

MARS

Tomorrow starts today

Environmental Law Institute's
Annual Summer School Seminar Series

Rachel Goldstein, Global Packaging Sustainability

The world we want tomorrow starts with how we do business today

MARS



The Five Principles
Quality | Responsibility | Integrity | Efficiency | Freedom

125,000+ Associates
are united and guided by The Five Principles of Mars which span geographies, languages, cultures and generations.



1911
Frank C. Mars made the first Mars candies in his Tacoma, Wash., kitchen



80+ countries in operation



454 SITES
2,500+ VETERINARY HOSPITALS

FORTUNE
Great Place To Work. World's Best Workplaces



HQ
Global HQ in McLean, Va.



Private, family-owned company



\$35B+ NET SALES

Billion Dollar Brands

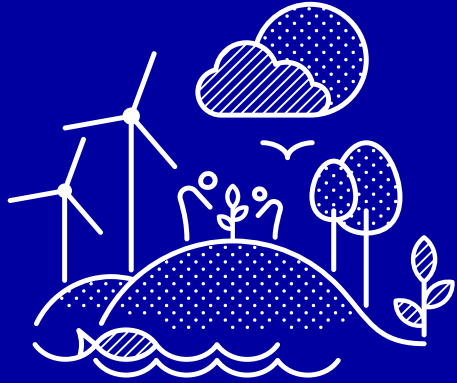


MARS Petcare | A Better World For Pets

MARS WRIGLEY | better moments make the world smile

MARS Food | Better food today A better world tomorrow

MARS Edge | Better Lives Through Nutrition



Sustainable in a Generation Plan MARS

The Sustainable in a Generation Plan from Mars features three interconnected ambitions – informed by science – that will allow the company to address significant environmental and social challenges facing our planet.

#GenerationforChange



Follow @marsglobal



Our goal is to reduce our total environmental impact in line with what science says is necessary to keep the planet healthy.



Our goal is to meaningfully improve the working lives of one million people in our value chain to enable them to thrive.



Our goal is to advance science, innovation and marketing to help billions of people and pets lead healthier, happier lives.



Climate Action

Reduce the total GHG emissions across our value chain by 27% by 2025 and 67% by 2050.



Water Stewardship

Eliminate water use in excess of sustainable levels in our value chain by 2050.



Land Management

Hold flat the total land area associated with our value chain.



Circular Packaging

Develop packaging that is 100% reusable, recyclable or compostable while decreasing virgin plastic use by 25% by 2025.



Increasing Income

Everyone within our extended supply chain should earn sufficient income to maintain a decent standard of living.



Respecting Human Rights

Everyone touched by our business is treated with fairness, dignity and respect.



Unlocking Opportunities for Women

In our workplaces, marketplaces and supply chain.



Food Safety

Mitigate food safety risks around the world.



Product Renovation

Invest in science and product design to improve the nutrition and portions of our products.



Responsible Marketing

Market our products in ways that will help billions of people lead healthier, happier lives.

What we are doing about it

Remove unnecessary packaging

Packaging weight reduction; removal of layers; 10 reuse programs



Redesign for circularity
100% of paper based packaging from certified, verified or recycled sources (by 2020);
Eliminate PVC (by 2020)

Invest to close the loop
Supporting EPR schemes; investing in and advocating for a scale-up of recycling systems; using 30% recycled content on average across our plastic portfolio; providing guidance to consumers in all major markets

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Why packaging matters



It ensures products meet the highest standards for food safety



It helps preserve the freshness of products



It provides consumers with helpful information

Anchor goals

100%

of our plastic packaging to be reusable, recyclable or compostable*

25%

reduction in virgin plastic use**

Partners

We're working to advance our packaging plans by collaborating with Ellen MacArthur Foundation, Consumer Goods Forum, Loop and others.

* Per EMF definitions

** Target dependent on advancement of mechanical, chemical and organic recycling at pace and scale & alignment of food safety regulations

The Why

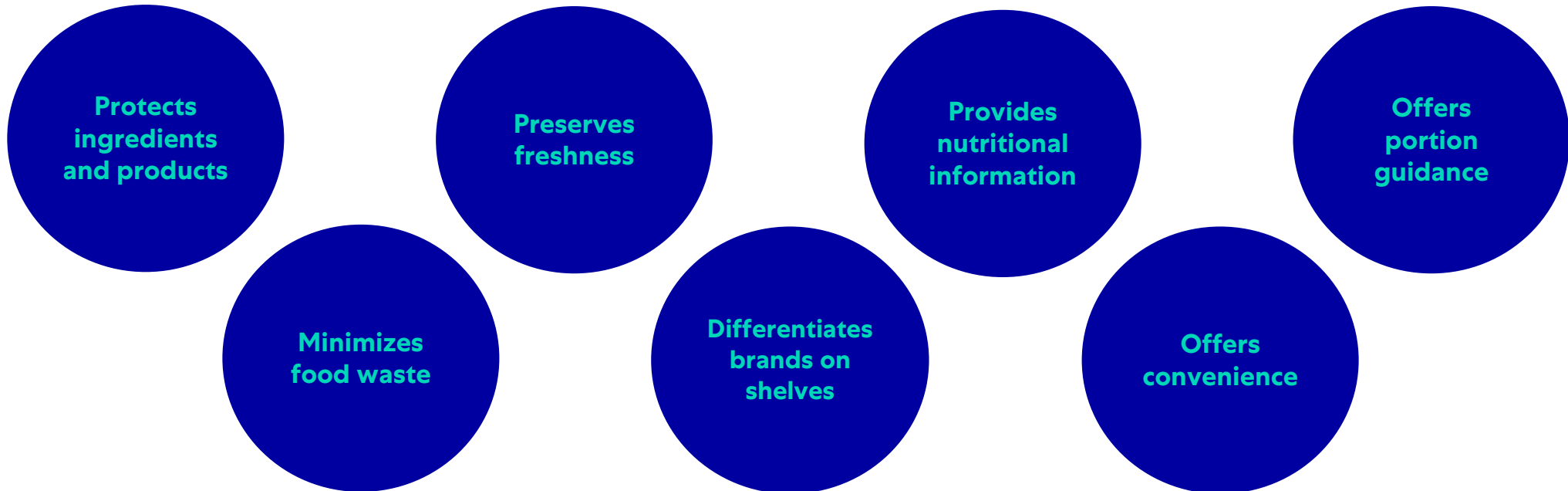




Defining the Issue

Why Packaging Matters

Packaging plays many important roles in ensuring products meet the highest market and food safety standards



All these benefits need to be maintained while also finding a way to make sure packaging can be part of a circular economy.

The Challenges with Today's Packaging

Packaging today is made of many different kinds of materials....

including sturdy cardboard boxes for shipping, lightweight papers, metal cans, glass jars and a variety of different plastic materials.....rigid, flexible, multi-material



Glass, metal, paper and rigid plastics are frequently recycled materials, where infrastructure exists....and in some informal recycling markets



Flexible plastics are lightweight and can have a low carbon footprint, but they are recycled far less and in many cases not at all.

The Challenges with Today's Packaging



CHALLENGES:



In developed markets there is waste collection, but still relatively low recycling rates, particularly for flexible plastics.



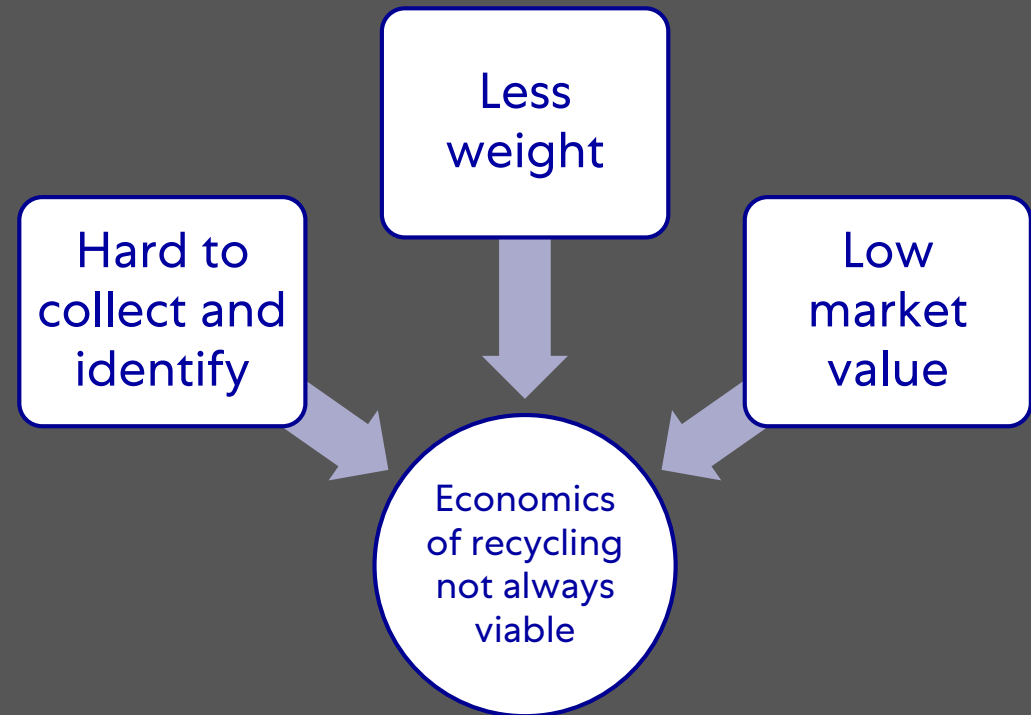
In developing markets there is little or no collection and consequently very low recycling and high leakage to nature.



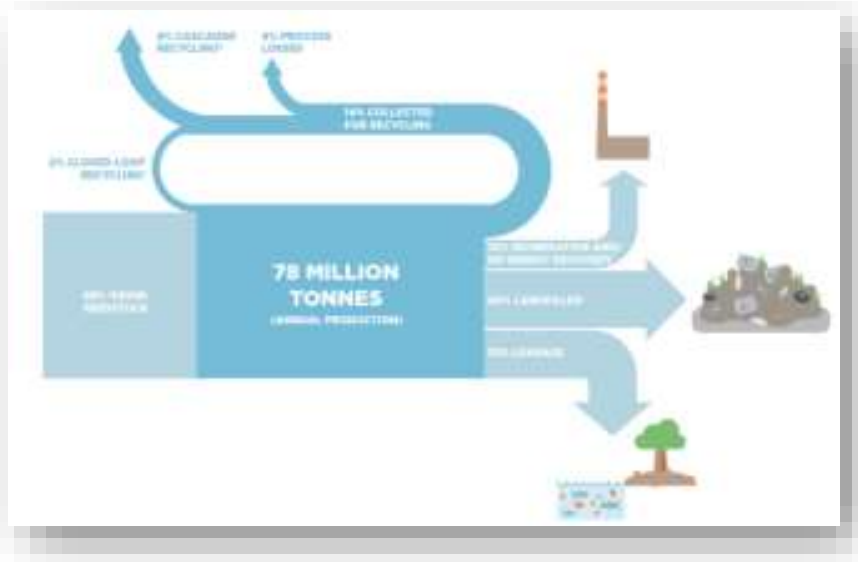
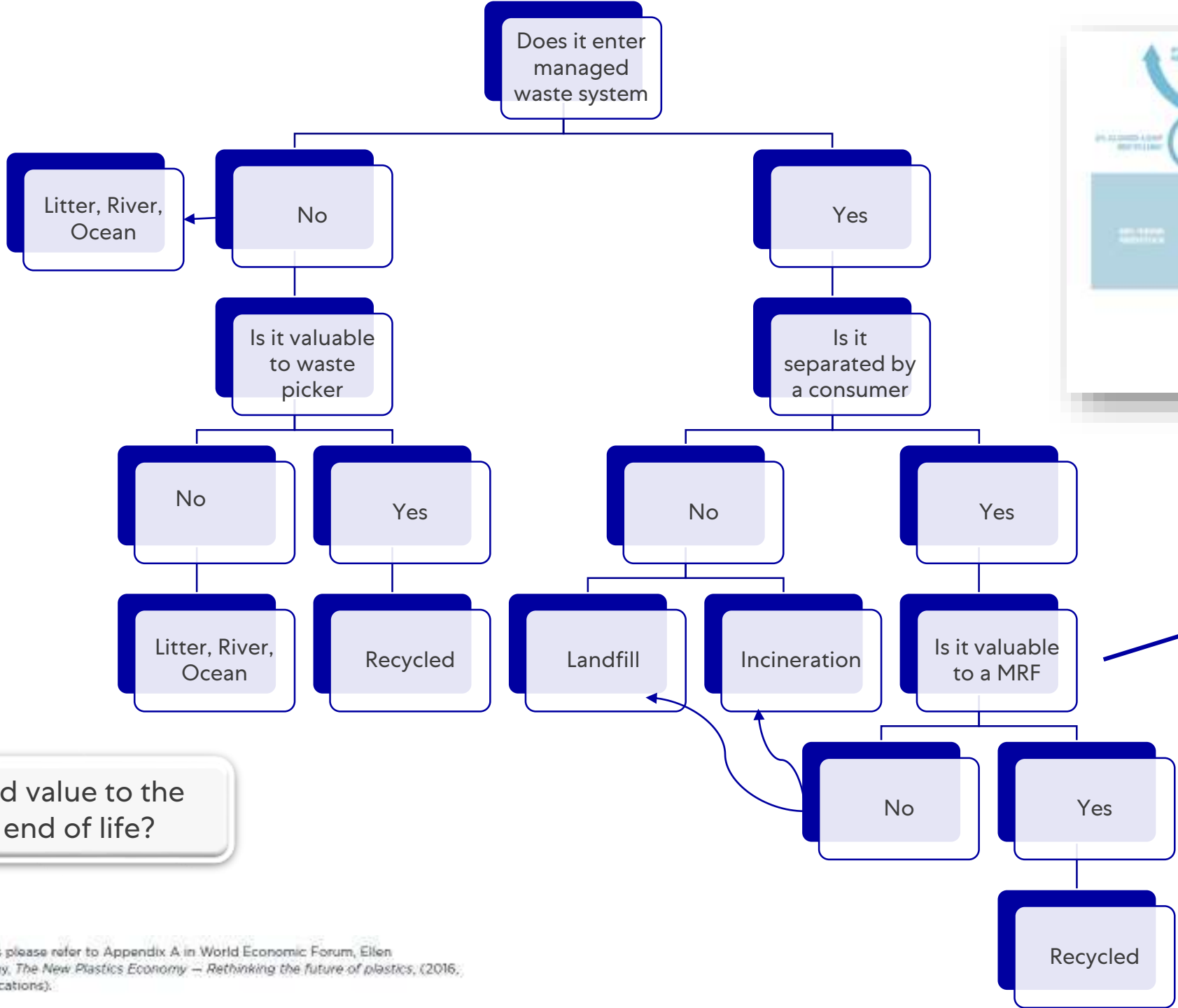
Most plastics in use today are made from fossil fuels, which are finite resources.



Why is collecting and recycling of plastic packaging such a challenge



There is a tension between material efficiency at start of life and material value at end of life

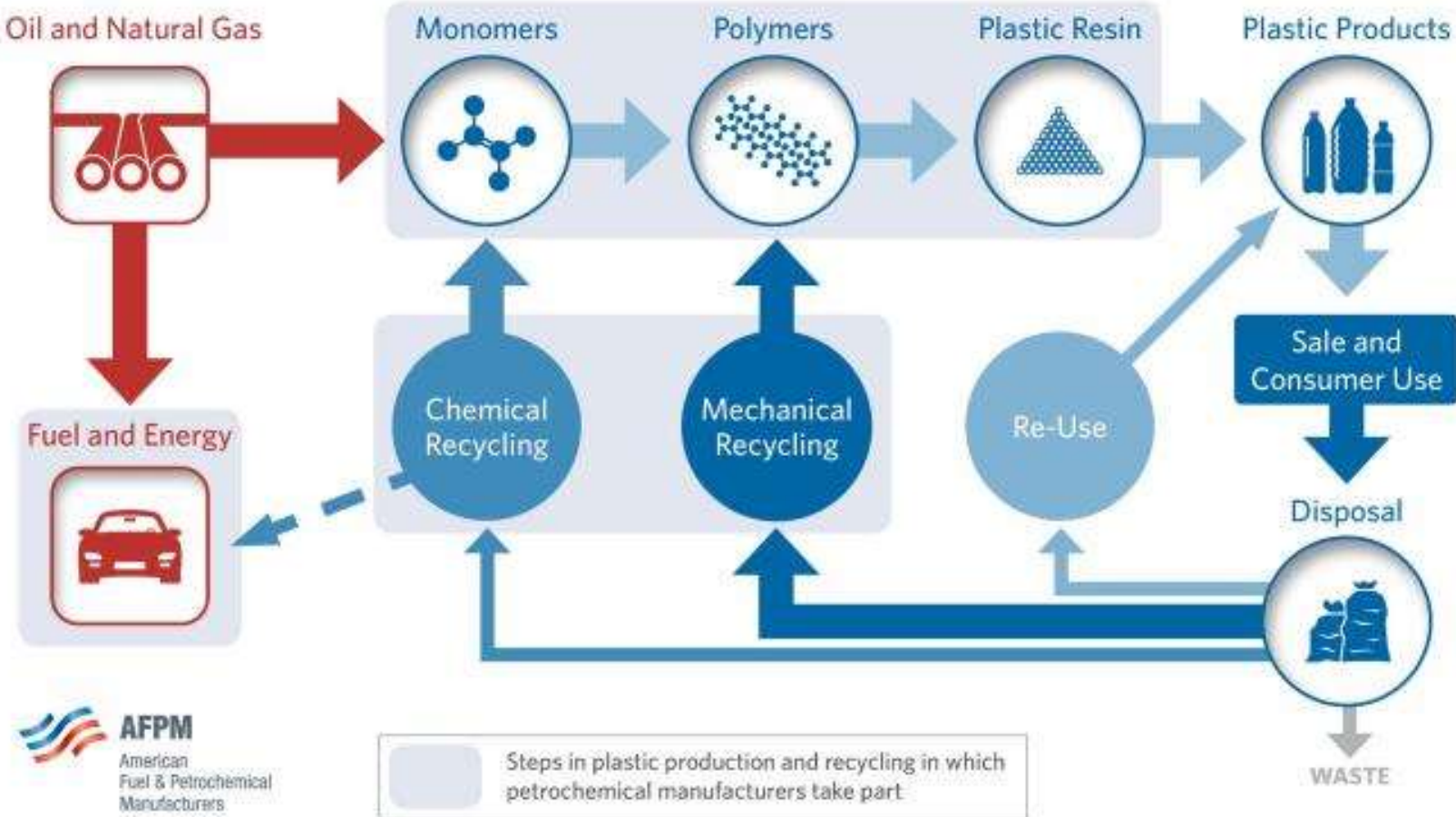


Where are you?
 Can it be identified?
 Weight?
 Commodity Prices

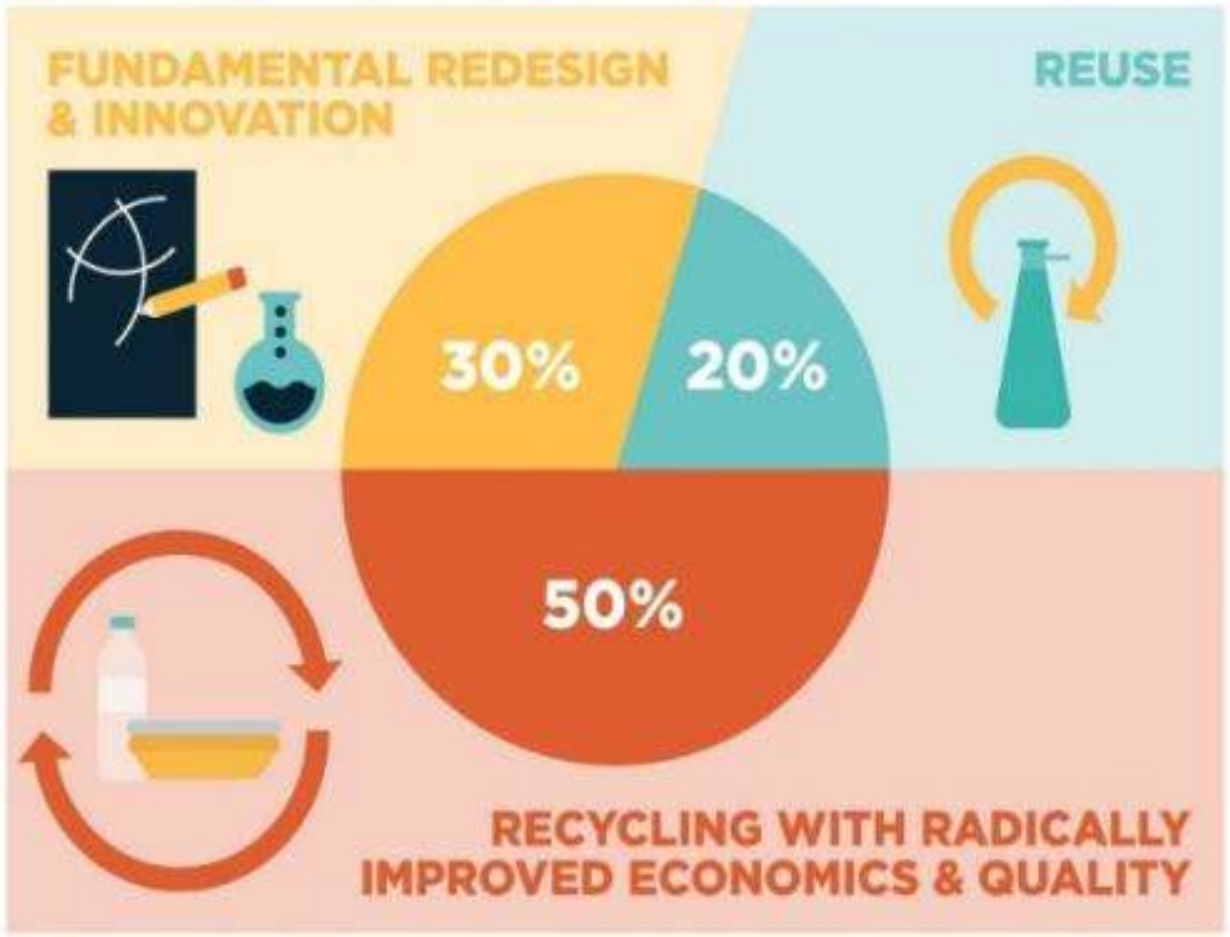
Do you add value to the recycling at end of life?

Mechanical and Chemical/Advanced/Enhanced Recycling

Evolving the Plastic Recycling Supply Chain



Three strategies to transform the global plastic packaging market



Fundamental redesign – upstream

Reuse- different delivery models

Recycling- adding value at end of life

Fundamental redesign – upstream

Reduce Fossil Based Plastic

Bio-based/biodegradable/compostable

Paper, metal, glass

Need awareness of tradeoffs, infrastructure, fit for purpose



Fundamental redesign – upstream

Reduce materials

What can you eliminate or lightweight



Reuse/ Refill- new delivery models and transport packaging

- Reusable pallets
- Pallet collars
- Reusable handheld containers
- Reusable bulk containers
- Reusable dunnage
- Reusable wraps and straps

MIWA

Pilots during 2019 • Prague

MIWA creates a business ecosystem for packaging-free sales.

RFID-enabled monitoring of inventory, automatic reordering of stock, and real-time data on flow of goods, improves the supply-chain efficiency and operational convenience.



Hepi Circle

Pilot • Indonesia

Household goods like detergent sold in small-format reusable bottles to replace single-use sachets.

Every time a customer returns a Hepi Circle bottle they receive a Hepi point that can be used towards purchasing new products in reusable packaging or food.





Reuse/ Refill- new delivery models and transport packaging

Looks to replace single use sachets

Buy as much or as little of a product as you want

Recycling- adding value at end of life



SOCIAL PLASTIC®

Social Plastic® is ethically recovered plastic that upholds the UN Sustainable Development Goals by transferring its value to emerging economies.



FA Shower Gel Henkel – Germany



Eco-shopping bag Marks & Spencers – United Kingdom



Recycling- adding value at end of life



**How Bricks Made
Of Plastic Waste Is
Helping Spread
Education In Ivory
Coast & We Can
Take Note**



<https://www.indiatimes.com/news/world/how-bricks-made-of-plastic-waste-is-helping-spread-education-in-ivory-coast-505137.html>

New Supply Chains Need to be Built



Using recycled content
in packaging

**Corporate
Commitments**



**Global Market
Disruptions**



**COVID 19
Disruptions**



Where does recycled content come from



Using recycled content
in packaging

Post Industrial



Post Consumer



Ocean bound



Global Regulatory Activity on the Rise

Increasing state and federal activity in U.S.

UN Environment and WRI found that at least 127 countries (of 192 reviewed) have adopted some form of legislation to regulate plastic bags as of July 2018.



China “National Sword” Policy in 2018 limited plastic waste imports

EU officials planning more than a dozen laws to strengthen the circular economy as part of European Commission’s Green Deal

Parties to the Basel Convention moving to make most plastic scrap/waste covered waste subject to a prior notice and consent procedure effective January 1, 2021

Increasing legislative activity at the federal level

2020 Activity

- June 17 Senate Environment and Public Works Committee held an oversight hearing on "Responding to the challenges facing recycling in the United States"
- June 15 [Plastic Waste Reduction and Recycling Act \(H.R.7228\)](#) was introduced in the House by Representatives Haley Stevens (D-MI) and Anthony Gonzalez (R-OH).
- June 11 Senator Tom Udall (D-NM) introduced [S.3944](#) which is nearly identical to [Break Free From Plastic Pollution Act \(S.3263\)](#) without the section relating to fees on plastic bags.
- May 22 Representatives Paul Tonko (D-NY) and David McKinley (R-WV) introduced [H.R.6987](#), a bill to expand the Paycheck Protection Program (PPP) to include payments for waste and recycling collection services

2019: [RECYCLE Act \(S.2941/H.R.5906\)](#) [RECOVER Act \(H.R.5115\)](#) [Save Our Seas 2.0 \(S.1982/H.R.3969\)](#)

Value Chain Partnership

- Packaging Design Changes
- Infrastructure Changes
- Consumer Engagement
- Metrics



Thank you

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