





















## **CHEMICAL RECYCLING SUMMIT**

Partnerships to stimulate Advanced Recycling Technologies















































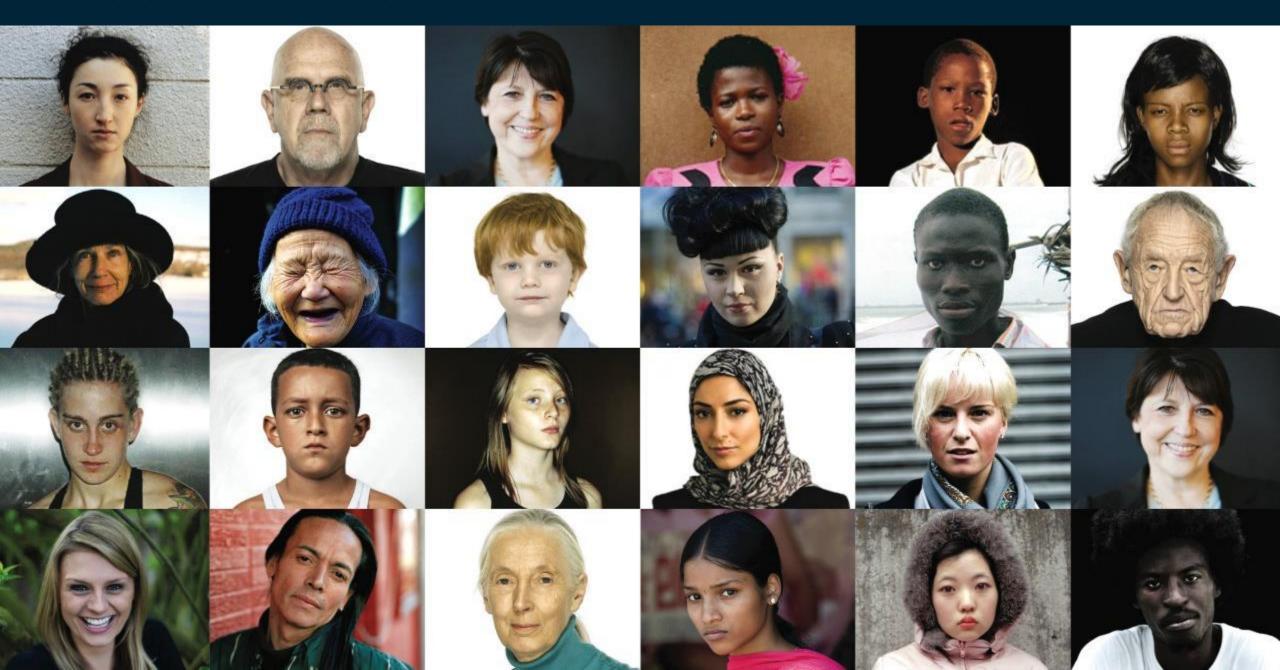






dermalogica

# THE SCHIZOPHRENIC CONSUMER





SUSTAINABLE BUSINESS



How Coca-Cola, Unilever, and Others Delay Action on Plastic

An investigation from Bioomberg tooks at how big companies use an industry ted recycling campaign to generate good PR, and not much eise

By Molly Tall - srtis-22.4.00W | Comments (%) - Alerts



'Biggest plastic polluters' accused of hypocrisy; Unilever, Danone, and Coca-Cola respond





rtunieuws

De plastictaks komt eraan: kost elke Nederlander zo'n 16 euro

**Bloomberg** 

Green

Greener Living

#### A Fund Designed to Recycle Shrink-Wrap Fails to Pay Out

- Fund backed by Unilever, Pepsico hasn't made a single payment
- Soft plastics like food wrap are notoriously difficult to sort

# **Delivering on Unilever Global Plastic Commitments**

Contributing to multiple UN Sustainable Development Goals

## **Global Commitment 2017 - by 2025**

Ensure all plastic packaging is reusable, recyclable or compostable





## **Global Commitments 2019 - by 2025**

Reduce our virgin plastic packaging by 50% Help collect and process more plastic packaging than we sell





## Future Scenario: Circular Plastics & Net-Zero Emissions



#### The NET ZERO SYSTEMS CHANGE SCENARIO

builds on the Circularity Scenario and brings the European Plastics system on a net zero pathway through 4 methods of GHG reduction:

#### CHANGE THE FEEDSTOCK CARBON SOURCE

to provide 1/4 of feedstock by 2050 via sustainable bio-based materials or captured carbon and hydrogen

#### APPLY BLUE AND **GREEN HYDROGEN**

as fuel and feedstack to reduce production emissions



#### **ELECTRIFY HEAT SOURCES**

for steam crackers with cumulative production capacity of 1.5 million tonnes by 2050



#### CAPTURE PRODUCTION AND END-OF-LIFE EMISSIONS

through applying CCS to steam crackers or CCU/S to waste-to-energy plants

# **Net Zero Systems Change Scenario**

Achieving both environmental & economic benefits

## **5 Key Insights**

## 13 CLIMATE ACTION Current plan not in line No silver bullet, with Climate Goals range of actions required Action across the full value Research & Innovation chain crucial for breakthroughs Substantial investments in coming 3-5 years

#### **5 Potential Outcomes**

-**60**%
55 Mt) less waste

>70%

(255 Mt) less waste incinerated between 2020-2050

less virgin plastic produced from fossil resources

1.6 Gigatonnes

+160,000

carbon emissions saved 2020-2050

jobs from circularity levers

€ 1 in 4

to be redeployed to innovative low carbon technologies & circular business models

ReShaping Plastics - Pathways to a Circular, Climate Neutral, Plastics System in Europe

# Three pillars towards more Circular & Sustainable Packaging

## **NO PLASTIC**



Switching to sustainable alternative materials

## **BETTER PLASTIC**



Improving recyclability & increase amount of recycled & biobased content in new packaging

## **LESS PLASTIC**



Optimising packaging, incl. weight reduction, concentration and refill solutions

## **Regulation: Transition Time! A Circular Economy for Plastics**























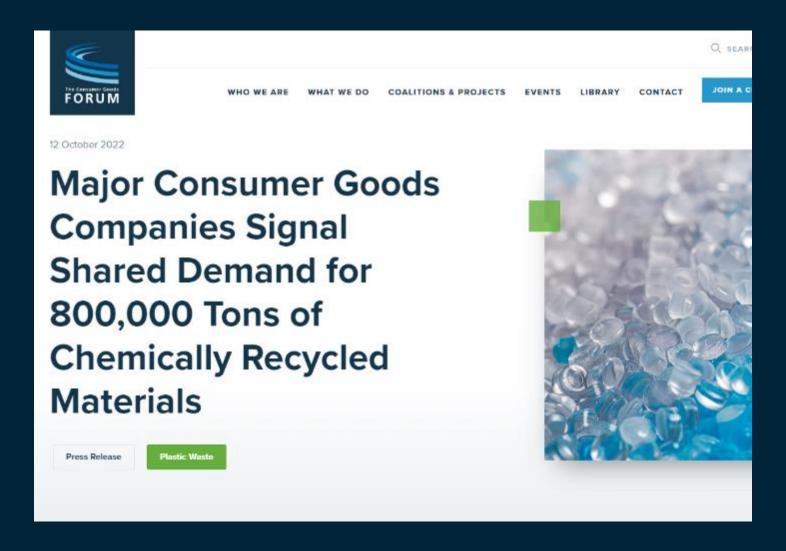
## **Value Chain Innovation**



**Polymers** 

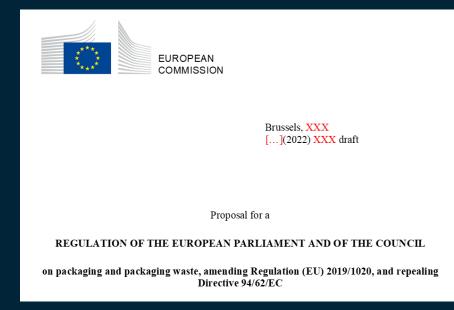
& Consumer Use

# **Implementation:** Demand from Consumer Goods



# **Leaked draft Packaging & Packaging Waste Regulation**

- Moving from a Directive to Regulation:
   Direct implementation across Member States
- Stricter requirements on recyclability:
   Min. 70% recyclability threshold, an additional 5 years to prove recycling at scale; potential ban on specific components.



- Uptake of recycled material in new packaging:
  - 25% recycled content target per unit of contact sensitive plastic packaging from 2030 (contact sensitive includes packaging food, feed & cosmetics)
  - 45% for all other plastic packaging per unit by 2030
  - 50% recycled content for contact sensitive packaging from 2040
  - 65% for all other packaging (excluding bottles) by 2040

# Future: Addressing Climate Change by Accelerating Circular Economy Circular Carbon Cycles | Circular Material Cycles



## **References & Links**

#### References to publications used in slides

- Breaking the Plastic Wave: Top Findings for Preventing Plastic Pollution PEW Trusts
- ReShaping Plastics Pathways to a Circular, Climate Neutral, Plastics System in Europe
- Dutch Sustainable Growth Coalition Transition Time! A Circular Economy for Plastics
- Major Consumer Goods Companies Signal Shared Demand for 800,000 Tons of Chemically Recycled Materials
- Circular Economy as a Climate Strategy PACE

#### **Unilever commitments:**

- 2010: <u>USLP Commitments on Waste & Packaging</u>
- 2017: <u>Unilever commits to 100% recyclable plastic packaging by 2025</u>
- 2019: Keeping our plastic in the loop

### Samenwerking Unilever-merken & partners in Nederland ohgv innovatieve recyclingtechnologieën:

- Dissolution: OBBOTEC en Unilever werken samen aan veelbelovende plastic pilots
- Pyrolyse: Magnum Circulair door opschalen van innovatieve recyclingtechnologie
- Depolymerisatie: <u>Calvé & Hellmann's werken met Ioniqa Technology</u>: <u>Eindeloos PET recyclen met Ioniqa's</u> revolutionaire technologie