹³ *Increasing Recycling Rates with EPR Policy*, THE RECYCLING PARTNERSHIP 1, 9-13 (2023).

¹⁴ Cal. Pub. Res. Code § 42050 (West 2023).

¹⁵ Or. Rev. Stat. 459A.926 (2022).

¹⁶ Eunomia, *Extended Producer Responsibility for Packaging: Elements and Outcomes*, NAT'L WASTE AND RECYCLING ASS'N 1, 16 (2021), <https://wasterecycling.org/wp-content/uploads/2022/03/NWRA-report-v3-Final-Issued-.pdf>.

Like the European Union, Maine’s recycling targets should be raised every five years. By starting with a target for 2030, producers would have plenty of time to prepare for any changes they need to make. Even as the program is in its infancy, the 2030 targets should be higher than the current recycling rates for each material. Because more data is needed to set proper targets, targets beyond 2030 should be created during the 2030 annual process. By that time, the program will have produced the data necessary to set escalating targets every five years. In the meantime, at the very least, the program should aim to meet the statutory 50% recycling goal that Maine has failed to meet herein.¹⁷

In addition to overall recycling rate targets, the Department should set targets for what percentage of the producers’ packaging is “readily recyclable”, with increasing amounts of readily recyclable material aimed for every five years. Like the overall recycling rate targets, these targets should also be financially incentivized.

Importantly, if the Department determines that it does not have enough data to set numerical targets at this stage, the Department should at a minimum plan to use the data collected through the program to create incentivized targets that increase every five years. In this case, the current rulemaking process should anticipate establishing performance targets that are incentivized by eco-modulated fees in the future.

B. Reduction and Reuse Targets¹⁸

Reduction and reuse goals are also vitally important to the program. Reduction and reuse come before recycling on every waste hierarchy, including Maine’s.¹⁹ Without a clear emphasis on reduction and reuse, this program risks becoming merely a way to pay for the status quo, rather than an engine for change. Plastics recycling, with a national recycling rate between 5% and 9%, is innately limited.²⁰ We cannot rely on recycling to solve the plastics crisis.

Maine’s reduction and reuse targets can build off those set in California’s EPR law. California sets the following targets: 10% reduction of plastic packaging by 2027, 20% by 2030, and 25% by 2032, ten years after their law was signed.²¹ This reduction is to be achieved by replacing 10% of packaging with reusable or refillable systems and reducing the rest by right-sizing, light-weighting, or switching to bulk packaging.²² The European Union’s new packaging reduction targets, measured against 2018 levels, are as follows: 5% reduction by 2030, 10% by 2035, and 15% by 2040.²³ Maine should apply California’s progressive target percentages to all materials, not just plastics. As such, we suggest the following reduction targets, using the

¹⁷ 38 M.R.S. § 2132(1)

¹⁸ These reduction and reuse targets mirror those advocated for by Upstream. *See*, Upstream, *Maine EPR for Packaging Stakeholder Meeting – Program Goals*, March 27, 2023, <https://www.maine.gov/dep/ftp/temp/epr/comments/>

¹⁹ § 2101 (1).

²⁰ Beyond Plastics, *New Report Reveals that U.S. Plastics Recycling Rate has Fallen to 5%-6%*, May 4, 2022, <https://www.beyondplastics.org/press-releases/the-real-truth-about-plastics-recycling>

²¹ Cal. Pub. Res. Code § 42057 (a) (1) (West 2023).

²² Cal. Pub. Res. Code § 42050 (a) (2) (B) (i) (West 2023).

²³ *Reuse Policy Wins in 2022*, UPSTREAM (Jan. 19, 2023), <https://upstreamolutions.org/blog/policy-wins-2022>.

numbers obtained during the statewide recycling needs assessment as a baseline: 20% by 2030 and 25% by 2035.

Furthermore, as in California’s law, the reuse goal should be tied to the reduction goal, with 10% of the 2035 reduction target met through reuse. We believe that these targets are achievable with the right fee incentives; producers are on notice now of the need to reduce. They will also be incentivized by the need to comply with other states’ EPR laws, especially California’s. Lastly, this program will build on itself. As producers switch to reusable and refillable systems and find other ways to use less single-use packaging, more producers will share and adopt best-practices across the industry, thus leading to further reduction. As such, we believe that future targets should require increased percentages of reduction to be met by reuse, with 20% of the 2040 reduction target met by reuse. We encourage DEP to include in the rulemaking a process to use the data produced by this program to adjust these targets to align with the realities in Maine or to make material-specific future targets, incentivized by fee structure.

III. Municipal Reimbursements for Reuse

A crucial aspect of reaching the reduction goals will be reuse programs. In addition to the requirement of goals for reduction of packaging material, the law requires goals for increased reuse of packaging material.²⁴ Reuse programs are crucial to reaching either of those goals, and these programs will most likely be run by municipalities. Because these statutory goals are meant to be achieved, the rules must provide support to those municipalities setting up these reuse programs.

It is important that municipalities be eligible for reimbursement for creating and operating reusable packaging initiatives. Such reimbursements are authorized by the statute: “[t]he method for calculating reimbursements must ... be designed to *incentivize municipal waste management activities that represent higher priorities on the solid waste management hierarchy*” (emphasis added).²⁵ Furthermore, the “Investments in education and infrastructure” section states that “[t]he department shall ensure that preference for funding is given to proposals that *support the State’s solid waste management hierarchy*” (emphasis added).²⁶ Reuse is the second-highest waste management activity on the hierarchy, after reduction.²⁷ Reuse, of course, is instrumental to reduction. Therefore, producer fees paid to the stewardship organization should be authorized to be paid out to municipalities as either municipal reimbursements or infrastructure investments. This rule would support the overall purpose of the program: to reduce the amount of single-use packaging. Reuse is written into the fabric of the statute, as evidenced by the word appearing ten times²⁸— in addition to two implicit mentions in mandates to move waste up the hierarchy.²⁹ It is up to the Department to ensure that the program supports the infrastructure required to make reusable packaging a reality.

²⁴ § 2146 (13) (5).

²⁵ § 2146 (13) (A) (4).

²⁶ § 2146 (11) (C).

²⁷ §2101 (1).

²⁸ § 2146 (1) (S); (3) (A) (4); (5) (G); (8); (8) (B) (2) (reuse mentioned twice); (8) (B) (4); (8) (D) (1); (13) (A) (1) (c); (13) (5).

²⁹ § 2146 (11) (C); (13) (A) (4).

IV. Conclusion

In conclusion, there should be at least four criteria for determining readily recyclable, and they should be set in rule to create consistency. Furthermore, the recycling rate, recyclability and reduction goals should include progressively ambitious targets that are incentivized through eco-modulated fees. Lastly, the reuse rate targets should also increase over time, aided by investing in reuse systems within municipalities. We hope that the Department will take full advantage of this process by proposing rules that ensure that Maine continues to lead the nation in its commitment to reduction, reuse, and recycling, through creating an EPR for Packaging Program that is ambitious, stringent, and effective.

Thank you for the opportunity to comment on this important rulemaking process.

Respectfully submitted,

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Appendix A

Recycling Rates in Select Other Countries with EPR for Packaging Laws

Germany³⁰

1991 Recycling Rates by Material

- Packaging in Total: 37.7%
- Glass: 53.7%
- Paper/Cardboard: 28%
- Tinplate: 33.8%
- Aluminum: 5.1%
- Plastics: 3.1%

2016 Recycling Rates by Material

- Packaging in Total: 76.2%
- Glass: 85.6%
- Paper/Cardboard: 81.1%
- Tinplate: 92.9%
- Aluminum: 88%
- Plastics: 53%

British Columbia³¹

2017:

- All packaging: 71%
- Paper and cardboard: 85%
- Plastic: 26%
- Metal: 66%
- Glass: 60%

2021:

- All packaging: 81%
- Paper and cardboard: 95%
- Plastic: 25%
- Metal: 83%
- Glass: 85%

³⁰ Eunomia, *supra* note 12, at 27.

³¹ THE RECYCLING PARTNERSHIP, *supra* note 17, at 9.

Quebec³²

2004:

- All packaging: 28%
- Paper: 34%
- Plastic: 9%
- Glass: 22%
- Metal: 16%

2006/7

- All packaging: 52%
- Paper: 56.2%
- Plastic: 27%
- Glass: 66%
- Metal: 38%

2019:

- All packaging: 64%
- Paper: 71.5%
- Plastic: 40%
- Glass: 79%
- Metal: 41.5%

³² *Id.* at 13.

Appendix B

Recycling Rate Targets in Other Countries

European Union Recycling Targets³³

By 2025:

- All packaging waste: 65%
- Plastic: 50%
- Wood: 25%
- Ferrous Metals: 70%
- Aluminum: 50%
- Glass: 70%
- Paper/Cardboard: 75%

By 2030:

- All packaging waste: 70%
- Plastic: 55%
- Wood: 30%
- Ferrous Metals: 80%
- Aluminum: 60%
- Glass: 75%
- Paper/Cardboard: 85%

Germany 2022 Recycling Targets³⁴

- Glass: 80% (achieved)
- Paper/Cardboard: 85% (achieved)
- Ferrous Metals: 80% (achieved)
- Aluminum: 80% (achieved)
- Plastics: 90%

British Columbia: 75-78% recycling rate target for packaging and paper.³⁵

Quebec: 75% 2023 paper and packaging recycling target.³⁶

³³ Eunomia, *supra* note 12, at 27.

³⁴ Eunomia, *supra* note 12, at 27.

³⁵ Guidance to Facilitate Consistent Extended Producer Responsibility Policies and Programs for Plastics, CANADIAN COUNCIL OF MINISTERS OF THE ENVIRONMENT 1, 67(2022) <https://ccme.ca/en/res/eprguidanceen.pdf>.

³⁶ *Id.*

