

EPR: An Introduction

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WHAT ARE WE TRYING TO ACHIEVE?

1. Circular Economy



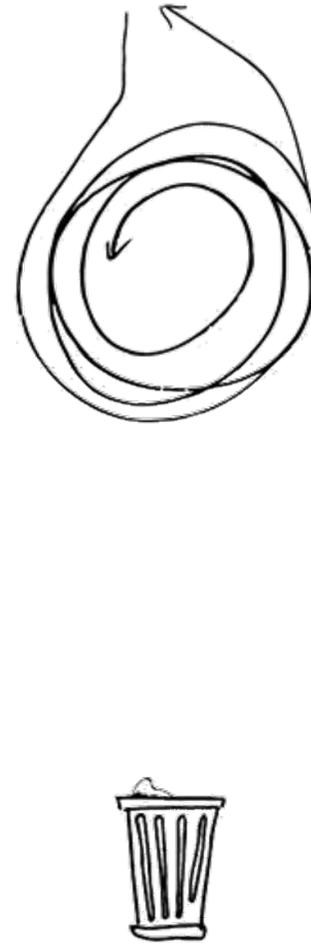
LINEAR ECONOMY



RECYCLING
ECONOMY



CIRCULAR
ECONOMY



**Planning for recycling =
Manage the problem.**



[Image source: "overflowing" by zoetnet is licensed under CC BY 2.0](#)

**Planning for a circular economy
= Solve the problem.**

THE NEW PLASTICS ECONOMY VISION



ELIMINATE
the plastics we
don't need.



INNOVATE
to ensure that the
plastics we do need are
reusable, recyclable,
or compostable.



CIRCULATE
all the plastic items
we use to keep them
in the economy and out
of the environment.



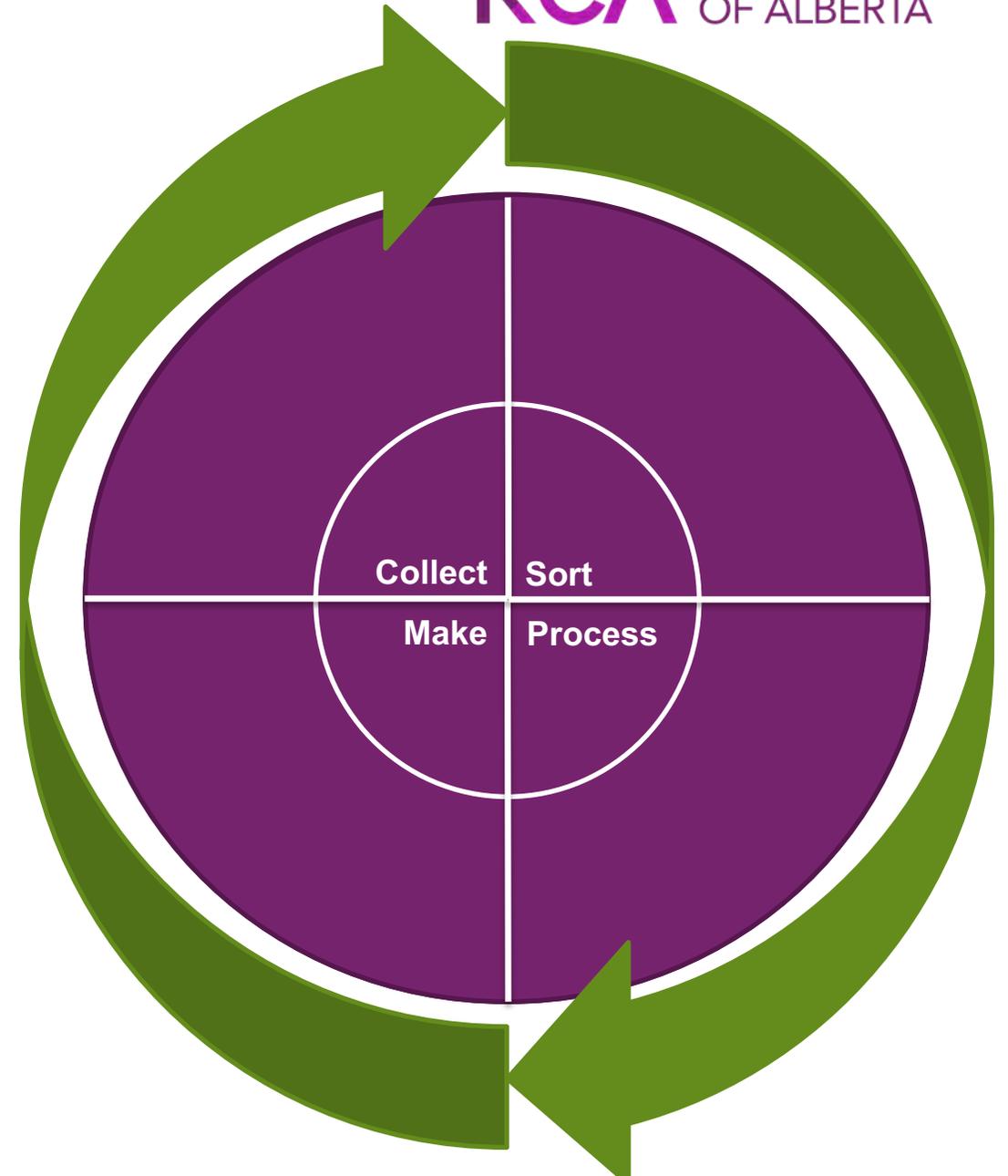
ELLEN
MACARTHUR
FOUNDATION

2. Recycling

Recycling — The process of reducing a product all the way back to its basic materials, reprocessing those materials, and using them to **make new products, components or materials.**

KEY: matter used in a new good

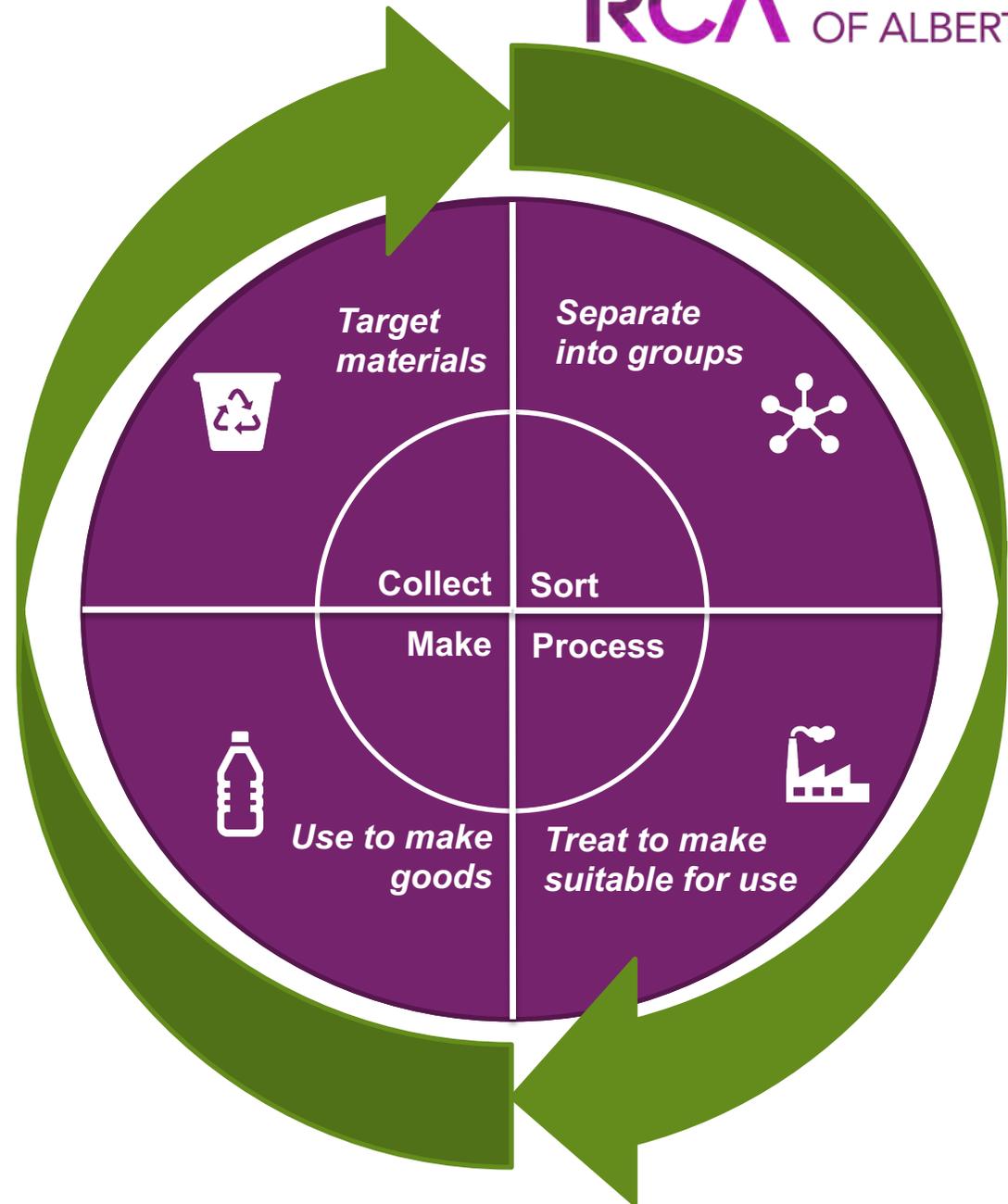
E.g., Ellen MacArthur Foundation –Definitions List; CSA Group SPE-890-15
-A Guideline for accountable management
of end-of-life materials;



Four Parts of a Recycling System

1. **Collect:** Which materials / how they are collected.
2. **Sort:** Material is separated and grouped.
3. **Process:** Materials are re-processed into manufacturing feedstock.
4. **Make:** Feedstock used to manufacture a new good.

Recycling = all four are complete.



E.g., ‘Sale to market’ is often used as evidence of recycling.

Does this look like recycling?



THE RECYCLING MODEL VS EPR

Alberta's Programs

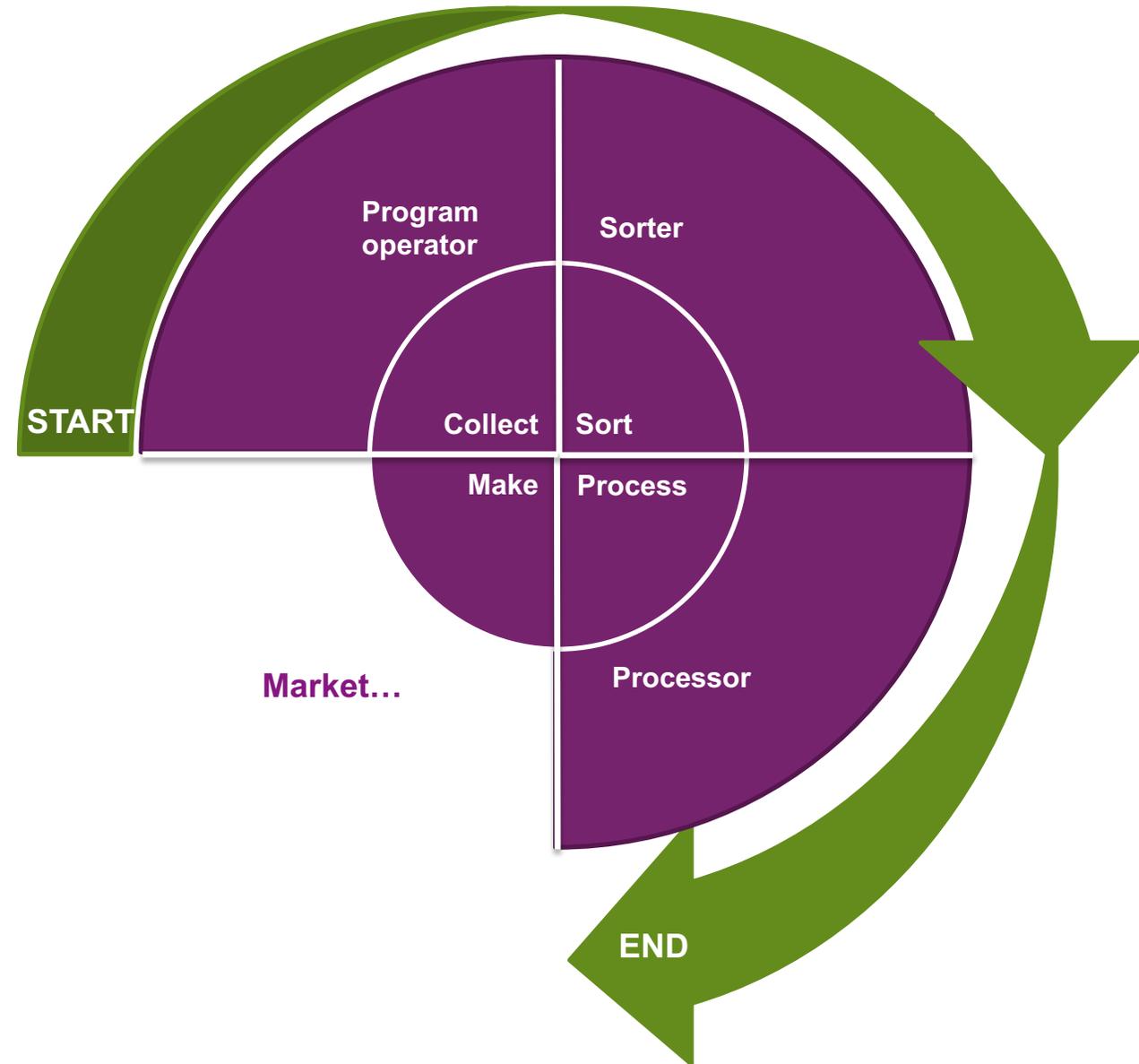
Scope of influence –managing disposed material

Program operator is the decision maker. Fees collected from consumers to fund collection, sorting and re-processing. Producers have **no obligation** for system outcomes.

KEY – PRODUCERS HAVE NO INCENTIVE TO:

- x use recycled content
- x communicate with other system players
- x keep materials at a high value
- x rethink design (e.g., longevity, recyclability, repair, reuse)

...because both costs and consequences borne by program operators / consumers / taxpayers.



RECYCLING
ECONOMY

Each decision maker determines what it can pull from the stream to create value.

Diversion is the goal.

The question: What portion can I economically recycle?



EPR Systems

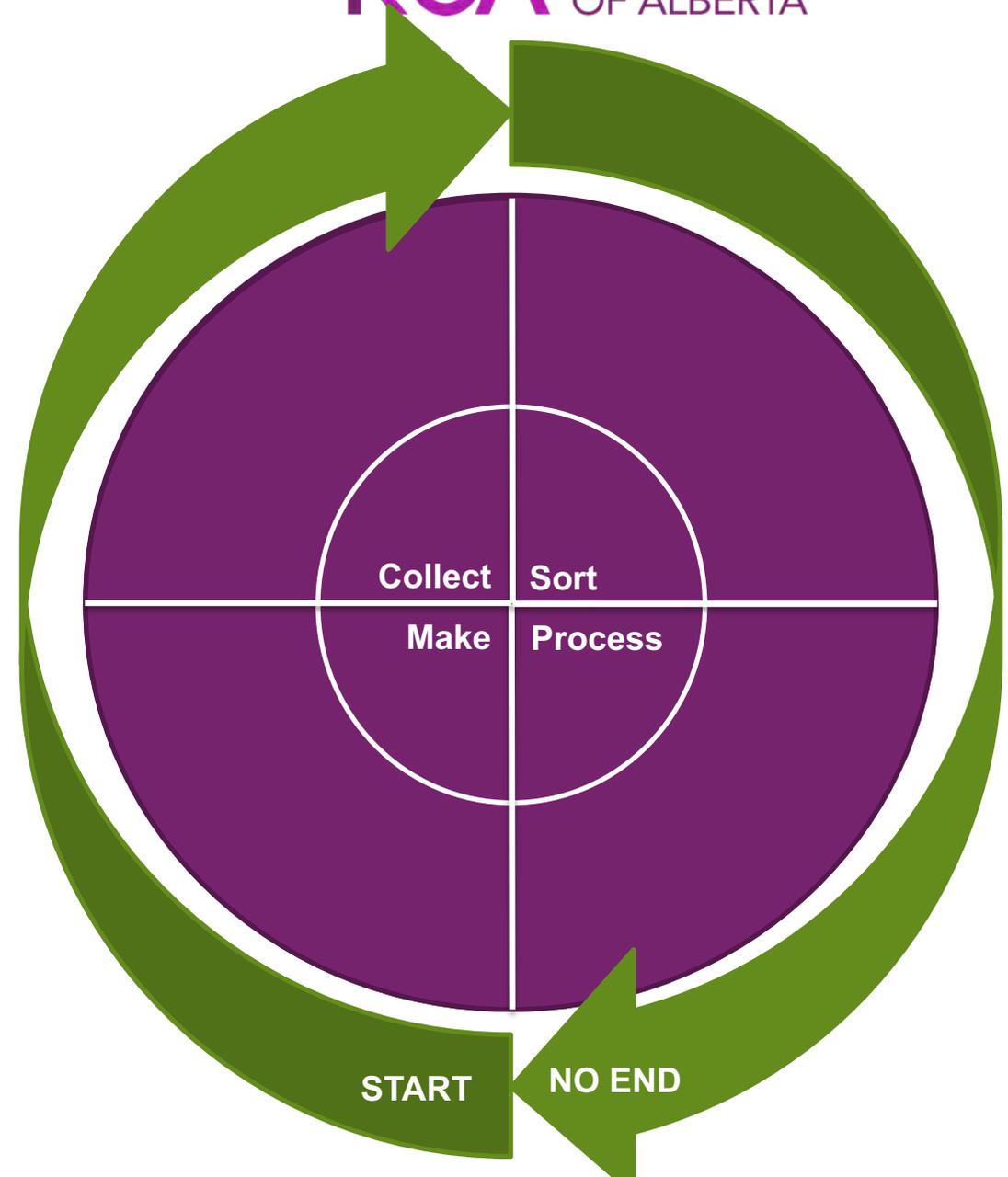
Scope of influence – cradle to cradle

EPR shifts decision making to producers. Producers have the **obligation and authority** to coordinate and operate recycling systems that keep materials in use.

KEY –PRODUCERS HAVE INCENTIVE TO:

- ✓ rethink design –recyclability, dematerialize
- ✓ increase product lifespan –repair, reuse
- ✓ invest in new recycling system processes and technologies
- ✓ use recycled content

... because both costs and consequences borne by producers.



CIRCULAR
ECONOMY

Producers responsible for making decisions that keep materials circulating.

Complete recycling, use of recycled content, dematerialization are goals.

The question asked: What do I need to change to make it possible and economical to recycle my whole product or package?



EPR ON THE GROUND

EPR in Action

EPR is not a type of 'program'.

EPR is an obligation that enables disruptive systems thinking.



Design for Recycling

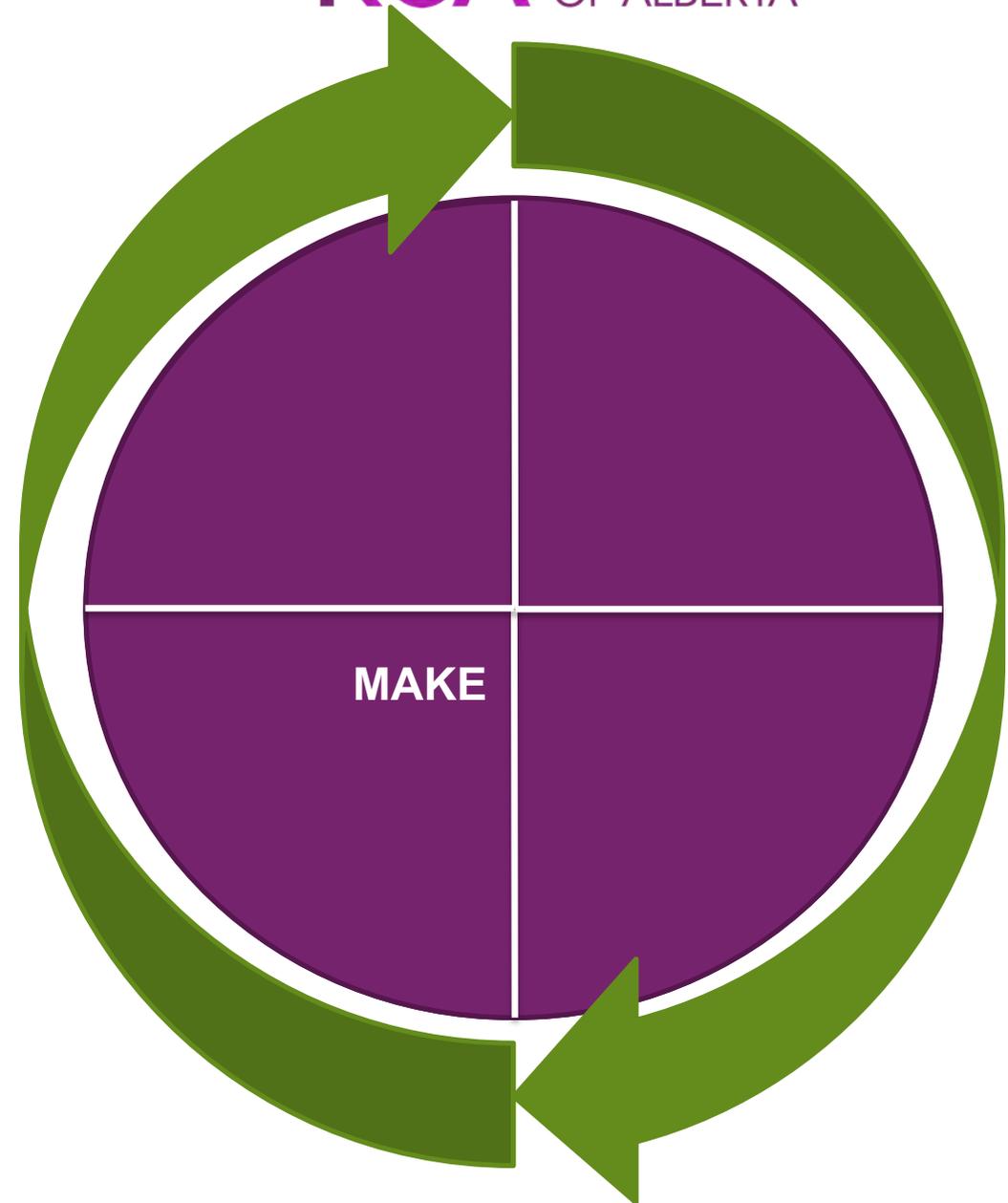


Background and Purpose

In the summer of 2019, CPMA surveyed members of the Plastics Packaging Working Group on the usage of plastic materials for produce packaging. Subsequent analysis, supported by the evaluation of domestic and international developments and trends in packaging¹, resulted in the creation of the CPMA Preferred Plastics Guide – May 2020 edition. Intended to help inform and support CPMA members in their packaging decision making processes, the CPMA Preferred Plastics Guide will be updated as developments in packaging materials, design and recycling capabilities warrant.

Unfavourable Unfavourable: Due to a lack of recyclability or effective reuse, CPMA members will seek to eliminate or replace the identified plastics by a defined period.	Minimize² Minimize: Although some recyclability or reuse may be possible, CPMA members will investigate alternatives or substitution for the identified plastics, or continue their use where required.	Preferred Preferred: Given the potential or existing capability to recycle or reuse, CPMA members will continue to use the identified plastics and consider them as viable replacements for plastics identified as “unfavourable.”
PVC and polystyrene	OPP (Oriented polypropylene)	PET (Polyethylene terephthalate)
Oxy-degradable plastics	PP (Polypropylene) ³	HDPE (High-density polyethylene)
Rigid water-soluble plastics	Complex laminates/multi-layer films	LDPE (Low-density polyethylene)
Polycarbonate	PVdC (Polyvinylidene dichloride) ⁴	PE (Polyethylene)
Acrylic		rPET and other PCR-containing preferred plastics ⁵
Black or dark coloured plastic ⁶		

1. A Landscape Review of Plastics in the Canadian Fresh Produce Sector, CPMA Technical Report, 2019
 2. Recycling of select plastics can vary considerably across Canada, with some jurisdictions (e.g., B.C.) having established recycling capacity, whereas other areas (e.g., Saskatchewan) do not have sufficient volumes to warrant a dedicated recycling stream, or are in the process of introducing dedicated recycling capacity. Members are encouraged to consult local or provincial recycling officials to confirm if changes (increases or decreases) in recycling rates are planned.
 3. Unlike plastics identified under the “Minimize” category, PP is being increasingly recycled in various regions of Canada, with other areas actively considering increases from nominal levels. If recycling levels continue to increase across Canada, PP may warrant a change from “Minimize” to “Preferred” status in due course. The CPMA will continue to monitor these developments and provide updates to the Preferred Plastics List when warranted.
 4. PVdC, not to be confused with PVC, is typically used as a coating to limit moisture and oxygen diffusion. PVdC is not recyclable, but PVdC coatings are relatively common in various packaging applications.
 5. Preferred plastics which incorporate post-consumer recycled content (PCR) and continue to meet produce packaging requirements are also considered as “preferred.”
 6. Although the plastics used in black or dark coloured packaging may be recyclable, the majority of recycling facilities lack the ability to detect and properly triage black or dark coloured plastics, resulting in the opaque packaging being redirected to landfill. Members are invited to confirm if local or regional efforts are underway to improve detection during recycling when making decisions on the use of black or dark coloured plastics.



Effective Collection

(maintain material value)

The screenshot shows the Recycle BC website with a navigation bar and a search bar. The main content is an article titled "How We Can Prevent Recycling Contamination" by Anthony, dated August 11, 2020. The article discusses the importance of preventing contamination in recycling bins and lists several examples of unacceptable materials. It also includes a section on why preventing contamination is important and a collector spotlight for the City of Terrace.

How We Can Prevent Recycling Contamination
Anthony | August 11, 2020

Contamination is a major obstacle in the recycling process. It occurs when material that is not accepted for recycling is put in recycling bins. There are many examples of contamination and they include:

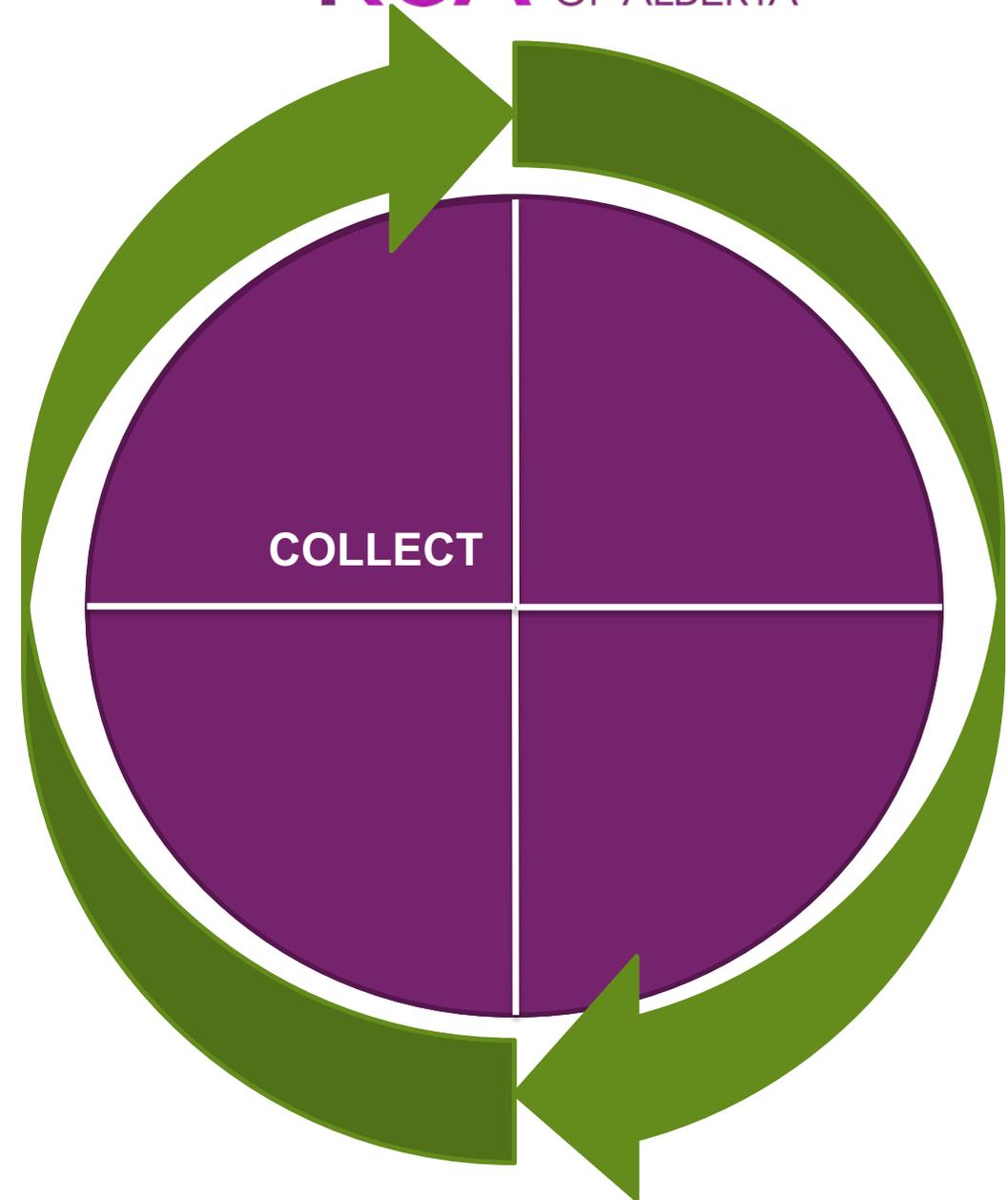
- Material not accepted by Recycle BC
 - Material that is not packaging or paper
 - Material that can't be recycled with current recycling technology
 - Hazardous material, including batteries, propane or butane cylinders, needles, lighters
- Containers with contents (e.g. food or liquid) inside
- Material sorted incorrectly
- Material tied in a plastic bag

Why Preventing Contamination is Important

When it comes to recycling, we're all in this together. From everyone here at Recycle BC, to the dedicated collection and post-collection crews, to you – the residents of BC – we all work together to ensure the success of the recycling system. In our 2019 Annual Report, we were happy to report that 90% of collected tonnes in the Recycle BC program were managed by recycling. Low contamination is a contributing factor to a high recycling rate.

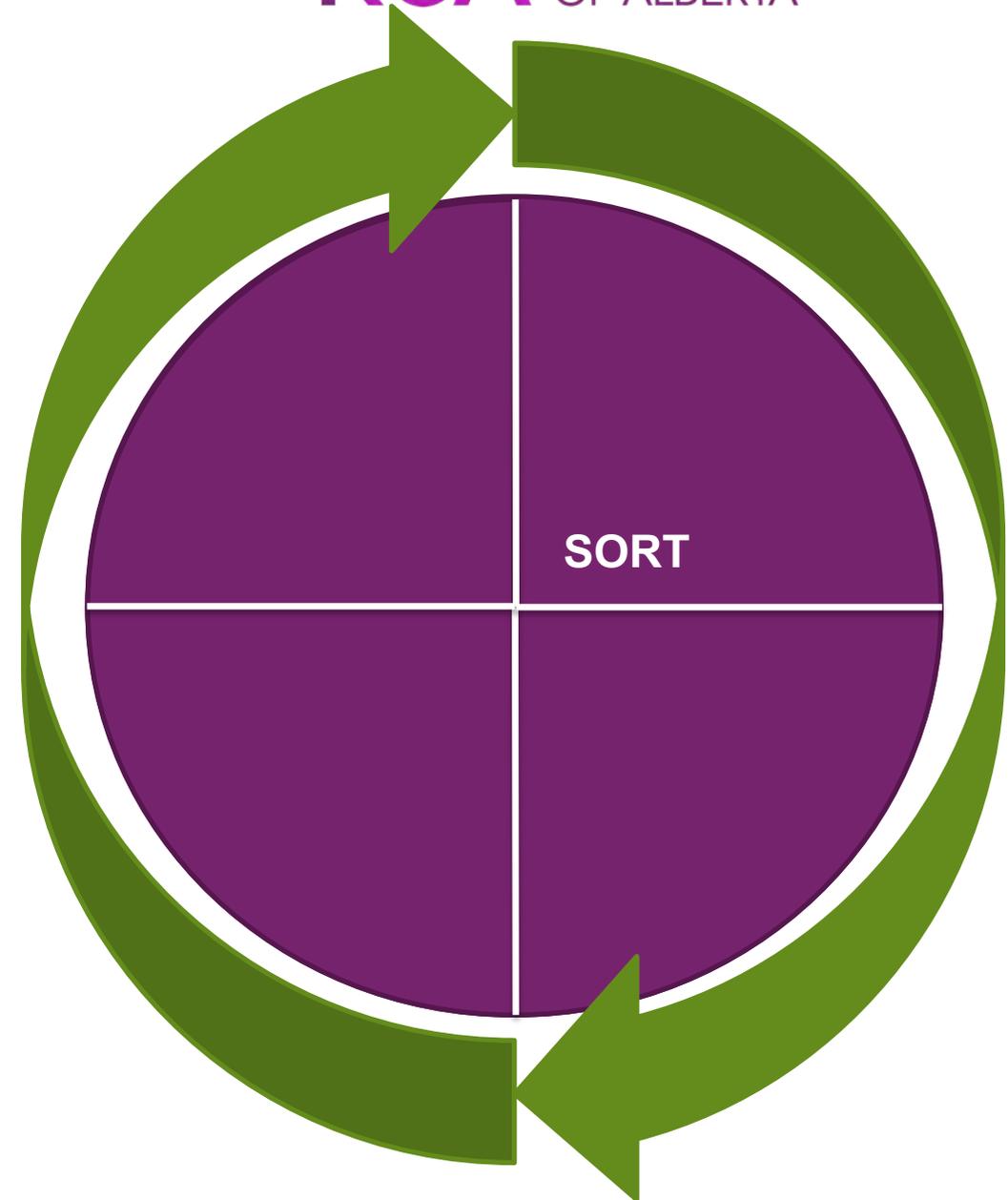
Collector Spotlight: City of Terrace

The City of Terrace is a great example of everyone – residents and collectors – pitching in to successfully reduce contamination. In 2018, curbside recycling contamination was nearly 14% in Terrace but after education campaigns, deeper visual screening by drivers during pick-up, and stricter enforcement of bylaw, Terrace reduced their curbside contamination level to 5%.



Effective Sorting

(investment, efficiency)



Province	Program Cost	Population	Cost/ Capita	Access
BC <small>(Recycle BC AR 2019)</small>	\$101,236,146	5.071 million	\$19.96	98%
AB <small>(ACES Report 2019)</small>	\$107,000,000	4.371 million	\$24.48	68%

Innovative Processing

(extend life, new technologies)



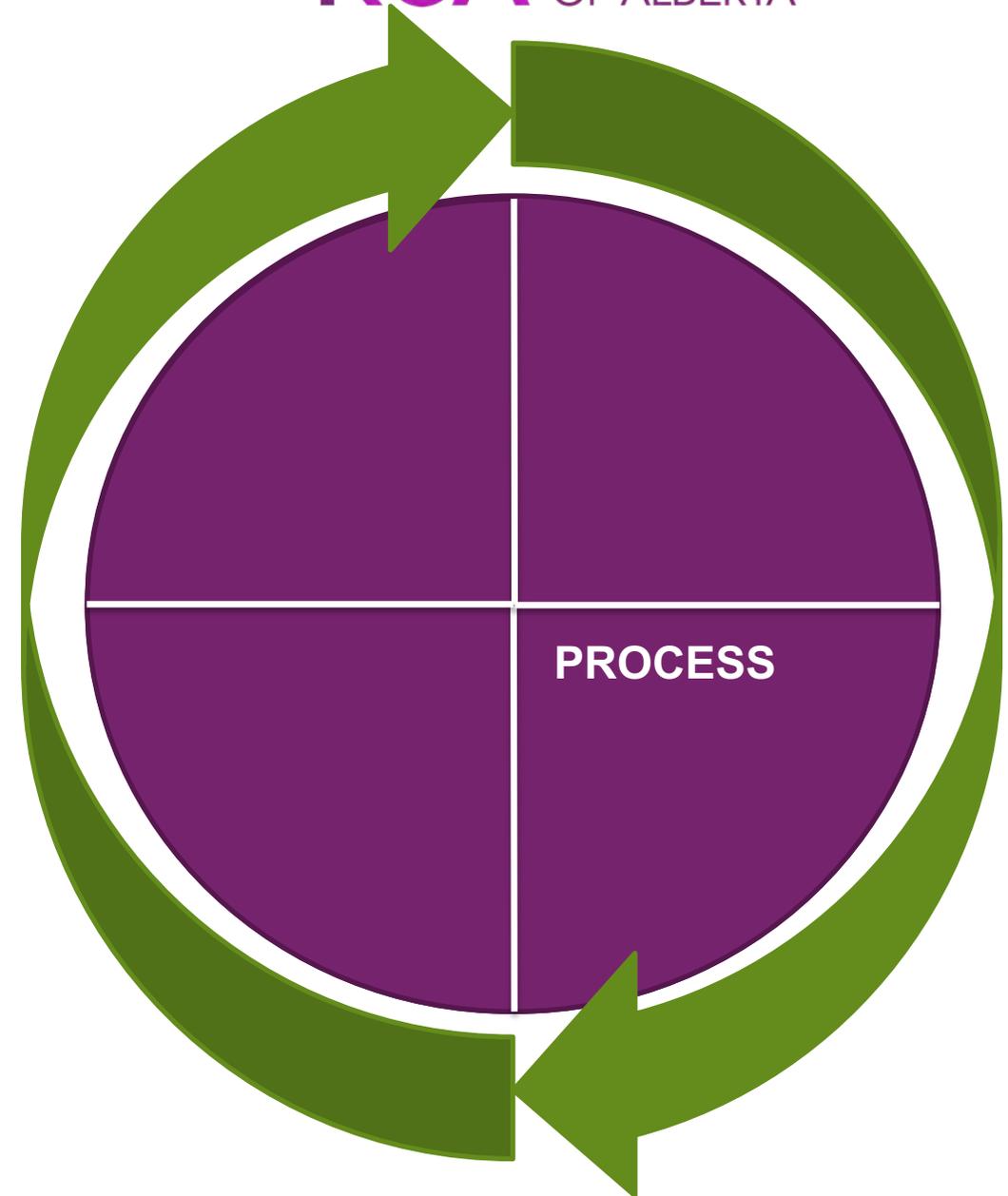
List of entities that have registered as Tire Retreaders

(As of October 15, 2020)

Total count: 20

Account Name

- B Town Auto Spa
- Benson Tire
- Canadian Treads
- Donald B Rice Tire Co, Inc
- Fountain Tire Supply
- Goodyear Canada Inc.
- H & H AUTO AND TOWING
- H&R GLOBAL TIRE SHOP INC.
- inderpaal singh
- Kal Tire
- Lottridge Tread Tech
- McArthur Tire Services
- New Millenium Tire Centre Inc.
- Pride Enterprises
- Robert Bernard TRM Ltée
- Rotana Auto Centre Inc
- Royal Tire Inc.
- SERVICE DE PNEUS LAVOIE OUTAOUAIS
- Tiremaster Limited
- TRUCKCAP LIMITED



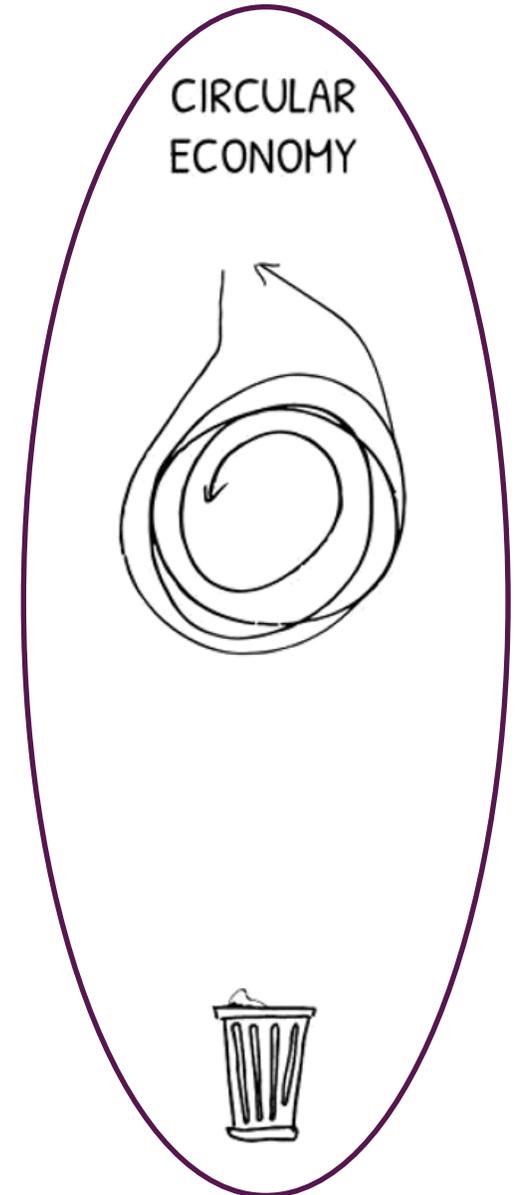
So... What's the role of government?

To set the system's framework - regulating and enforcing outcomes that drive EPR over 'just recycling'

RCA's EPR Principles

An EPR framework should:

1. Drive a **circular economy**
2. Be **outcomes-based**
3. Have performance standards that are **ambitious, measurable and enforceable**
4. Ensure a **level playing field**
5. Be implemented alongside **complementary regulations**





Thank You!

Jodi Tomchyshyn London

RCA President