



Summit for Recycling  
&  
Rocky Mountain Composting Symposium

# Circular Economy Development Center

What's Next?

August 23 - 24, 2022 Aurora, Colorado



## Summit for Recycling & Rocky Mountain Composting Symposium



**Rachel Roussel-Diamond**  
**CDPHE**



**Gail Garey**  
**Steamboat Springs City Council**



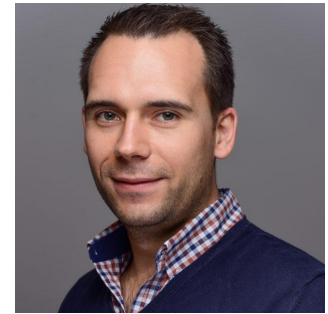
**Adam Hill**  
**Direct Polymers LLC**



**Sara Axelrod**  
**Ball Corporation**



**Cindy Lair**  
**CO Department of Agriculture**



**Marcel Rokowski**  
**Reverse Logistics Group**



# Summit for Recycling & Rocky Mountain Composting Symposium



**Rachel Roussel-Diamond**  
Sustainability Unity Manager  
CDPHE

**August 23 - 24, 2022 Aurora, Colorado**





# Colorado Circular Economy Development Center

Rachel Roussel-Diamond, Sustainability Unit Manager

August 2022



**COLORADO**  
Division of Environmental  
Health & Sustainability  
Department of Public Health & Environment

# CHARTING THE PATH



[www.erasethewasteco.com](http://www.erasethewasteco.com)

## SB20-055

Incentivize the Development of  
Recycling End Markets

- Producer  
Responsibility  
Literature Review
- Statewide education  
campaign
- Research Market  
Development Center



**COLORADO**  
Division of Environmental  
Health & Sustainability  
Department of Public Health & Environment

# CHARTING THE PATH



[www.erasethewasteco.com](http://www.erasethewasteco.com)

## SB20-055

Incentivize the Development of Recycling End Markets

- Producer Responsibility Literature Review
- Statewide education campaign
- Research Market Development Center

## HB22-1159

Waste Diversion and Circular Economy Development Center

- Create the Center!
- Improve FRWD Grantmaking Process



**COLORADO**  
Division of Environmental  
Health & Sustainability  
Department of Public Health & Environment

# CHARTING THE PATH



[www.erasethewasteco.com](http://www.erasethewasteco.com)

## SB20-055

Incentivize the Development of Recycling End Markets

- Producer Responsibility Literature Review
- Statewide education campaign
- Research Market Development Center

## HB22-1159

Waste Diversion and Circular Economy Development Center

- **Create the Center!**
- Improve FRWD Grantmaking Process



# CENTER PURPOSE



- The center focuses on increasing the demand for recyclables in the state.
- Grow existing markets
- Create new markets
- Provide necessary infrastructure, systems, logistics and marketing to create a sustainable circular economy for recycled commodities and compost





# CENTER ACTIVITIES



- Connect end markets to existing state grants and incentives
- Work with processors and manufacturers in the state to increase use of recycled content inputs
- Support waste reduction and reuse within systems that advance circularity goals
- Market recycled materials and recruit out-of-state end markets including manufacturers
- Facilitate connections
- Support end-market businesses as they look to scale & grow
- Evaluate recycling markets and supply-chains



# CENTER ACTIVITIES



- In the first year – the center will conduct a statewide end-market gap analysis and opportunity assessment with a final report due August 1, 2024.
- While the bill did not establish a formal advisory board, the center shall seek and consider input from: CDPHE, OEDIT and representatives from the public and private sectors engaged in waste diversion and economic development.



# CREATING THE CENTER



- Directs CDPHE to contract with a third-party administrator to operate the center by July 1, 2023
- Funding for the center is provided by RREO (40%) and FRWD (60%)
- A Request for Proposals is being drafted and will be released this fall
- Proposals shall include at a minimum a proposed work plan outlining goals, strategies, activities, deliverables and expected outcomes





# Summit for Recycling & Rocky Mountain Composting Symposium



**Gail Garey**  
Founder, Impact 360 Strategies  
Steamboat Springs City Council

**August 23 - 24, 2022 Aurora, Colorado**





# Circular Economy Center

## Gail Garey

Steamboat Springs City Council

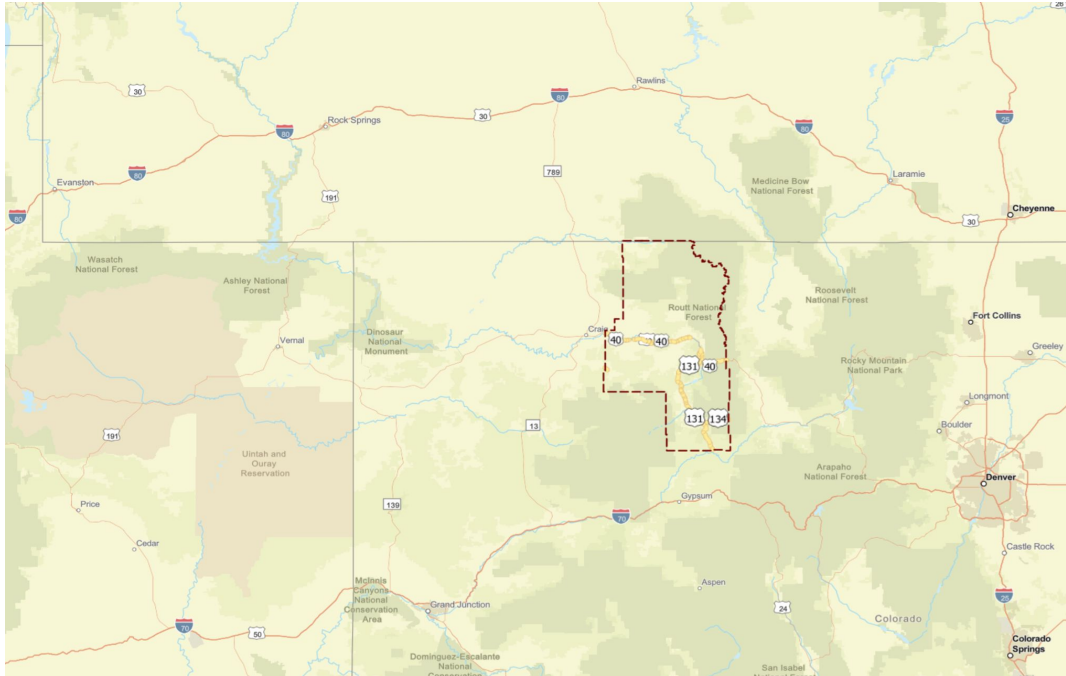
8 24 2022

# Who am I?

- 1st term Council member
- Climate Action Plan Collaborative Board Member
- Yampa Valley Sustainability Board Member
- Creator/Founder Impact 360 Strategies
- All views expressed are my own and not official Council positions



# Routt County - where is it?



# Current Waste Landscape

- Privately owned landfill
- 3 haulers
  - accept different materials
- Varying services and ordinances
  - Steamboat Springs
    - curbside for residents
    - ordinances require business/MFU recycling and hauler reporting
  - no curbside available in unincorporated parts of the County
  - varies in smaller municipalities
- New HTR drop off for electronics, CFLs, mattresses, etc.
- Current waste diversion rates are low

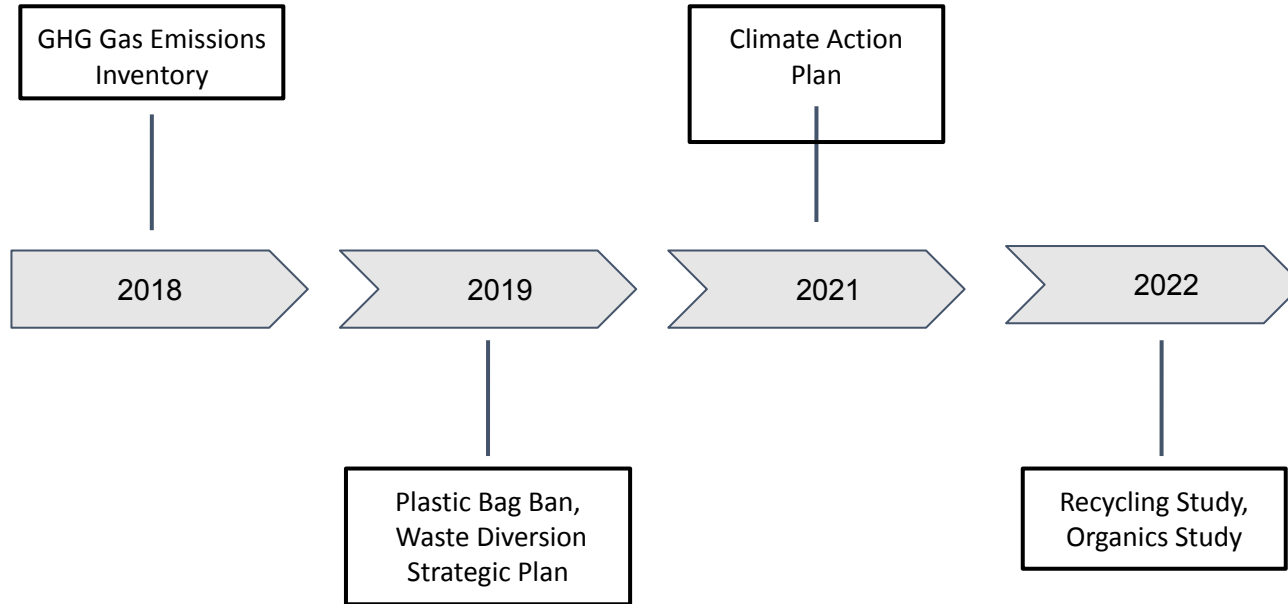


# State of Composting

- Privately owned landfill
  - closed commercial composting facility in 2016
  - currently processes biosolids for onsite landfill revegetation
  - restarting food waste collection and composting
- Cowgirl Composting opened in 2021
  - residential and commercial service
  - 45 tons of organics composted to date
- Some small scale and residential composting
  - bear issues
  - long cold winters



# Climate Action/Waste Diversion Milestones



# Circular Economy Opportunity in NW CO

- Compost is the low hanging fruit
  - abundance of food and yard waste
  - <5% diversion rate for organics
  - low participation to date
- Valuable end product
  - landscape businesses currently truck in compost
  - valuable soil amendment for agricultural lands
  - revegetation efforts
- Support economic development/diversification
  - Just Transition for coal-fueled economy
- Achieves Climate Action Plan strategies and actions

# Support from the Circular Economy Center

- Assistance creating, permitting and scaling of new facilities
  - compost
  - asphalt/concrete
  - glass (for road base or landscaping)
- Identifying and sharing best practices and successful business models
- Facilitating collaboration
- Identifying and incentivizing local/regional end market opportunities



Contact Info:

[ggarey@steamboatsprings.net](mailto:ggarey@steamboatsprings.net)

970 846 9897



# Summit for Recycling & Rocky Mountain Composting Symposium



**Adam Hill**  
Owner  
Direct Polymers LLC

**August 23 - 24, 2022 Aurora, Colorado**



Adam H. Hill

Direct Polymers

# End Market Development in Colorado: How and Why

# Direct Polymers - Who Are We

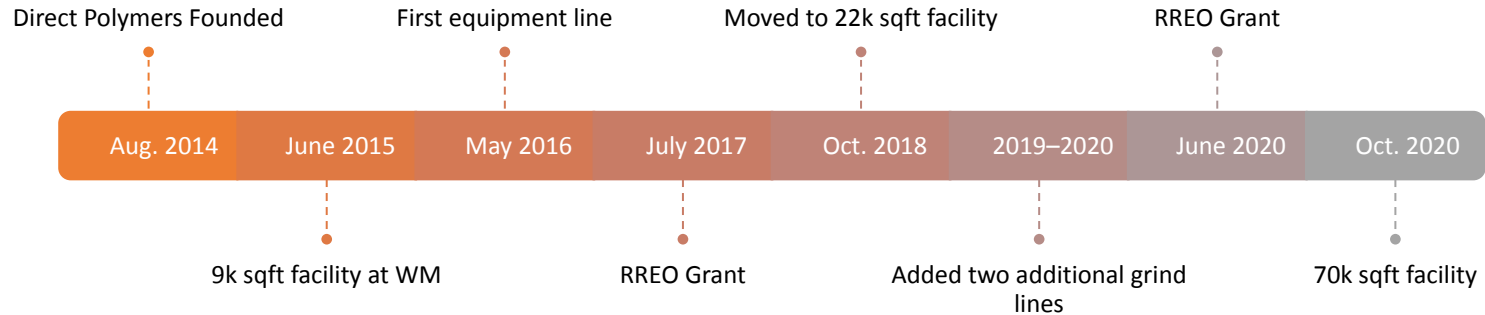
- Direct Polymers is a Denver-based plastics recycler who specializes in creating custom reground and reprocessed compounds from post-industrial and post-consumer plastic materials.
- Sort, shred, grind, de-dust, metal-sort, custom compounding, washing, baling
- Reliable Service, Quality Assurance, and Customized solutions for a variety of industries, whether it be for hauling and servicing scrap accounts or customizing blends for end-users.
- We currently source scrap from and sell feedstocks to a variety of industries throughout the United States.



# Direct Polymers - Who Are We

- We provide comprehensive recycling solutions to provide our customers with cost-effective ways to improve their recycling systems, maximize their efficiencies, and responsibly dispose of their waste streams.
- Goal is to provide efficient and user-friendly programs that require minimal effort on the customers' behalf so that they can focus on strengthening their primary areas of business. All-in-one solution for plastics
- Grow or die mentality – We just get things done (except PowerPoint slides!!)

# Direct Polymers – Timeline and History



# Next 24 months

- Finish facility and equipment upgrades
- Add additional shift(s) and more management staff
- 2023-2024 – Business development to provide more hands-on solutions for local businesses, develop additional sales, further expansion in pelletizing and upcycling with corporate partners
- 2024-2025 – Get more involved with Colorado's political landscape, help develop end-markets, become an end-user?

# Denver's Landscape is Very Unique

We're on an island!

We're primarily a warehousing and distribution hub. We don't manufacture much.

Very different from other areas of the country – limited volume of any one polymer grade has required us to provide solutions for many different polymers.

Develop custom solutions that make sense for Colorado (and beyond)

Focus on consistent, sustainable practices that are replicable and profitable

Our business model has benefitted from this  
Happy the State is getting very involved!

# End Market Center Benefits

- Colorado needs better and more consistent and efficient recycling systems
- Confusion among Residents/Consumers
- Colorado needs more recycling infrastructure
- EPR development and communication with Businesses
- Colorado needs more manufacturing and end-markets
- Better solutions for smaller municipalities and towns
- Grant programs will benefit

# Challenges

- Freight
- Costs to Manufacture in Colorado are high
- Labor is difficult to find
- Power is difficult to get
- Colorado historically a packer and exporter so we started behind the curve
- Market Fluctuations make consistency difficult



# Advantages

- Denver's unique landscape allows creation of customized solutions
- Collaboration
- Grants and Legislation
- Capable of becoming a regional leader in advancement of legislation and recycling practices/capabilities

# Customized Solutions and “Upcycling” Materials

Virgin vs. Recycled

The Manufacturer’s  
Perspective

Partnerships and  
Value-Add

Recycle Content and  
EPR

Better QC Standards

Better Communication

Better Technology

“Upcycle” and  
Blending





# Summit for Recycling & Rocky Mountain Composting Symposium



**Sara Axelrod**  
**Director of Sustainability**  
**Beverage Packaging North and Central America**  
**Ball Corporation**

**August 23 - 24, 2022 Aurora, Colorado**





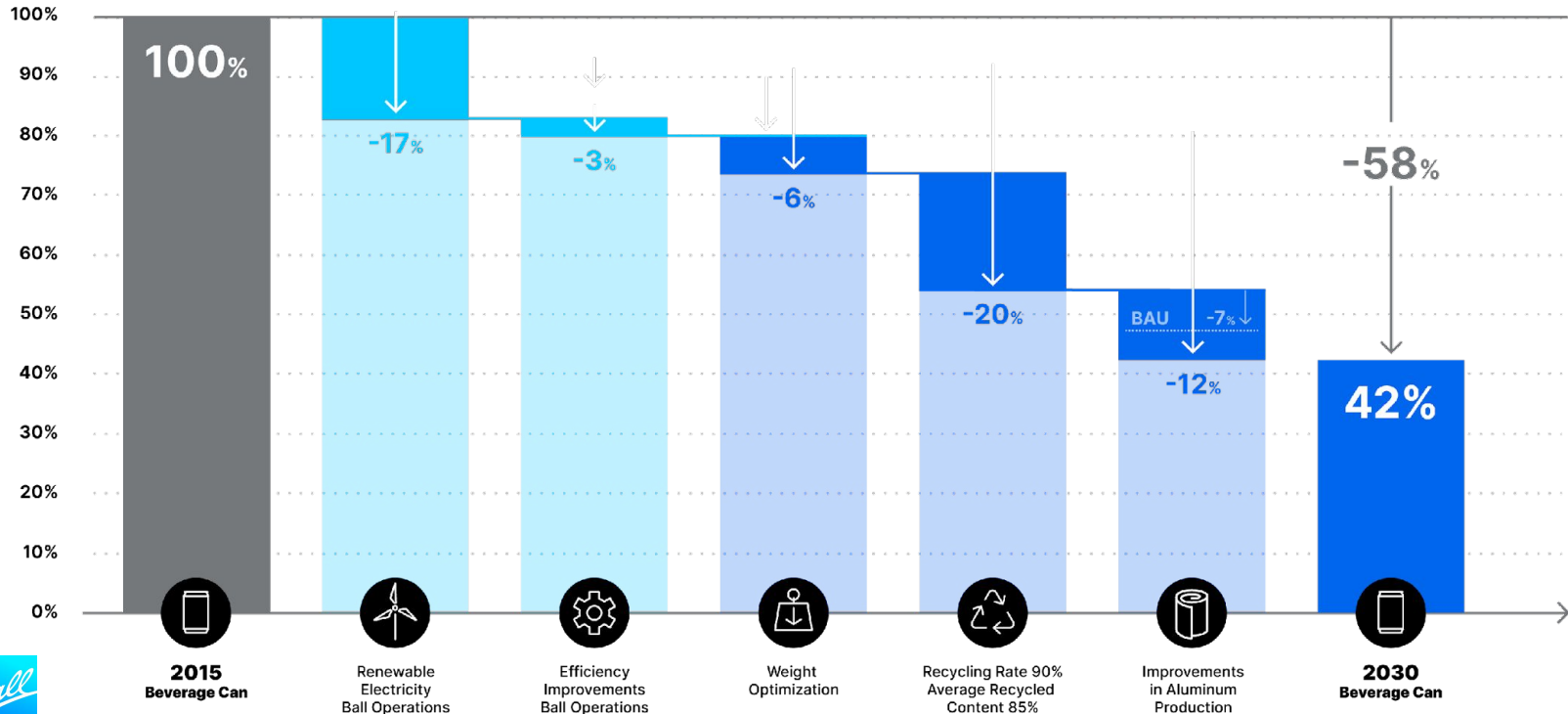
# TOWARDS A PERFECT CIRCLE

Sara Axelrod – Sustainability Director  
Ball Packaging  
Recycle Colorado - Summit for Recycling  
August 24, 2022



# POTENTIAL NORTH & CENTRAL AMERICAN BEVERAGE CAN CARBON FOOTPRINT REDUCTION PATHWAY (2015-2030, CUT-OFF APPROACH)

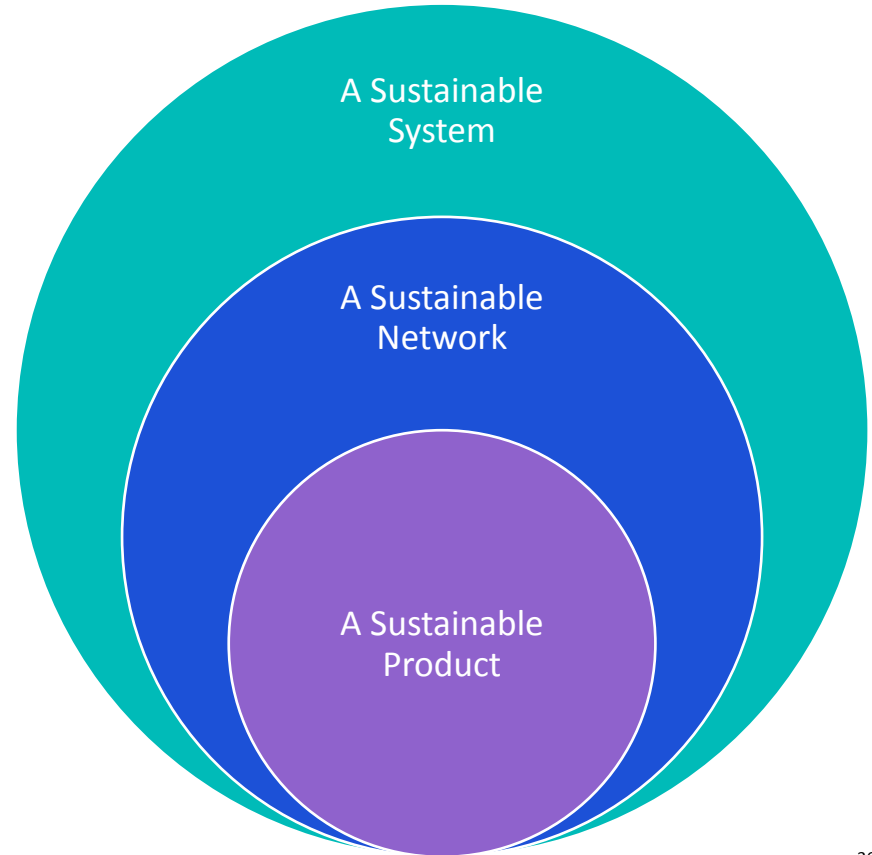
**2015 - 2030 Product Carbon Footprint**  
(North and Central America 12oz Standard Can)



# OUR COMMITMENT GOES BEYOND THE CAN

It isn't enough to just make a sustainable product.

Ball is your partner in creating a sustainable system.



# CIRCULARITY VISION 2030

---

## GLOBAL RECYCLING RATE

---

TODAY	2030
69%*	90%*

## GLOBAL RECYCLED CONTENT

---

2030  
85%\*



## DESIGN FOR SORTING

---

TODAY

- Homogeneous material ✓
- Equally recyclable despite color, size of formats ✓
- Tab attached to the can ✓

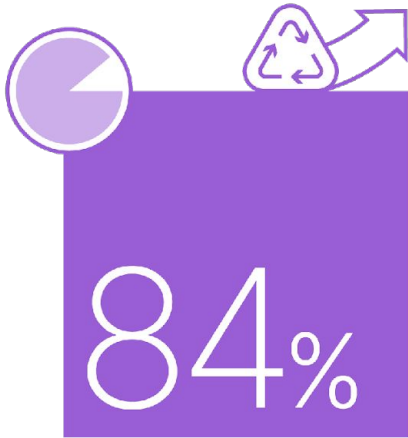
## RECYCLING YIELDS

---

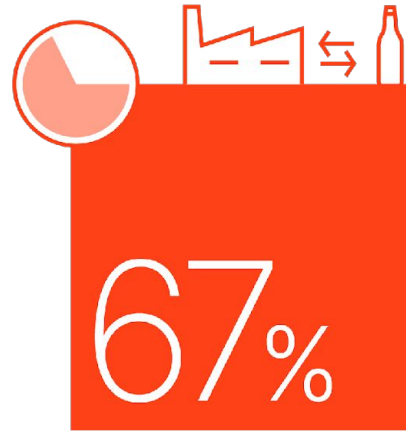
TODAY  
>95% ✓

\* BASED ON THE VALUES IN THE MAIN REGIONS WHERE BALL IS PRESENT: NORTH AMERICA, EMEA, SOUTH AMERICA, SOUTHEAST ASIA

# AMERICANS SUPPORT INVESTING IN PACKAGING RECYCLING



agree that “investing in **expanding and improving our nation’s recycling infrastructure** should be a higher priority.”



agree that “companies that manufacture food and beverage containers **should be responsible for the cost of collecting and recycling** their products after people discard them.”

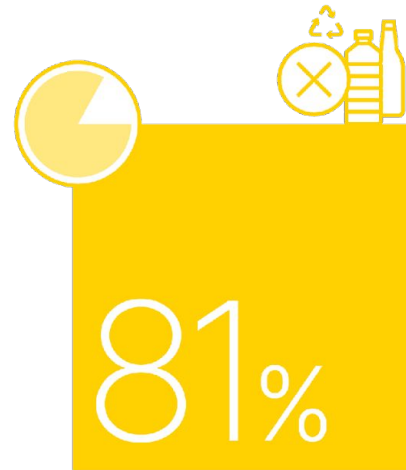


Source: Data from online survey of 4,000 US adults conducted March 2021

# AMERICANS SUPPORT STRONGER PACKAGING RECYCLING POLICIES



agree that “the US should create a **nationwide beverage container refund program to encourage recycling**, where consumers get back a small fee for returning empty glass jars, aluminum cans and plastic bottles.”

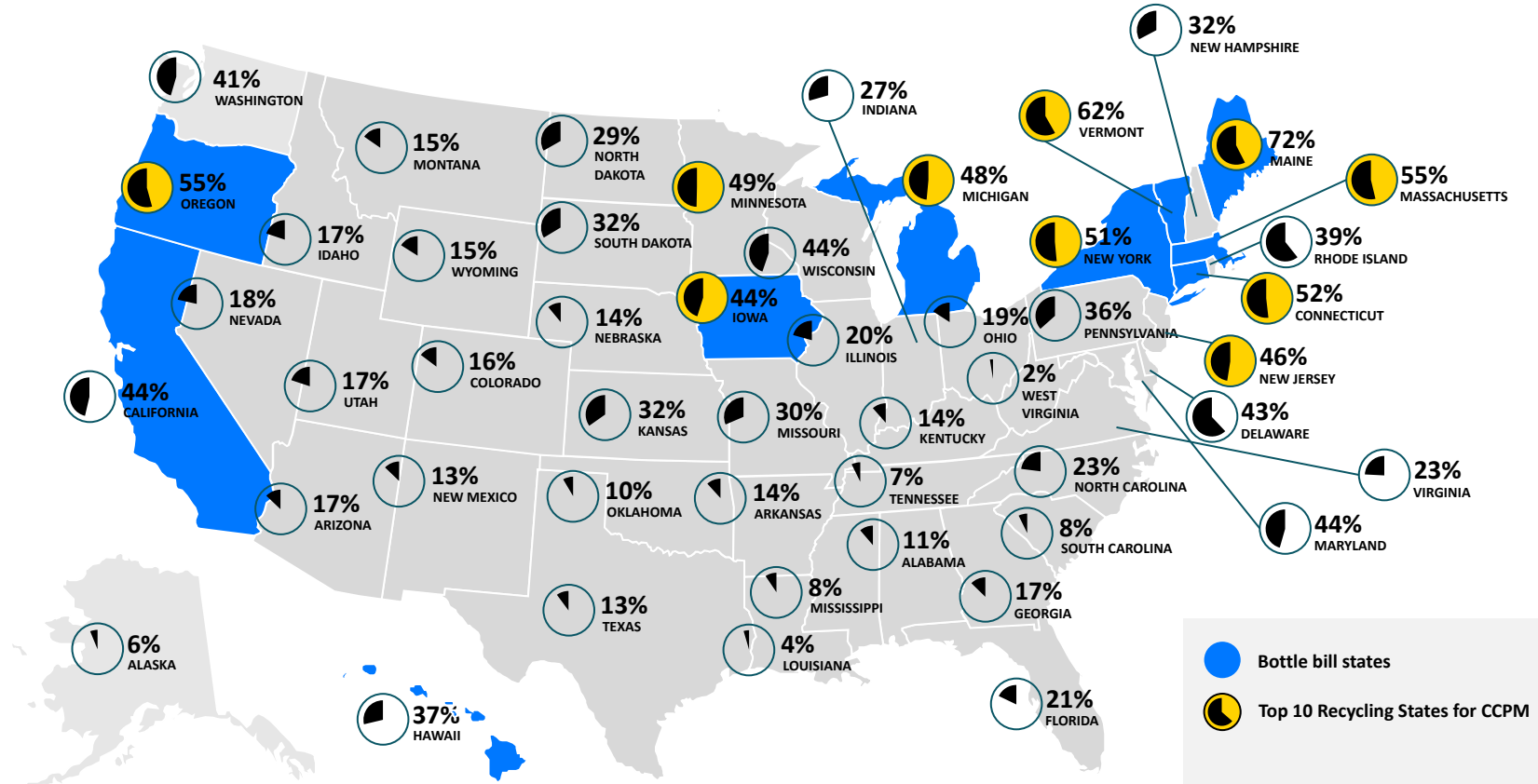


agree that “difficult or impossible to recycle packaging materials should be **phased out of use** in the US to reduce pollution.”



Source: Data from online survey of 4,000 US adults conducted March 2021

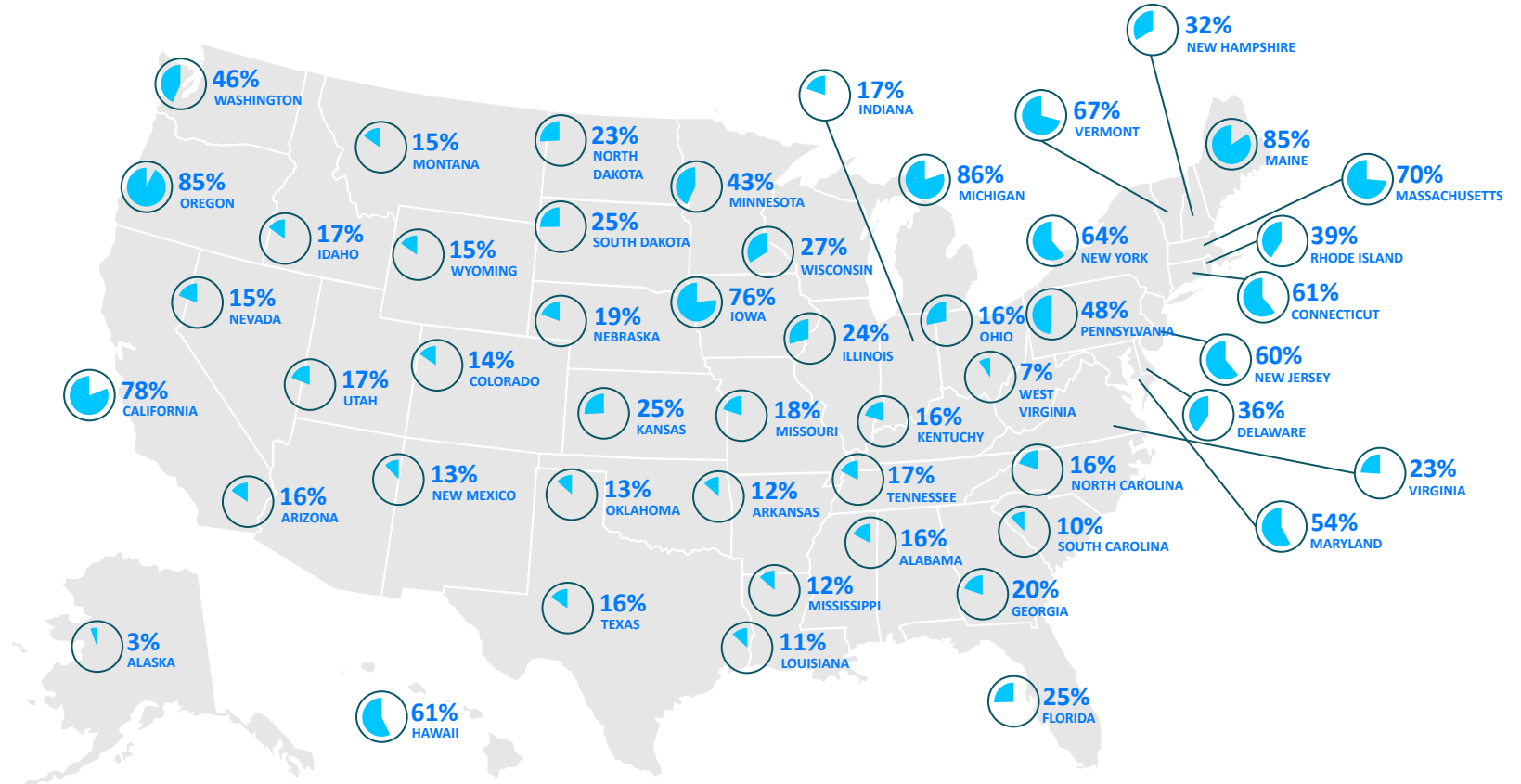
# TOTAL CCPM RECYCLING RATES FOR PER STATE (EXCLUDES CARDBOARD)



Note: Excludes Cardboard and boxboard Includes plastic (PET Bottles, PET other rigid plastics, HDPE bottles, PP, Rigid #3 – 7), Glass bottles and jars, Aluminum cans, Steel cans



# ALUMINUM CAN RECYCLING RATES FOR CANS PER STATE



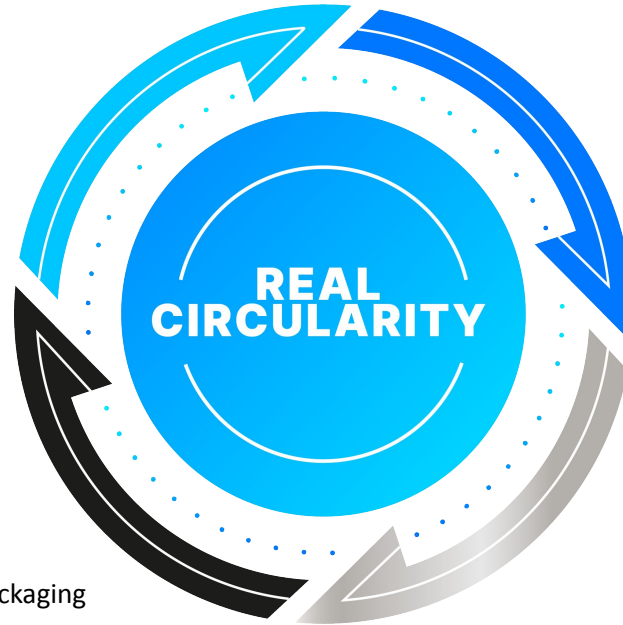
# REAL CIRCULARITY OF SINGLE USE PACKAGING: A CIRCLE THAT NEVER ENDS

## 1 COLLECTION

- EPR with modulated fees
  - Deposit Return Systems (DRS)
  - Set a 90% recovery target for all beverage containers
  - Convenient for consumers including on-the-go collection
- 

## 4 RECYCLED CONTENT

- Standard for Recycled Content
  - Incentives to keep packaging to packaging closed loops
  - Tax incentives for recycled materials vs virgin
- 



## SORTING 2

- Product design guidelines
    - Right tipping fees & Material landfill bans
    - Remove barriers for investments in MRFs and novel sorting technologies
- 

## RECYCLING 3

- New recycling technologies with maximum yields and quality
    - Increase local recycling to reduce imports of virgin raw materials
-

# EXPANDING DOMESTIC SUPPLY OF ALUMINUM

- May 2022 Manna Capital, as a strategic partner of Ball, announced they will build an aluminum remelt and rolling mill in New Mexico as part of their commitment to create a more robust and sustainable domestic supply chain for the growing aluminum beverage packaging market
- Ball, a key customer of the new mill will be provided high recycled content aluminum can sheet under long-term supply agreements.
- Further investment in used beverage can (UBC) recycling infrastructure is anticipated in order to supply the rolling mill with enough scrap material.
- This is a market signal asking states to increase their recycling rates - We are building the opportunity to create a regional circular economy for western states to take advantage of



# RECYCLING ALUMINUM CANS IS GOOD BUSINESS



## ECONOMIC & SOCIAL BENEFITS



Generate **\$1.6 billion** for the country's economy through material sales



Contribute **103,800 jobs** in collection, sorting, and reprocessing to the U.S. economy



Raise wages in related industries nationwide from **\$2.1 billion to \$5 billion**



## CLIMATE BENEFITS



Keep **1.3 million tons of materials** out of the landfill each year



Save enough energy to power **1.5 million homes** for a year



Avoid **12.1 million MTCO<sub>2</sub>e** of GHG emissions annually — equivalent to taking **2.6 million cars** off the road for a year

# ENVIRONMENTAL + ECONOMIC IMPACT OF RECYCLING IN COLORADO

TODAY, **COLORADO** RECYCLES **14%** OF ALUMINUM CANS.\* INCREASING THE RECYCLING RATE TO **90%** WOULD OFFER SIGNIFICANT ECONOMIC, SOCIAL, AND CLIMATE BENEFITS:

## ECONOMIC & SOCIAL BENEFITS



Generate **\$31.9 million** for Colorado's economy through material sales



Contribute **2,000 jobs** in collection, sorting, and reprocessing to Colorado's economy



Raise wages in related industries in Colorado from **\$15.8 million to \$95.2 million**



## CLIMATE BENEFITS

Keep **25,400 tons of materials** out of the landfill each year



Save enough energy to power **28,000 homes** for a year



Avoid **231,600 MTCO<sub>2e</sub>** of GHG emissions annually — equivalent to taking **50,000 cars** off the road for a year





# Summit for Recycling & Rocky Mountain Composting Symposium



**Cindy Lair**  
**Program Manager**  
**Colorado State Conservation Board**  
**CO Department of Agriculture**

**August 23 - 24, 2022 Aurora, Colorado**





**COLORADO**  
Department of Agriculture

# *Program Overview*

March 2022

# 5 soil health principles

1. Soil Armor
2. Minimize disturbance
3. Plant diversity
4. Continual living root
5. Integration of livestock



Land Stewardship Project



Dr Pia Benaud



Prairie Ecologist



Development Assistance for Rural Education



University of Nebraska-Lincoln



# STAR

Saving

Tomorrow's

Agricultural

Resources



# What is STAR?

---

- “Saving Tomorrow’s Agriculture Resources”
- Free and voluntary tool to:
  - Help producers assess where they are on their soil health journey
  - Inspire producers by identifying new practices
  - Structure conversations around soil health
- Complete the STAR Field Forms as part of the producer consultation
- Works synergistically with the research parts of the program



★ 1 Star (Average)

A field with practices similar to what 80% of fields of that type are doing in that region.

★★ 2 Stars (Above Average)

A field beginning to implement soil health principles.

★★★ 3 Stars (Great)

A field implementing multiple soil health principles.

★★★★ 4 Stars (Excellent)

A field implementing several soil health principles.

★★★★★ 5 Stars (Ideal)

A field implementing all five soil health principles.



# Why STAR?

---

- Reward producer effort for doing the right thing
- Scientifically rigorous: Developed by a diverse committee of scientists, producers, NRCS, and others
- Flexible and adaptable
  - Looks at soil health holistically
  - Many pathways to improve soil health
  - No prohibitions
- Encourages experimentation and continual improvement
  - Field-based (except for Grazing Lands)
  - Annual process
- Not overly burdensome for producers or administrators (hopefully!)
- Potential for a market signal



# Producer benefits

---

- Producer monetary benefits
- Technical Assistance
- Soil Health Benefits
- Market signals



# STAR (for Individual Producers)

---

- Fill out forms through [CDA's Soil Health Program Website](#)
- First 100 to sign up get a free soil health test
- Form is assessed by CDA Soil Health Specialist and feedback returned to producer
- Field sign received

## STAR - For Individual Producers

**The first 100 participants will receive a FREE soil health test!**

Producers interested in participating in the STAR Program should fill out the corresponding field assessment form below. The first 100 field assessment forms received are eligible to receive a free soil health test. Scoring sheets describe how field assessments will be scored and are included for your reference. If you have any issues completing the field assessment form, please contact [cda\\_soil@state.co.us](mailto:cda_soil@state.co.us).

∨ STAR Forms



# STAR Plus

---

- 3 year program
- Administered through 17 conservation districts and 3 eligible entities
- Conservation Districts receive capacity building payments
- Producers receive \$75/acre for soil health practice
  - Min of \$1000 and Max of \$5,000 with a 100% match required by producers
  - [Covered practices](#) are flexible
- Producers receive technical assistance
- Soil health testing + soil moisture probes
- Economic analysis on most fields





# Accessing STAR

<https://ag.colorado.gov/soil-health>



**COLORADO**  
Department of Agriculture

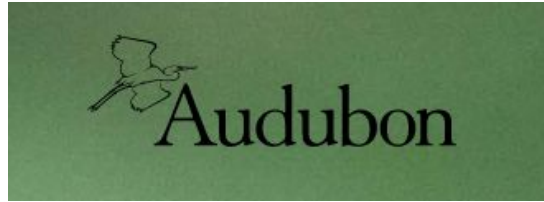


# Partnerships

---



Colorado  
State  
University



ACRES<sup>USA</sup>

colorado *Corn*





# Summit for Recycling & Rocky Mountain Composting Symposium



**Marcel Rakowski**  
Executive Vice President  
Corporate Development  
Reverse Logistics Group

**August 23 - 24, 2022 Aurora, Colorado**





# THE CIRCULAR ECONOMY DEVELOPMENT CENTER - WHAT'S NEXT?

24<sup>th</sup> August 2022

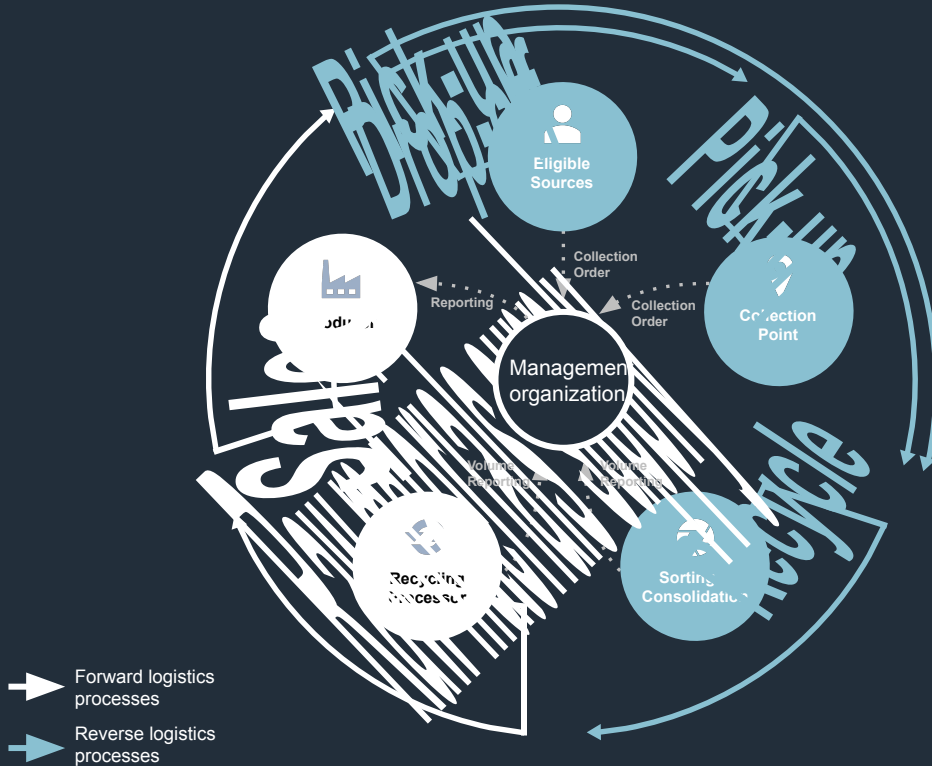
EVP DRS: Marcel Rakowski

2022 Summit for Recycling and  
Mountain Compost Symposium

Rocky



# CIRCULAR ECONOMY SETUP



- Follow **holistic** and an end-to-end **approach**
- Focus on **resource recovery** (not purely on waste management)
- Ensure **material quality control & efficient collection flows**
- Target **circular economy & build an ecosystem**





# THREE PRACTICAL SOLUTIONS DRIVING CIRCULAR ECONOMY



**RECYCLING  
MANAGEMENT**



**EXTENDED PRODUCER  
RESPONSIBILITY (EPR)**



**DEPOSIT REFUND  
SOLUTIONS (DRS)**

# EPR – SHORT RECAP



- **Responsibility** for the environmental impact of a product **on the producer**.
- Currently, they are mainly used to ensure there are **responsible disposal options** for products at the end of their useful lives.
- Producers may take responsibility for doing this themselves or pay another organization to do it.
- **EPR is in the US** for other products incl. electronics 25 states + DC, 4 for mattresses, 10 for paint, carpets, batteries, pharmaceutical
- But there is a need for a bigger push... in packaging

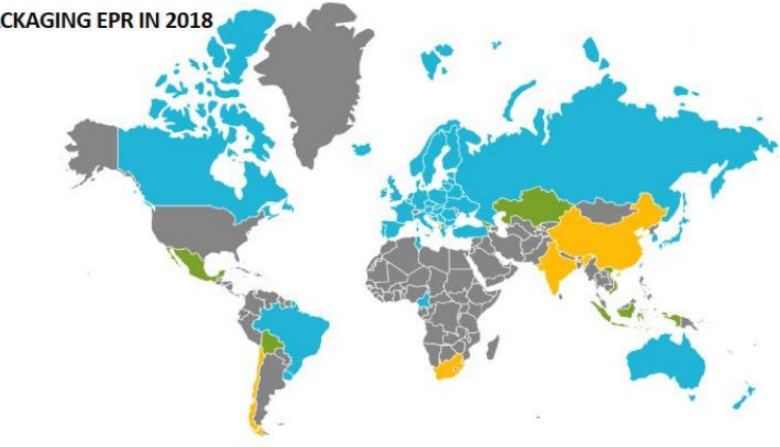


# GROWTH IN EPR SCHEMES

PACKAGING EPR IN 2000



PACKAGING EPR IN 2018



**USA: 4 states passed a bill (Main, Oregon, Colorado, California)**

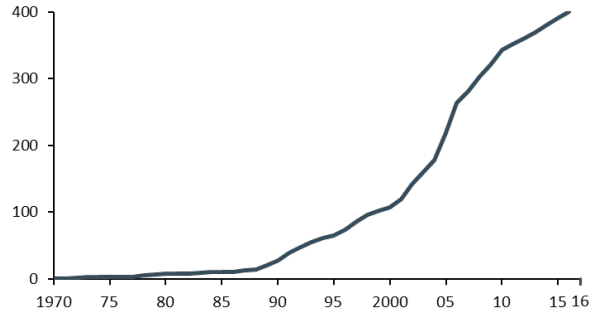


Source: [wwf\\_germany\\_epr\\_briefing\\_\\_\\_final\\_230819\\_2.pdf](#) (d2ouvy59p0dg6k.cloudfront.net)

# EPR ADOPTION

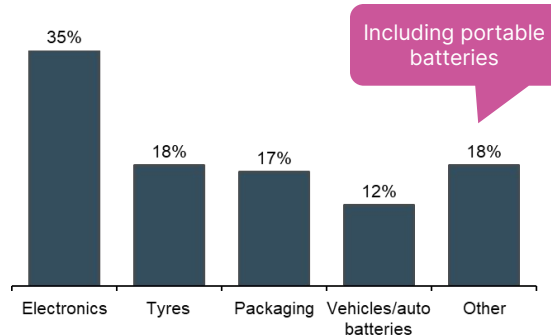
Global cumulative adoption of EPR regulation\* (1970-2016)

Number of EPR policies implemented



Global EPR regulation by product type\* (2016)

Distribution of EPR regulation by product type (N=400)



- Governments focused on sustainability agenda
- EPR regulations were established to cope with growing social awareness for environmental issues
- Manufacturers increasingly obliged to recycle products on the journey towards a circular economy



## NECESSARY PRODUCT ATTRIBUTE DATA:

### BATTERIES

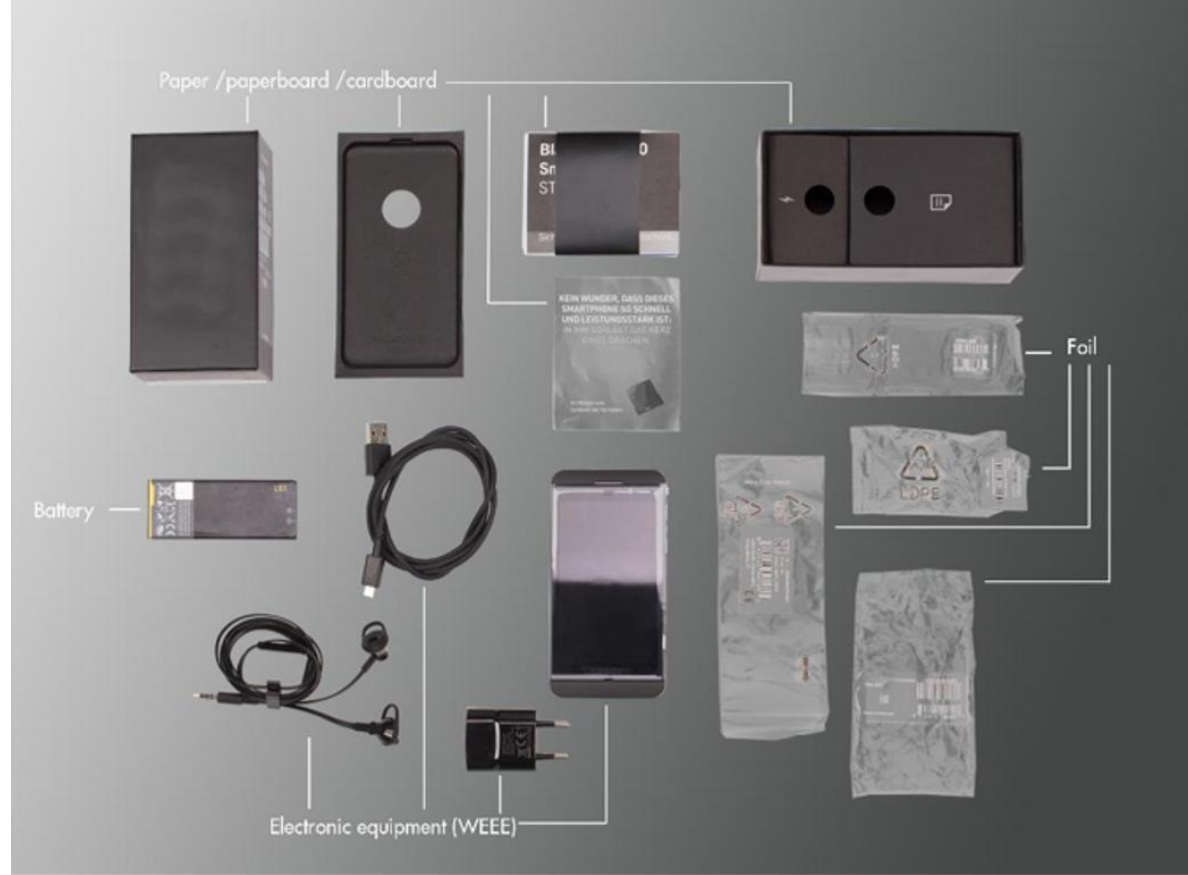
1. Items per Fraction
2. Net weight
3. Battery type
4. Chemical system
5. IEC code
6. Primary/Secondary
7. Fraction brand name
8. Capacity
9. Button cell (y/n)
10. Mercury content
11. Integrated (y/n)
12. Battery pack (y/n)
13. Number of cells per battery pack

### WEEE

1. Items per Fraction
2. Net weight
3. Height
4. Length
5. Depth
6. Fraction brand name
7. Manufacturer type
8. Monitor screen size)

### PACKAGING

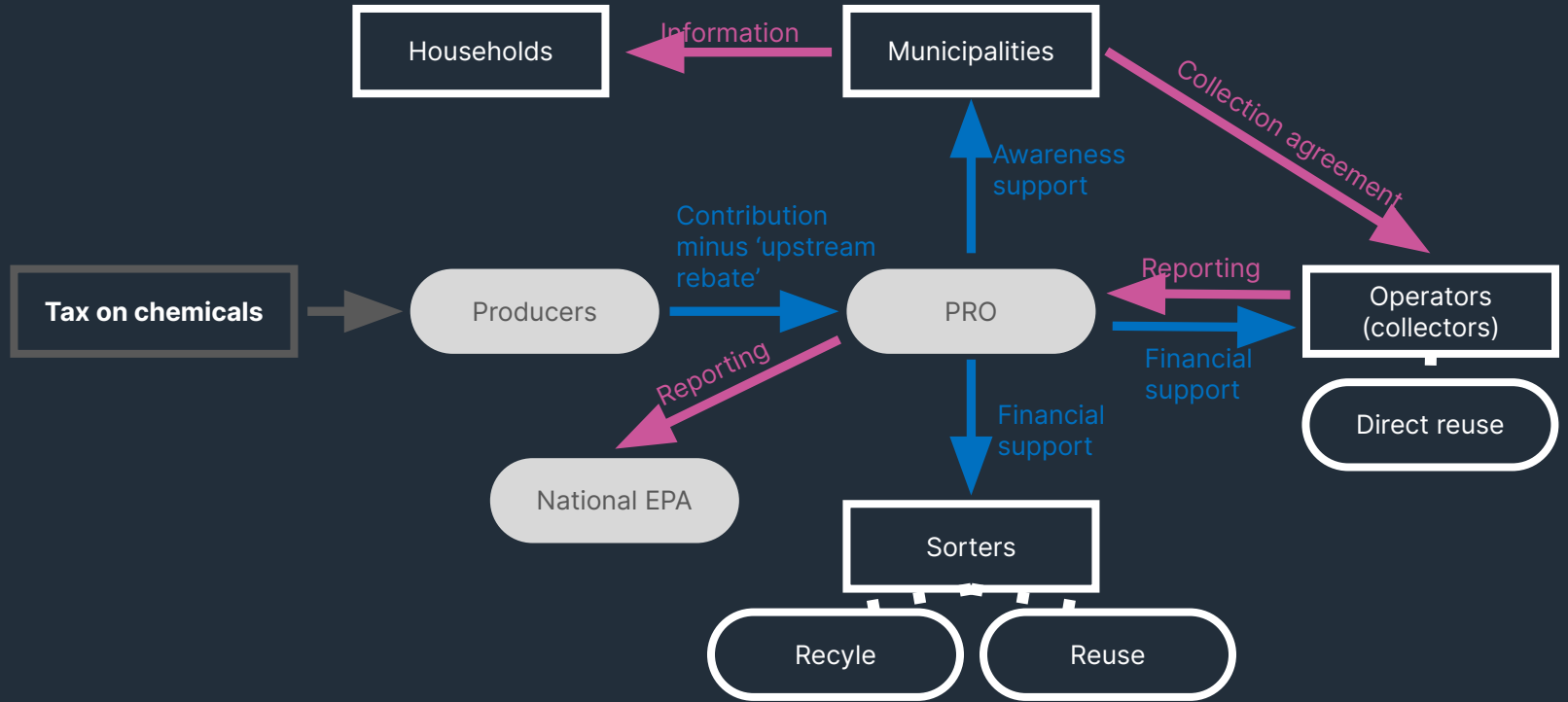
1. Items per Fraction
2. Net weight
3. Packaging category
4. Material general
5. Material detail
6. Reusable (y/n)
7. Type of packaging
8. Filled packaging
9. Beverage container (y/n)
10. Hazardous content (y/n)
11. Manufacturer type



TOTAL: 32 attributes

# SMARTPHONE unboxed

# EPR SCHEME SETUP



# ●●● CHALLENGES

**1** Efficiency (Cost and Environment)

**2** Financing and design structures

**3** Enforcement

**4** Auditability of the value chain

**5** How does it fulfil the purpose?

**6** Unclear definition and the role of stakeholders



# WHY DRS?

Legislation\* demands strong sustainability action



## Need for action

- Plastic, glass and aluminum bottles are amongst the top-ten ocean polluting products<sup>1</sup>
- **Beverage** companies rate amongst the **biggest plastic polluters** in the world<sup>2</sup>
- **Beverage** companies have strong **sustainability targets** regarding product circularity<sup>2</sup>



## All plastic packaging

- All plastic packaging re-usable or easily recyclable
- All EU members must implement EPR schemes for all packaging by 2025
- Recycling target: **50% by 2025**



## Plastic beverage packaging

- Integrate recycled plastic in PET bottles: **25% by 2025**
- All beverage containers: 30% by 2030
- Collection target: **77% by 2025**  
**90% by 2029**

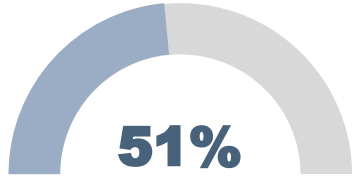
<sup>1</sup> [Takeaway food and drink litter dominates ocean plastic, study shows | The Guardian](#)

<sup>2</sup> [https://reloopplatform.org/wp-content/uploads/2019/03/LISBON\\_Feb-22\\_v1.pptx](https://reloopplatform.org/wp-content/uploads/2019/03/LISBON_Feb-22_v1.pptx)

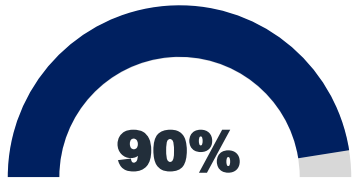
\* EU SUP



# DEPOSIT SYSTEMS PROVIDE HIGH EFFICIENCY (PERCENTAGE)



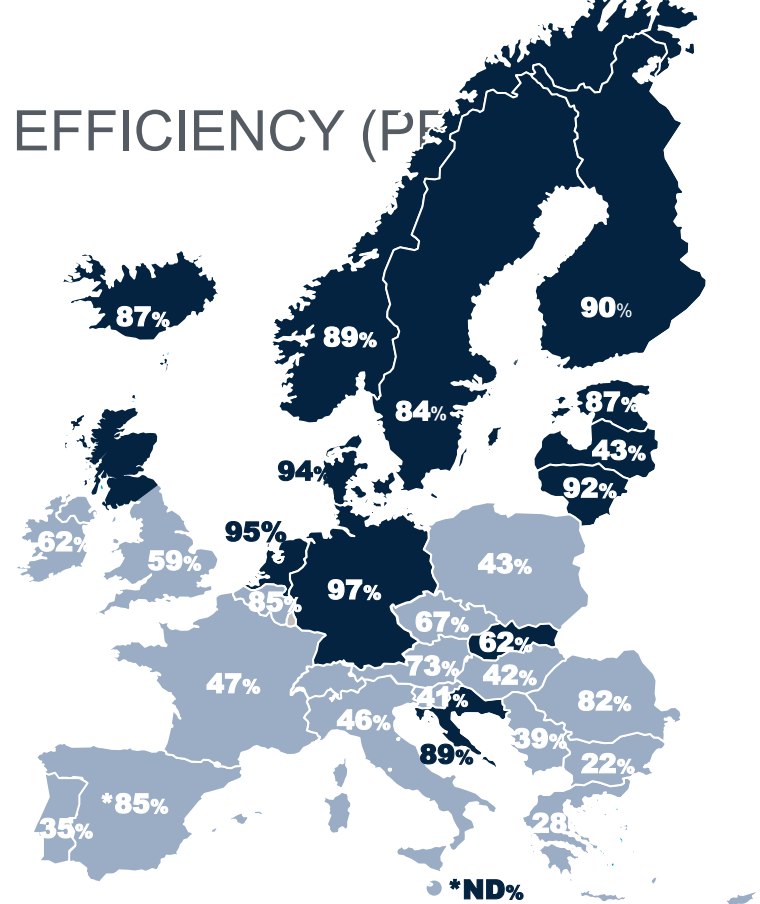
Average collection rate for other recycling collection models



Average collection rate for deposit systems\*

+300 million people with access to DRS systems worldwide

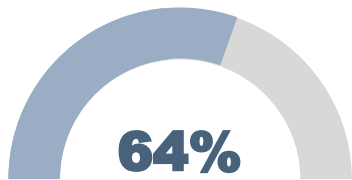
*\*plastic drink containers collected for recycling*



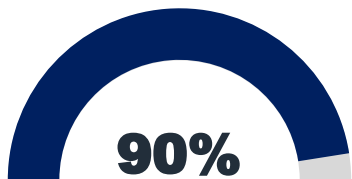
Source: Eunomia/EFBW/Petcore/PRE 2020, based on 2017 data. + Global Deposit Book (Reloop 2020), \*Slovakia (Institute for Environment Policy report, 2018) \*Spain (Ecoembes, 2017) DRS countries in darker colour



# DEPOSIT SYSTEMS PROVIDE HIGH EFFICIENCY (AL)



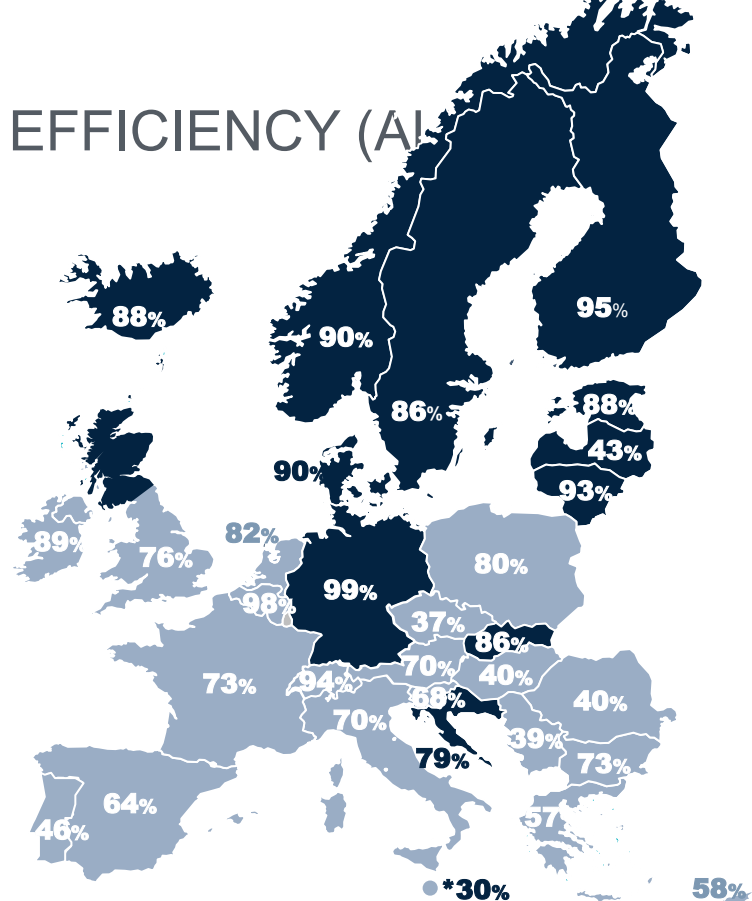
Average collection rate for other recycling collection models



Average collection rate for deposit systems\*

+300 million people with access to DRS systems worldwide

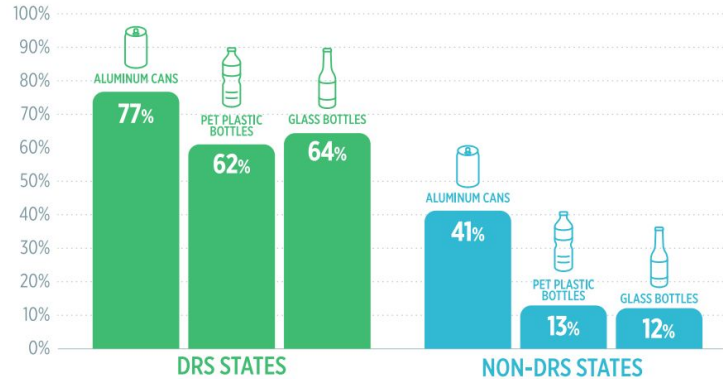
*\*alu containers collected for recycling*



Source: MPE/European Aluminium, 2019 (2017 data) except \* (latest reported data) + Global Deposit Book (Reloop 2020) – DRS countries in darker colour

# DRS IN THE USA

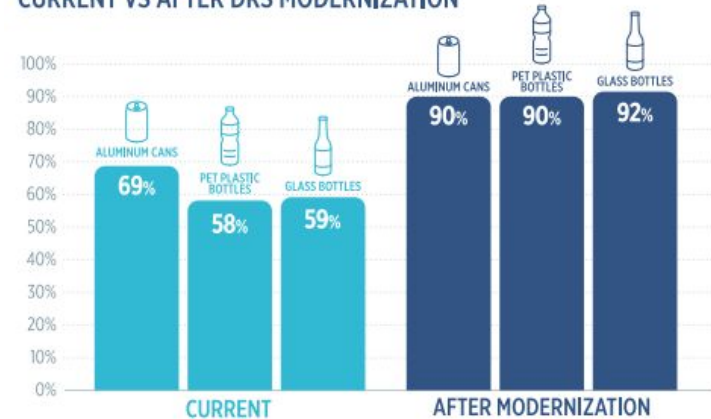
US Deposit States perform better than non-deposit states



"2018 Beverage Market Data Analysis", Container Recycling Institute, 2020

But they are still far from high performing DRS countries

## CONTAINER RECYCLING RATES, BY MATERIAL: CURRENT VS AFTER DRS MODERNIZATION





# The need of a Well-Designed DRS





# DRS ARE HIGHLY EFFICIENT BUT THERE IS A NEED FOR A “WELL DESIGNED” DRS



**Convenience**



**Sustainable**  
(Economically and Ecologically)



**Future-proof**

## • **DRS is not only RVM**

It's a system of stakeholders and interactions between them





# INTEGRATING CONVENIENT COLLECTION METHODS



## Traditional DRS



Manual collection



Standard RVM



## Smart DRS

*Convenient and inexpensive collection*



E-Bins



E-bin with manual crushing unit



Handheld collection



Mobile App



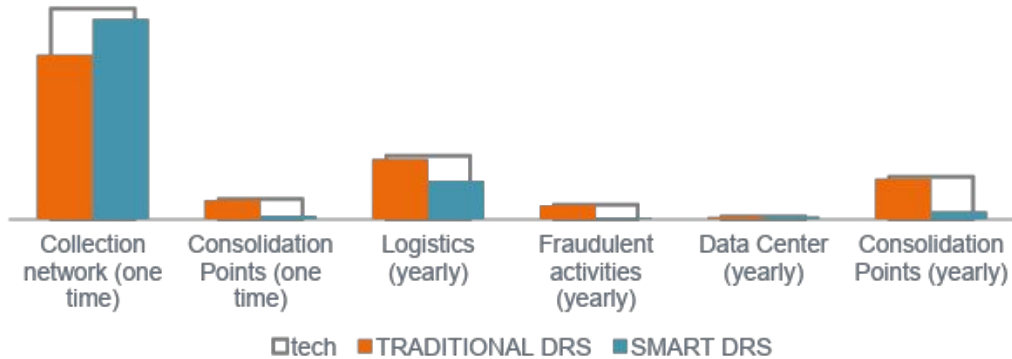
Simplified RVM



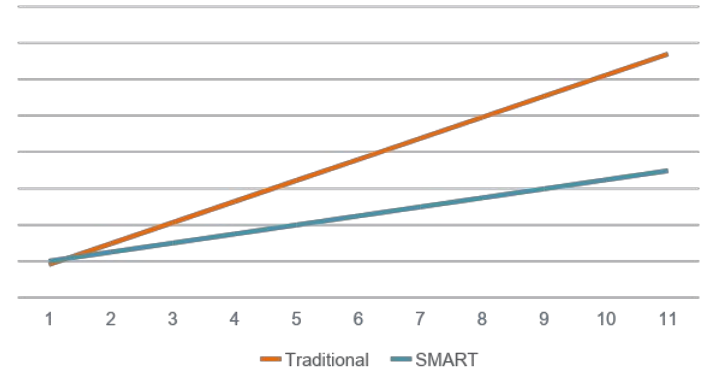
# SMART VS TRADITIONAL DRS – POTENTIAL FOR LONG TERM SAVINGS

## Example Cost Comparison

TRADITIONAL DRS vs SMART DRS (IN 1 YEAR)



Cost Traditional DRS vs SMART DRS





# LEARNINGS AND BEST PRACTICES FROM DRS COUNTRIES

**Set up an extensive and convenient collection network**

**Add minimum deposit value**

**Set collection targets**

**Increase scope of beverage containers**

**Improve system transparency**

**Industry and system self-financing**

**Leverage on technology and innovation**

# KEY TAKEAWAYS

- 1 Set and Focus on objectives
- 2 Ensure transparency
- 3 Engage and leverage on stakeholders' strengths
- 4 Localize and leverage on learnings from other regions
- 5 Keep end customer in mind

# *Return to Value*



Summit for Recycling  
&  
Rocky Mountain Composting Symposium

**THANK YOU!**  
**QUESTIONS?**

**August 23 - 24, 2022 Aurora, Colorado**

