



State of Oregon Department of Environmental Quality

Draft Fiscal and Racial Equity Impact Statement

Plastic Pollution and Recycling Modernization Act 2023, Rulemaking 1

Introduction

DEQ invites public comment on proposed rules and rule amendments to Chapter 340 of the Oregon Administrative Rules, related to the Plastic Pollution and Recycling Modernization Act (“Act”). The Act establishes a producer responsibility program for packaging, food serviceware, writing and paper products. The purpose of this first rulemaking is to address specific topics related to:

- Defining and clarifying Producer Responsibility Organization(s) obligations, including meeting responsible end market criteria, program plan timelines, the plan review and annual administration fees, market share and PRO coordination if multiple PROs operate in the state.
- Clarifying opportunities, requirements and procedures for local governments and their service providers to be eligible for funding and reimbursement for transportation costs, generator-facing contamination reduction programming, and recycling service expansion.
- Establishing Oregon’s first statewide Local Government Recycling Acceptance List, Uniform Statewide Collection List, and PRO Recycling Acceptance List.
- Defining convenience standards, collection targets and performance standards for PRO recycling services.

The proposed rules and rule amendments included in this rulemaking are based on discussions with DEQ’s rulemaking advisory committee which included members of the regulated community, community-based organizations, producer responsibility organizations and local governments. Additionally, information received during prior consultation with a technical working group, earlier meetings with interested parties from the service providers and local governments, PROs from other jurisdictions, other interested parties, and the public were also used to inform the topics subject to this rulemaking.

Not all requirements of the Act are addressed in this current rulemaking. Some will be addressed through a subsequent rulemaking, while others do not require rules to implement.

Fee Analysis

These proposed rules would establish new fees, as directed by legislation.

Brief description of proposed fees

The Plastic Pollution and Recycling Modernization Act (Senate Bill 582, 2021) requires certain producers¹ of packaging, food serviceware and printing and writing paper to join a Producer Responsibility Organization, which is a nonprofit membership organization that will administer this producer responsibility program. The PRO will propose to DEQ and then implement an approved program plan that describes how this will be achieved, including how the PRO(s) will satisfy a wide variety of financial and operational obligations that are contained in statute.

DEQ is required to establish a one-time plan review fee and an annual fee calculated to cover DEQ's administrative costs specific to many (although not all) elements of the Act. These fees are not paid by businesses directly, rather they will be paid by the PRO(s). The PRO(s) in turn will recover these and other expenses by assessing membership fees to producers of covered products.

The program plan and annual fees will pay for DEQ's review of the PRO(s) program plan and DEQ's annual expenses for administering, implementing, and enforcing provisions of the Act as described in ORS 459A.938(1)(b).

Reasons

The proposed fees would address policy changes and fees established by statute. The Act outlines the obligations of PRO(s) and establishing the proposed fees will allow DEQ to implement the Act as directed by Oregon Legislature.

Fee proposal alternatives considered

DEQ did not consider alternatives. The proposed fee model was established in legislation and DEQ is proposing to implement the model as directed.

Fee payers

Only Producer Responsibility Organizations would pay these fees to DEQ.

Affected party involvement in fee-setting process

The proposed fee model, including types of fees and overall structure, was established through collaborative discussions with relevant parties during the legislative development of Senate Bill 582. No PROs for printed paper, packaging, and food serviceware exist within Oregon at this time; however, DEQ's prior consultations with PRO(s) from other jurisdictions informed the development of these proposed fees.

¹ For the purposes of this rulemaking "producers" are largely businesses as defined in ORS 459A.866. Importantly, they are not always the manufacturer of packaging, food serviceware, or printing and writing paper (also referred to as "covered products") but are more often the business users of such products that purchase them from the manufacturer and then sell them in Oregon.

Summary of impacts

The proposed fees would be paid by the PRO(s), as established in legislation. The PRO(s) in turn will recover their expenses using membership fees paid by entities defined in the Act (producers) that produce certain types of products for sale in Oregon.

The proposed fees would support DEQ's administration of the Act, specifically:

- Review of program plan and program plan amendment submissions from prospective and existing PRO(s) per ORS 459A.875 and 459A.878 (the program plan review fee); and
- Ongoing administration, implementation, and enforcement of provisions ORS 459A.860 to 459A.975, but excluding ORS 459A.955, 459A.956 and 459A.959 (the annual administration fee). Also excluded is the implementation of ORS 459A.941, whereby DEQ will establish a new program to reduce the environmental impacts of covered products through means other than recycling. That program will be established through a separate fee as required by ORS 459A.941(4). That new fee will be established in a subsequent rulemaking.

The proposed fees are critical to DEQ being able to successfully implement the Act, as directed by the Oregon Legislature, and to modernize Oregon's recycling systems.

Fee payer agreement with fee proposal

No PRO(s) for producers of packaged items, paper products and food serviceware are currently established in Oregon, so DEQ was not able to solicit direct feedback from these entities as part of the rulemaking process. Representatives of two PRO(s) active in Canada did review these rules through their participation on the RAC. DEQ does expect to receive feedback from entities that may organize to operate as PRO(s) in Oregon before this rulemaking process is complete.

Links to supporting documents for proposed fees

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| Plastic Pollution and Recycling Modernization Act (Senate Bill 582, 2021) | https://olis.oregonlegislature.gov/liz/2021R1/Downloads/MeasureDocument/SB582 |
|---|---|

How long will the current fee sustain the program?

This is not applicable. There is no current fee, as the proposed fees are new and are designed to establish the program efforts as directed in legislation.

Fee Amount Details

The proposed fee amounts are as follows:

- Program plan review fee: a one-time fee of \$150,000 due from a PRO at the time of submission of a program plan or a renewal program plan. If there are multiple PROs, each will pay the fee. Due to a statutory 10 percent market share minimum for PROs,

DEQ expects 1-3 PROs will initially operate in the system, although it could theoretically contain up to ten PROs.

- Annual administration fee: up to \$4,000,000 per year paid for the first four program years (2025-2028) and up to \$3,000,000 paid per year thereafter (2029 onward).² If there are multiple PROs, the fee will be divided among the PROs in proportion with to the amount of market share held by each producers participating in each PRO. DEQ may adjust the fee downward each year to reflect actual operating costs.

Fee schedule

The proposed fees include a one-time plan review fee for each PRO(s) established in Oregon and an annual fee for continued improvement and ongoing implementation of recycling modernization programs and activities at DEQ. The plan review fee will become effective in 2024 when prospective PRO(s) submit their plans for a March 31, 2024, deadline. The annual fee will be paid for the first time in 2025 when approved PRO(s) begin their programs beginning July 1, 2025.

² The first four annual fees are higher than the later annual fees because they encompass reimbursement of DEQ's start-up costs incurred in 2021-2025.

Statement of Fiscal and Economic Impact

183.335 (2)(b)(E); 183.540 [Fiscal Impact Analysis](#)

Overview

This proposed rulemaking will clarify and implement portions of the Act, passed in 2021 by the Oregon Legislature. The Act requires producers covered products to support and expand recycling services for their products in Oregon.

These proposed rules are specific to topics, including PRO program plan content, DEQ administrative fees, funding and reimbursement for local governments related to select eligible recycling-related expenses and creating a materials acceptance list for materials eligible for collection in Oregon, as well as collection targets, convenience standards and performance standards for recycling of certain materials by PRO(s). The Materials Management Program will begin a second rulemaking beginning mid-2023 to implement additional elements of the Act, building on these foundational structures.

The proposed rules and rule revisions included in the rulemaking are based on discussions and input provided by DEQ's Rulemaking Advisory Committee, which included representatives from waste collectors and processors, local governments, non-profit organizations, waste generators, PRO(s) and producers of covered products.

Fiscal and Economic Impacts Overview

The proposed rules support the actions directed by the Oregon Legislature in the Act. The proposed local government compensation, materials acceptance lists and PRO obligation rules help DEQ establish and implement recycling programs and regulatory structures that provide more uniform and equitable access to recycling opportunities for communities across the state.

The proposed rules would help mitigate specific barriers to access, such as high transportation costs for rural and remote communities and non-standardization of materials accepted by on-route recycling collection services and drop-off-style depots. Additionally, these rules clarify how PRO(s) will distribute funding to local governments and their service providers³ across the state for the expansion of recycling collection service.

This expansion of services, accompanied by culturally-specific outreach and education materials, will provide equitable access to recycling service for all communities across Oregon.

³ For the purposes of this rulemaking, a local government's service provider is defined in the Act as:

- (a) A collection service franchise holder under ORS 459A.085;
- (b) Any person authorized by a city or county to provide recycling collection services described in subsection (25)(a) to (d) of this section; or
- (c) Any person authorized by a metropolitan service district to provide recycling collection services described in subsection (25)(d) of this section.

I. Fiscal Impacts of Local Government Compensation Rules:

A portion of the membership fees collected by the PRO(s) from the producers of covered products will be directed to local governments and their respective service providers. DEQ anticipates several positive impacts related to the requirements in ORS 459A.890 and the proposed rules relevant to this section.

Local governments will be eligible for compensation from the PRO(s) to pay for:

- Specific costs associated with on-route collection.
- Specific startup and operational costs at recycling collection depots.
- The costs for transporting collected materials from a recycling depot or recycling reload facility to a commingled recycling processing facility or a responsible end market that is 50 miles or further away.
- Contamination reduction efforts up to \$3 per year per capita. While statute dictates the amount payable to local governments, the proposed rules clarify which census data must be referenced and clarifies the administrative procedures for reimbursement.

II. Fiscal Impacts of Materials Acceptance Lists Rules:

Proposed rules related to material acceptance lists will require local governments, their service providers, and commingled recycling processing facilities, to collect and process higher volumes and a more complex mix of recyclable materials than is currently the case outside of the Portland metro tri-county region. These higher volumes will increase the costs of collecting and processing recyclables. However, cost increases will be partially offset by reductions in garbage collection and disposal costs, and some costs will shift from local governments and processing facilities to PRO(s).

Separately, other proposed rules related to material acceptance lists will impose additional fiscal impacts on the PRO(s) for the provision of convenient recycling services for a variety of materials such as fuel canisters and block white expanded polystyrene. These impacts will also be offset by benefits to Oregon households and businesses, which will realize additional opportunities to recycle and reduce waste management expenses.

Finally, higher levels of recycling reduce the pollution associated with virgin resource extraction and manufacturing, which in turn reduces a wide variety of societal costs such as those associated with climate change, air and water pollution, habitat disruption, and depletion of non-renewable resources.

III. Fiscal Impacts of Producer Responsibility Organization Obligations Rules:

The proposed rules governing PRO obligations will primarily impact and impose costs upon the PRO(s) themselves, with costs passed on to their member producers through membership fees. The rules requiring PROs to meet convenience and performance standards for recycling of certain items, along with rules requiring that waste collected for recycling is sent to responsible end markets are likely the most

financially impactful to the PRO(s) among the proposed rules.⁴ From these responsible end market rules, anticipated costs include auditing recycling supply chains, as well as the implementation of solutions if required.

Through the proposed rules, PRO(s) must also pay administrative costs for DEQ's implementation of the Act, including the cost of interim coordination among multiple PRO(s) should DEQ approve multiple PRO plans. The rules impose costs on the PRO(s) who will recoup the expenses by charging the producers a membership fee. Related PRO obligation rule(s) will provide several benefits, including:

- Responsible End Markets:
 - increased public confidence that materials collected for recycling are recycled
 - maximum environmental benefits and reduced environmental and public harm risk from recycling activities (through the responsible end markets rules)
- Market Share and Modified Market Share: fair allocation of costs among PRO(s) and producers
- Fees and PRO Coordination: effective administration of the Act by DEQ

Statement of Cost of Compliance

State agencies

DEQ does not anticipate that other state agencies will incur costs or benefits different than those described under the public section, below.

Local governments

The Act provides funding opportunities for all communities, regardless of size, and has some new requirements for cities with populations over 4,000 and other regulated local governments.

DEQ anticipates that Local Governments may incur compliance costs related to:

- Recordkeeping and invoicing PROs for compensation
- Ongoing operational costs of expanded recycling service that are not eligible for reimbursement
- Collecting the materials on the Local Government Recycling Acceptance List

Due to variability between local government operations, DEQ is not able to quantify the specific costs of compliance. Most local governments recover oversight and administration expenses via the application of a "franchise fee", which often manifests as a percentage-of-revenue or percentage-of-expenditure surcharge on franchised services.

⁴ Rules requiring PROs to compensate local governments and their service providers will also impose significant financial impacts on the PRO(s). However, those requirements are already largely established in statute, whereas the materials on the PRO Recycling Acceptance List, convenience and performance standards for the recycling of such materials, and responsible end market requirements are discretionary and more subject to EQC approval.

A. Local Government Compensation Rules

I. Transportation Costs Reimbursement

Local governments and service providers will work with the PRO(s) directly to determine the method to be used for calculating transportation costs. Local governments may incur some costs associated with recordkeeping and invoicing for compensation.

II. Recycling Services Expansion

DEQ anticipates that this proposed rule will result in additional reporting and recordkeeping requirements for those local governments that choose to voluntarily request reimbursement for costs associated with recycling service expansion. These costs will most likely be related to the opportunities for local governments to participate in periodic needs assessment surveys, administered by DEQ or a contractor to DEQ, determining exact needs and negotiating compensation details with the PRO(s), and documenting recycling costs and procedures to request reimbursement from PRO(s). In most cases, any ongoing operational costs that are not eligible for reimbursement by the PRO will likely be recovered through user fees (e.g., garbage bills) as opposed to being an expense to the local government itself.

III. Contamination Reduction Programming

DEQ anticipates some fiscal impact created by the proposed rules due to associated recordkeeping costs. Local governments will be responsible for documenting costs and establishing reimbursement procedures with the PRO(s).

B. PRO Obligation Rules

DEQ does not anticipate that local governments will incur costs from the rules on PRO obligations. Local governments will benefit from the responsible end market obligation by having increased confidence that the materials accepted for recycling in their communities are being recycled responsibly. Such transparency in turn will increase the public's confidence in the recycling system. It is difficult to quantify these benefits in direct financial terms.

C. Materials Acceptance List

DEQ anticipates that there may be compliance costs for local governments or their service providers for costs associated with collecting the materials on the Local Government Recycling Acceptance List. In most cases, the costs incurred by local governments themselves will be relatively low, because most recycling services are paid for by ratepayers (system users), and not local government general funds. The fiscal impacts of the proposed Recycling Acceptance List rules can be categorized by costs associated with on-route collection, at disposal sites or depots, general operational costs, and administrative compliance costs.

Producer Responsibility Organizations

As defined in ORS 459A.863, a Producer Responsibility Organization is a nonprofit organization established to administer a producer responsibility program. PROs will have the highest costs of compliance relative to all other parties.

It is important to distinguish between the cost of compliance with statute, and the cost of compliance with the proposed following rules:

A. Local Government Compensation Rules

DEQ proposes three rules associated with local government compensation, transportation costs reimbursement, recycling service expansion and contamination reduction programming. Currently DEQ is unable to quantify the fiscal impacts of these rules.

I. Transportation Costs Reimbursement

The PRO(s) are required to pay for eligible transportation costs established in statute and most of these are not related to this proposed rule.

The proposed rules establish that transportation costs also include administrative costs including, but are not limited to, costs related to staffing and the hiring and managing of staff. The proposed rules shift these costs from local governments and service providers to the PRO(s). DEQ anticipates that administrative costs will be low relative to the magnitude of the transportation costs themselves.

II. Recycling Service Expansion

DEQ anticipates that this proposed rule will result in additional reporting and recordkeeping requirements for those local governments that choose to voluntarily request reimbursement for costs associated with recycling service expansion. The Act requires that the PRO(s) pay for specific costs related to expanding and providing recycling collection services for covered products, per ORS 459A.890(5)(a). This includes both on-route collection and recycling depot service.

III. Contamination Reduction Programming

The rules related to contamination reduction programming require local governments will be responsible for documenting costs and establishing reimbursement procedures with the PRO(s).

B. Materials Acceptance List Rules

DEQ's estimate of the compliance costs to the PRO for the activities listed above compare the costs of DEQ's rule concept against a set of hypothesized alternatives, as opposed to the costs of Oregon's current recycling system. This is because continuation of the current system is not a viable alternative under the Act. The Act requires the use of a uniform statewide collection list and the provision of a certain degree of programming such as contamination reduction efforts and processing of mixed recyclables at permitted facilities. The discretion available to the Environmental Quality Commission as part of this rulemaking is limited to what materials are on that uniform list and how are they collected.

An evaluation of option comparisons and associated costs, and an estimate of the costs of Oregon’s current recycling system is provided in the Cascadia Consulting Group’s 2023 report titled, “Overview of Scenario Modeling: Oregon Plastic Pollution and Recycling Modernization Act.”

The proposed rules for materials acceptance lists establish the contents and complexity of the acceptance lists. These proposed rules implement only a portion of the Act but may result in financial impacts to the PRO(s) if existing recycling services need to expand to accommodate materials added to the list. Expanding services will create new and increased costs related to:

- Collection and processing of materials on the Local Government Recycling Acceptance List.
- “Responsible end market” disposition requirements for materials on the Uniform Statewide Collection List.
- Recycling materials and achieving collection targets, convenience standards and performance standards for covered products on the PRO Recycling Acceptance List, and requirements to send such materials to “responsible end markets”.

I. Local Government Recycling Acceptance List: Costs associated with the collection and processing of materials on the Uniform Statewide Collection List

DEQ is not able to fully quantify the specific fiscal impacts of these proposed rules. Fiscal impacts to the PRO(s) associated with collection and processing costs for materials on the Uniform Statewide Collection List are limited to the following:

- Reimbursement to local governments and their service providers under ORS 459A.890(5) for expansion of collection service *only to the extent that such expansion is with a consequence of a more expansive commingled list than what is currently collected*. In some cases, expansion will be for other reasons, and so will not be a fiscal impact of the Local Government Recycling Acceptance List rule.
- Reimbursement to local governments and their service providers under ORS 459A.890(2) for transportation of collected materials to distant processing facilities or end markets *only to the extent that such transport costs increase due to a more expansive Local Government Recycling Acceptance List*. These impacts are estimated at about \$0.3 million annually.
- Reimbursement to commingled processing facilities under ORS 459A.920 and .923 *only to the extent that costs (net of revenue) increase due to a more expansive Uniform Statewide Collection List*. DEQ is unable to estimate the extent of the impacts because of the Act’s integrated components and the concurrent changes and system efficiencies that will occur.

II. Impacts associated with “responsible end market” disposition requirements for materials on the Uniform Statewide Collection List

Materials included in the Uniform Statewide Collection List, which includes most of the materials proposed for inclusion on the Local Government Recycling Acceptance List, prompts additional requirements on the PRO(s), to ensure that such materials:

1. Are sent to responsible end markets,

2. Are managed according to the hierarchy of materials management options in ORS 459A.015 and
3. Are managed in an environmentally protective way through to final disposition.

These requirements may impose compliance costs on the PRO(s) because there is a joint obligation for PRO(s) and commingled recycling processing facilities to ensure that materials reach responsible end markets. Currently DEQ does not have sufficient information to estimate associated compliance costs with these requirements.

III. PRO Recycling Acceptance List: Impacts associated with the recycling of materials and the achievement of collection targets, convenience standards and performance standards for covered products

This proposed rule requires the PRO(s) to provide for recycling of materials on the PRO Recycling Acceptance List, and to meet collection targets, convenience standards and performance standards. All materials on the PRO Recycling Acceptance List and all targets and standards are the subject of this rulemaking. DEQ is unable quantify all the fiscal impacts of these rules on the PROs due to several unknown variables, including:

- The expenses PRO(s) will incur because the Act (ORS 459A.896(1)(a)) includes a requirement that PRO(s) first contract with existing depots “where possible”. DEQ cannot guarantee how many existing depots will choose to, and successfully contract with a PRO(s). DEQ has instead applied professional judgment to estimate how many such facilities might take this opportunity.
- Compliance costs because it is unknown how the PRO(s) itself will respond to this mandate. The Act provides PRO(s) significant flexibility in how a PRO may achieve convenience standards.

DEQ estimates that the net direct costs to Oregon’s recycling system⁵ of the proposed rules for PRO Recycling Acceptance Lists, including collection targets, convenience standards, and performance standards may be on the order of \$24 to \$29 million annually (in 2021 dollars with capital costs amortized). An estimated \$6 to 9 million of that total involves costs associated with personal vehicle use that would be incurred voluntarily by households and others choosing to deliver recyclables to PRO collection points.

Major costs to the PRO(s) include:

- Approximately \$19 - \$21 million annually to provide recycling service for ten different materials at up to two hundred different locations across the state. If PRO(s) can optimize collection points more efficiently than modeled, their compliance costs may be lower.
- Approximately \$1 million annually to cover increased operational costs at commingled recycling processing facilities.

⁵ For system boundaries limited to local government and PRO obligations contained in ORS 459A.

Additionally, PRO(s) or their contractors will benefit from approximately \$1 million/year in commodity revenues, and other users of the system will benefit from approximately \$1 million per year due to reduced garbage collection, transfer and disposal costs.

C. PRO Obligations Rules

DEQ anticipates that PRO(s) will incur costs to comply with the rules governing their obligations. Costs associated with the two PRO fees are described above. Costs to PROs associated with other PRO obligation rules are as follows:

- Responsible End Markets
- PRO Coordination
- Market Share and Modified Market Share

I. Responsible End Markets:

As discussed, PRO(s) must ensure that materials collected for recycling are sent to responsible end markets and are managed in an environmentally protective way until final disposition.

DEQ is currently unable to estimate to potential cost of compliance with these provisions for these materials. To implement this obligation, PRO(s) will incur costs for auditing and/or certifying recycling supply chains. If out of compliance, PRO(s) may incur costs to come into compliance by implementing solutions, such as the development of alternative markets. DEQ cannot provide an estimate the costs associated with implementing solutions until after July 1, 2025. This is when data on existing recycling supply chains for Oregon’s recyclables will be submitted to DEQ.

II. PRO Coordination:

The proposed rules clarify the coordination requirements if multiple PRO(s) submit program plans to DEQ and receive approval. DEQ proposes to serve as interim coordinator until a PRO coordination plan has been approved or until December 31, 2026, whichever comes sooner. The PRO(s) would pay DEQ’s associated costs, approximately \$1.1 million from April 2024 through to December 2026.

III. Market Share and Modified Market Share:

Proposed rules include a formula termed “modified market share” to fairly divide system costs among multiple PRO(s). The potential fiscal impacts for PRO(s) will be proportional to the product-specific financial burden to Oregon’s recycling system of the products sold into the state by their member producers.

PROs will be responsible to cover DEQ’s costs to develop an index of material-specific financial burden factors to be used in calculating modified market share in the first year of the program.

Public

The proposed rules establish no compliance obligations directly on the public. However, impacts of the rule will result in some indirect fiscal impacts, both negative and positive.

As discussed previously, many of the costs associated with the proposed rules are largely set in the Act. Any fiscal impacts of proposed rules on PRO(s) will be paid by producer members. One potential negative impact on the public depends on whether and how producers pass on additional costs to consumers in Oregon. This has been difficult to estimate, although a DEQ-commissioned study of the impact of similar requirements in Canada indicate that the costs to the public will be minimal.

Anticipated positive impacts from the rules include:

- The improvements to Oregon’s recycling system will transfer certain expenses from collection and processing companies currently paid by the ratepayers to the PRO(s). All other things being equal, this should reduce the rates charged to ratepayers, such as households and businesses.
- Oregon households and businesses will also have new opportunities to further reduce expenses for disposing of garbage or paying for a subscription or similar recycling service. For example, households and others currently transporting materials such as expanded polystyrene to distant collection points would benefit from a more convenient network of collection sites.
- Compensation for long distance (50 miles or more) transportation costs may benefit recycling programs and system users in rural areas, who are far from end markets and processing infrastructure. These rules may transfer certain expenses currently paid by ratepayers.
- More and improved recycling will reduce environmental impacts, a central objective of the Act. DEQ estimated the potential changes in environmental outcomes for thirteen different types of impacts, such as emissions of greenhouse gases and air toxics. For each of these outcomes, impacts are then converted to estimates of “social costs”. DEQ estimates that transitioning from the current recycling system to the system contained in the Act, and further clarified in these rules, could reduce social costs by approximately \$29 million annually. This likely understates the full magnitude of benefits, as DEQ’s social cost assessment is limited to only 13 types of environmental impacts. Not included, for example, is one of the more profound impacts of these rules (and the Act), which is to reduce Oregon’s contribution of plastics waste into the oceans, rivers, and disadvantaged communities that may currently result from inadequate separation, processing and exports.

Implementation of the Act will reduce such societal costs but not all of those benefits have been quantified. Similarly, the stability offered to collection programs and waste generators associated with uniform, statewide acceptance lists, and the emotional benefits that individuals realize from increased confidence that the materials they separate for recycling will be managed in responsible ways, are very real economic benefits that DEQ has not attempted to quantify.

Anticipated Business Impacts

The impacts of these rules are anticipated to be proportionately similar for most businesses regardless of their size. The Act itself provides exemptions for small businesses, although the definition of “small business” is defined differently from the definition used for this document. The proposed rules do not address these exemptions. DEQ estimates that there are 11 commingled recycling processing facilities operating in the state, but currently does not have the information to distinguish how many fall under the “large” or “small” category.

Large businesses: Businesses with more than 50 employees

Based on membership data provided by the Oregon Refuse and Recycling Association on March 6, 2023, DEQ can provide an estimate of the service providers that would be considered a large business for the purposes of this section and are anticipated to be impacted by the proposed rules. The estimates of cost of compliance by the proposed rules to large businesses apply to the following industry sectors: producers of covered products, processors of materials, and waste service providers.

| Large Business/ Sector Type | Business Count |
|--|--|
| Service Providers | 8 |
| Commingled recycling processing facilities | This information is currently unavailable. |
| Producers of covered products | This information is currently unavailable |

A. Local Government Compensation Rules

DEQ proposes three rules associated with local government compensation, transportation costs reimbursement, recycling service expansion and contamination reduction programming. These rules are anticipated to have both fiscal impacts to large businesses.

I. Transportation Costs Reimbursement

At this time, DEQ is unable to determine the total cost associated with the transportation cost reimbursement rule to large businesses.

The proposed transportation costs reimbursement rules are anticipated to have positive fiscal impacts on “large” service providers operating within Oregon. Transportation costs paid by PRO(s) will provide these companies operating a recycling depot and/or a recycling reload facility compensation for transportation when they must transport recyclable materials 50 miles or more to reach a commingled recycling processing facility or a responsible end market. This ensures that it will not be cost prohibitive for a collection company to move low-value material(s) to market.

Commingled recycling processing facilities or, processors, who are considered large businesses should not be directly impacted by the transportation cost reimbursement. The provision of freight reimbursement should make it more viable for distant communities to collect materials for recycling. This should increase the tonnage of material ultimately

directed to commingled recycling processing facilities, and the financial opportunity associated with processing and marketing such materials.

DEQ anticipates indirect fiscal impacts of the transportation costs reimbursement rules on large businesses who meet the Act's definition of a producer. The Act requires that producers pay fees for the total amount of eligible covered product(s) they sell, offer to sell or distribute in or into Oregon to the PRO(s). Expenses incurred by the PRO(s) will be compensated by the PRO's members, but DEQ is unable to provide an estimate at this time.

II. Recycling Service Expansion

At this time, DEQ is unable determine the total fiscal impacts to large businesses associated with service expansion because these costs will be informed by a Needs Assessment survey currently in progress.

The proposed recycling service expansion rules are anticipated to have positive fiscal impacts for service providers. The PRO(s) will be responsible for certain costs associated with the expansion and provision of recycling collection services, including for on-route and at depots. For on-route expansion, ongoing labor costs are not an eligible expense and may impose fiscal impacts. However, for depot expansion, ongoing operational costs, such as labor, will be eligible for funding from the PRO(s).

It is anticipated that processors will experience a positive fiscal impact from the proposed service expansion rules because newly established or expanded on-route and depot collection programs, statewide, will lead to an increased volume of material being brought to commingled recycling processing facilities. This will result in more material for processors to handle, market and profit from.

III. Contamination Reduction Programming

As discussed previously the proposed rules clarify which census data must be referenced and clarifies the administrative procedures for reimbursement. DEQ does not anticipate fiscal impacts to large businesses related to these rules.

B. Materials Acceptance Lists Rules

The proposed materials acceptance list rules will create fiscal impacts on waste and recycling collection companies. Costs associated with collecting materials on the proposed Uniform Statewide Collection List are expected to be several million dollars higher each year than collection costs would be for a less comprehensive list. At the same time, as materials shift from the garbage stream into the commingled collection system, garbage collection, transfer and disposal costs are expected to decrease.

The materials acceptance list rules are anticipated to have fiscal impacts on commingled recycling processing facilities. DEQ expects that new processing facilities may be built, and existing facilities will be required to invest in upgrades, new equipment and implement new procedures to process the materials proposed for inclusion in the Uniform Statewide Collection List. The higher costs associated with processing larger volumes and a more

complicated list should be compensated by fees paid by the PRO(s) to processing facilities under ORS 459A.920 (Contamination Management Fee) and 459A.923 (Processor Commodity Risk Fee). In some cases, higher costs associated with equipment will be offset by savings as mechanization replaces the use manual labor.

Finally, the proposed rules will have fiscal impacts on businesses that are classified as “producers” of covered products. The PRO(s) will charge membership fees to their producer members based on the quantities of different materials they sell into Oregon and the costs that each material imposes upon the PRO(s). The membership fee schedule will be established by the PRO(s) and DEQ is unable to estimate the impact of proposed rules on the producer membership fees. (Please see “PRO Obligations Rules” below for additional discussion of these impacts.)

C. PRO Obligations Rules

The proposed rules related to the PRO obligations are anticipated to have indirect fiscal impacts on large businesses that are producers of covered products and do not qualify for a small producer exemption. The producers of covered products will be required to join and pay membership fees to PRO(s) that will establish the membership fee schedule and administer a producer responsibility program.

The proposed rules require that the PRO(s) structure its fee schedule to cover its costs, and in a multi-PRO scenario, the PRO’s overall costs will be proportional to its modified market share, the formula being proposed in rule.

The PRO(s) will be establishing the membership fees and at this time, DEQ has not estimated the projected costs to individual producers.

Small businesses: Businesses with 50 or fewer employees

The impacts of the proposed rules on small businesses will be similar to large businesses as discussed above, although the impacts should be proportionately smaller. Additionally, the Act provides for an exemption for small producers from the requirement to join and pay fees to a PRO(s). The exemption applies to producers that sell less than one metric ton of covered product into Oregon each year, or which have global revenues of \$5 million or less.

ORS 183.336 Cost of Compliance Effect on Small Businesses

1. Estimated number of small businesses and types of businesses and industries with small businesses subject to proposed rule.

| Small business/sector type | Count of Small Businesses |
|--|--|
| Service Providers | 40 |
| Commingled Recycling Processing facilities | This information is not currently available. |
| Producers of covered products | This information is not currently available. |

The types of industries subject to the requirements of these proposed rules include service providers, processing facilities, and producers of covered products, as those terms are defined in ORS 459A.863 and 459A.866. DEQ has not performed a market analysis to estimate the number of businesses, small or large, who meet these defined criteria as part of this proposed rulemaking. Of the small business sectors that will be impacted by proposed rules, the producers of covered products be obligated to pay a membership fee to the PRO(s).

2. Projected reporting, recordkeeping, and other administrative activities, including costs of professional services, required for small businesses to comply with the proposed rule.

The costs incurred by small businesses will be based on the fees and processes established by the PRO(s), not DEQ. DEQ does anticipate some costs associated with the labor and administration of providing PRO-requested information, to be incurred by small businesses. Such requirements are not the subject of this rulemaking.

3. Projected equipment, supplies, labor, and increased administration required for small businesses to comply with the proposed rule.

The costs incurred by small businesses will be based on the fees and processes established by the PRO(s), not DEQ. DEQ does anticipate some costs associated with the labor and administration of providing PRO-requested information, to be incurred by small businesses.

4. Describe how DEQ involved small businesses in developing this proposed rule.

The RAC convened for this rulemaking included representatives of small businesses and membership organizations. The proposed rules are based on legislation that included significant engagement with potentially affected parties, including small businesses.

Documents relied on for fiscal and economic impact

The requirement to list the documents relied on to determine fiscal impact is separate from and in addition to the similar list in the Rules Affected, Authorities, Supporting Documents section above.

| Document title | Document location |
|---|--|
| Plastic Pollution and Recycling Modernization Act (Senate Bill 582, 2021) | Oregon Legislature website, SB 582 |
| Overview of Scenario Modeling: Oregon Plastic Pollution and Recycling Modernization Act (Cascadia Consulting Group, Mar. 14 2023) | DEQ Recycling website |
| Memo: Impact of Extended Producer Responsibility Fees for Packaging | DEQ Recycling website |

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|---|---|
| and Printing Paper on Price of Consumer Packaged Goods (RRS, Feb. 19 2021) | |
| Supplemental Information: Selected Responses to DEQ's Recycling Acceptance Lists Request for Information | DEQ Recycling website |
| Supplemental Information: Recyclability of Paper Cans | DEQ Recycling System Advisory Council website |
| Materials Lists Technical Workgroup: Comparative Life Cycle Assessment of Expanded Polystyrene Dispositions | DEQ website |
| Materials Lists Technical Workgroup: Comparative Life Cycle Assessment of Glass Collection and Recycling | DEQ website |

Advisory committee fiscal review

DEQ appointed an advisory committee for this rulemaking process. As ORS 183.33 requires, DEQ will ask for the committee's recommendations on:

- Whether the proposed rules would have a fiscal impact,
- The extent of the impact, and
- Whether the proposed rules would have a significant adverse impact on small businesses; if so, then how DEQ can comply with ORS 183.540 reduce that impact.

The committee will review the draft fiscal and economic impact statement at its sixth meeting, on April 11, 2023. The recommendations and discussion of the committee will be documented in the minutes for that meeting.

Housing Cost

As ORS 183.534 requires, DEQ evaluated whether the proposed rules would influence the development cost of a 6,000-square-foot parcel and construction of a 1,200-square-foot detached, single-family dwelling on that parcel.

DEQ determined the proposed rules would have minimal impacts on these development or construction activities. The proposed rules and related fees would be paid largely by PRO(s), which would be funded through membership fees paid by the producers of specific types of products sold in Oregon. Producers of packaged products, including construction materials, may recover their membership fee expenses by passing those costs on to customers, such as wholesalers, retailers or homebuilders. In theory, this could result in higher retail prices for packaged goods such as plumbing and lighting fixtures. Evidence for these types of price impacts is anecdotal, inconsistent, and not well documented. Further, the price of packaging contributes relatively little to the cost of home construction and even less to the development costs of land. It is further unlikely that those producers or the PRO(s) would modify business operations or take other actions that would have other effects on housing costs or activities. Finally, any such cost increases might be offset by cost reductions associated with the expanded availability of no-fee recycling opportunities, as well as potential reductions in garbage/recycling fees as discussed previously.

Racial Equity

ORS 183.335(2)(a)(F) requires state agencies to provide a statement identifying how adoption of this rule will affect racial equity in Oregon.

The scope of this racial equity impact statement is for the proposed rules developed for the first rulemaking of the Plastic Pollution and Recycling Modernization Act. This is the first of two planned rulemakings, and the proposed rules would change Oregon's recycling requirements to meet the directives and objectives of the Act (Senate Bill 582, 2021). Each change or new provision may have an individual impact while also having an overall, cumulative impact.

This state- and system-wide update will make recycling easier for the public to use, expand access to recycling services, result in upgrades to the facilities that sort recyclables, and create environmental benefits while reducing social and environmental harms, such as plastic pollution. This rulemaking addresses multiple topics including PRO obligations, local government compensation, and the materials acceptance lists. Within each topic, DEQ finds that there are likely positive racial equity impacts and does not anticipate any negative racial equity impacts.

I. Producer Responsibility Organization Obligations: Responsible End Markets

The discrepancy between the quantity of materials generated and marketed to end markets, and the ability of those markets to deal with the materials in ways that do not harm public health or the environment, is an on-going issue within the recycling industry. DEQ's proposed rules regarding responsible end markets support the Act's objectives to benefit Oregon's environment and minimize risk to public health and worker safety. By requiring that materials collected for recycling in Oregon all go to responsible end markets, as defined in the law and further subject to criteria established by DEQ through this rulemaking, the proposed rules are designed to improve the environmental and social benefits of recycling.

These proposed rules could address negative impacts of recycling facilities upon adjacent communities, which are more likely to include communities of color due to systemically racialized zoning and land use practices. By requiring PRO(s) and commingled processing recycling facilities to send waste only to responsible end markets, as defined in the proposed rules, DEQ expects to achieve public health, social and environmental benefits for communities disproportionately burdened by the processing and disposition of recycled materials.

II. Local Government Compensation

The proposed rules would create funding structures to improve recycling opportunities, particularly for communities and individuals across Oregon underserved by the current system. This includes tenants in multifamily buildings, and residents in exurban and rural communities and other areas that are located far from major recycling infrastructure, which

is primarily located in the Portland area. In Oregon, these groups make up 12.5 percent of low income and minority community members ⁶, who are disproportionately non-white.

The funding structures established through the Act, and clarified in these proposed rules will benefit underserved communities by:

- Providing local governments or a local government’s service provider(s) with funding to cover the capital costs associated with either establishing or expanding an on-route program for collection of recyclable materials (RMA covers the single-family, commercial and multifamily sectors), or covering start-up and operational costs associated with recycling depots.
- Reducing financial barriers for getting recyclables from distant areas to commingled recycling processing facilities or responsible end markets by providing financial support for the transportation of collected materials. This should significantly equalize recycling costs between different areas of the state.
- Creating standards and requirements for non-urban communities to provide recycling services to their residents, consistent with services available in urbanized portions of the state.

III. Materials Acceptance List

These proposed rules would improve equity of service for all communities across Oregon by requiring the acceptance of materials on a uniform statewide collection list, regardless of location or proximity to recycling facilities. The recommended convenience standards for materials on the PRO Recycling Acceptance List will further expand recycling communities in all counties of Oregon. Additional standards ensure that at least some collection points will be accessible to users of public transit, and that cities with multiple collection points must have those collection points distributed throughout the community. Performance standards will help to ensure that collection points are maintained and avoid litter or other hazards, regardless of neighborhood or location. The creation of uniform lists also allows for clear and consistent information and messaging to all people across Oregon, including the availability of information in languages other than English to ensure compliance with state and federal laws for meaningful and equitable access to government services. The intent is to distribute more standardized benefits, including improved access to recycling, and reduce disproportionate burdens across communities.

Documents relied on for this section

| Document title | Document location |
|---|--|
| The State of Multitenant Recycling in Oregon | DEQ website |
| Plastic Pollution and Recycling Modernization Act: Senate Bill 582 (2021) | Oregon Legislature website, SB 582 |

⁶ Kaiser Family Foundation, 2021, Poverty by Race/Ethnicity: <https://www.kff.org/other/state-indicator/poverty-rate-by-raceethnicity/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D>

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|---|--|
| Historical Context of Racist Planning: A History of How Planning Segregated Portland (City of Portland, 2019) | City of Portland website |
|---|--|

Appendix I:

Uniform Statewide Collection List: Option comparisons and associated costs

Under the Act, PRO(s) have several financial obligations related to materials on the Local Government Recycling Acceptance List. As local governments implement the requirements of the List, some of the additional costs they may incur would be eligible for funding or reimbursement by the PRO.

DEQ's estimate of the compliance costs to the PRO compare the costs of DEQ's rule concept against a set of hypothesized alternatives, as opposed to the costs of Oregon's current recycling system. An estimate of the costs of Oregon's current recycling system is provided below. Continuation of the current recycling system in Oregon, with more than a hundred local governments each choosing which materials will be collected for recycling, is not a legally allowable or realistic future scenario to compare against when evaluating the fiscal impact of this proposed rule.

Comparisons of Different Uniform Statewide Collection List Options:

DEQ draws its estimates of fiscal impacts from extensive modeling of system costs conducted by Cascadia Consulting Group and a team of subcontractors, under contract to the Department. The financial model has been constructed and revised over a several-year period and incorporates data on waste composition, generation and material flows, and capital and operational costs of community engagement, material collection, processing/marketing and disposal. The data is drawn from communities across Oregon and elsewhere. Elements of the model were also reviewed by a separate Technical Work Group convened by DEQ during 2022. A report summarizing modeling methods and outputs can be viewed at <https://www.oregon.gov/deq/recycling/Documents/RMAModeling.pdf>.

Cascadia Consulting Group modeled several different scenarios that isolate differences in material flows and program costs for Uniform Statewide Collection Lists of varying length and complexity. The two most extreme scenarios involved:

- A relatively short list, consisting of corrugated and other kraft packaging paper (e.g., brown paper bags), a variety of printing and writing papers, non-polycoated paperboard (e.g., cereal boxes), molded pulp (e.g., egg cartons), packaging tissue paper, aluminum and steel cans, small scrap metal, and bottles and jars made of PET, HDPE and PP plastics.
- A relatively long list, consisting of materials listed above as well as most other PET, HDPE and PP packaging (including buckets and pails), aseptic and other polycoated cartons, polycoated paper cups, plastic food serviceware (cups, clamshells, etc.), rigid polystyrene packaging, aerosol containers, and bulky HDPE and PP products (such as children's and patio furniture and laundry baskets and hampers).

The Uniform Statewide Collection List proposed in this rule is of moderate length (and associated cost impacts) when compared against these two extremes. Regardless, when considering the two options, the gross recycling costs (excluding revenue) are expected to vary by less than 5 percent (or approximately \$10 million/year, amortized). Net recycling and garbage system costs are expected to vary by less than 1 percent (or approximately \$7 million/year, amortized). The primary reasons for the relatively small variability in gross costs between options are as follows:

- **Fixed costs:** Certain costs are constant across all collection scenarios
- **Amortization of capital:** Certain costs associated with a more expansive list involve capital expenditures for facility upgrades, especially at processing facilities. Cascadia's model amortizes capital expenses, thereby spreading their impacts over multiple years.
- **Existing collection infrastructure:** In most communities, the recycling collection infrastructure associated with the Opportunity to Recycle Act already exists. In communities that currently have limited acceptance lists, accepting more materials may require some restructuring of routes (additional trucks may be needed as they will fill more rapidly), but these impacts increase costs at the margin as opposed to requiring the establishment of entirely new services. High-volume materials (such as cardboard and mixed paper) are included even in the least ambitious Uniform Statewide Collection List scenario; a more ambitious list does not necessarily add a significant amount of volume. Meanwhile decreases in route efficiency (fewer stops per route) associated with more materials in recycling collections are offset by increases in route efficiency on the garbage side of operations: fewer materials in the garbage can allow garbage collection trucks to serve more customers per truck.
- **Processing system efficiencies:** A more extensive commingled acceptance list leads to a complex series of fiscal impacts at processing facilities. Greater complexity results in greater in-bound contamination, which increases processing costs. These impacts are partially reduced due to the assumed effectiveness of new, PRO-funded and local government-implemented generator-facing contamination reduction programming (required by ORS 459A.929 and paid for by ORS 459A.890(4)). In the case of the Portland metro tri-county region, where acceptance lists are already of a complexity similar to that proposed in this rule, the presence of generator-facing contamination reduction programming should reduce inbound contamination at the processing facilities (compared to current collections). Acceptance of a wider range of materials also provides processing facilities with opportunities to recover more material and dispose of less, as some materials that are currently treated as contamination (e.g., clear plastic cups) are now targeted for recycling. Regardless, while a more complex inbound stream will increase processing costs, Cascadia's model assumes that commingled processing facility operators will respond to a more complex Uniform Statewide Collection List with two important changes, both of which increase operating efficiencies and mitigate cost increases. The first assumption is that the network of processing facilities will diversify. As opposed to most facilities trying to process all (or most) materials,

DEQ anticipates and Cascadia has modeled that some facilities will expand capacity to process all materials, while others will focus primarily on recovering fiber, passing the more complicated and difficult mixed container stream on to specialized facilities for what is called “secondary processing”. The second change is an assumption that processing facilities will increasingly rely on automation, such as optical sortation, robotics, and artificial intelligence. Highly automated systems tend to have lower operating costs, as amortized capital tends to be less expensive than manual labor.

- **Revenues and Disposal Savings:** Finally, the creation and adoption of the uniform statewide collection list and the PRO recycling acceptance list will result in the recycling of more materials. This will provide a fiscal benefit by reducing costs associated with garbage collection, transfer and disposal, which are the single largest category of costs in Oregon’s system. This dynamic is discussed next.

Comparison to Existing System Costs: For reference and comparison, Oregon’s current system of recycling services provided under the Opportunity to Recycle Act, along with the closely associated provision of garbage collection and disposal, has annual direct costs estimated at approximately \$984 million (2021 dollars). This estimate excludes costs for services that are not directly in the scope of the Act, such as yard debris/organics recovery, household hazardous waste, other extended producer responsibility laws (e.g., E-Cycles, bottle bill) and the extensive network of private recycling services (e.g., scrap metal).

Of the estimate provided above:

- Garbage collection, transfer and disposal, along with overall system administration (customer service, billing, etc.) comprises the majority of costs (approximately \$790 million).
- Recycling costs are dominated by collection (approximately \$149 million). Most of those costs are associated with on-route collection as opposed to depots at disposal sites.
- Initial transfer/transport of collected recyclables (transport following initial collection, to commingled processing facilities or direct to end markets) contributes relatively little (approximately \$14 million).
- Processing of the mixed recyclables costs approximately \$55 million, some of which is offset by commodity revenues. Commodity revenues are highly variable due to the volatile nature of commodity markets. An expected mid-point range of revenues for a historically average year is around \$32 million.
- Finally, local governments and service providers currently spend around \$8 million annual on recycling outreach and promotion.

The Act uses a shared responsibility model where system ratepayers (households, businesses) continue to pay for all costs associated with the collection and disposal of garbage, almost all costs associated with recycling collection services provided by or under the direction of the local government, and most costs associated with current levels of outreach. The PRO(s) will pay for most transfer/transport costs (recyclables, not garbage), processing of mixed recyclables, enhanced community outreach (including generator-facing

contamination reduction programming), and expansion of collection services (both for local governments, as well as for materials on the PRO Recycling Acceptance Lists).

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