



**MODERNIZING
OREGON'S
RECYCLING
SYSTEM**

Recycling Frameworks Information Session

Friday, January 31, 2020

Welcome

Robin Harkless, Oregon Consensus



Recycling Steering Committee

Modernizing Oregon's recycling system with support from Oregon Consensus

Recycling Steering Committee members

Timm Schimke

Association of Oregon Counties (Deschutes County)

Amy Roth

Association of Oregon Recyclers

Nicole Janssen

Association of Plastics Recyclers/Denton Plastics

Bruce Walker

City of Portland

Jeff Murray

EFI Recycling

Vinod Singh

Far West Recycling

Scott Keller

League of Oregon Cities (City of Beaverton)

Sarah Grimm

Lane County

Pam Peck

Metro

Jay Simmons

NORPAC

David Allaway & Abby Boudouris

Oregon DEQ (co-chairs)

Kristan Mitchell

Oregon Refuse & Recycling Association

Dylan de Thomas

The Recycling Partnership

Laura Leebrick

Rogue Disposal & Recycling

Jason Hudson

Waste Connections

Matt Stern

Waste Management



Recycling Steering Committee

Modernizing Oregon's recycling system with support from Oregon Consensus

Overview of Recycling Issues

David Allaway, Oregon DEQ



Recycling Steering Committee

Modernizing Oregon's recycling system with support from Oregon Consensus

Background

- Overview of recycling
- Challenges
- Goal and work of Oregon's Recycling Steering Committee
- Scope: "traditional" recyclables (paper, glass, metal, plastic) collected from households and businesses



Recycling Steering Committee

Modernizing Oregon's recycling system with support from Oregon Consensus

Benefits of recycling

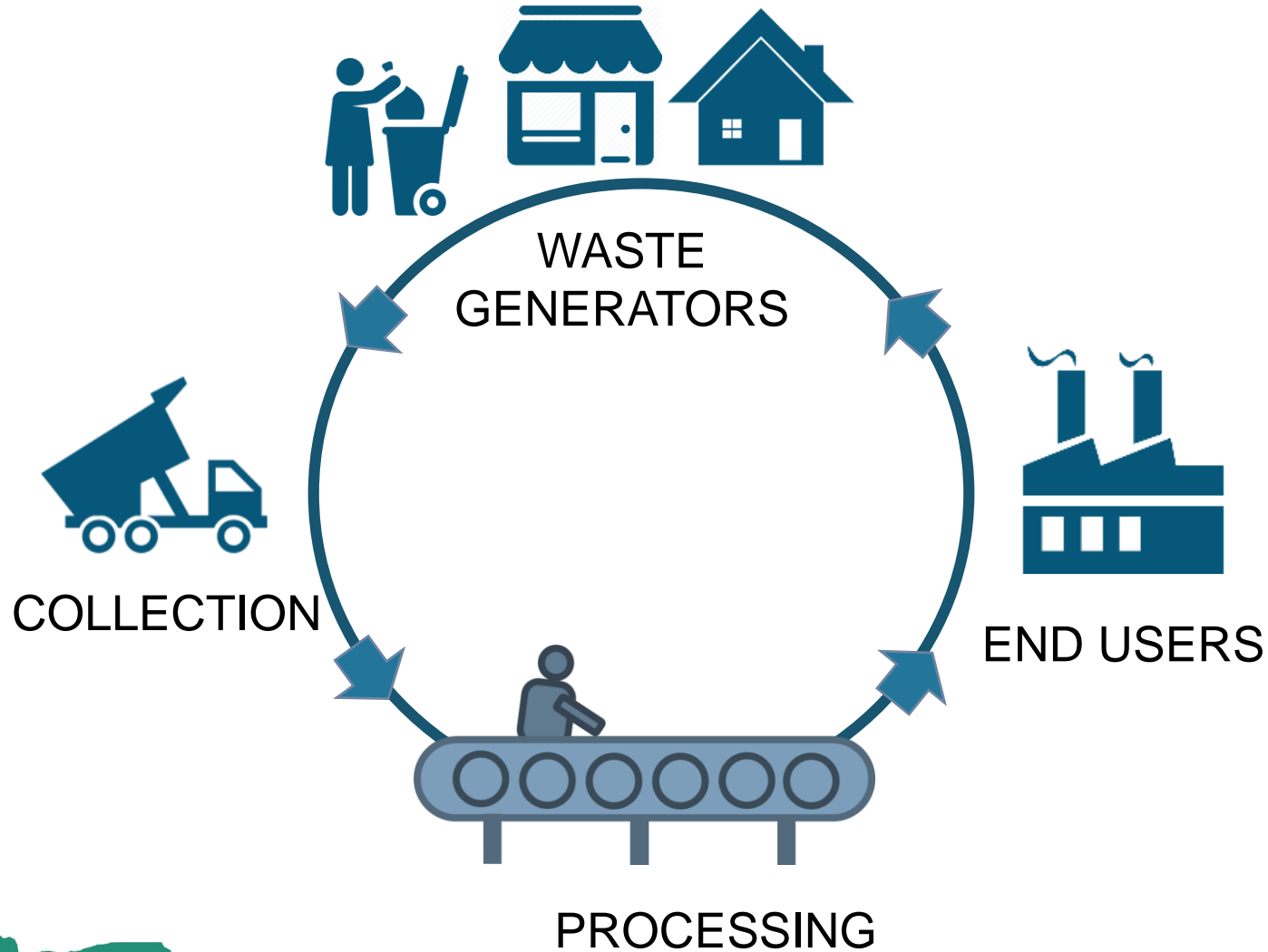
- Provides local economic/social benefits
- Conserves resources
 - Equivalent to ~3% reduction of statewide energy use
- Reduces pollution
 - Equivalent to tailpipe greenhouse gases from ~750,000 average passenger cars



Recycling Steering Committee

Modernizing Oregon's recycling system with support from Oregon Consensus

What is recycling?



Recycling Steering Committee

Modernizing Oregon's recycling system with support from Oregon Consensus

2050 Vision and Framework for Action

Materials Management in Oregon

2050 Vision and Framework for Action

Adopted by the
Environmental Quality Commission
December 6, 2012



*Oregonians in 2050 produce and use materials responsibly
conserving resources • protecting the environment • living well*



Recycling Steering Committee

Modernizing Oregon's recycling system with support from Oregon Consensus

Oregon's policy framework

- Strong focus on recycling collection
- Opportunity model, with primary responsibility assigned to local governments
- But only when the cost to recycle is less than the cost of disposal



Collection

- 1983 – 1997: Intensive material separation



Recycling Steering Committee

Modernizing Oregon's recycling system with support from Oregon Consensus

Collection

- 1983 – 1997: Intensive material separation



- ~1997: Shift to “commingling”



Recycling Steering Committee

Modernizing Oregon's recycling system with support from Oregon Consensus

Contamination makes the recycling system more expensive



Recycling Steering Committee

Modernizing Oregon's recycling system with support from Oregon Consensus

Contamination reduces recycling by domestic industries



Recycling Steering Committee

Modernizing Oregon's recycling system with support from Oregon Consensus

Contamination, if exported, directly harms the environment



Photos: Megan Ponder



Recycling Steering Committee

Modernizing Oregon's recycling system with support from Oregon Consensus

End markets are inconsistent



Recycling Steering Committee

Modernizing Oregon's recycling system with support from Oregon Consensus

Producers have limited responsibility



Recycling Steering Committee

Modernizing Oregon's recycling system with support from Oregon Consensus

Recycling is part of a larger system



*Oregonians in 2050 produce and use materials responsibly
conserving resources • protecting the environment • living well*



Recycling Steering Committee

Modernizing Oregon's recycling system with support from Oregon Consensus

Exports . . . and “National Sword” (2017)



Recycling Steering Committee

Modernizing Oregon's recycling system with support from Oregon Consensus

Oregon response to “National Sword”

- Cities, counties and collectors:
 - Dropped materials
 - Increased rates to pay for additional processing
 - Stepped up efforts to reduce contamination at the source
- Processors and Metro:
 - Invested in technology improvements
- DEQ:
 - Convened the Recycling Steering Committee



Recycling Steering Committee

Modernizing Oregon's recycling system with support from Oregon Consensus

Recycling Steering Committee charter

Examine and make recommendations for modernizing recycling system in Oregon, in order to:

Optimize the environmental benefits of managing materials using a lifecycle perspective

Create a recovery system that is strong and resilient to changes

Restore and maintain public trust in the system through education and engagement



Two major tracks of inquiry

**Legal and Relational
Frameworks**

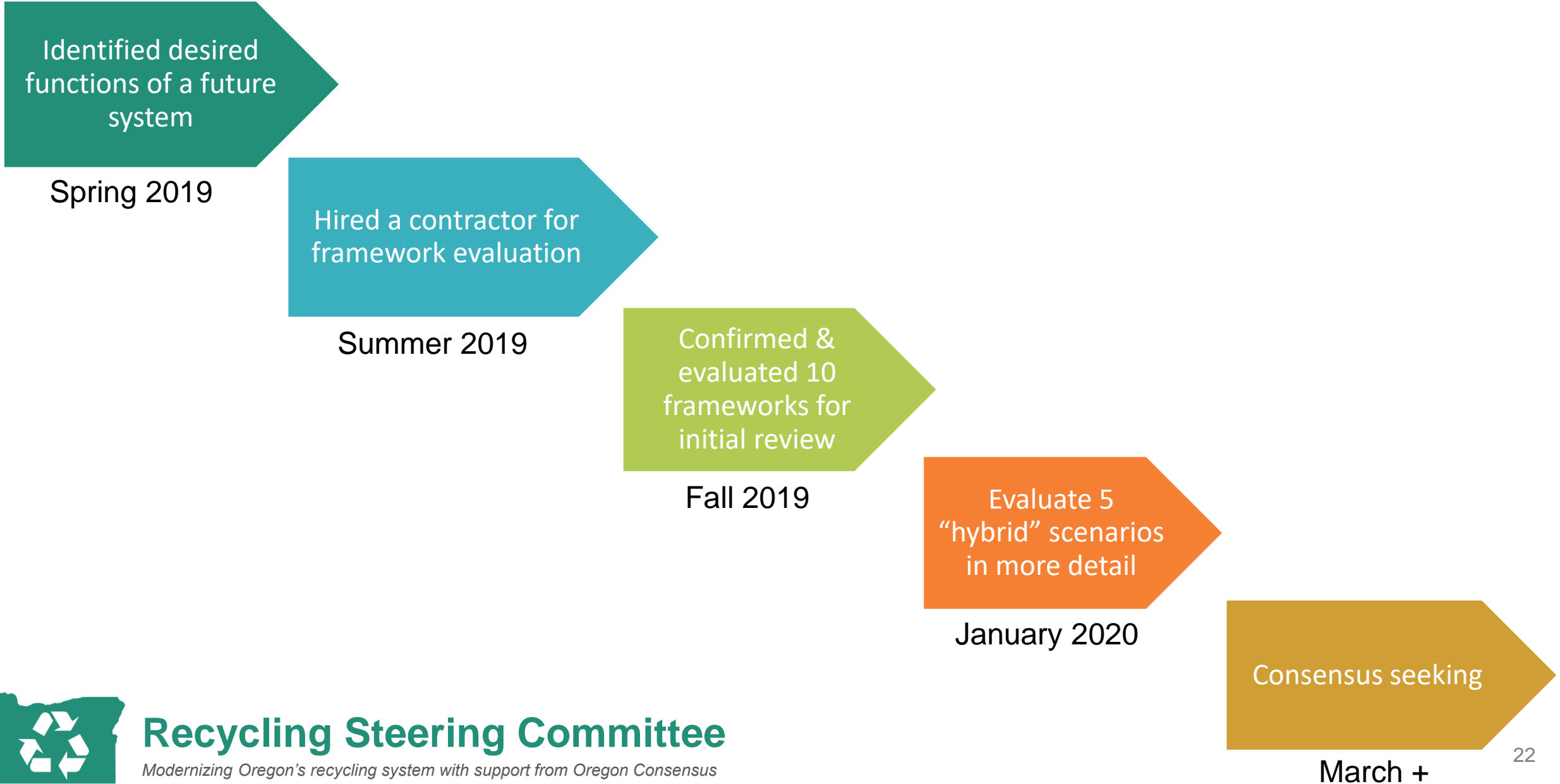
Infrastructure



Recycling Steering Committee

Modernizing Oregon's recycling system with support from Oregon Consensus

Legal and relational frameworks



Recycling Steering Committee

Legal and Relational Frameworks

Infrastructure

Whole-System Recommendations

Implementation Planning



Recycling Steering Committee

Modernizing Oregon's recycling system with support from Oregon Consensus

Summary


- Oregon's recycling policy was created for very different circumstances
- National Sword has revealed limitations in Oregon's system
- Recycling continues today . . .
 - . . . but at a reduced scale and with higher uncertainty
- We have a generational opportunity to modernize our system



Packet of background materials

- Worksheet
- Infographic
- Key Concepts

ROLES AND RESPONSIBILITIES WITHIN SCENARIOS



SCENARIOS	SETS MATERIALS LIST	PROVIDES COLLECTION		PROVIDES PROCESSING		PROVIDES MARKETS
		FUNDING	MANAGEMENT	FUNDING	MANAGEMENT	
Enhanced government managed	DEQ	RATEPAYER*	LOCAL GOVERNMENT	RATEPAYER*	MRF	END MARKET*
State government managed (MRF contracts)	DEQ	RATEPAYER*	LOCAL GOVERNMENT	TBD	DEQ	END MARKET*
Post-collection producer responsibility	DEQ	RATEPAYER*	LOCAL GOVERNMENT	PRODUCER	PRODUCER	END MARKET* PRODUCER
Producer responsibility with local control	PRODUCER DEQ	PRODUCER	LOCAL GOVERNMENT	PRODUCER	PRODUCER	END MARKET* PRODUCER
Full producer responsibility with optional local control	PRODUCER DEQ	PRODUCER	LOCAL GOV PRODUCER	PRODUCER	PRODUCER	END MARKET* PRODUCER

*DEQ regulatory oversight included in all phases except those noted with an asterisk.

Link to other materials, including the evaluation of five scenarios: <https://go.usa.gov/xmYYe>



Framework Scenario Review

Resa Dimino, Resource Recycling Systems



Recycling Steering Committee

Modernizing Oregon's recycling system with support from Oregon Consensus

Wrap Up and Next Steps



Recycling Steering Committee

Modernizing Oregon's recycling system with support from Oregon Consensus

Opportunities for feedback

- Fill out a worksheet (for those in the room today)
- Talk with individual Recycling Steering Committee members
- Local governments: Attend a DEQ/AOC/LOC listening session
- Speak during a public comment period at an RSC meeting
- Sign up for email notifications: <https://go.usa.gov/xmYYe>
- Provide written feedback to the Recycling Steering Committee: david.allaway@state.or.us
- Complete DEQ's feedback survey



DEQ Survey

- DEQ survey closes February 21
- Email Tom Lang to receive a survey link:
tom.lang@state.or.us



Thank you!



Recycling Steering Committee

Modernizing Oregon's recycling system with support from Oregon Consensus



OREGON RECYCLING SYSTEM FRAMEWORKS RESEARCH: SCENARIO EVALUATION

Jan 31, 2020

WHAT WE DO

SINCE 1986, RRS has expanded its services throughout the value chain:

- Planning/Implementing recycling and composting programs.
- Planning/Implementing materials management and zero waste solutions.
- Waste and compliance training.
- Developing/Facilitating collaborations to increase commodity recovery.
- Analyzing the recyclability and compostability of packaging.
- Evaluating anaerobic digestion and biomass facilities.
- Food waste prevention and organics recovery planning.
- Reviewing/Negotiating hauler and MRF contracts.
- Designing/Permitting MRF and composting sites.
- Developing/Implementing multi-stakeholder communications and outreach.



RECYCLE.COM



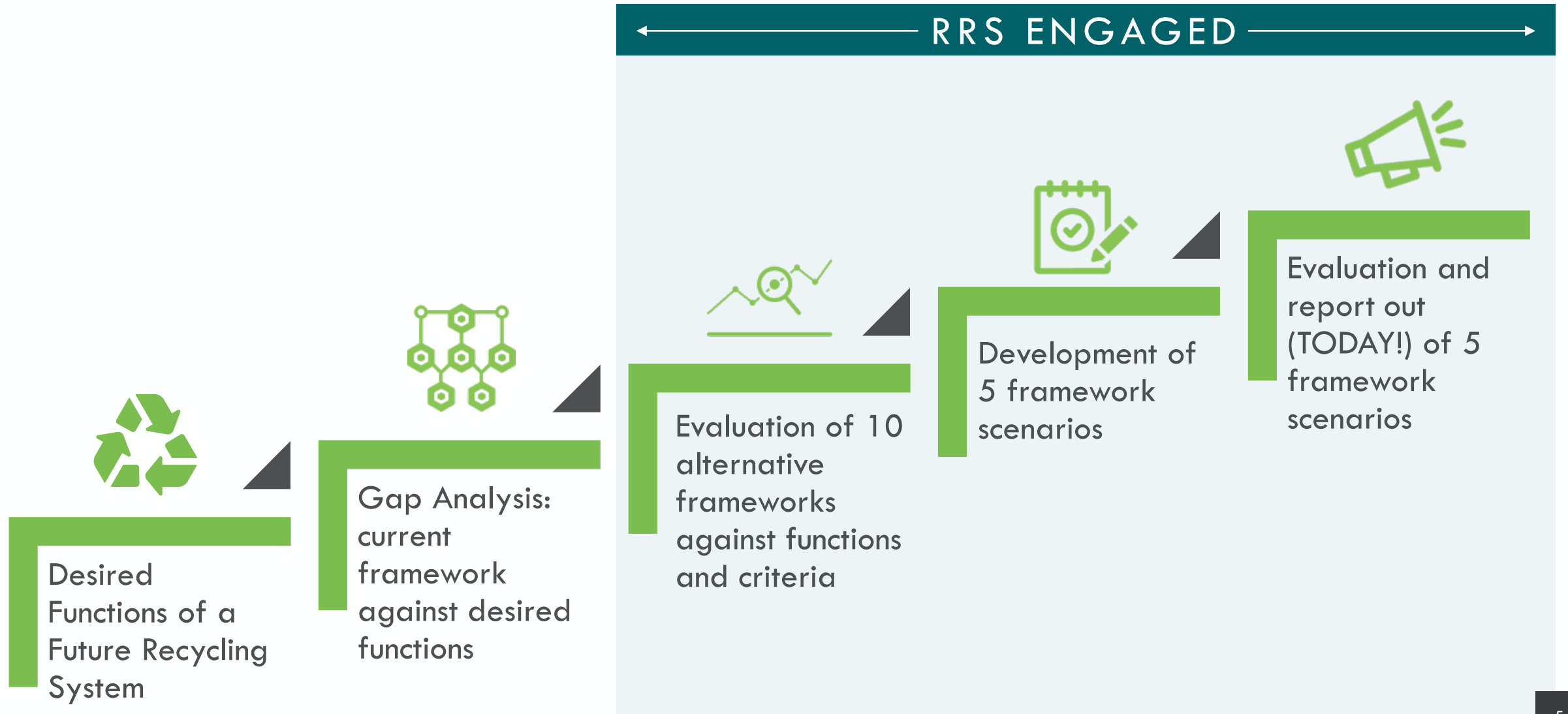
AGENDA

- Process and Overview
- Evaluation of Government Managed Scenarios
- Evaluation of Producer Managed Scenarios



SCENARIO DEVELOPMENT AND EVALUATION PROCESS

THE RECYCLING STEERING COMMITTEE PROCESS TO DATE



WHAT IS A RECYCLING FRAMEWORK?

Collection of elements designed to meet certain functions

- Laws
- Policies
- Programs
- Agreements

**MRF stands for Material Recovery Facility. It is where the commingled curbside material is sorted and prepped for market*



WHAT IS A SCENARIO?

Hypothetical combination of elements designed to better meet certain functions



WHAT ARE THE FUNCTIONS?

A	Optimization: Optimizes the benefits of recycling considering life-cycle impacts and costs
B	Resiliency: Resiliently adapts to changes in material supply and end-market demand
C	Financing: Provides sustainable and equitable financing for stable operations and capital investments
D	Integration: Integrates system components to achieve overall system goals
E	Upstream: Includes mechanisms to reduce upstream impacts of materials
F	Equity: Designs for equity – examining the burdens and benefits across the state
G	Shared Responsibility: Shares responsibility for the system among players including residents and businesses, producers, state and local governments, and recycling industry
H	Goals: Uses goals and metrics to measure progress and support ongoing improvement

I	Education: Educates and encourages residents and businesses to use the system properly
J	Understanding Impacts: Engages the public to understand the benefits and the costs of recycling, preventing waste and reducing impacts of materials throughout their life-cycles
K	Material Selection: Identifies beneficial materials acceptable for collection programs
L	Collection: Collects clean, acceptable materials for processing
M	Incoming Processing: Ensures processing facilities receive clean materials and in sufficient volumes
N	Outgoing Processing: Produces quality materials that reach end markets
O	Downstream: Ensures materials are managed responsibly from collection through end markets
P	Accountability: Ensures all players in the system perform responsibly

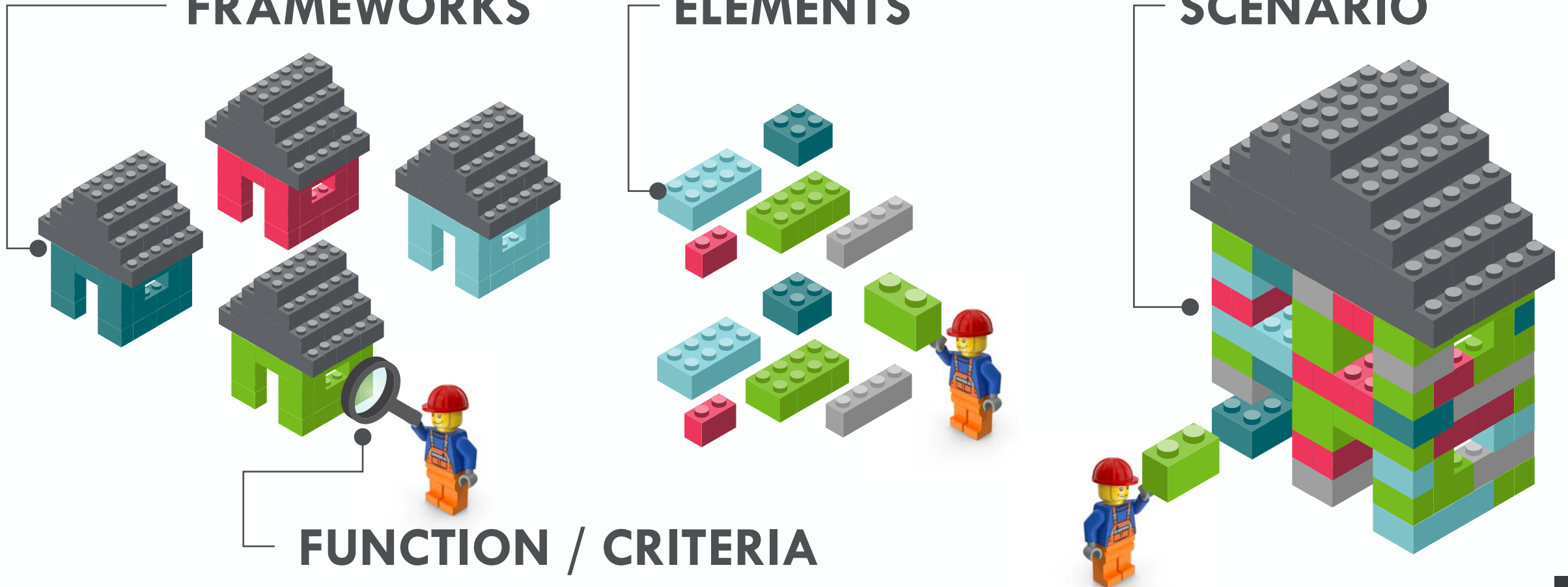
SCENARIO BUILDING PROCESS

FRAMEWORKS

ELEMENTS

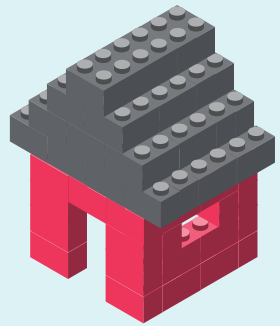
SCENARIO

FUNCTION / CRITERIA

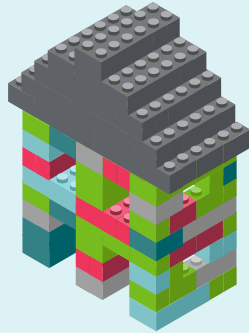


GOVERNMENT MANAGED

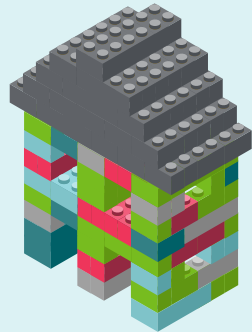
EXTENDED PRODUCER RESPONSIBILITY (EPR)



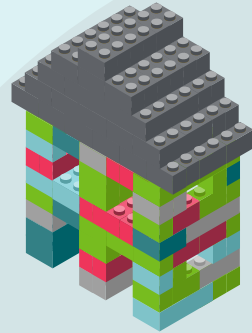
Existing Oregon Framework



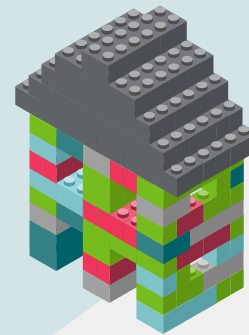
Enhanced government management



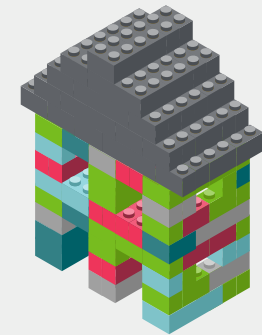
State government management with MRF contracts



Post collection EPR



EPR with local control



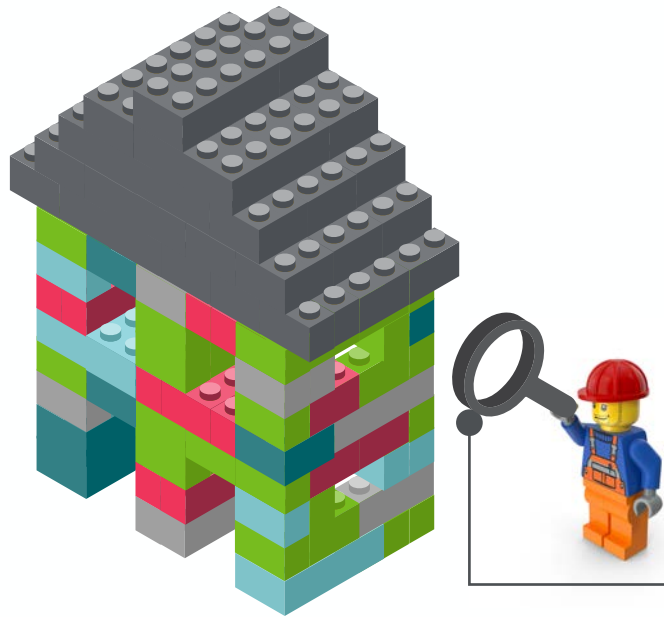
Full EPR

ELEMENTS RECOMMENDED FOR ALL SCENARIOS*

- Parallel access to recycling
- Mandatory variable rate pricing
- MRF certification and reporting
- Life-cycle assessment (LCA) database to inform decision making
- Statewide list of recyclables
- Recyclables disposal ban
- Recycled content requirements and/or incentives
- Labeling standards
- Market development activities
- Enforceable performance and equity standards
- Expanded bottle bill (i.e. wine and spirits)
- Litter and waste prevention / upstream activities

**How these are applied and by whom will change among frameworks*

SCENARIO EVALUATIONS



FUNCTION / CRITERIA

HOW DO THE SCENARIOS DIFFER?



FINANCE



OPERATIONS



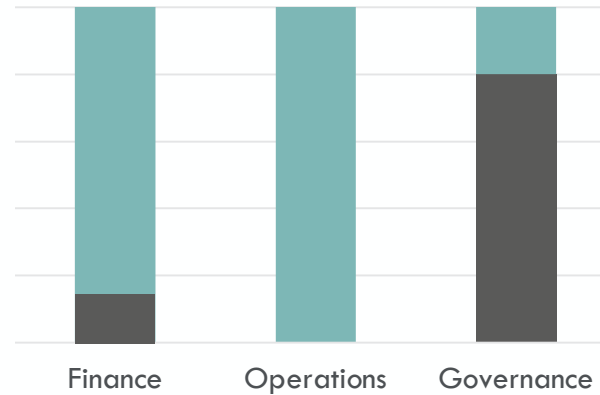
GOVERNANCE

HOW DO THE SCENARIOS DIFFER?

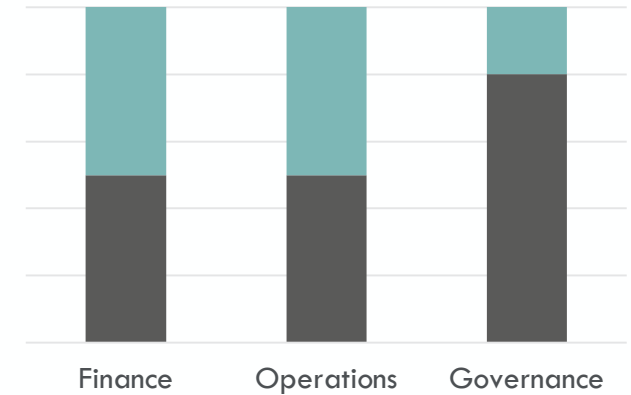
- *Finance*
- *Operations*
- *Governance*

■ *State* ■ *Local* ■ *Producer*

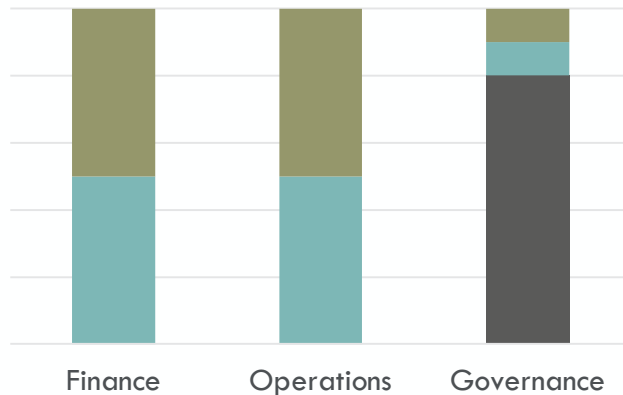
SCENARIO 1



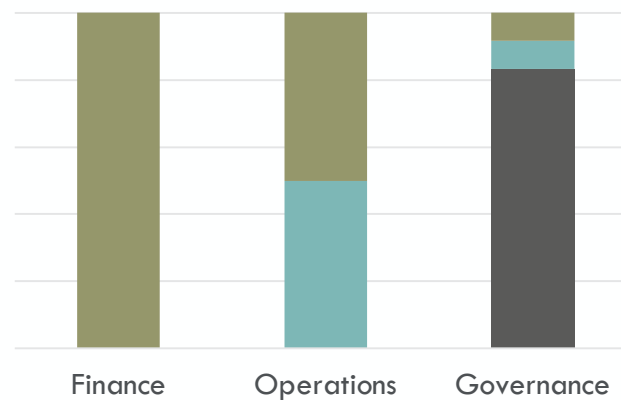
SCENARIO 2



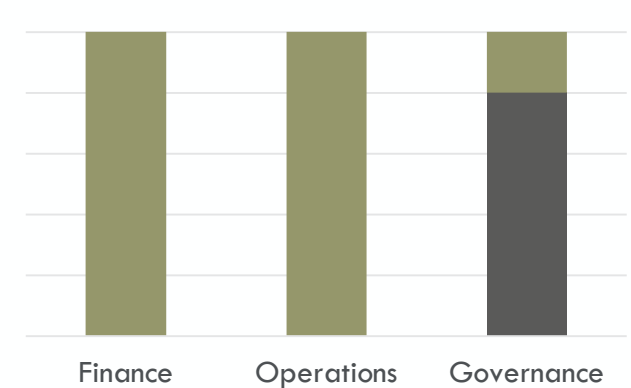
SCENARIO 3

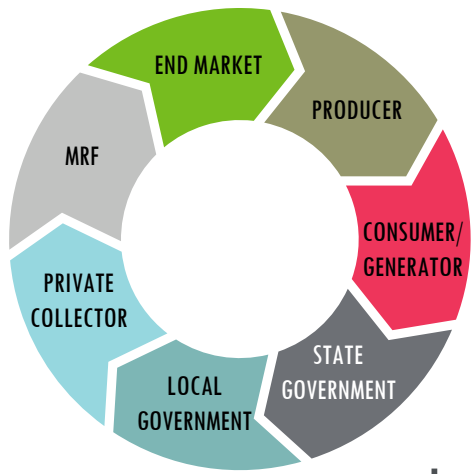


SCENARIO 4



SCENARIO 5





ROLES AND RESPONSIBILITIES WITHIN ALL FIVE SCENARIOS



SCENARIOS	SETS MATERIALS LIST	PROVIDES COLLECTION	PROVIDES PROCESSING	PROVIDES MARKETS		
		FUNDING	MANAGEMENT	FUNDING	MANAGEMENT	
Enhanced government managed	DEQ	RATEPAYER*	LOCAL GOVERNMENT	RATEPAYER*	MRF	END MARKET*
State government managed (MRF contracts)	DEQ	RATEPAYER*	LOCAL GOVERNMENT	TBD	DEQ	END MARKET*
Post-collection producer responsibility	DEQ	RATEPAYER*	LOCAL GOVERNMENT	PRODUCER	PRODUCER	END MARKET* PRODUCER
Producer responsibility with local control	PRODUCER DEQ	PRODUCER	LOCAL GOVERNMENT	PRODUCER	PRODUCER	END MARKET* PRODUCER
Full producer responsibility with optional local involvement	PRODUCER DEQ	PRODUCER	LOCAL GOV PRODUCER	PRODUCER	PRODUCER	END MARKET* PRODUCER

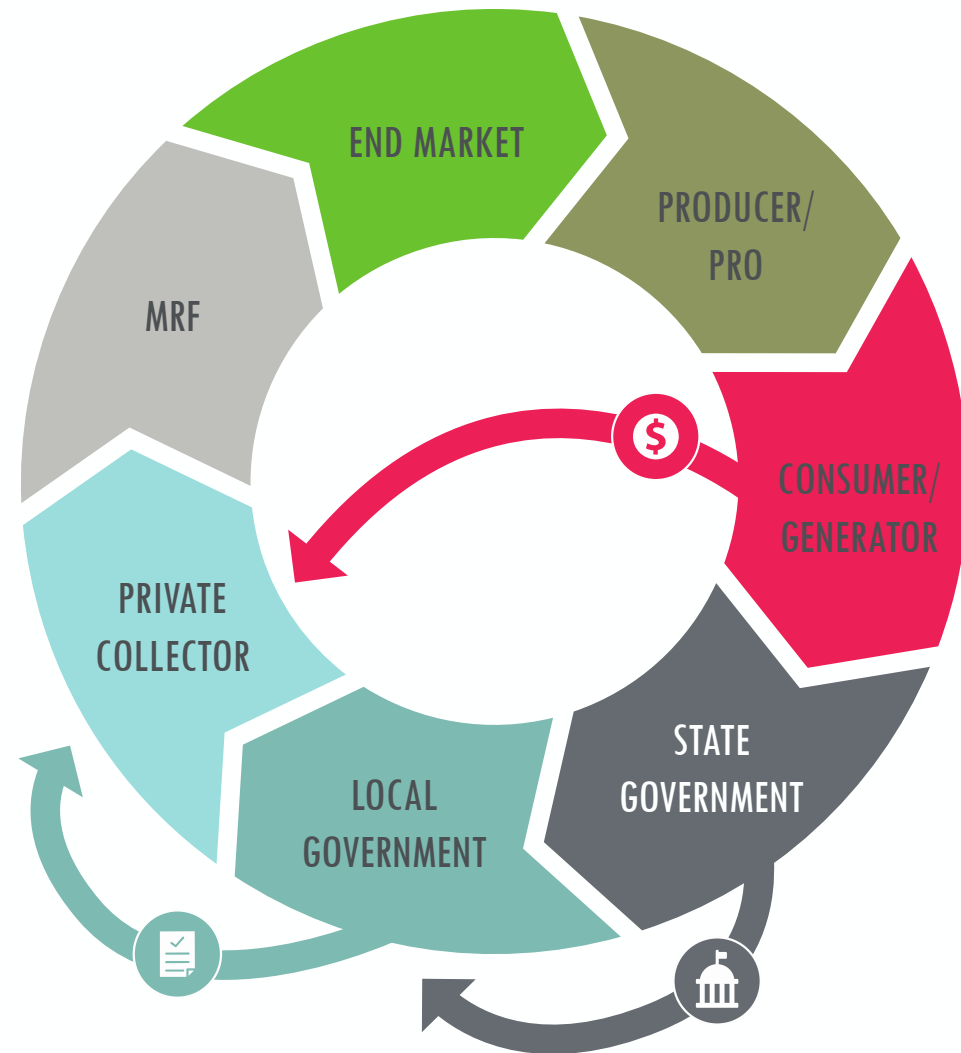
*DEQ regulatory oversight included in all elements except those noted with an asterisk.



SCENARIO GROUP 1: ENHANCED GOVERNMENT-MANAGED MODELS

GOVERNMENT MANAGED SCENARIOS: *KEY DISTINCTIONS*

Baseline Oregon Framework



FINANCING



OPERATIONAL /
CONTRACTUAL

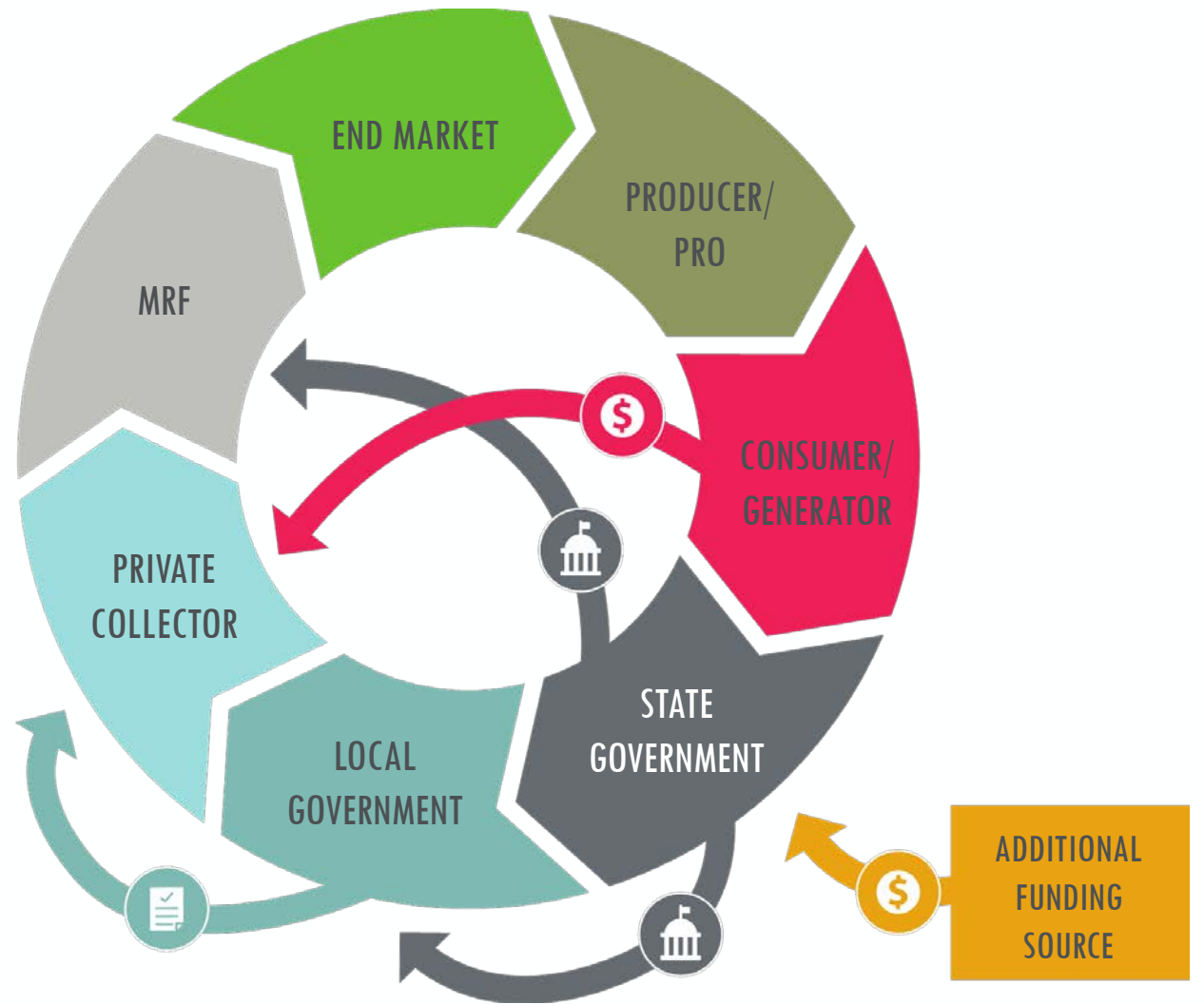


STRATEGIC / REGULATORY
AUTHORITY

GOVERNMENT MANAGED SCENARIOS: *KEY DISTINCTIONS*

1 - Enhanced government managed

- Additional Required Elements
- Additional Funding Needed



FINANCING



OPERATIONAL /
CONTRACTUAL

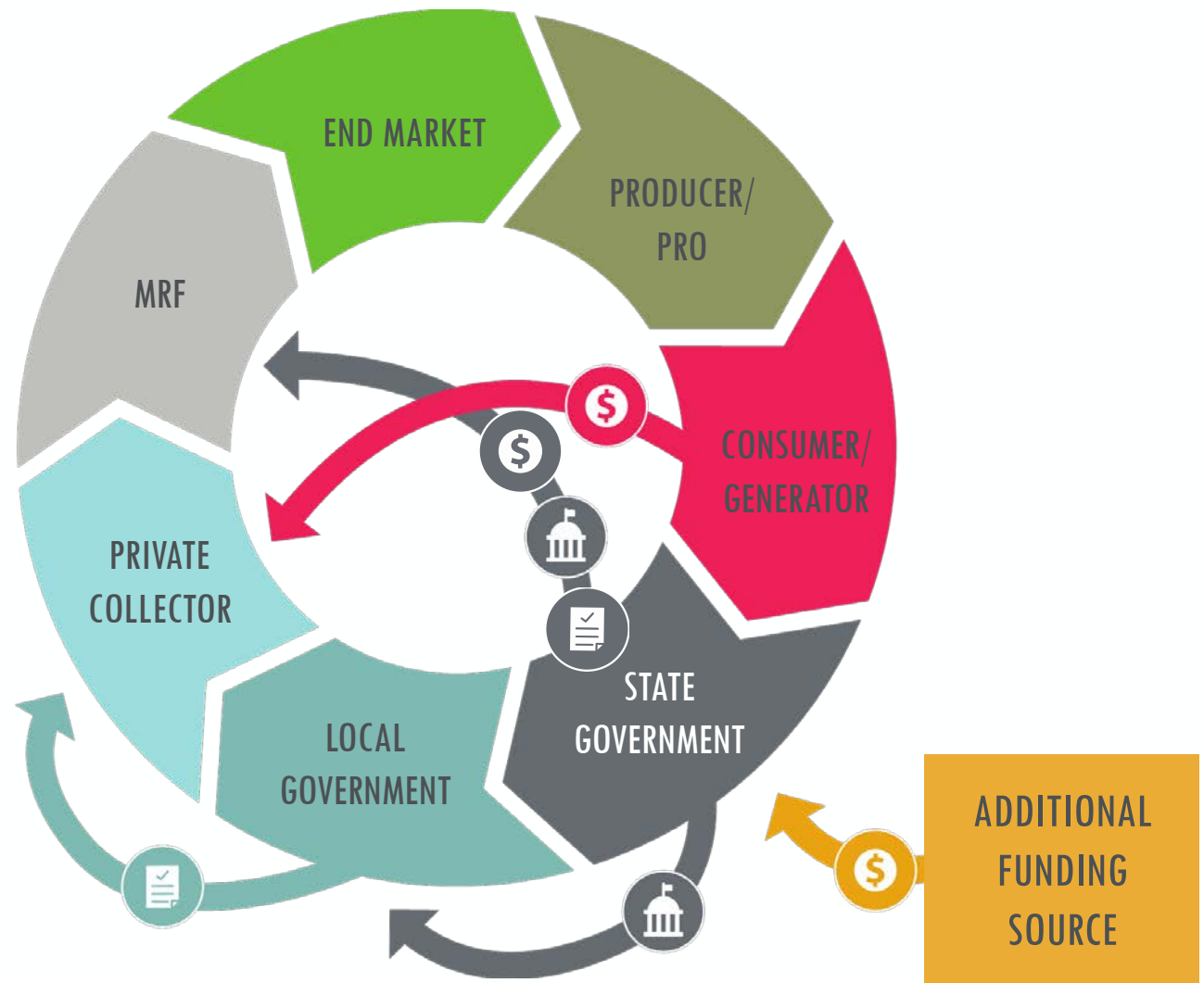


STRATEGIC / REGULATORY
AUTHORITY

GOVERNMENT MANAGED SCENARIOS: *KEY DISTINCTIONS*

2 - State Government Managed (MRF Contracts)

- Everything from Scenario 1 plus MRF contracting



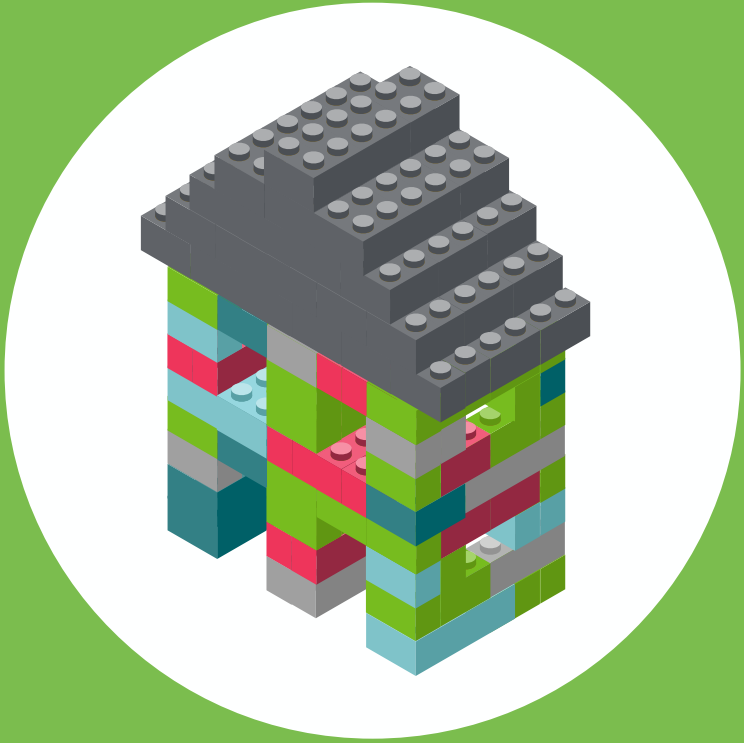
FINANCING



OPERATIONAL /
CONTRACTUAL



STRATEGIC / REGULATORY
AUTHORITY



SCENARIO 1

Enhanced Government
Managed System

SCENARIO 1: *Enhanced Government Managed System*



State has more authority



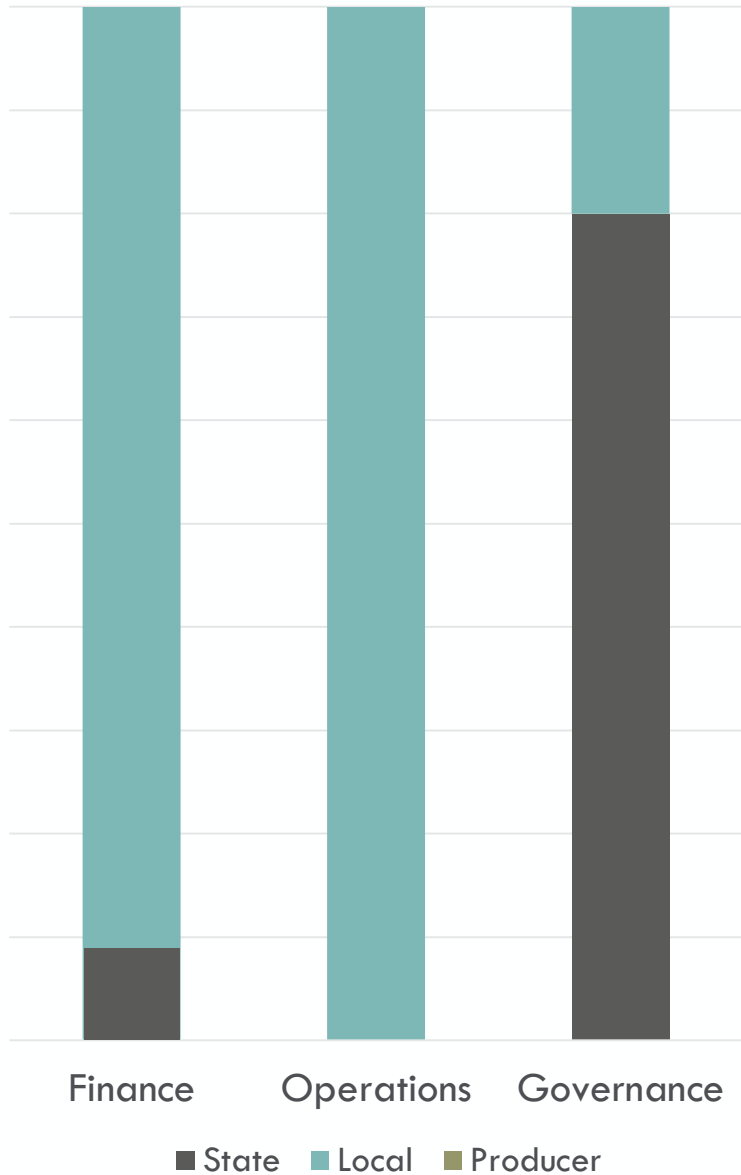
New financing needed



MRFs to be permitted or certified by state



Roles and relationships stay the same



Finance: Local ratepayers



Operations: Locally managed collection; open market post-collection



Governance: DEQ rules and regulations; local franchise / license service agreements

ROLES AND RESPONSIBILITIES: *Enhanced Government Managed*



STATE GOVERNMENT

- Regulate and oversee the system, including MRFs
- LCA research
- Create new recycling advisory committee
- Set statewide mandatory list of recyclables
- Require parallel recycling access and variable rate pricing



LOCAL GOVERNMENT

- Plan and implement recycling programs that meet new state requirements
- Update franchise/license agreements to comply with new policies



COLLECTOR

- Collect material in accordance with new requirements
- Deliver to permitted or certified MRF(s)



MRF

- Implement new operating and equity standards, reporting requirements and contamination targets



PRODUCER / PRO

- No specified role



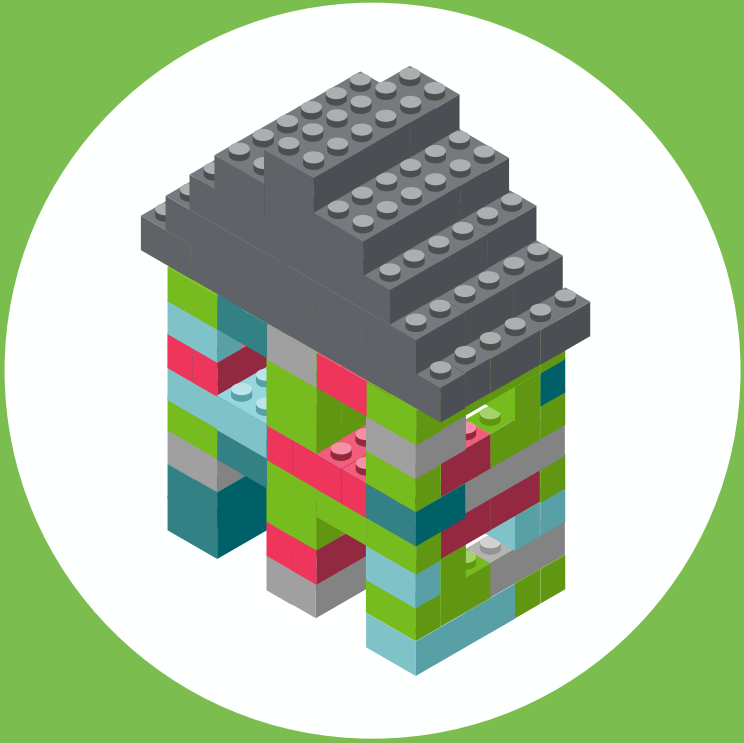
BENEFITS

- Maintains strength of existing system – collection opportunities
- Enhance system optimization, integration and accountability
- Formally address post-collection segments of the system



CHALLENGES

- Not all system players have responsibility
- No platform to address upstream environmental impacts and design
- Limited impact on downstream decision making
- Need for additional funding



SCENARIO 2

Enhanced State Government
Managed System (MRF
Contracts)

SCENARIO 2: *Enhanced State Government Managed System (MRF Contracts)*



State has more authority including MRF contracting



Significant new financing needed



MRFs to be permitted or certified by state and contract with the state

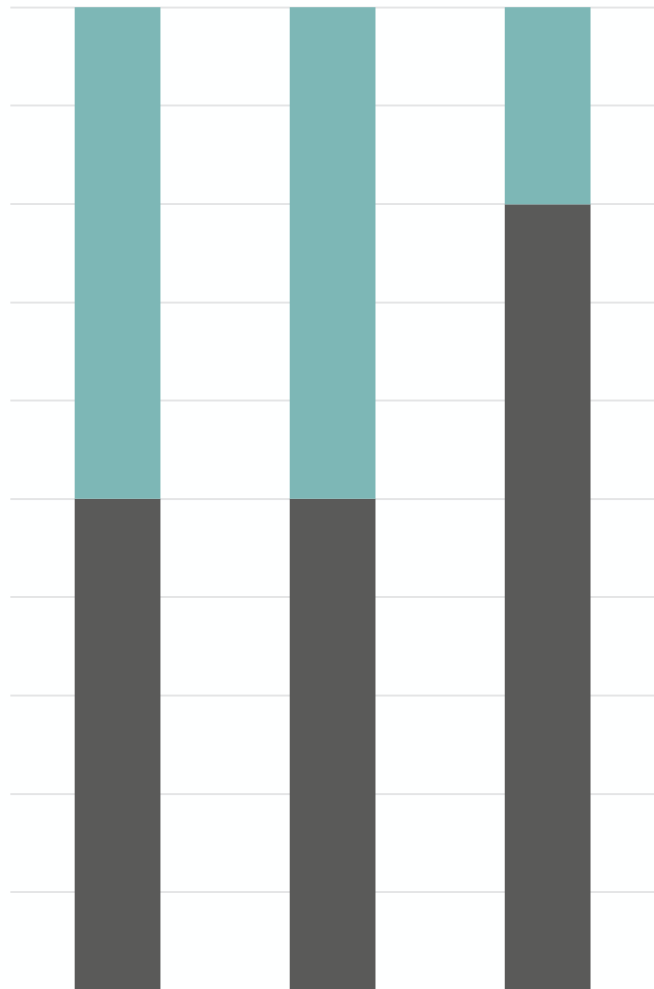


Roles and relationships stay the same on collection side but change for MRFs

The background image shows a large-scale industrial recycling plant. It features multiple levels of blue machinery, including conveyor belts and sorting stations. Workers wearing yellow safety vests and hard hats are visible throughout the facility, engaged in various tasks. The environment is brightly lit, likely by natural light from large windows or skylights. The overall scene depicts a complex and active industrial process.

WHY CONTRACT WITH MRFS?

- Provide equal access to processing for all parts of the state
- Greater ability to set environmental health and safety standards for material end markets
- Mitigate market risk for local programs and ratepayers



Finance Operations Governance

■ State ■ Local ■ Producer



Finance: Local ratepayers fund collection; State funds processing*



Operations: Locally managed collection; state managed post-collection



Governance: DEQ rules and regulations; local franchise / license service agreements

ROLES AND RESPONSIBILITIES: *Enhanced State Managed System (MRF Contracts)*



STATE GOVERNMENT

- Contract with MRFs for processing of program materials
- Regulate and oversee the system
- LCA research
- Create new recycling advisory committee
- Set statewide mandatory list
- Require parallel recycling access and variable rate pricing



LOCAL GOVERNMENT

- Plan and implement recycling programs that meet new state requirements
- Update franchise / license agreements to comply with new policies



COLLECTOR

- Collect material in accordance with new requirements
- Deliver to contracted MRF(s)



MRF

- Compete for state contracts
- Implement operating and equity standards, reporting requirements and contamination targets



PRODUCER / PRO

- No specified role



BENEFITS

- More engaged management of post-collection
- Equitable access to processing
- Mitigate market risk
- Maintain strengths of existing system
- Enhance system optimization, integration and accountability



CHALLENGES

- Substantial funding and authority required
- Significant departure from status quo in processing / marketing relationships
- Administratively complex
- Not all system players have responsibility
- No platform to address upstream environmental impacts and design

KEY CONSIDERATIONS FOR IMPLEMENTATION OF GOVERNMENT MANAGED SCENARIOS



New legislation and rules



Additional funding



Complexities of MRF contracting process (Scenario 2)



Shifting MRF business model (Scenario 2)



Service would appear (mostly) seamless to ratepayers

QUESTIONS

Clarifying questions to round out understanding of the government managed scenarios

WHAT THIS IS

- An opportunity to learn
- A chance to seek clarification

WHAT THIS IS NOT

- A time to debate
- A forum to express what you like and don't like
- A poll to select a framework



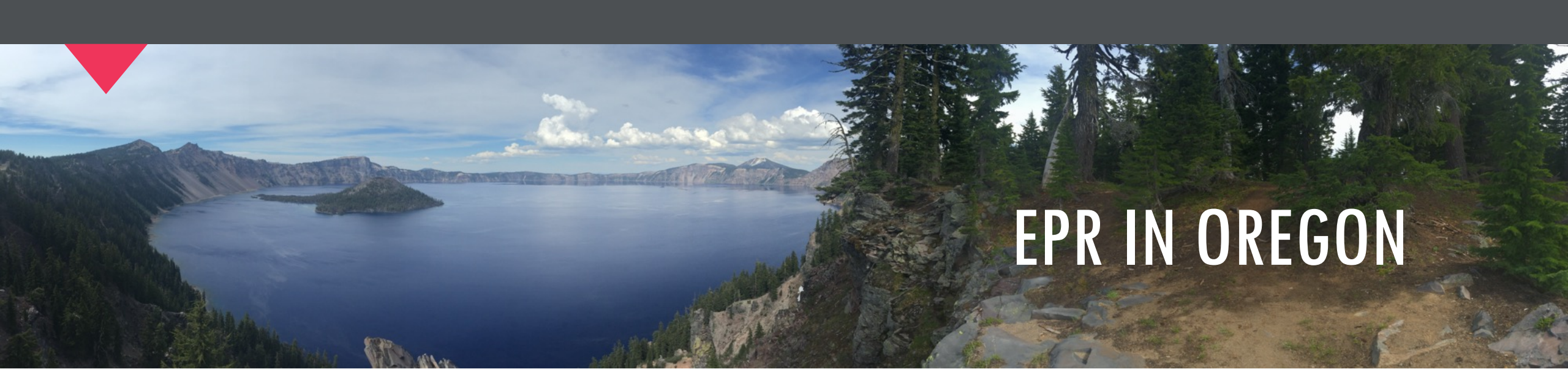
**SCENARIO GROUP 2: EXTENDED
PRODUCER RESPONSIBILITY MODELS**



WHAT IS EXTENDED PRODUCER RESPONSIBILITY?

Extended producer responsibility is a practice and a policy approach in which producers take responsibility for management of the products and / or packaging they produce at the end of their useful life. Responsibility may be fiscal, physical, or a combination of the two.

WHO ARE THE PRODUCERS?
Brands / Retailers



EPR IN OREGON



WHAT ABOUT EPR FOR CURBSIDE MATERIALS?

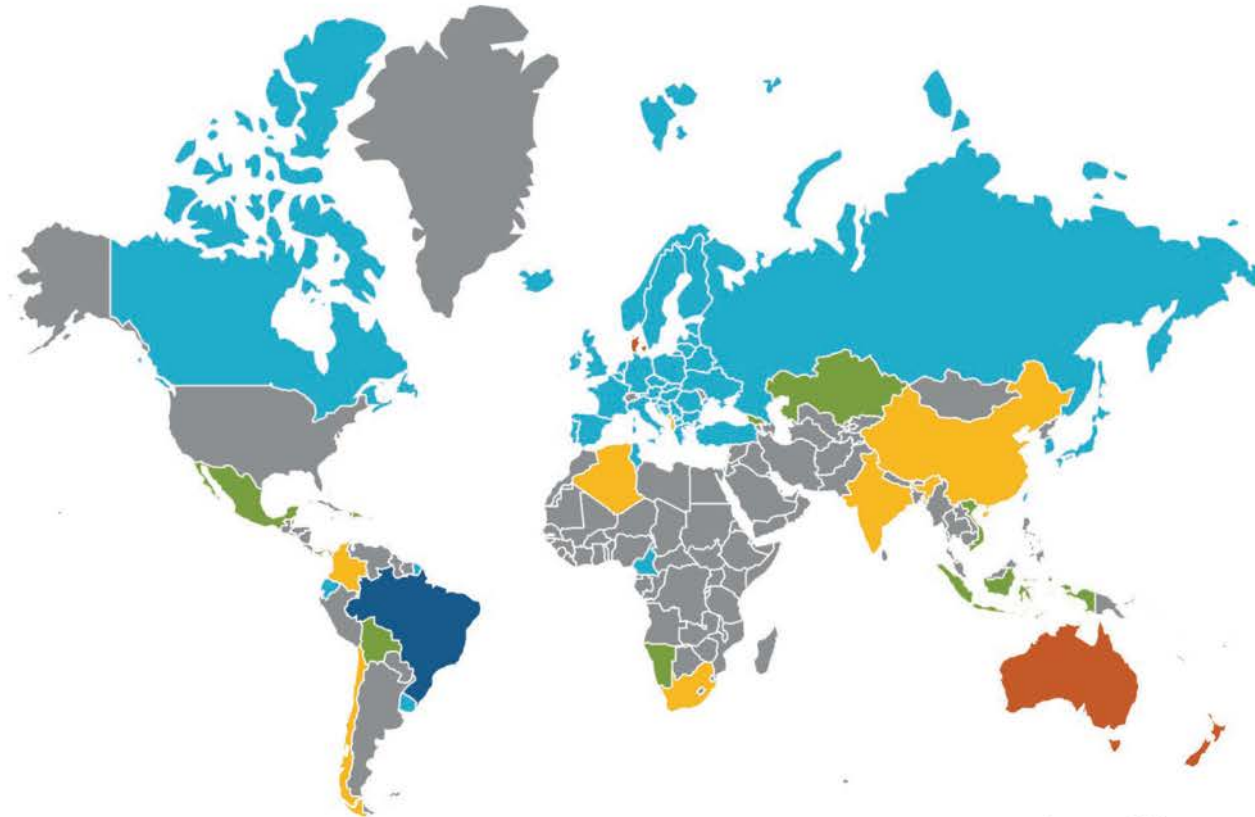


PACKAGING EXTENDED PRODUCER RESPONSIBILITY (EPR)

Packaging EPR in 2000



Packaging EPR in 2019



-  Mandatory EPR in Effect
-  Voluntary EPR in Effect
-  EPR in Effect (province-level);
In Implementation (country-level)
-  In Implementation
(India and China expected by 2022)
-  Framework EPR Legislation

Source: EPI



DRIVERS FOR PRINTED PAPER AND PACKAGING (PPP) EPR

- Need for stable funding
- Market challenges
- Focus on circular economy
- Stagnant recycling rates

COMMON FEATURES RECOMMENDED FOR ALL EPR SCENARIOS:



Managed by a
Producer
Responsibility
Organization (PRO)



Guided by
a Program
Plan



Uses Eco-
Modulated
Fees



RECYCLEBC™

CITEO

Éco
Entreprises
Québec

MMSM
Multi-Material
Stewardship Manitoba

ARA

SLOPAK
ŽIVIMO Z OKOLJEM.

WHAT IS A PRO?

- Represents brands / retailers
- Manages obligation
- Authorized in legislation
- Develops and implements Program Plan
- Sets and collects fees

The image shows several rolled-up architectural blueprints on a light-colored surface. The blueprints are partially unrolled, revealing detailed technical drawings with various lines, dimensions, and alphanumeric labels. A red triangle is visible in the top-left corner of the overall image. The blueprints are the primary visual element on the left side of the slide.

WHAT IS A PROGRAM PLAN?

- Blueprint for meeting goals and obligations
 - Proposed list of recyclables
 - Collection / processing arrangements
 - Education and outreach
 - End market development
 - Waste reduction and litter abatement
- Must be approved by oversight entity (DEQ)



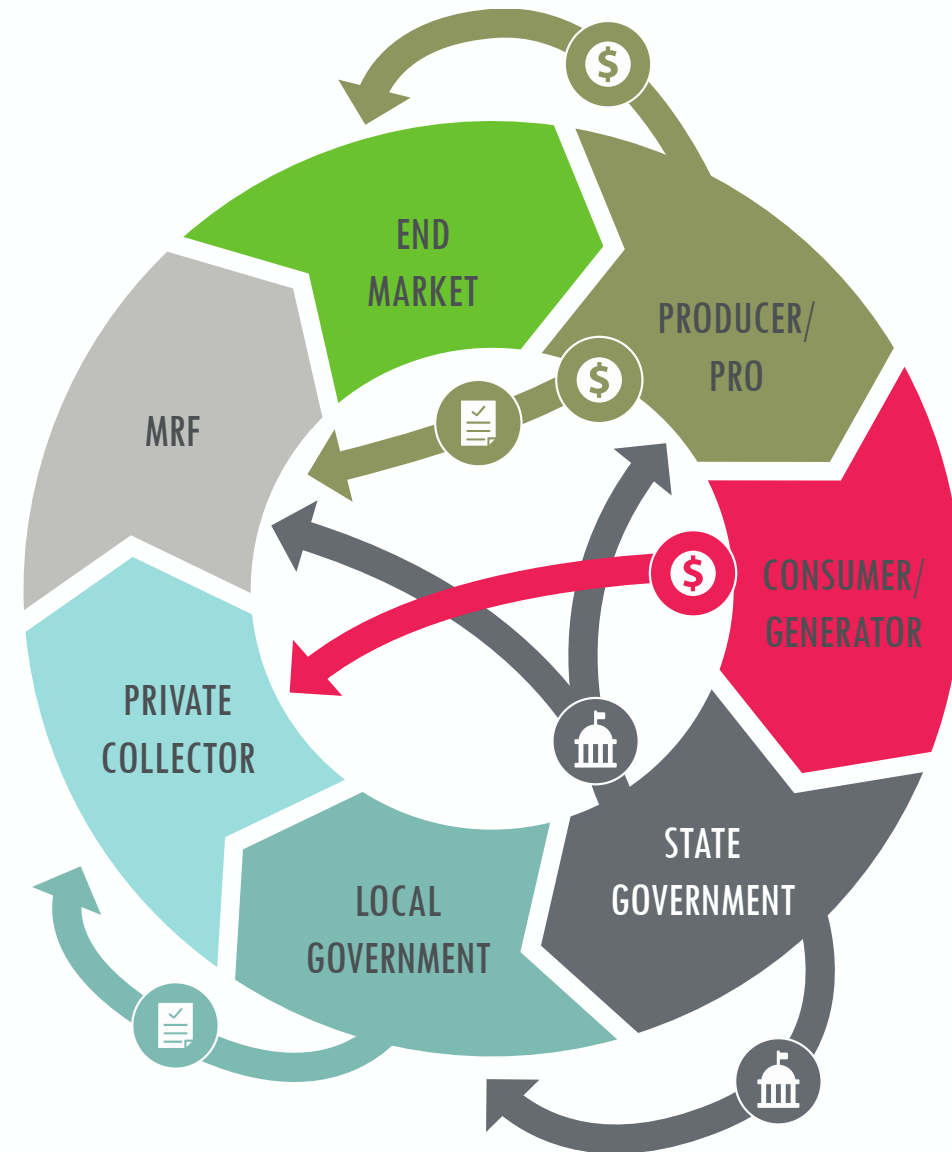
WHAT IS ECO MODULATION?

- Method of differentiating fees paid by brands / retailers
 - Incentivize environmental design
 - Penalize negative attributes
- Added or subtracted from base fee
- Based on DEQ LCA research
- Must be approved by DEQ

EPR SCENARIOS: *KEY DISTINCTIONS*

3 - Post collection Producer Responsibility

- Producers contract with MRFs to fund processing and marketing



FINANCING



OPERATIONAL /
CONTRACTUAL

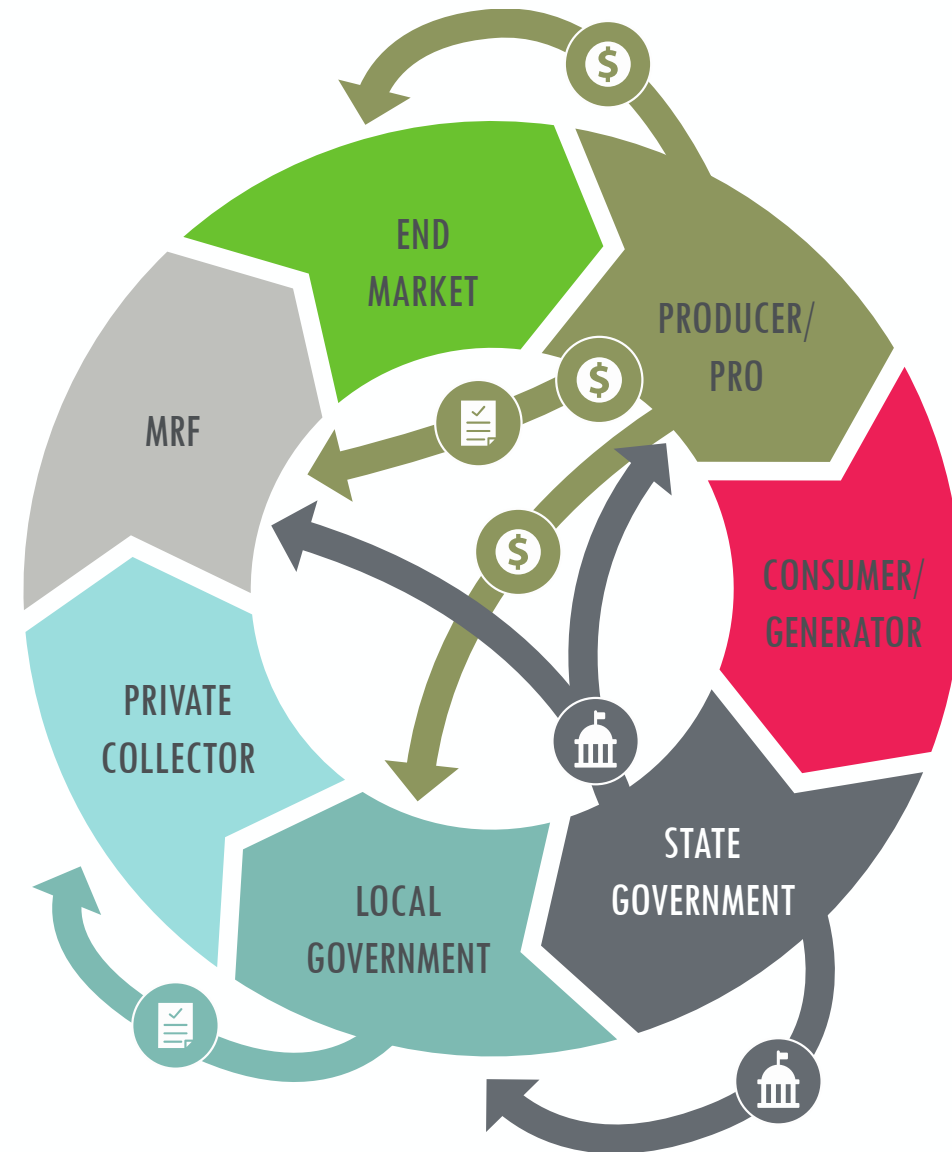


STRATEGIC / REGULATORY
AUTHORITY

EPR SCENARIOS: *KEY DISTINCTIONS*

4 - Producer Responsibility with Local Control

- Post-collection same as Scenario 3
- Producers fund local government collection systems



FINANCING



OPERATIONAL /
CONTRACTUAL

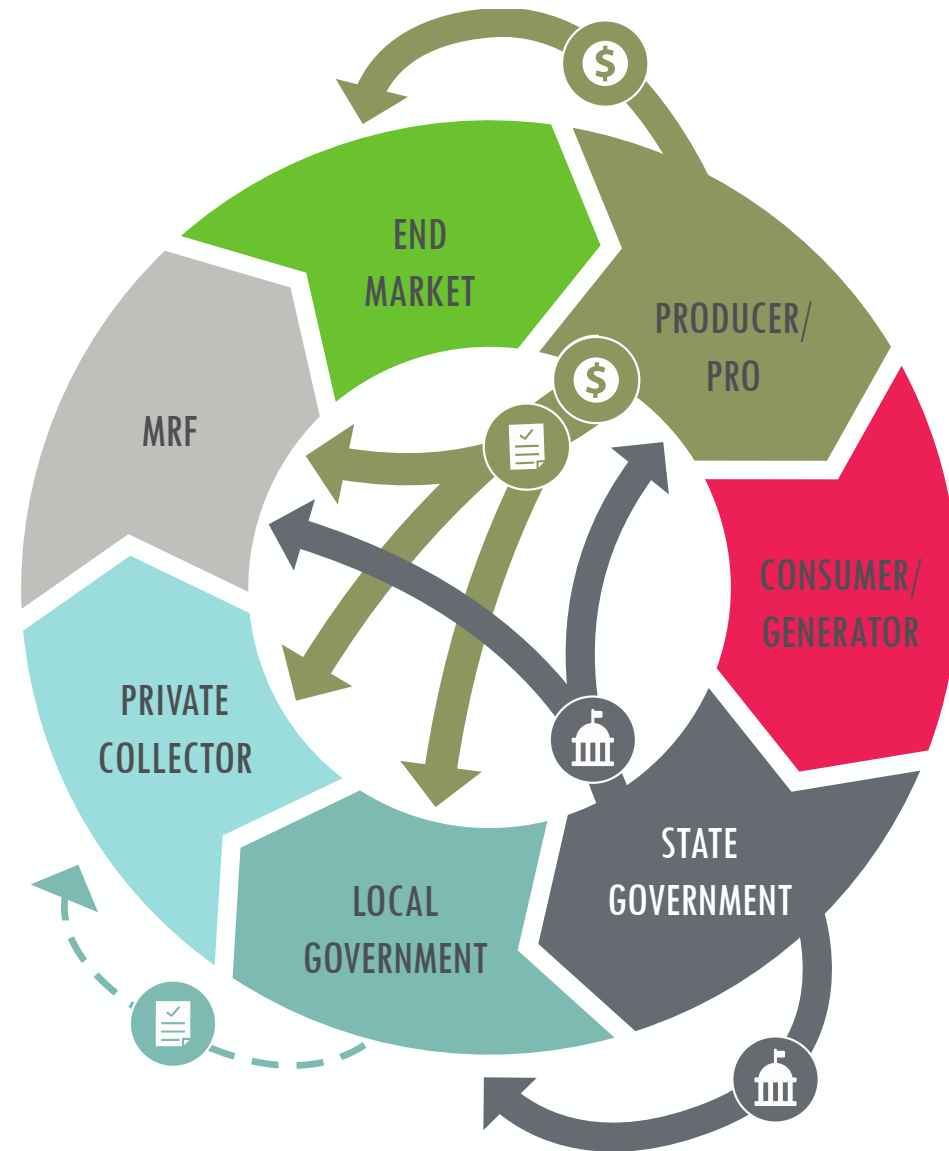


STRATEGIC / REGULATORY
AUTHORITY

EPR SCENARIOS: *KEY DISTINCTIONS*

5 - Full Producer Responsibility with Optional Local Involvement

- System fully funded and managed by producers



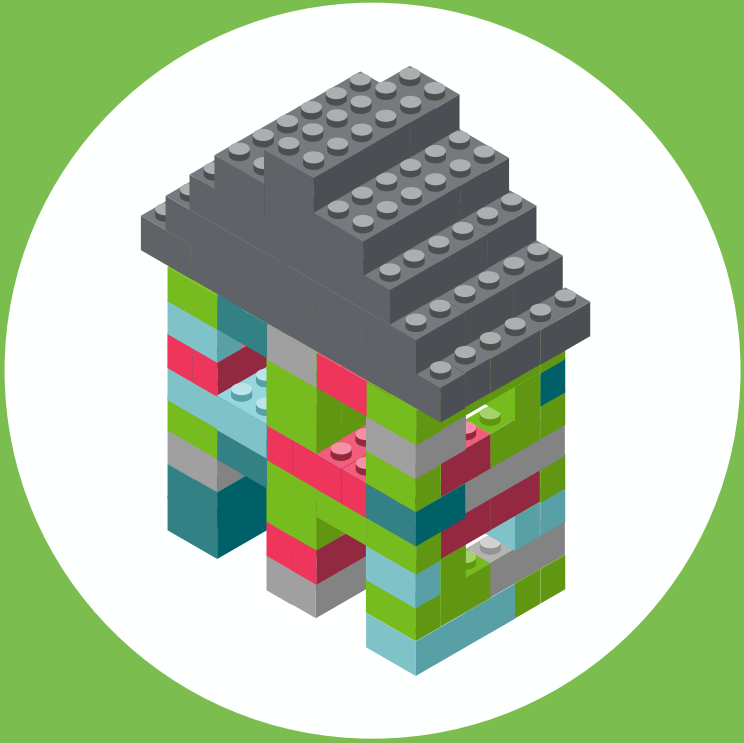
FINANCING



OPERATIONAL /
CONTRACTUAL



STRATEGIC / REGULATORY
AUTHORITY



SCENARIO 3

Post-Collection EPR

SCENARIO 3: *Post-Collection EPR*



Producers responsible
for post-collection
system



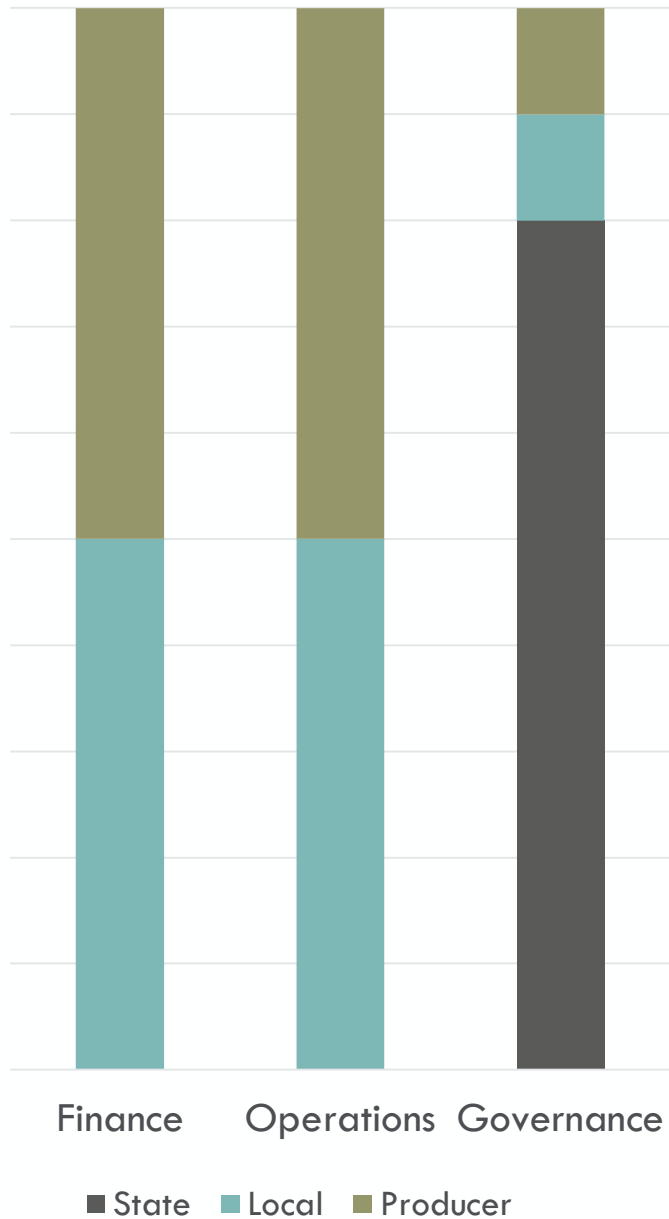
MRFs to be
permitted or
certified by state
and contract with
PRO(s)



Roles and relationships
stay the same on
collection side



DEQ a regulator and
integrator



Finance: Local ratepayers fund collection; PRO(s) fund post-collection



Operations: Locally managed collection; PRO(s) managed post-collection



Governance: DEQ oversight and integration; local franchise / license service agreements; PRO-MRF contracts

ROLES AND RESPONSIBILITIES: *POST-COLLECTION EPR*



STATE GOVERNMENT

- Expand authority matching Scenario 1 (including list)
- Negotiate, approve, oversee, and enforce producer's program plan
- Integrate ratepayer-funded collection with producer funded post-collection activities



LOCAL GOVERNMENT

- Plan and implement recycling programs that meet new state requirements
- Update franchise/license agreements to comply with new policies



COLLECTOR

- Collect material in accordance with new requirements
- Deliver to contracted MRF(s)



MRF

- Compete for PRO(s) contract(s)
- Implement operating and equity standards, reporting requirements and contamination targets



PRODUCER / PRO

- Manage and fund post-collection
- Develop and implement program plan
- Report on results



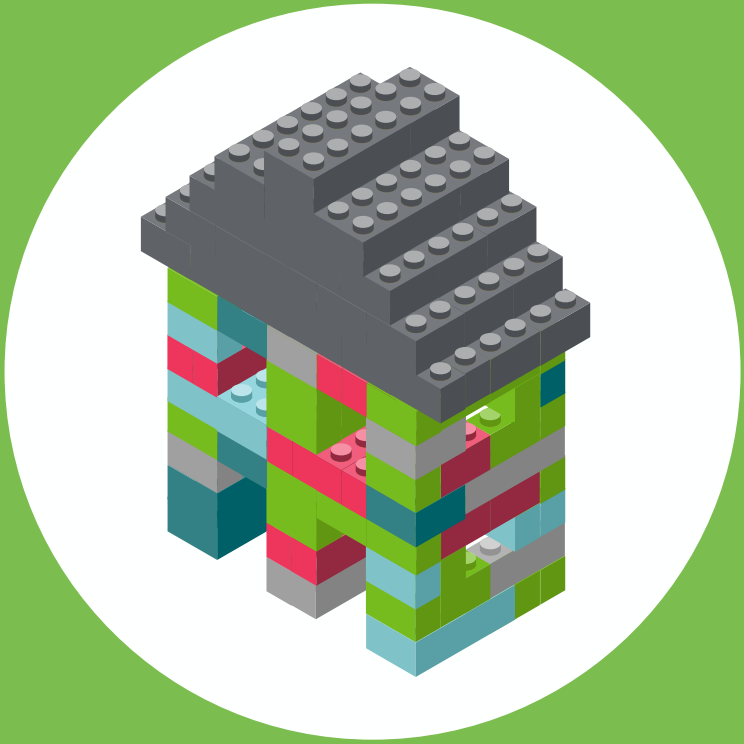
BENEFITS

- Engages brands / retailers
- Reliable source of funding
- Equitable access to processing
- Addresses upstream and downstream impacts
- Mitigates market risk
- Maintain strengths of existing system
- Enhance system optimization, integration and accountability



CHALLENGES

- Changing dynamics incorporating new players
- Significant departure from status quo in processing and marketing
- Coordination between collection and processing systems



SCENARIO 4

Producer Responsibility with
Local Control

SCENARIO 4: *Producer Responsibility with Local Control*



Producers responsible for funding and managing post-collection system and funding the collection system



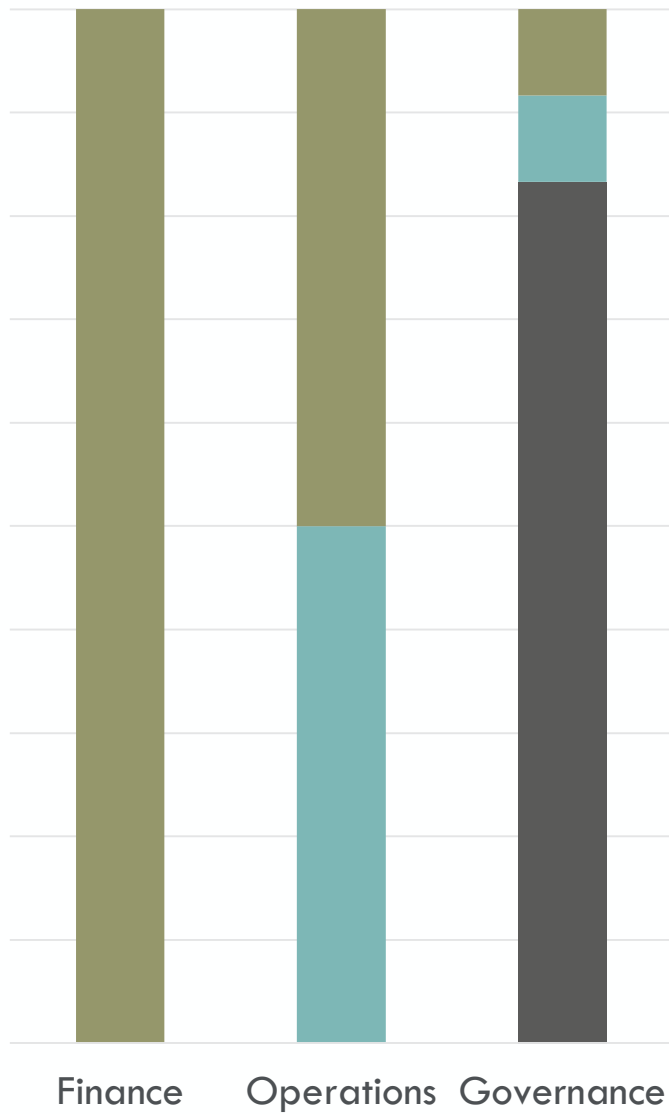
MRFs to be permitted or certified by state and contract with PRO(s)



Relationship between local government and collectors remains the same



DEQ a regulator and arbiter of reimbursement process



■ State ■ Local ■ Producer



Finance: PRO(s) funds collection and post-collection



Operations: Locally managed collection; PRO(s) managed post-collection



Governance: DEQ oversight and integration; local franchise / license service agreements; PRO-MRF contracts

ROLES AND RESPONSIBILITIES: *PRODUCER RESPONSIBILITY* *WITH LOCAL CONTROL*



STATE GOVERNMENT

- Expand authority matching Scenario 1 (except the list)
- Negotiate, approve, oversee, and enforce producer's program plan (including approval of list)
- Oversee and coordinate reimbursement process



LOCAL GOVERNMENT

- Work with state and PRO(s) to obtain reimbursement for recycling program costs
- Plan and implement recycling programs that meet new state requirements
- Update franchise/license agreements to comply with new policies



COLLECTOR

- Collect material in accordance with new requirements
- Deliver to contracted MRF(s)



MRF

- Compete for PRO(s) contracts
- Implement operating and equity standards, reporting requirements and contamination targets



PRODUCER / PRO

- Manage and fund post-collection
- Reimburse collection programs
- Develop and implement program plan
- Report on results



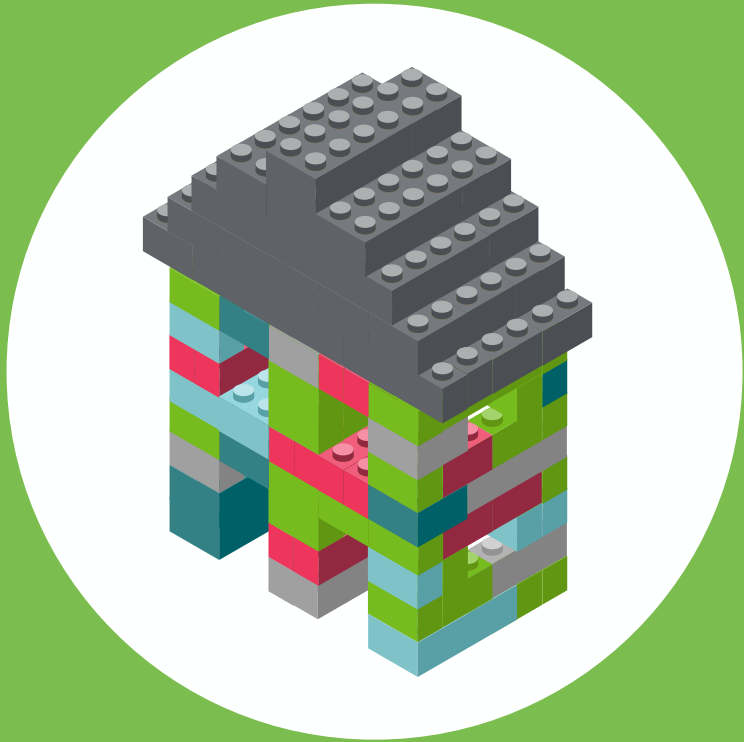
BENEFITS

- Engages brands and retailers
- Reliable source of funding
- Equitable access to processing
- Addresses upstream and downstream impacts
- Mitigates market risk
- Maintain strengths of existing system
- Greater system optimization, integration and accountability



CHALLENGES

- Changing dynamics incorporating new players
- Coordination of collection program reimbursements
- Significant departure from status quo in processing and marketing



SCENARIO 5

Full Producer Responsibility
with Optional Local
Involvement

SCENARIO 5: *Full Producer Responsibility With Optional Local Involvement*



Producers responsible for collection and post-collection system



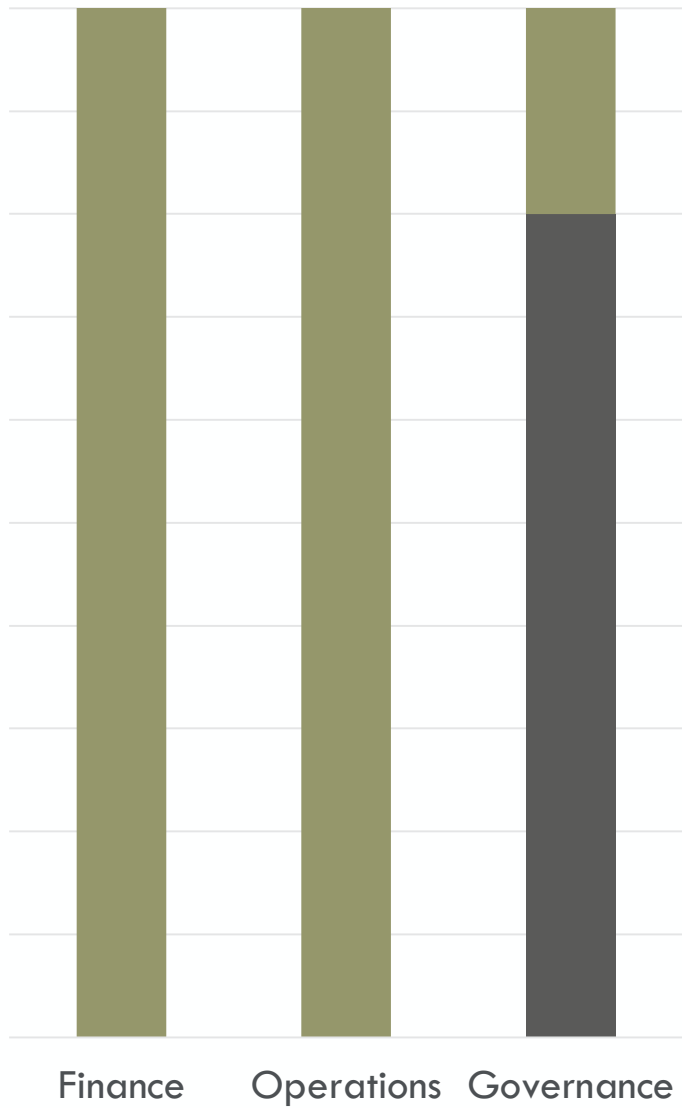
MRFs to be permitted or certified by state and contract with PRO(s)



Local government engagement optional



DEQ a regulator



■ State ■ Local ■ Producer



Finance: PRO(s) fund entire system



Operations: PRO(s) manage collection and post-collection; optional local involvement



Governance: DEQ oversight; collection and post-collection PRO(s) contracts

ROLES AND RESPONSIBILITIES: *FULL PRODUCER* *RESPONSIBILITY WITH OPTIONAL LOCAL INVOLVEMENT*



STATE GOVERNMENT

- Expand authority matching Scenario 1 (except the list)
- Negotiate, approve, oversee, and enforce producer's program plan (including approval of list)



LOCAL GOVERNMENT

- Choose to:
- Opt-in to contract as collector for PRO(s)
 - Elect service by PRO(s)
 - Opt-out of system and receive no funding



COLLECTOR

- Contract either directly with PRO(s) or to a local government
- Meet collection program requirements



MRF

- Compete for PRO(s) contracts
- Implement operating and equity standards, reporting requirements and contamination targets



PRODUCER / PRO

- Finance and manage system
- Develop and implement a program plan
- Report on results



BENEFITS

- Engages brands & retailers
- Reliable source of funding
- Equitable access to processing
- Mitigates market risk
- Addresses upstream and downstream impacts
- Greatest potential for optimization, integration and accountability



CHALLENGES

- Greatest change in dynamics incorporating new players
- Most significant departure from status quo
- Potentially significant shift in local government involvement

KEY CONSIDERATIONS FOR IMPLEMENTATION OF EPR SCENARIOS



New legislation and rules



Shifting business models



Integration of collection and post-collection (Scenarios 3 and 4)



Collection reimbursement process
(Scenario 4)

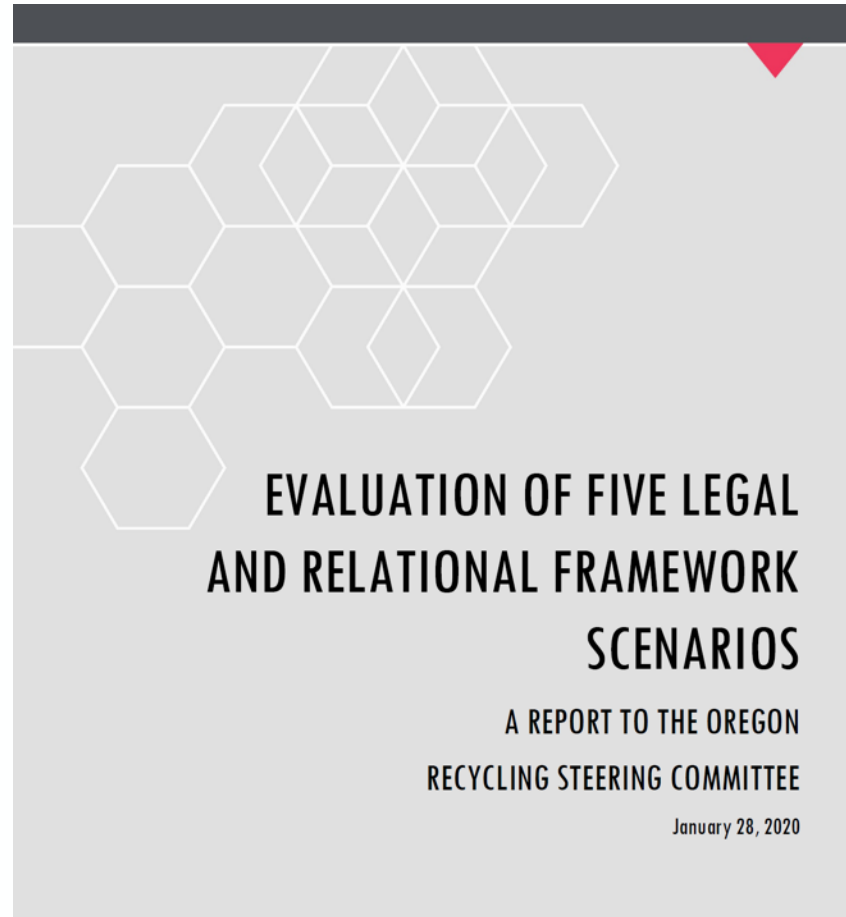


Changing role of local government (Scenario 5)



Potential changes in collection service (Scenario 5)

WANT MORE DETAIL?



PREPARED BY:



COMMISSIONED BY:

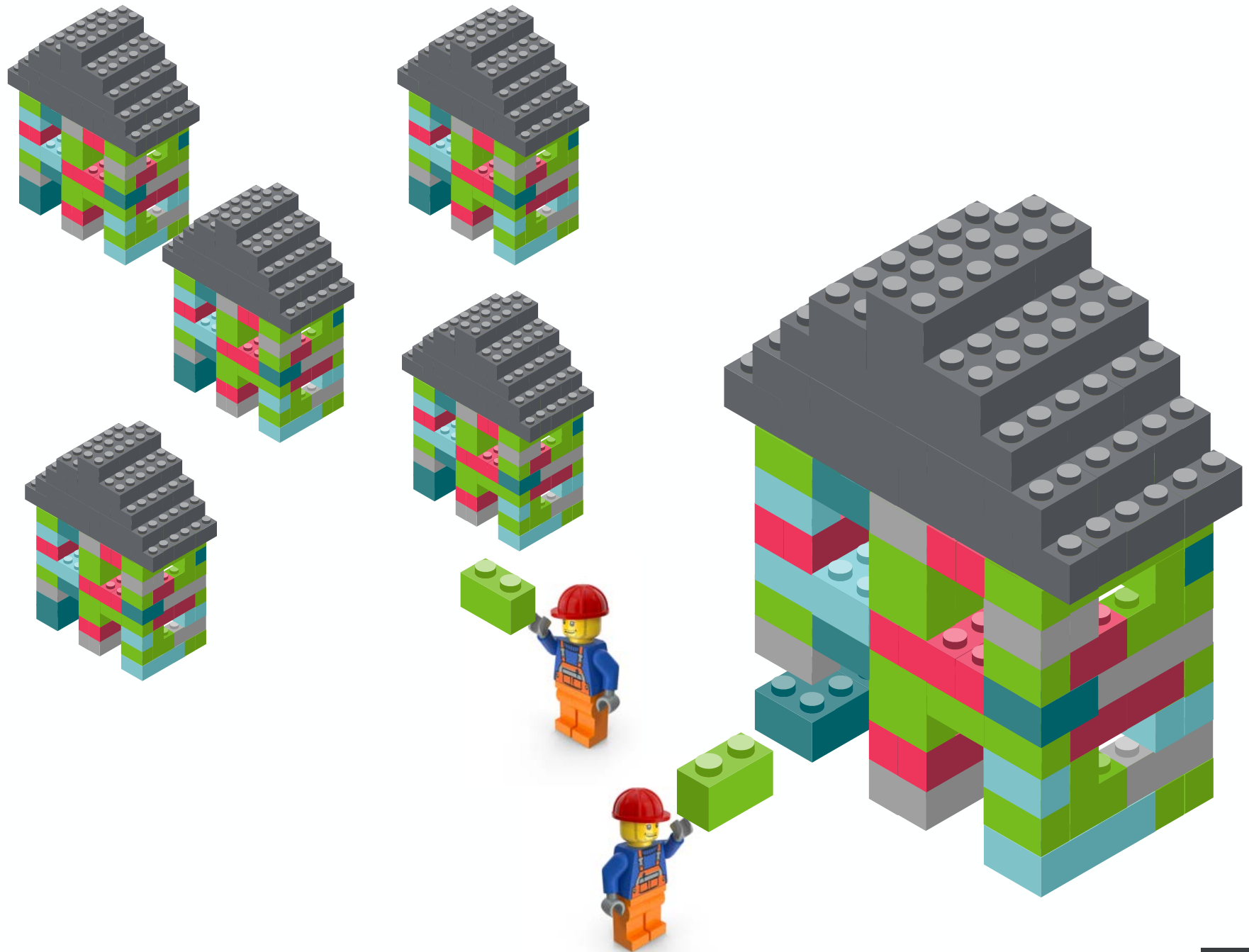


Appendix B: Scoring Matrix of the Five Scenarios Relative to the Desired Functions Defined by the RSC

	Scenario 1 Enhanced Government Managed	Scenario 2 Enhanced State Managed with MRF Contracts	Scenario 3 Post-Collection Producer Responsibility	Scenario 4 Producer Responsibility with Local Control	Scenario 5 Full Producer Responsibility with Optional Local Involvement
1. OPTIMIZATION	Yellow	Light Green	Green	Green	Green
2. RESILIENCY	Light Green	Yellow	Green	Green	Green
3. FINANCING	Light Green	Light Green	Green	Light Green	Light Green
4. INTEGRATION	Yellow	Light Green	Green	Green	Green
5. UPSTREAM	Blue	Blue	Green	Green	Green
6. EQUITY	Yellow	Green	Green	Green	Green
7. SHARED RESPONSIBILITY	Yellow	Yellow	Green	Green	Green
8. GOALS	Yellow	Yellow	Green	Green	Green
9. EDUCATION	Blue	Blue	Blue	Blue	Blue
10. UNDERSTANDING IMPACTS	Yellow	Yellow	Yellow	Yellow	Yellow
11. MATERIAL SELECTION	Green	Green	Green	Green	Green
12. COLLECTION	Light Green	Light Green	Light Green	Light Green	Light Green
13. INCOMING PROCESSING	Green	Green	Green	Green	Green
14. OUTGOING PROCESSING	Light Green	Light Green	Light Green	Light Green	Light Green
15. DOWNSTREAM	Yellow	Green	Green	Green	Green
16. ACCOUNTABILITY	Yellow	Green	Green	Green	Green

- Same as current Oregon framework
- Slightly better than current Oregon framework
- Better than current Oregon framework
- Much better than current Oregon framework
- TBD

**NEXT STEPS:
STEERING
COMMITTEE
WILL TAKE
IT FROM
HERE**



QUESTIONS

Clarifying questions to round out understanding of the EPR scenarios

WHAT THIS IS

- An opportunity to learn
- A chance to seek clarification

WHAT THIS IS NOT

- A time to debate
- A forum to express what you like and don't like
- A poll to select a framework



RESA DIMINO

SENIOR CONSULTANT

518.610.8095

RESA@RECYCLE.COM

BRYCE HESTERMAN

CONSULTANT

917.520.0555

BHESTERMAN@RECYCLE.COM