

CHEMISTRY THAT MATTERS™



# INNOVATIVE SOLUTIONS FOR SUSTAINABLE RECYCLING

MARK VESTER  
Business Unit Director PE - Europe



# SABIC AT-A-GLANCE



1976

Company established



34,000

Employees around the world



50

Countries of operations



3<sup>rd</sup>

Largest global chemical company\*



120<sup>th</sup>

Largest public company in the world\*

3.7

US\$ bn

Estimated Brand Value\*\*

86

US\$ bn

Total assets

4.9

US\$ bn

Net income

39.9

US\$ bn

Annual revenue



≈ 150

New products each year



11,534

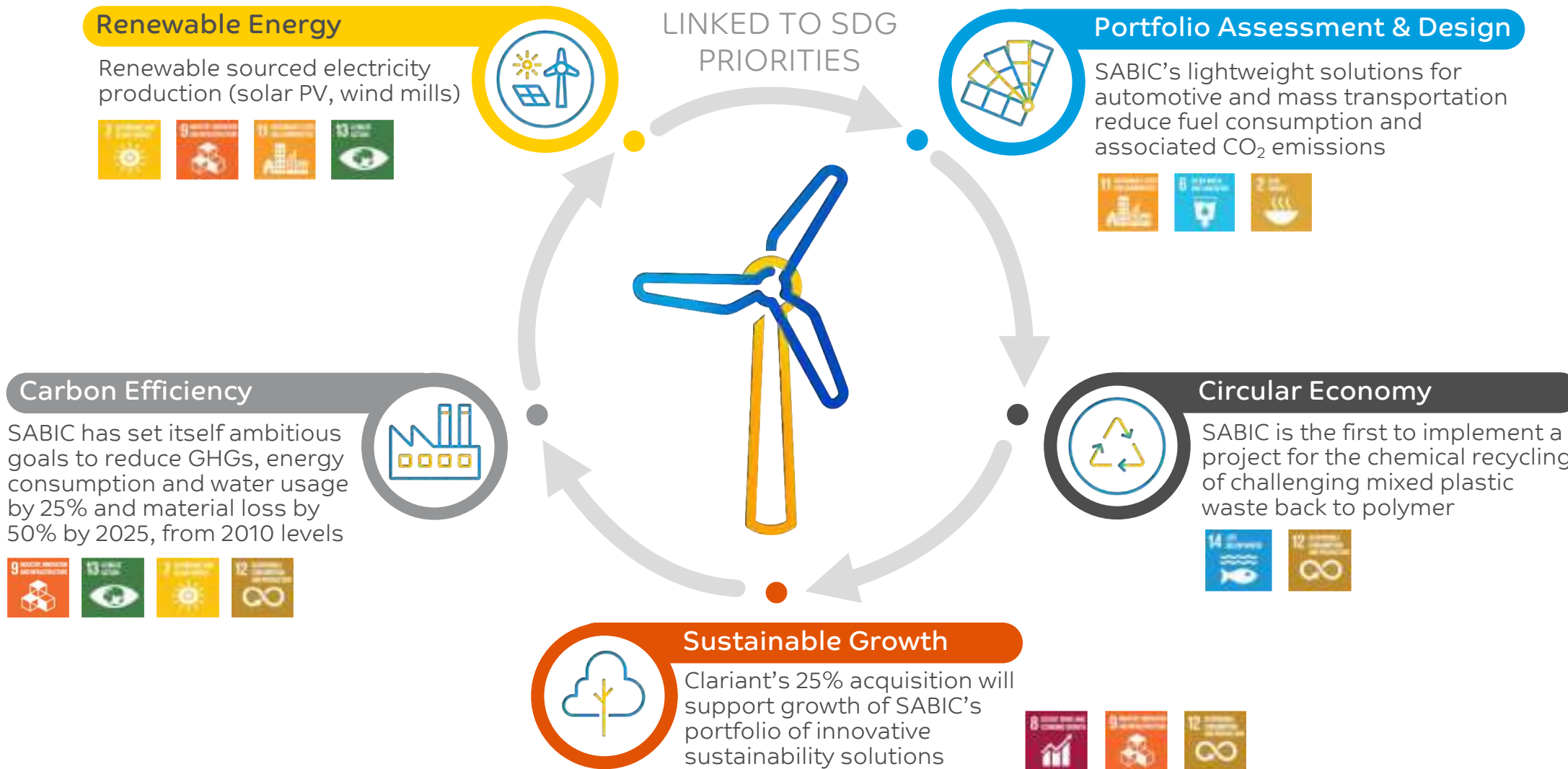
Global patent filings



64

World-class plants worldwide

# LINKING UN SDG'S TO SABIC'S TOP SUSTAINABILITY PRIORITIES



# SABIC'S CIRCULAR AMBITION IS DRIVEN BY THE UNMET NEEDS OF THE INDUSTRY AND FUELED BY OUR VISION TO CREATE CHEMISTRY THAT MATTERS TOGETHER

Legislative initiatives in all regions

Voluntary commitments from brand owners, industry associations, value chains

The industry is looking for NEW and INNOVATIVE raw materials for plastics applications

PLASTICS for Packaging?

Are plastics the preferred choice ?

DESIGN for Recyclability

Designs that advance mechanical recycling

MECHANICAL Recycled Polymer

Resins from MECHANICAL recycling

Certified CIRCULAR Polymer

High purity resins from CHEMICAL recycling

Certified BIO-RENEWABLE Polymer

Resins from animal free BIO-FEEDSTOCK cracker feed

THE SABIC AMBITION IS TO DEVELOP THESE CIRCULAR SOLUTIONS BY WORKING SIDE BY SIDE WITH BRAND OWNERS AND OUR DIRECT CUSTOMERS



Circular Economy



Portfolio Assessment & Design

## SABIC PIONEERS IN CIRCULAR POLYMERS THROUGH CHEMICAL RECYCLING

**SABIC IS THE FIRST IN THE INDUSTRY THAT IS COMMITTED TO SCALE UP CHEMICAL UPCYCLING OF MIXED PLASTIC WASTE TO THE ORIGINAL POLYMER.**



PRESS RELEASE

DAVOS, SWITZERLAND, January 24, 2019



### SABIC AND CUSTOMERS LAUNCH CERTIFIED CIRCULAR POLYMERS FROM MIXED PLASTIC WASTE

- SABIC and customers Unilever, Vinventions and Walki Group will introduce ISCC certified circular polymers in 2019 during a market foundation stage.
- SABIC's certified circular polymers will be produced in The Netherlands from a recycled plastic waste feedstock developed by PLASTIC ENERGY and offer a drop-in alternative for customers looking at meeting the needs of various challenging applications.
- The initiative to upcycle mixed plastic waste back to the original polymer supports SABIC's and its feedstock supplier and customers commitment to providing innovative solutions for a circular economy.



Unilever



VINVENTIONS



## WHY IS IT THIS GOOD?

# VALUE OFFER FOR SABIC'S CERTIFIED BIO-BASED RENEWABLES & SABIC'S CERTIFIED CIRCULAR POLYMERS



- Replacing fossil based feedstock
- No compromise on product packaging safety
- Identical product specifications to SABIC's current PO portfolio
- No modifications to production processes down-stream,
- Feedstock source has a lower carbon footprint compared to fossil alternative
- Recyclable
- 2<sup>nd</sup> generation renewable feedstock, not in competition with the food chain (only applicable for cert. bio-based renewables)

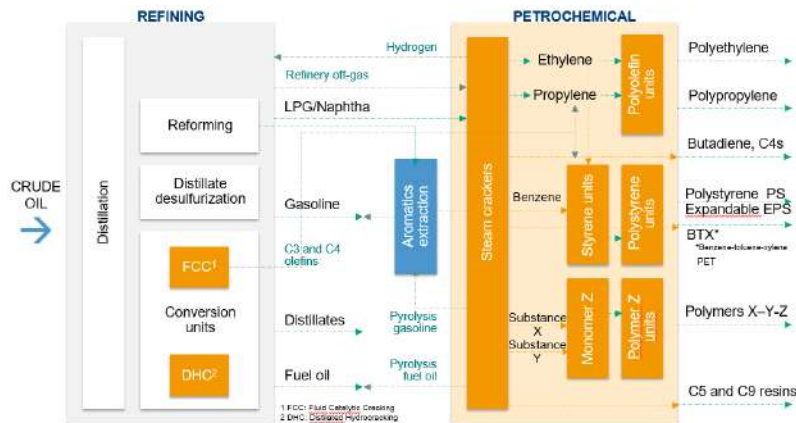




## WHY MASS BALANCE APPROACH ?



- A **CRUCIAL BRIDGE** between today's linear economy and the sustainable circular plastics economy of the future.
- An innovative & **CRUCIAL INSTRUMENT** to stimulate the **FULL TRANSITION** to new feedstock (~ pyrolysis oil)
- The **RELATIVELY SMALL VOLUMES** of new feedstock have to be **MIXED** with conventional fossil-based feedstock in SABIC's current world-scale production units



A distillation process turns crude oil into lighter fractions.  
One fraction, naphtha is one of the major feedstock for plastics.  
Monomer production lines are not dedicated to specific applications

- **HIGH COMPLEXITY** to run cracker and downstream outlets
- The mass balance & certification concept allows the total value chain to make together concrete steps in using new feedstock **IN COMMERCIAL APPLICATIONS**





THANK YOU





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