



RMS Fundamentals: Everything You Need to Know to Prepare for Public Comment Part 2 of 2

November 4, 2020

Overview: Part 2

- Quick recap on part 1 – certification claims
- Defining the Attributes of Recycled Content (ARC) system
- Additionality Tests
 - Existing processors
 - Reinvestment criteria
- The ARC Registry
- Retiring certificates and making claims

Public Comment Period

Nov. 9 – Dec. 18, 2020

Visit **RMScertified.com**
for more information

Recap Part 1

- The RMS approach
- Types of claims
- Definitions
 - Post consumer
 - Post industrial
- Average content claims
- Mass Balance claims

Recording and slides are
available at:

RMScertified.com

The Recycled Material Standard (RMS)

- Our objective: **To advance the use of recycled materials**
- Multi-material, chain of custody standard that will serve as an **assurance mechanism** for third-party certification of recycled content claims.
- A platform for companies to demonstrate their **support for investments in recycling** technology.

The RMS Promise

GreenBlue's Recycled Material Standard (RMS) promises to be the most comprehensive standard for recycled materials

Developed through voluntary consensus process

- Multi-stakeholder advisory group
- Field testing
- Public comment (pending)

Material specific definitions

- Post consumer
- Post industrial
- Product group designations

Multiple control systems

- Single % claims
- Rolling average % claims
- Mass balance claims
- Commodity trading (ARC system)

Scope boundary options

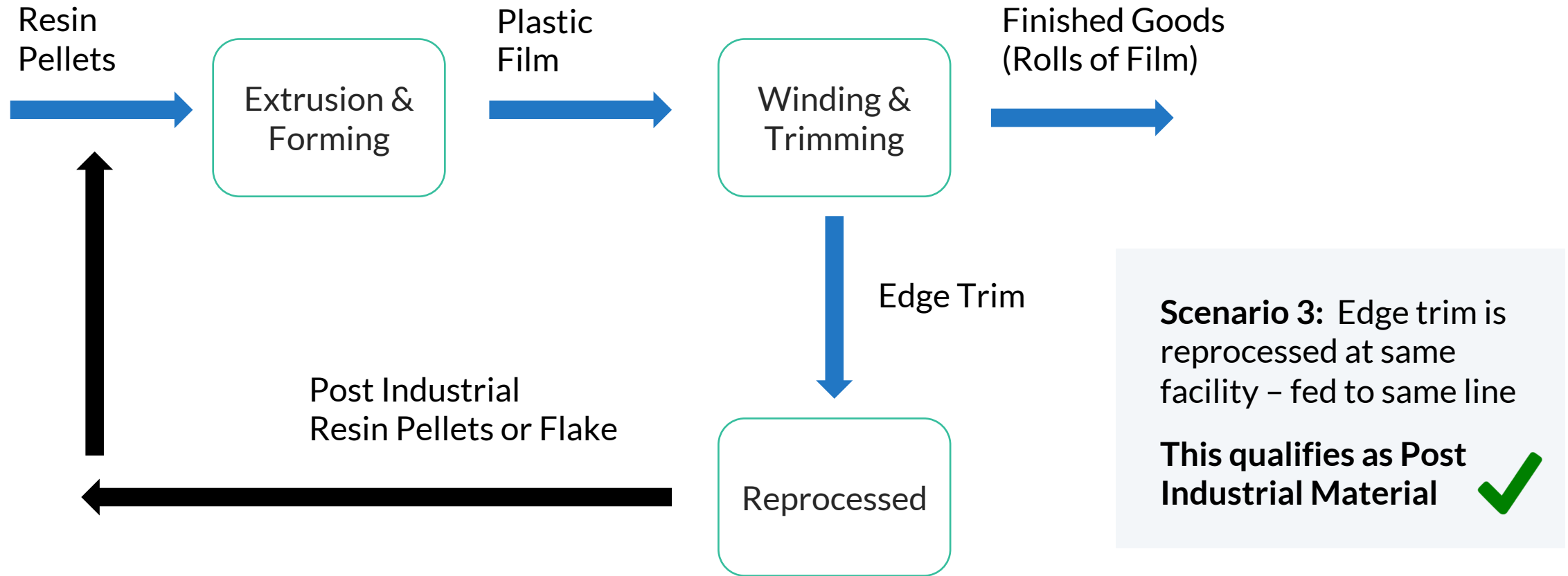
- Single site
- Multi site
- Group certification

Source: <https://resource-recycling.com/recycling/2020/01/12/setting-the-standard/>

Source: <https://sustainablepackaging.org/advancing-the-use-of-recycled-materials/>

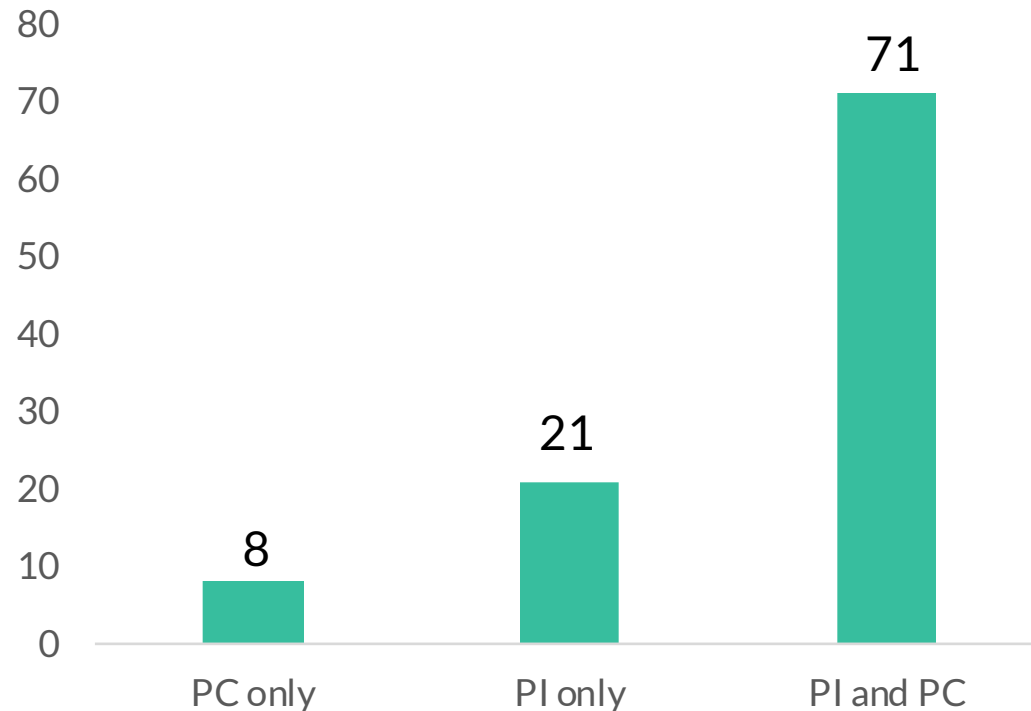


Post Industrial Plastic Example



The RMS post industrial plastic definition is partly defined by **phase transition**

Post Industrial Processing



92 of the top 100 plastic recyclers process post industrial plastics

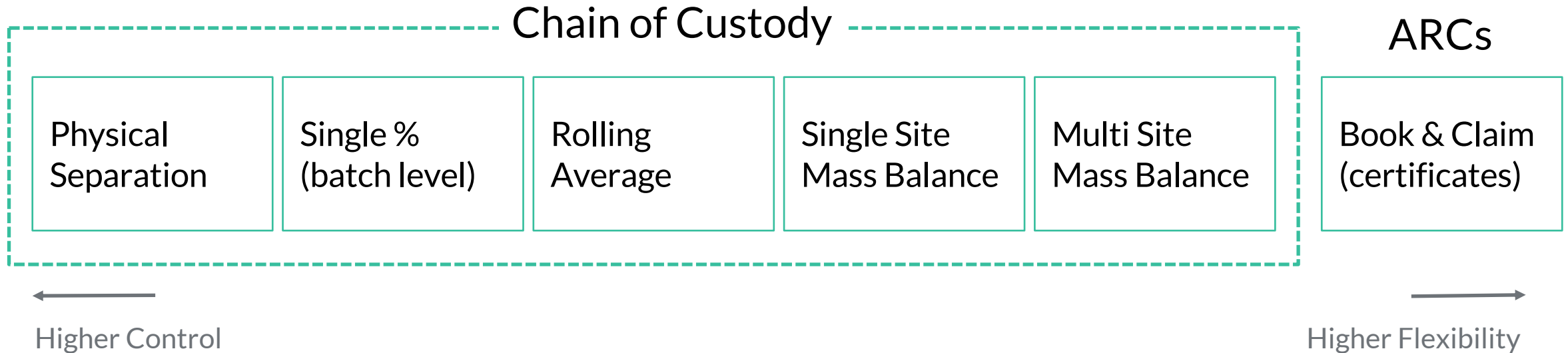
Only 8 of the top 100 recyclers report using post consumer only

Both types of materials are significant contributors to the circular economy – reducing the need for virgin materials

Source: *Plastic News 2020 Recyclers Ranking*

Control Systems

Systems vary in level of control and supply chain flexibility



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Corporate Commitments for Recycled Plastics



- Signatories of the [Global Commitment](#) are asked to “set an ambitious 2025 recycled content target across all plastic packaging used”

Source: <https://www.ellenmacarthurfoundation.org/assets/downloads/13319-Global-Commitment-Definitions.pdf>

- A target on % of recycled content is preferred – or a commitment to a **meaningful investment** in recycling technologies or activities

- The [US Plastics Pact](#) has announced a target of **30% recycled** or biobased content in packaging by 2025

Source: <https://usplasticspact.org/launch-august2020/>



Innovative solutions

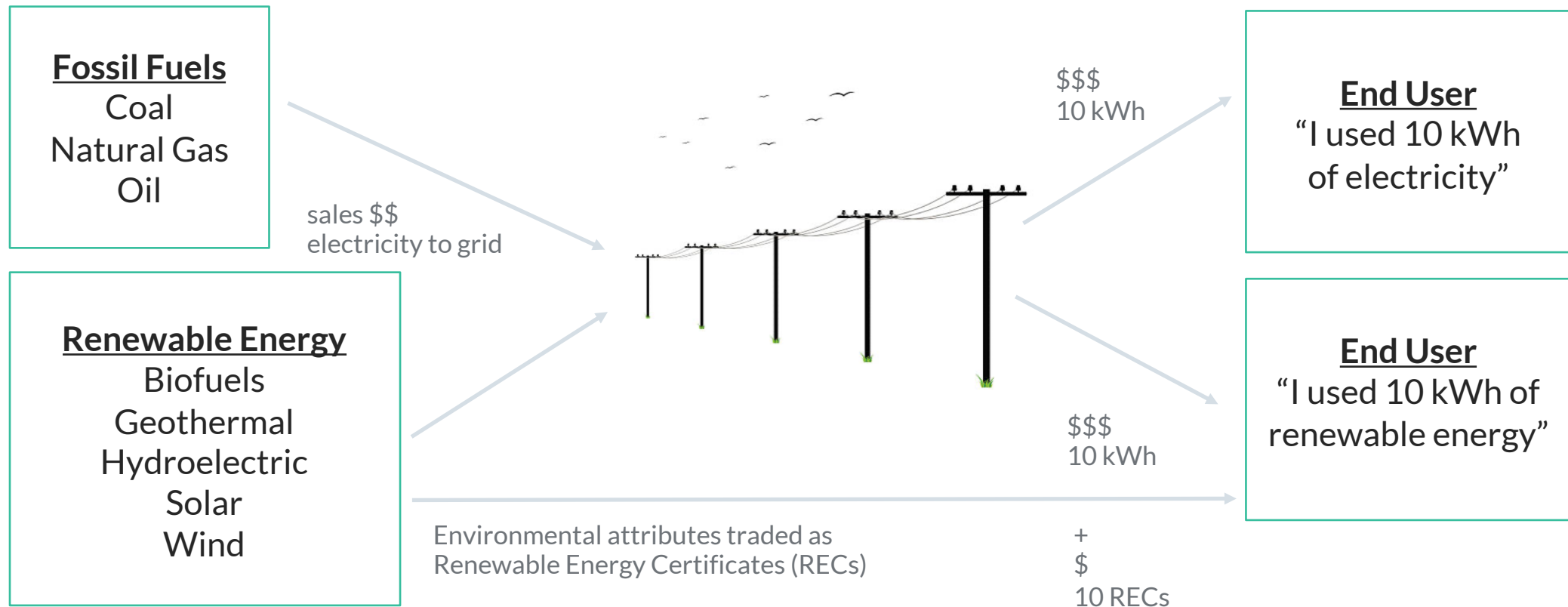
We need innovative solutions to help companies achieve their goals

- Capacity and availability of post consumer materials is limited
- Closed Loop Partners estimates only 6% of PCR plastics demand is being met
- Investments are needed across the supply chain and the ROI often does not look good
- **We are proposing a voluntary market based solution that can bridge the gap between investment needs and corporate commitments – the ARC system**



REC Trading

REC trading was established to support growth of renewable energy



End user pays a premium to claim the environmental attribute

Certificate trading systems

	Carbon Offsets	Renewable Energy Certificates (RECs)	Attributes of Recycled Content (ARCs)
Units	Metric tons of CO ₂ or CO ₂ eq	Megawatt Hours (MWh)	Metric tons of recycled materials
Source	Projects that avoid or reduce GHGs	Renewable electricity generators	Processors of recovered materials (e.g. plastics reclaimers)
Purpose	<ul style="list-style-type: none"> - Represent GHG emissions reductions - Provide support for reduction activities - Lower costs of GHG emission mitigation 	<ul style="list-style-type: none"> - Convey use of renewable electricity generation - Expand consumers choices - Support renewable electricity development 	<ul style="list-style-type: none"> - Represent processing of recycled materials - Expand supply chain options - Support investments in recycling technology
Additionality	YES	Depends on program	YES

Source: <https://www.epa.gov/greenpower/carbon-footprint-reduction-instruments>

Additionality is used to ensure that operations are moving “beyond business as usual”

	Carbon Offsets	Renewable Energy Certificates (RECs)	Attributes of Recycled Content (ARCs)
Additionality	Tests include legal/regulatory, financial, barriers, common practice and performance tests	Green-e established a newness date and reinvestment criteria	<ul style="list-style-type: none">- Tests include legal/regulatory, financial, barriers, common practice and performance tests- RMS established a newness date, reinvestment criteria- Allows limited eligibility for existing processors with five year phase out

Source: <https://www.epa.gov/greenpower/carbon-footprint-reduction-instruments>

Attributes of Recycled Content (ARCs)

Units of measure:

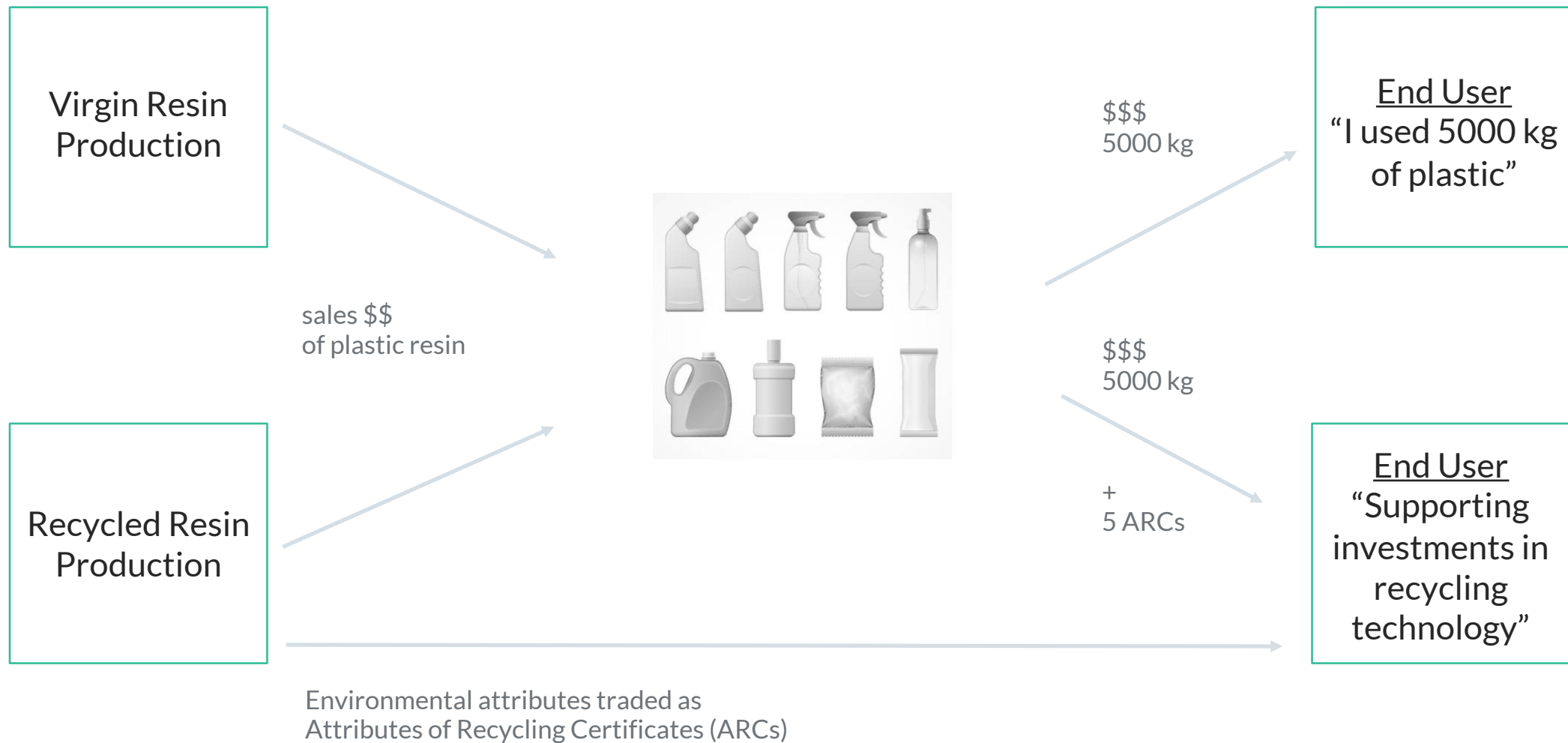
- **1000 kgs** of recycled material produced from recycled sources as certified by a third party agency against a standard
- **ARCs** may be referred to as the **environmental attributes** associated with processing recycled materials

Certification assures:

- **The material is from new projects** as defined by the standard
- **The material is verified** to validate claims
- **The material has not been double counted** – recycled attribute is only attributed to the entity that buys the ARC

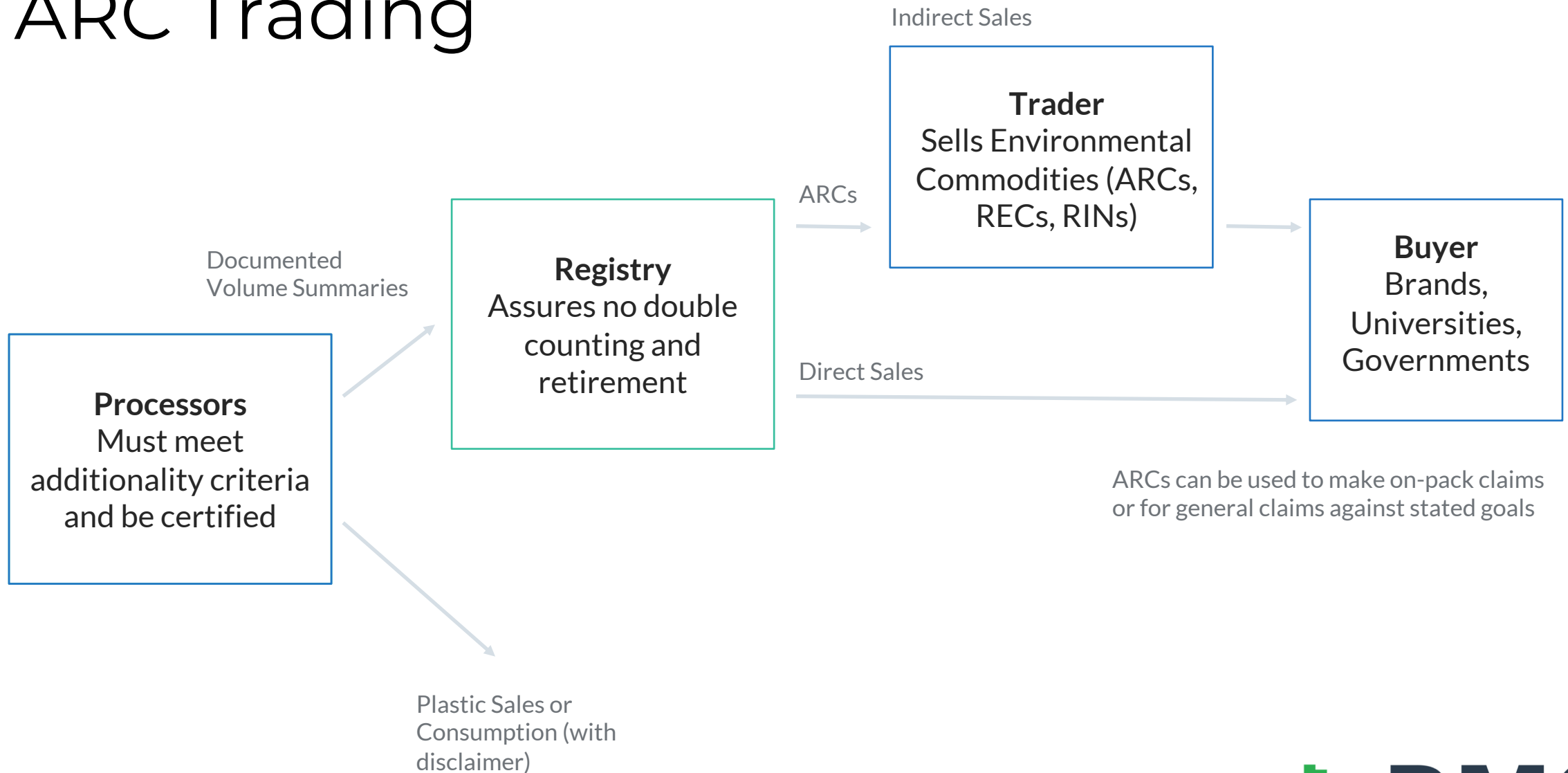
There could be two markets:

- **Voluntary ARCs** purchased to support processing of recycled material generation; allowing for a claim against a company objective or goal
- **Compliance ARCs** purchased by companies for compliance with Extended Producer Responsibility (EPR) programs

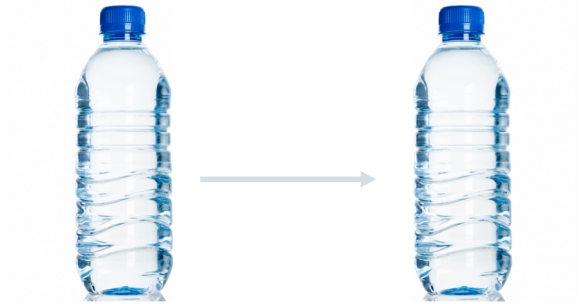


End user pays a premium to claim the environmental attribute

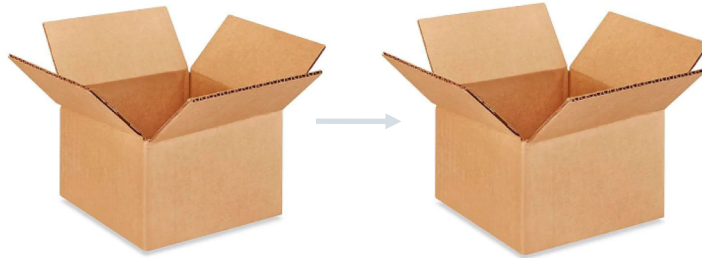
ARC Trading



Closed Loop Recycling



Bottle to bottle



Box to box



Can to can

Can work when substituting like for like materials

Some brands try to take this one step further e.g. “my bottles to my bottles”

Open Loop Recycling



Magazines



to Cereal
Box



to Corrugate



to Napkins

Open Loop Recycling



Jug



to Mailer



to Bag



to Composite Lumber

Potential “ARCable” Markets

- Many grades of plastics cannot compete on price vs virgin materials
- Recycling plastics alters physical properties (clarity, strength, odor, food contact can be compromised)
- There are many uses of recycled materials that the consumer never sees
- Generally: non-consumer facing, darker colors, often durable goods
 - Automotive parts (e.g. trunk liners)
 - Asphalt binders
 - Building products
 - Culverts
 - Ink/toner cartridges
 - Mats
 - Railroad ties
 - Pallets
 - Slip sheets
 - Totes
 - Underground Pipe

ARC Transactions

■ Processor

- demonstrates meeting additionality criteria
- gets certified to RMS and gains access to registry
- recycles plastic and either sells or consumes in a product – **without a claim**
- uploads sales volume summaries to registry (e.g. 10,000 metric tons quarterly)

■ Registry

- converts sales volume to ARCs with unique serial number and time stamp
- houses accounts for sellers and buyers
- establishes a “holding space” for individual transactions

■ Processor approves sale + Buyer approves purchase = ARCs transferred to new account

Note: ARCs must be retired within the generation year or subsequent calendar year or they **expire**

ARC Registry

Documented volume
summaries
by resin type and
recycled material
status



Processor
Account
holds ARCs
by resin type

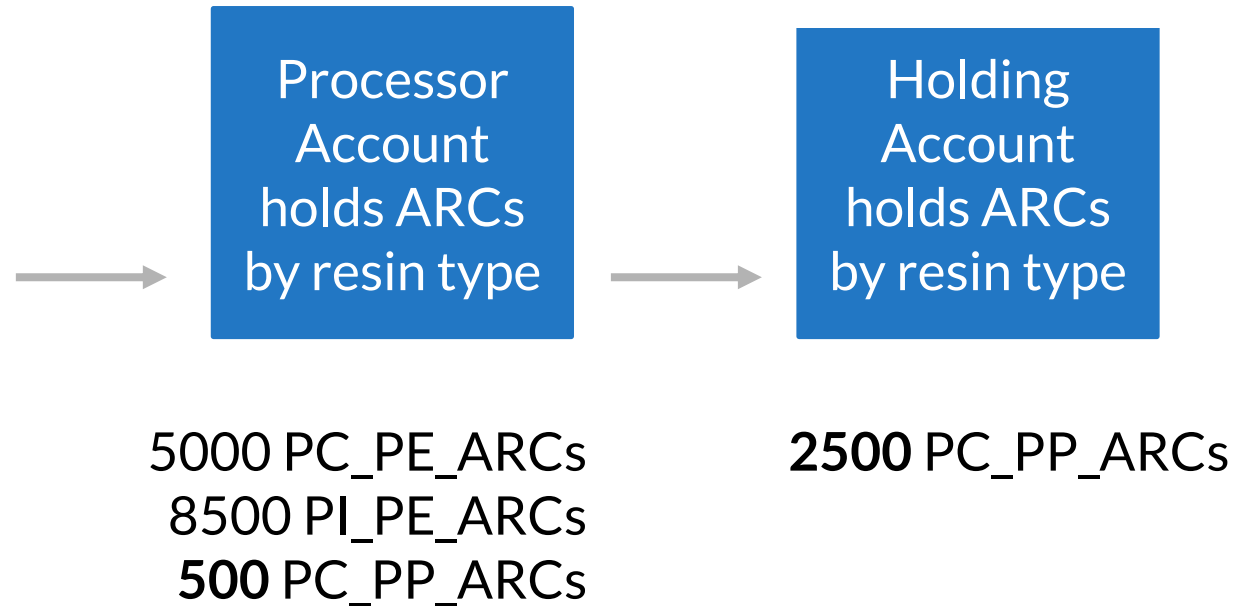
5000 PC_PE_ARCs
8500 PI_PE_ARCs
3000 PC_PP_ARCs

The registry converts
volume summaries to ARCs

Each ARC is assigned a
unique serial code and an
expiration date

Processor builds up account over time

ARC Registry

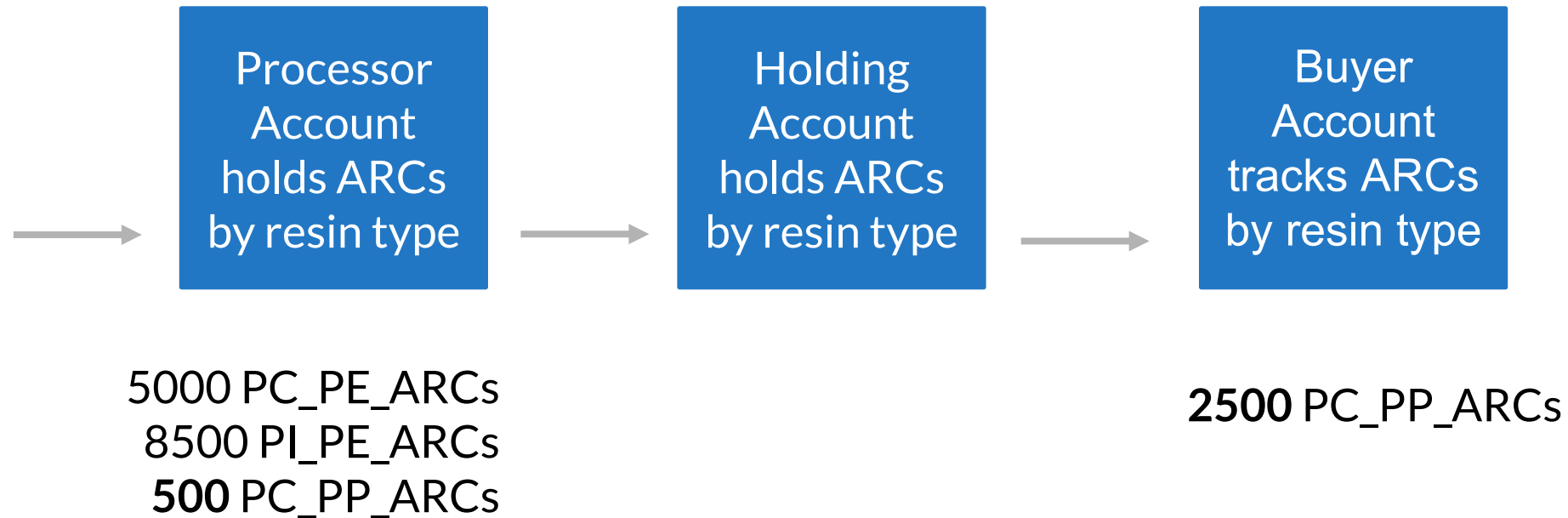


Processor and Buyer strike a deal for 2500 PC_PP_ARCs

Financial transaction happens outside of registry

Processor moves ARCs to holding account

ARC Registry



Buyers' transactions are tracked against claims
GreenBlue manages registry and label approval process
GreenBlue will also generate annual summaries

Leveraging the RMS to Achieve Goals

ARCs have the potential to help companies meet their goals – especially those with challenging applications

Year	Avg Volume Recycled Content	Mass Balance	ARCs	Total (% of goal)
2021	500 mt	0 mt	500 mt	1,000 (33%)
2022	700 mt	300 mt	500 mt	1,500 (50%)
2023	900 mt	500 mt	500 mt	1,900 (63%)
2024	1200 mt	800 mt	500 mt	2,500 (83%)
2025	1500 mt	1000 mt	500 mt	3,000 (100%)

Example:

Company AtoZ has a commitment to utilize 30% recycled content by 2025.

Currently use 10,000 mt of plastic per year and aim to consume 3,000 mt of post consumer materials.

RMS helps support progress on PCR goals. In this scenario, AtoZ has established a long-term agreement with an ARC producer which enables that company to invest and process more post consumer materials.

ARC Recognition Platform

Encouraging Investment: the platform could list long-term contracts (over 5 years)

Company	Annual Usage of Recycled Materials (lbs)	ARCs as % of Total Plastic Usage
Company A	5,921,711	57%
Company B	5,334,585	50%
Company C	1,983,773	46%
Company D	1,072,149	42%
Company Z	1,037,331	35%

Example:

“Zee Co purchases recycled material certificates (ARCs) equal to 35 percent of its plastic used in packaging”.

This is modeled after EPA’s GPP platform: <https://www.epa.gov/greenpower>

Challenging Aspects During Development

Issue	View “A”	View “B”	As Written
Additionality Tests	Needed	Not Needed	Modeled after CDM and supported with plastics industry examples
Double Counting	Not Allowed	Allowed	Not allowed – claims and disclaimers on sales docs
Including PI	Not Allowed	Allowed	Included for new or reinvestments, not for existing producers
Newness Test and Reinvestment Criteria	Needed	Not Needed	Modeled after Green-e and supported with plastics industry examples
Existing Reprocessors	Not Eligible	Fully Eligible	Half of existing capacity is eligible for five years; phasing out 10% per year
Pricing Transparency	Full Transparency	No Transparency	To be encouraged but not required

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Claims and Labels

Claims

- **Required** on sales documents to support chain of custody
- Follows a syntax to clearly define recycled material status and control system
- *Example:* RMS 10%PC MB
Represents a mass balance claim of 10% post consumer material

Labels

- Labels on products or packages are **optional**
- Follows a format to clearly convey recycled material status, and control system
- Labeling has different requirements than chain of custody claims

About RMS Labels



Certified Designation

Independent certification offers the highest level of assurance for environmental labeling. Only standards, such as the RMS, that are developed by a voluntary consensus body can use this designation.



About RMS Labels



Claim Information

The main body of the label provides specific information about the material type and clarifies whether the claim refers to the product or the package. Supporting full transparency, different claims will be used depending on whether the claim is based on average volume (x%), a mass balance allocation, or the purchase of ARCs.

About RMS Labels



RMS Website and Certificate Number

Conscientious consumers will have an option to learn more about the RMS labels and claims by visiting the website. The certificate number will reference the specific company that produced the product or package and will be listed in a searchable database.



Complementing Policy

- There is unprecedented focus on improving recycling in the U.S., and abroad.
- Lawmakers, and both the public and private sectors are considering what investments need to be made to modernize collection and sortation infrastructure.
- Anticipating an increase in materials *captured* for recycling, the RMS has been developed to help *advance the use* of recycled materials.
- The ARC system is uniquely positioned to help spur investments at the reprocessor level.



For more information:

RMScertified.com