OREGON DEQ RECYCLING SYSTEM FRAMEWORKS RESEARCH: DRAFT SCENARIOS FOR CONSIDERATION

Presented to Recycling Steering Committee and Legal & Relational Frameworks Subcommittee: December 17 2019
AGENDA

• Approach to Scenario Analysis

• Recap of Oregon Framework

• Initial Draft Scenarios

• Work Session to Refine Scenarios for Study
SCENARIO DEVELOPMENT AND EVALUATION
PUTTING IT ALL TOGETHER: SCENARIO BUILDING
OUTLINE OF JANUARY 31 PRESENTATION

• For each scenario:
  • Roles and responsibilities of key players
  • Financing and operational flows diagram
• Key Elements
  • Operational
  • Financing
  • Governance
• Benefits
• Shortcomings
• Key considerations for implementation
In addition to information covered in the presentation:

• Narrative summary of relationship of scenario to functions
• Key factors to consider in transition from Oregon baseline to scenario
  • Legal changes
  • Regulatory approaches
  • Programmatic transitions
OREGON FRAMEWORK RECAP
FRAMEWORK 0
Baseline: State Guided Local Government Contracted System

REFERENCE PROGRAM: OREGON
FINANCIAL AND OPERATIONAL FLOWS: OREGON

* Does not include flows associated with bottle deposit program
## ROLES AND RESPONSIBILITIES: OREGON

<table>
<thead>
<tr>
<th>REGULATOR</th>
<th>PRODUCER / PRO</th>
<th>CONSUMER</th>
<th>LOCAL GOVERNMENT</th>
<th>COLLECTOR</th>
<th>PROCESSOR</th>
<th>END MARKET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statewide planning (2050 Vision)</td>
<td>No role in curbside recycling</td>
<td>Recycle appropriately</td>
<td>Provide opportunity to Recycle</td>
<td>Provide service in accordance with Local Government</td>
<td>Accept materials from collection service providers</td>
<td>Process, prepare and market materials to end markets</td>
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<tr>
<td>Regulatory Guidance and Oversight</td>
<td>Beverage distributors finance and operate deposit program</td>
<td>Pay variable rate fees (PAYT)</td>
<td>Comply with state requirements</td>
<td>Plan, Implement and Manage programs</td>
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<td>Contract / Franchise collection service providers</td>
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OVERVIEW:

• Local Governments (cities / counties) must ensure opportunity to recycle by establishing recycling programs that provide a set of required elements and a suite of additional variable elements, depending on size and geography of a community. There are more requirements for larger communities closer to the Portland market.

• Program elements include, at a minimum, education and curbside collection for single family residents with many offering commercial and some offering multi-family (MF). MF will soon be more robust through statutory changes. There is no uniform list of recyclables.

• Collection Services delivered primarily through franchise agreements, where rates are set. Consumers pay set rates to service providers using variable rates (PAYT) which incentivizes waste reduction and recycling. Franchise fees support LG programs.

• Framework does not formally address downstream flow of materials other than that source separated materials cannot be disposed. Collectors usually choose what processors to use and typically don’t have formal contracts.

• There are very few public collectors and no public MRFs.

• There is a distributor managed beverage container deposit system.
**KEY ELEMENTS**

- **System Finance** – stable funding for collection and education through ratepayers. Provides broad access including many multi-family and businesses.
- **Education** – Clearly defined in rules.
- **Collection** – ROA and PAYT encourage and incentivize recycling resulting in above average recycling rate.

### C
Provides sustainable and equitable financing for stable operations and capital investments.

### I
Educates and encourages residents and businesses to use the system properly.

### L
Collects clean, acceptable materials for processing.
### AREAS FOR IMPROVEMENT: FRAMEWORK WEAKNESSES

<table>
<thead>
<tr>
<th>ID</th>
<th>Description</th>
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<tbody>
<tr>
<td>D</td>
<td>Integrates system components to achieve overall system goals</td>
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<td>G</td>
<td>Shares responsibility among program participants in a way that is justifiable, reduces risk, and leverages roles to provide program stability</td>
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<tr>
<td>K</td>
<td>Identifies beneficial materials acceptable for collection programs</td>
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<tr>
<td>O</td>
<td>Ensures materials are managed responsibly from collection through end markets</td>
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</tbody>
</table>

- Post-collection roles and responsibilities are not formally defined or integrated
- Not all system players have responsibility
- No harmonized list of recyclables
- Does not control or guide end markets
QUESTIONS

Clarifying questions to round out understanding of the framework
INITIAL DRAFT SCENARIOS
Elements recommended for all scenarios*:

- Universal access / parallel access for all sectors – SF, MF, Commercial, Public Spaces
- Mandatory variable pricing (pay as you throw – PAYT) for all sectors – SF, MF, Commercial, Public Spaces
- MRF certification and reporting requirements
- Material specific LCA database to support EOL and DFE-based decisions
- Defined optimal material specific EOL pathway (instead of hierarchy)
- Statewide list of designated recyclables and ban on disposal of those items
- Recycled content requirements and/or incentives
- Enforceable standards: Material specific recycling rate; contamination rate; equity standards; minimum end market EHS standards
- Labeling requirements
- Market development
- Expanded bottle bill: i.e. wine and spirits

*How these are applied and by whom will change among frameworks
SCENARIO GROUP 1: ENHANCED GOVERNMENT-MANAGED MODELS
SCENARIO GROUP 1: ENHANCED GOVERNMENT PROGRAMS

Basic Elements Applied to Scenarios 1&2:

• Current Oregon framework as Baseline
• Additional funding mechanism needed, could be any / all the following:
  • Tip fee surcharge
  • Waste generator Fee
  • Legislative appropriation (removed)
  • Other Options?
SCENARIO 1
Enhanced Government Managed System
SCENARIO 1
Enhanced Government Managed System

Elements:
- Operationally similar to current Oregon framework
- Added State Responsibility
  - Develop and implement policy (universal access; mandatory PAYT)
  - LCA research and define optimum EOL Pathway
  - Statewide list of recyclables and ban on disposal of those items
  - Set enforceable standards (recycling rates, contamination rates, etc.)
  - Coordinate and fund strategic infrastructure and market development activities
- Require MRFs to be registered or certified by state
  - Standards and responsibility defined
  - Material flow reporting requirements
- Require Local Governments to provide additional reporting on program costs and material flows
FINANCIAL AND OPERATIONAL FLOWS: ENHANCED GOVERNMENT MANAGED SYSTEM

- END MARKET
- PRODUCER/PRO
- CONSUMER/GENERATOR
- MRF
- PRIVATE COLLECTOR
- LOCAL GOVERNMENT
- STATE GOVERNMENT

ADDITIONAL FUNDING SOURCE

FINANCING
OPERATIONAL/CONTRACTUAL
STRATEGIC/REGULATORY AUTHORITY
ROLES AND RESPONSIBILITIES: ENHANCED GOV’T MANAGED

*Red indicates change from existing Oregon Framework

**REGULATOR**
- Regulatory Guidance, Oversight and Enforcement
- Statewide Planning (2050 Vision)
- Policy Development
- Develop list of mandatory recyclables
- Set performance and reporting standards
- Certify / register MRFs
- Coordinate infrastructure / end market development

**PRODUCER / PRO**
- No role in curbside recycling
- Beverage distributors financing and operate deposit program

**CONSUMER**
- Recycle appropriately
- Pay variable rate fees (PAYT)

**LOCAL GOVERNMENT**
- Provide opportunity to Recycle
- Comply with state requirements (including add’l reporting and performance)
- Plan, Implement and Manage programs
- Contract / Franchise collection service providers

**COLLECTOR**
- Provide service in accordance with agreement with Local Government
- Take collected materials to certified / registered processing facility
- Meet new performance and reporting standards

**PROCESSOR**
- Accept materials from collection service providers
- Process, prepare and market materials to end markets
- Register / certify with State
- Meet new performance and reporting standards

**END MARKET**
- Engage with DEQ as appropriate
QUESTIONS

Clarifying questions to round out understanding of the framework
SCENARIO 2

Enhanced Government Managed System with Sustainable Materials Management Authority (SMMA)
SCENARIO 2
Enhanced Government Managed System with SMMA

Everything from Scenario 1, and:

• Establish SMMA with multi-stakeholder board representing recycling supply chain
  • Authority to address products and/or packaging as it relates to the recycling system, including sales bans
  • Authority to contract with MRFs to provide processing services at low or no-additional cost and set other requirements under the contract
  • Engage in R&D, infrastructure and market development

• Shift some roles from State Government to SMMA:
  • LCA research on optimal EOL pathway,
  • Set uniform list and define materials subject to disposal bans
  • Authority to define performance standards and reporting requirements
  • Coordinate strategic infrastructure planning and market development projects
FINANCIAL AND OPERATIONAL FLOWS: ENHANCED GOVERNMENT MANAGED SYSTEM WITH SMMA

- END MARKET
- PRODUCER/PRO
- CONSUMER/GENERATOR
- SMMA/STATE GOV'T
- LOCAL GOVERNMENT
- PRIVATE COLLECTOR
- MRF

FINANCING
OPERATIONAL/CONTRACTUAL
STRATEGIC/REGULATORY AUTHORITY
ADDITIONAL FUNDING SOURCE
ROLES AND RESPONSIBILITY: SMM AUTHORITY

*Red indicates change from existing Oregon framework*

**REGULATOR**
- Regulatory Guidance, Oversight and Enforcement
- Policy development
- Statewide Planning (2050 Vision)

**SMMA**
- Develop list of mandatory recyclables
- Set performance and reporting standards
- Harmonization / Integration
- Contract with MRF
- R&D, Infrastructure and Market development

**PRODUCER / PRO**
- Comply with requirements imposed by SMMA (e.g. single-use products, source reduction, recycled content, reuse / repair, expanded deposits)

**CONSUMER**
- Recycle appropriately
- Pay variable rate fees (PAYT)

**LOCAL GOVERNMENT**
- Provide opportunity to Recycle
- Comply with state requirements (including reporting and performance)
- Plan, Implement and Manage programs
- Contract / Franchise collection service providers

**COLLECTOR**
- Provide service in accordance with agreement with Local Government
- Deliver materials to contracted processor
- Implement changes directed by SMMA (e.g. change in scope of products / packaging)
- Meet new performance and reporting standards

**PROCESSOR**
- Provide service in accordance with contract with SMMA
- Meet new performance and reporting standards

**END MARKET**
- Engage with SMMA as appropriate

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**Engage with SMMA as appropriate**
QUESTIONS

Clarifying questions to round out understanding of the framework
SCENARIO GROUP 2: EXTENDED PRODUCER RESPONSIBILITY MODELS
Elements recommended for all scenarios*:

- Universal access / parallel access for all sectors – SF, MF, Commercial, Public Spaces
- Mandatory variable pricing (pay as you throw – PAYT) for all sectors – SF, MF, Commercial, Public Spaces
- MRF certification and reporting requirements
- Material specific LCA database to support EOL and DFE-based decisions
- Defined optimal material specific EOL pathway (instead of hierarchy)
- Statewide list of designated recyclables and ban on disposal of those items
- Recycled content requirements and/or incentives
- Enforceable standards: Material specific recycling rate; contamination rate; equity standards; minimum end market EHS standards
- Labeling requirements
- Market development
- Expanded bottle bill: i.e. wine and spirits

*How these are applied and by whom will change among frameworks
Common Elements Recommended for All EPR Models:

• Scope of obligated materials - includes Either PPP or PPP+

• Obligation extends to all EOL pathways, including litter

• Regulatory authority (DEQ or SMMA) defines optimal EOL pathway

• Eco-modulated fees set by PRO but informed by regulatory authority based on LCA / DFE factors

• Mechanism for investment / coordination in infrastructure and markets

• Education / Outreach clearly defined
Producer Responsibility Organizations (PROs) in All EPR Scenarios:

- Authorized in legislation which defines:
  - Composition of board
  - Non-profit or for-profit
  - Single or multiple PROs

- PRO(s) must develop program plan to meet goals / targets; plan must be approved by oversight entity (DEQ or SMMA)
  - Proposed list of recyclables
  - Collection / processing arrangements
  - Educational components

- PRO must set and collect fees based on eco-modulation
  - Oversight agency provides DFE impact factors for materials and approves fee structure
  - PRO establishes base fee structure and incorporates DFE impact factors
SCENARIO 3
Post-Collection EPR with SMMA
SCENARIO 3
Post Collection
EPR with SMMA

Key Elements:

• Operationally similar to current Oregon framework through collection

• EPR from MRF gate to end markets requiring producers to:
  • Contract with and pay processors to ensure no cost or revenue floor at gate
  • Ensure end markets for designated recyclables
  • Engage in R&D and market development

• SMMA as regulator and integrator
FINANCIAL AND OPERATIONAL FLOWS: POST COLLECTION EPR WITH SMMA
**ROLES AND RESPONSIBILITY: POST-COLLECTION EPR**

*Red indicates change from existing Oregon framework*

<table>
<thead>
<tr>
<th>REGULATOR*</th>
<th>SMMA</th>
<th>PRODUCER / PRO</th>
<th>CONSUMER</th>
<th>LOCAL GOVERNMENT</th>
<th>COLLECTOR</th>
<th>PROCESSOR</th>
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</thead>
<tbody>
<tr>
<td>Regulatory Guidance, Oversight and Enforcement</td>
<td>Approve Program Plan</td>
<td>Set / collect fees to finance post-collection system</td>
<td>Recycle appropriately</td>
<td>Provide opportunity to Recycle</td>
<td>Provide service as per agreement with LG</td>
<td>Engage with PRO as appropriate</td>
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<tr>
<td>Statewide Planning (2050 Vision)</td>
<td>LCA research to Determine EOL pathway provide inputs for eco modulation</td>
<td>Contract with processors</td>
<td>Pay variable rate fees (PAYT)</td>
<td>Plan, Implement and Manage programs</td>
<td>Deliver materials to contracted processor</td>
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<td></td>
<td>Harmonization / Integration</td>
<td>Comply with regulatory standards and reporting requirements</td>
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<td>Contract / Franchise collection service providers</td>
<td>Implement changes directed by SMMA (e.g., collected material)</td>
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<td></td>
<td>Engage in R&amp;D and Market development</td>
<td>Develop program plan defining how targets will be met</td>
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<td>Meet new performance and reporting standards</td>
<td>Meet new performance and reporting standards</td>
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SCENARIO 4
EPR with Local Government managed collection
SCENARIO 4
EPR with Local Government Managed Collection

Key Elements:
• Operationally similar to current Oregon framework through collection
• EPR to finance system and provide integration requiring producers to:
  • Propose list of recyclable materials
  • Reimburse local governments for collection & education costs
  • Contract with MRFs
  • Engage in market development activities
• DEQ as sole regulator (no SMMA)
FINANCIAL AND OPERATIONAL FLOWS: SCENARIO 4
EPR with Local Govt managed collection
ROLES AND RESPONSIBILITY: EPR WITH LG COLLECTION

*Red indicates change from existing Oregon framework

REGULATOR
- Regulatory Guidance, Oversight and Enforcement
- Statewide Planning (2050 Vision)
- Set reimbursement rate and arbitrate reimbursement process
- Approve program plan
- LCA research to define frame of EOL pathway and eco-modulation

PRODUCER / PRO
- Set / collect fees to finance system
- Develop program plan defining how targets will be met
- Comply with regulatory standards and reporting requirements
- Engage in Market development

CONSUMER
- Recycle appropriately
- Pay variable rate fees (PAYT) for waste only

LOCAL GOVERNMENT
- Provide opportunity to Recycle
- Comply with state requirements (including reporting and performance)
- Plan, Implement and Manage programs
- Pay portion of franchise cost for recycling collection
- Report cost to State for reimbursement

COLLECTOR
- Provide service in accordance with agreement with Local Government
- Deliver materials to contracted processor
- Comply with regulatory standards and reporting requirements

PROCESSOR
- Provide service in accordance to contract with PRO
- Comply with regulatory standards and reporting requirements

END MARKET
- Engage with PRO as appropriate
SCENARIO 5
EPR with full producer finance and system coordination
SCENARIO 5
EPR WITH FULL FINANCING AND SYSTEM COORDINATION

Key Elements:
• Collection and post-collection financed and coordinated by PRO through contracts
• Producers
  • Contract with collection service providers (can be LG)
  • Contract with MRFs or establish processing and marketing capacity necessary to manage materials
• Propose list of recyclable materials
• Engage in market development
• DEQ as sole regulator (no SMMA)
FINANCIAL AND OPERATIONAL FLOWS:
SCENARIO 5
EPR WITH FULL PRODUCER FINANCE AND SYSTEM COORDINATION
ROLES AND RESPONSIBILITY: EPR WITH FULL FINANCE AND OPS

REGULATOR
- Regulatory Guidance, Oversight and Enforcement
- Statewide Planning (2050 Vision)
- Approve program plan
- LCA research to define frame of EOL pathway and eco-modulation

PRODUCER / PRO
- Set / collect fees to finance system
- Develop program plan defining how targets will be met
- Comply with regulatory standards and reporting requirements
- Engage in market development

CONSUMER
- Recycle appropriately
- Pay variable rate fees (PAYT) for waste only

LOCAL GOVERNMENT
- Can opt-in to provide education, collection services (direct or by contract / franchise agreement)
- Comply with regulatory standards and reporting requirements if opt-in is chosen

COLLECTOR
- Collect materials in accordance with agreement with PRO or sub-agreement with LG
- Deliver materials to contracted processor
- Comply with regulatory standards and reporting requirements

PROCESSOR
- Provide service in accordance to contract with PRO
- Comply with regulatory standards and reporting requirements

END MARKET
- Engage with PRO as appropriate

*Red indicates change from existing Oregon framework
QUESTIONS

Clarifying questions to round out understanding of the framework
ARE THERE ANY ELEMENTS MISSING OR OUT OF PLACE?