MENU FOR TODAY...

- SABIC Carbon Neutrality journey
- TRUCIRCLE program at SABIC
- Product safety
- Value Chain collaboration
TRUCIRCLE™ SOLUTIONS
A CHALLENGING CONTEXT

ECONOMICS
Key driver

SOCIETY
Growing importance

ENVIRONMENT
Global trend

INNOVATION
PORTFOLIO & SERVICES
BLUE CHAIN
COLLABORATION

LCA
REGULATIONS
BRAND OWNER PLEDGES
CONSUMER FEEDBACK
RETAILER GUIDELINES
NGO VIEWS
SABIC’S TRUCIRCLE™ PROGRAM – CASE STUDIES

WORKING SIDE BY SIDE WITH PARTNERS ACROSS THE ENTIRE VALUE CHAIN TO DEVELOP CIRCULAR SOLUTIONS AND FULFILL SABIC’S AMBITION FOR A NEW PLASTIC ECOSYSTEM

CLOSING THE LOOP AND CREATING A CIRCULAR ECONOMY FOR PLASTICS
THINK OF ...

MIXED PLASTIC WASTE → OCEAN BOUND PLASTIC

NEW

CERTIFIED CIRCULAR PRODUCTS

CRUDE TALL OIL → USED COOKING OIL

NEW

CERTIFIED RENEWABLE PRODUCTS
PLASTIC WASTE TO FEEDSTOCK FOR POLYMERS: FROM LINEAR TO CIRCULAR

ADVANCED RECYCLING CREATES FEEDSTOCK FROM DIFFICULT-TO-RECYCLE-PLASTICS
TRACEABILITY OF CERTIFIED PE, PP AND PC SOLUTIONS

CERTIFICATION BY MASS BALANCE CHAIN OF CUSTODY

REPLACING PART OF THE FOSSIL BASED FEEDSTOCK

BIO

NON-FOSSIL

FOSSIL

PYOIL

FEEDSTOCK

POLYMER PRODUCER

PRODUCER

CONVERTOR

BRAND OWNER
TRUCIRCLE™ PROGRAM

LIFE CYCLE ANALYSIS

PRODUCT SAFETY
**LCA CONSIDERATIONS**

**CERTIFIED RENEWABLE POLYMERS**

Based on results of “Cradle to Gate” study on SABIC certified renewable polymers, carbon footprint reduction is about 4 kilograms of CO₂ per kilogram of resin in comparison to fossil route to HDPE*

Other polyolefins show the same relative effect, but with slightly different absolute footprints

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**CERTIFIED CIRCULAR POLYMERS**

Based on results of “Cradle to Gate” study on SABIC certified circular polymers, carbon footprint reduction is about 2 kilograms of CO₂ for every kilogram of polyolefins produced via chemical recycling route in comparison to fossil route*

This reduction includes the benefit realized from avoidance of mixed plastic waste diversion to energy recovery.

* The above studies have successfully passed ISO Critical Review
BENEFITS OF ADVANCED RECYCLING

SUPPORTING CUSTOMERS IN ADDRESSING CORPORATE SUSTAINABILITY GOALS

SABIC’S CERTIFIED CIRCULAR POLYMERS

PURE AND CARING
NO COMPROMISE ON PRODUCT PACKAGING PROPERTIES
BIG WINDOW OF APPLICATIONS, INCLUDING F&B CONSUMER PACKAGING, E&E, PERSONAL CARE, AUTOMOTIVE, …

DROP-IN SOLUTION
IDENTICAL PRODUCT SPECIFICATIONS TO OUR CURRENT POLYOLFIN GRADE PORTFOLIO
PROCESS ON EXISTING EQUIPMENT WITHOUT MODIFICATIONS
DOWN GAUGING OPPORTUNITIES (COMPAARED TO MECHANICAL RECYCLING)

TRULY RECYCLABLE
NO LIMITATIONS IN NUMBER OF RECYCLING STEPS
TRUCIRCLE™ PROGRAM

VALUE CHAIN COLLABORATION
OUR JOURNEY SO FAR... MANY FIRSTS

PROVEN SOLUTIONS

- **MASS BALANCE**
  - chain of custody for polymers

- **D4R WITH TF-BOPE**
  - Mono-material solutions to overcome limits of conventional PE film

- **CERTIFIED RENEWABLE POLYCARBONATE**
  - from second generation renewable feedstock

- **CLOSED LOOP**
  - with Tesco, Plastic Energy & Partners

- **PCR COMPOUNDS**
  - up to 70% mechanically recycled content

- **CIRCULAR PRODUCTS**
  - based on OCEAN PLASTIC

- **CERTIFIED RENEWABLE PE & PP**
  - from second generation bio-based feedstock

- **CERTIFIED CIRCULAR PE & PP**
  - from advanced recycled feedstock

- **CERTIFIED RENEWABLE CHEMICALS**
  - supporting launch of new renewable value chains

- **CIRCULAR PRODUCTS based on OCEAN BOUND PLASTIC**

- **CERTIFIED RENEWABLE PRODUCTS**
  - from diversified second gen Used Cooking Oil
VALUE CHAIN COOPERATION CRITICAL TO OUR FUTURE

EXTERNAL REPORTING

SABIC IS IN THE TOP 1% OF COMPANIES in category basic chemicals, fertilizers, plastics & rubber assessed by Ecovadis*

PARTICIPATING INITIATIVES

SABIC IS A FOUNDBLING MEMBER OF THE ALLIANCE Supporting infrastructure development to manage waste and increase recycling

AS A VALUE CHAIN

SABIC IS A FOUNDING MEMBER & DRIVER OF WPC Supporting UN and G20 initiatives to prevent marine litter
COLLABORATION. IT’S MAKING THE CIRCULAR ECONOMY GO ROUND.

As we adapt to a new normal, we’re helping support more sustainable economies.

That’s why SABIC introduced the TRUCIRCLE™ initiative to work with our collaboration partners to rethink recycling. SABIC’s collaborations are making it possible to create materials of high enough quality for food packaging by breaking complex, low quality waste plastics down to their original state. We can use, reuse and repurpose more of our resources without using new ones. It’s innovative technology that’s making the circular economy reality with Chemistry that Matters™.

Meet one of the world’s leading chemical companies at SABIC.com