Richard Jones, SVP Sustainability

Reshaping Businesses in Response to the Sustainable Trend

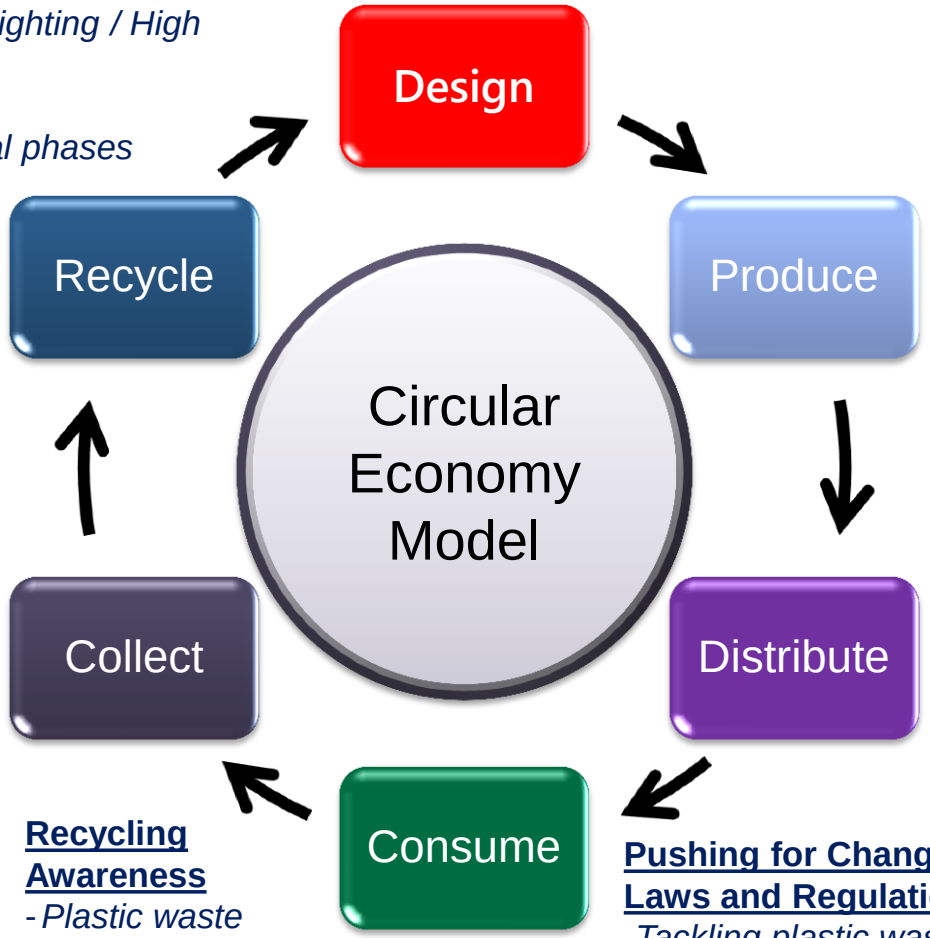
IVL Recycling Strategy **to Enable** the Circular Economy

Innovation & Product Stewardship
- *Product Design: Lightweighting / High performance*
- *Low carbon products*
- *Use / Handling / Disposal phases*

Recycling
- *New recycling technologies to tackle plastics waste*
- *Recycling commitment*

Collaboration with
- *Customers*
- *Suppliers / Partners*
- *Government bodies*

Total Ban in EU:
Plastic cutlery (forks, knives, spoons and chopsticks)
Plastic plates (an exemption might be foreseen until 2023)
Plastic straws
Food containers, Cups, Yogurt Pots, Beverage Containers, made of expanded polystyrene



Alternative Raw Materials
- *Recycled feedstock*
- *Renewable raw materials*

Operational Eco-Efficiency
- *Carbon footprint / Energy / Water / Waste*
- *Renewables resources*
- *Life cycle assessment and management*

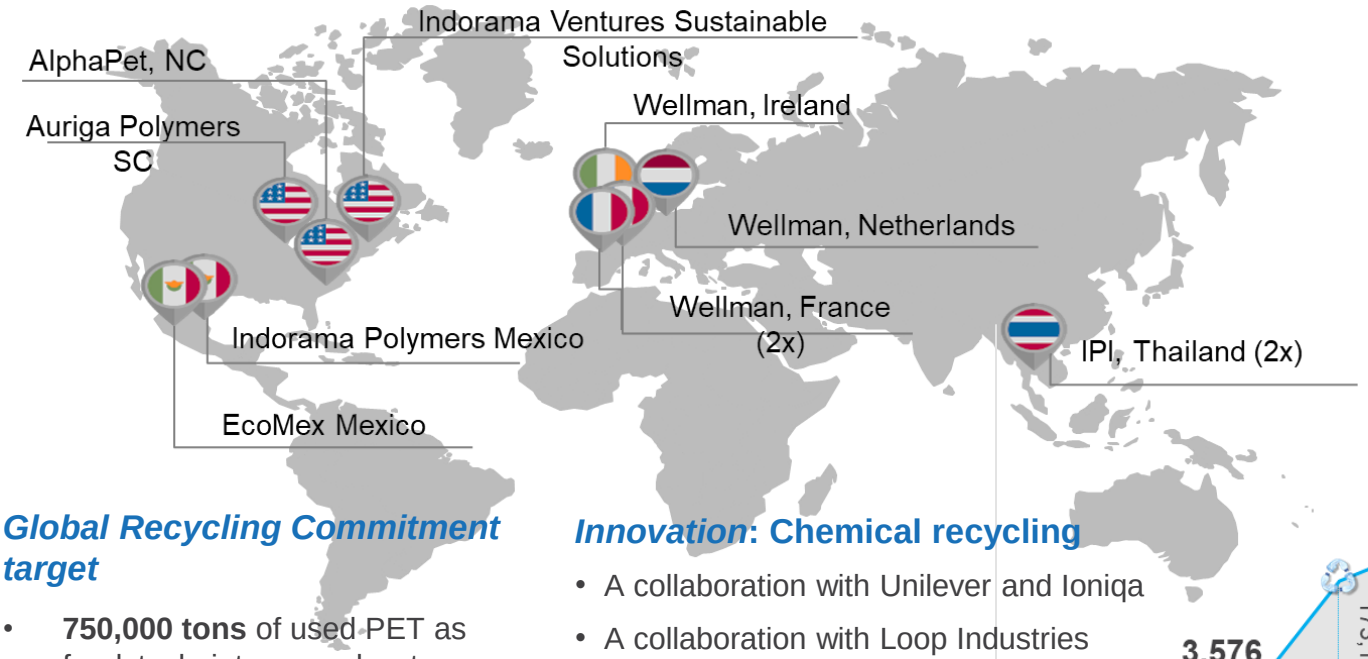
GHG Scope 3 accounting

Pushing for Change in Laws and Regulations
- *Tackling plastic waste concerns by promoting demand for recycled plastics*
- *Increasing local demand for recycled PET*

Recycling Awareness
- *Plastic waste separation*
- *Plastic recycling*
- *Educating students*

Recyclable PET Drives Circular Economy

Recycling Platform in 6 Countries



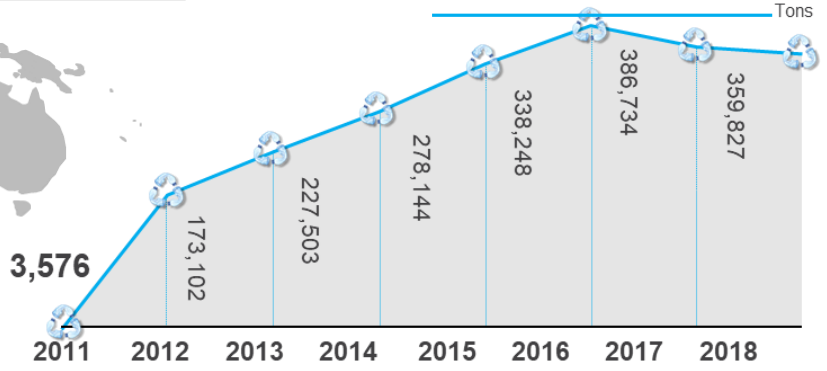
Global Recycling Commitment target

- **750,000 tons** of used PET as feedstock into our polyester production by 2025

Innovation: Chemical recycling

- A collaboration with Unilever and Ioniqa
- A collaboration with Loop Industries

Around 38 billion bottles
Were recycled from 2011-2018



* rPET resin that contains up to 30% recycled content

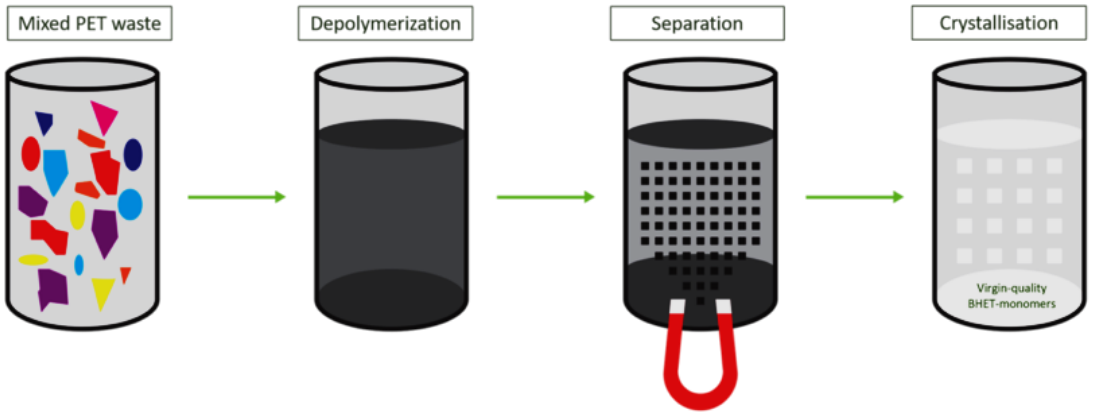
Meeting Increasing Brand owners Needs

- Coca-Cola: 50% recycled content by 2030
- PepsiCo: 50% recycled content by 2030
- Kraft Heinz: 100% recyclable by 2025
- Unilever: 100% recyclable and 25% recycled PET by 2025
- Nestlé Waters: 100% recycled or renewable content by 2020

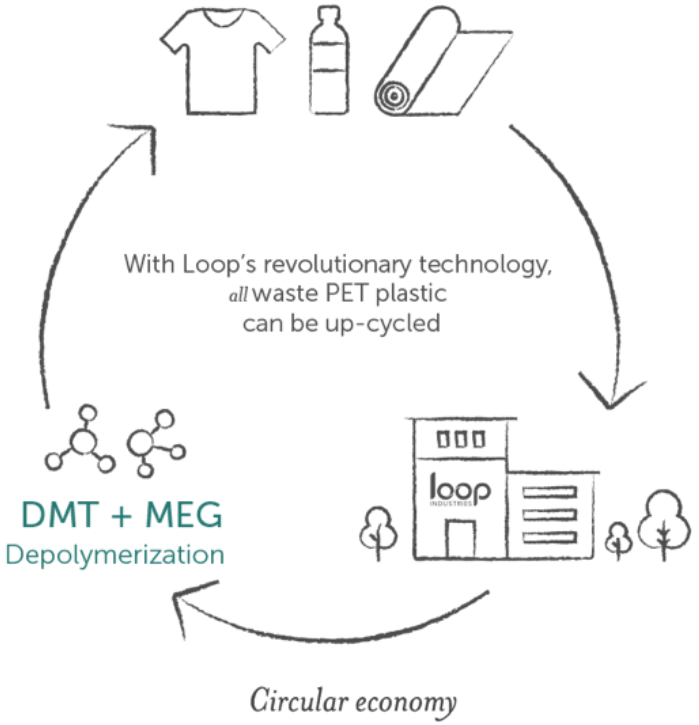
Our vision: To be a world-class chemical company making great products for society.

IVL *Investing in Chemical Recycling Technologies*

Ioniqa Technologies



loop INDUSTRIES



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INDORAMA VENTURES

Cognitive bias among consumers may make sustainability awareness difficult: Do you know which hurts the environment more?

Should I use a reusable cup?

Paper coffee cup

Foam coffee cup

Paper cup consumes 6X as much steam as foam
13X as much electricity
2X as much cooling water
When paper biodegrades, produces methane, a GHG

How many USES before the reusable cup (left column) is equally energy efficient to the disposable cups (right)

Reusable Cup		
	Paper	Foam
Ceramic	39	1006
Plastic	17	450
Glass	15	393

Sustainability should include the energy and water used as well as its recyclability