

CERTIFIED CIRCULAR TRUCIRCLE™ SOLUTIONS

Driving a circular economy for plastics
Electrical and Electronics segment



INCREASING DEMAND FOR RECYCLED PLASTICS

The global market for recycled plastic is anticipated to increase by 56% over the next five years*



56%

Increase in demand

COMMITTING TO CIRCULAR PLASTICS

To meet these growing demands, we have committed to process one million metric tons of TRUCIRCLE™ products annually by the year 2030



1 million

Annual volume



COMMITTS TO
ACCELERATING A
CIRCULAR ECONOMY

SABIC CEO

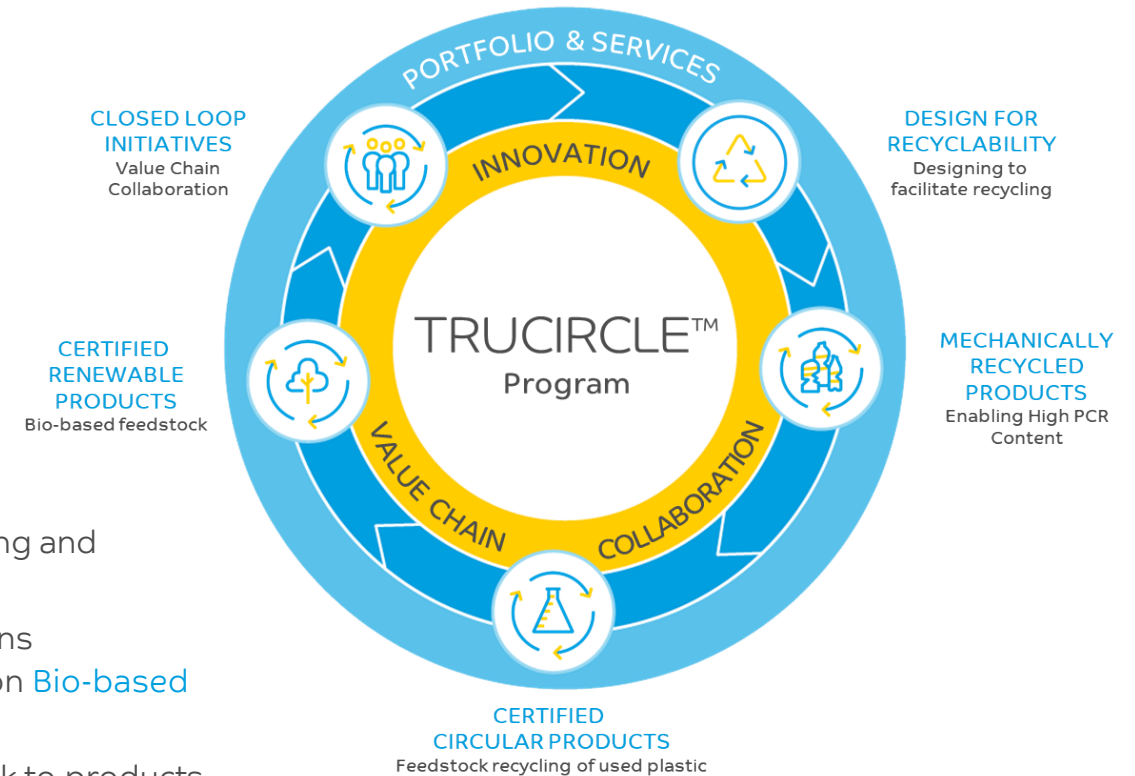
Abdulrahman Al-Fageeh

Our aim to achieve a circular economy is inspiring us to adapt our processes to the use of renewable and recycled feedstock, to create durable, recycled product solutions for our customers.

To achieve this vision and advance circularity, we have pioneered industry-leading product solutions through our TRUCIRCLE™ portfolio, which collectively showcase our circular innovations and help manufacturers produce more sustainable products.

Our vision is that plastic should never end up in the environment, landfill or in our oceans but instead be reused and remade into new products.

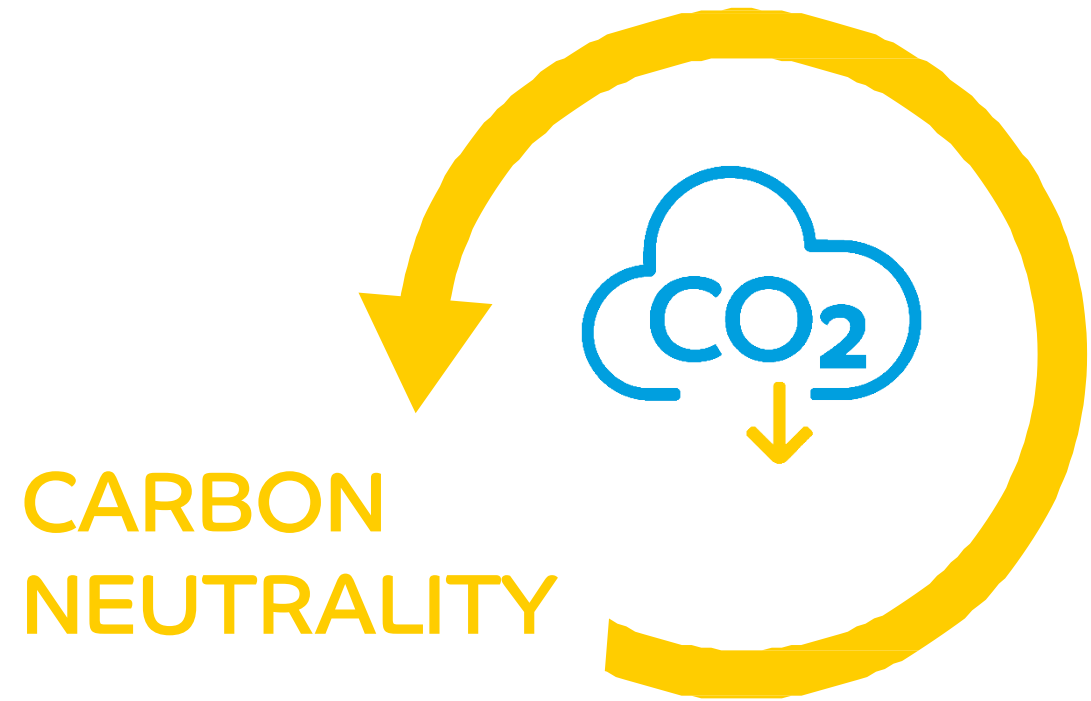
- [Redesign](#) applications for easier recycling
- Securing global leadership in [Advanced Recycling](#) to deliver on food-packaging and healthcare demand
- Targeting [Mechanical Recycling](#) solutions in medium and high-end applications
- Decarbonization targets driving introduction of alternative, second generation [Bio-based feedstock](#)
- Orchestrate collaboration in the value chain to [close the loop](#) from waste back to products



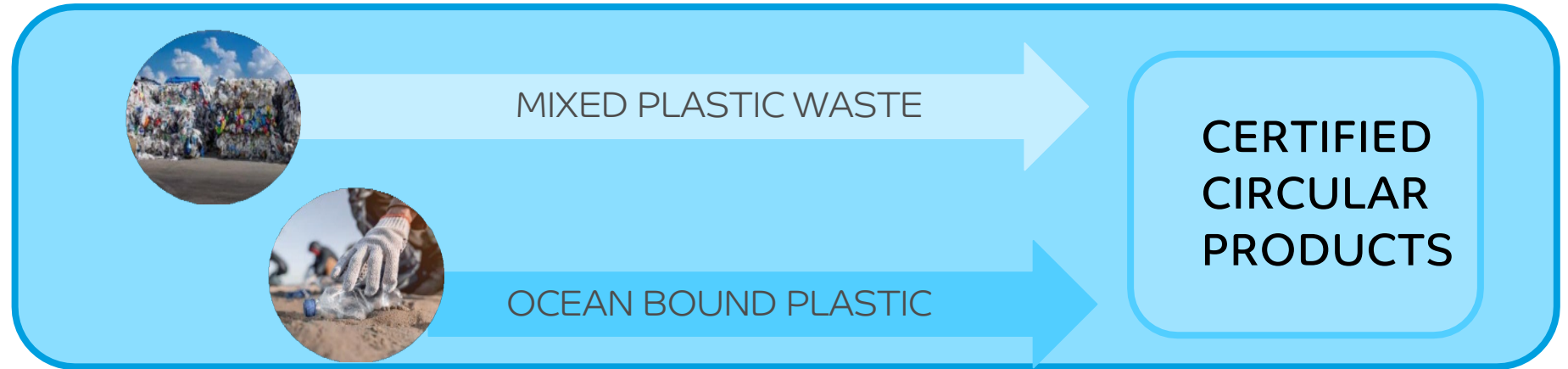
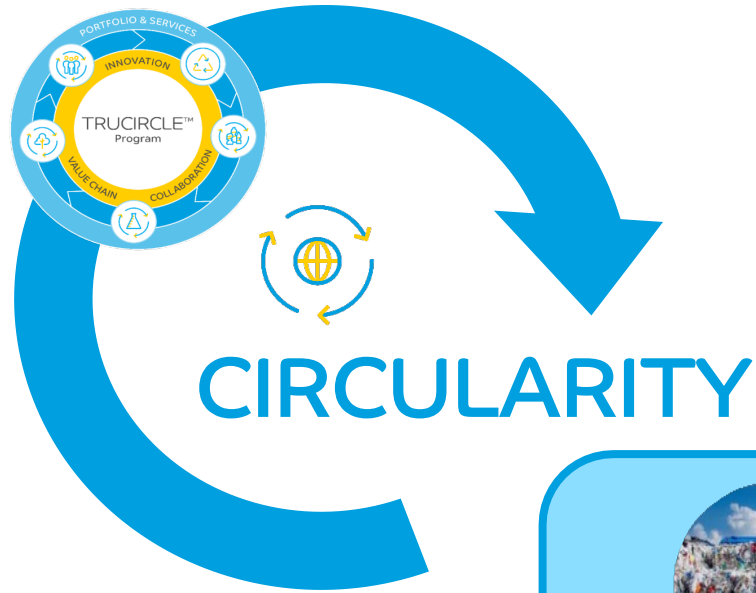
TRUCIRCLE™ SOLUTIONS RESPOND TO TWO MEGA DRIVERS



KEEPING THE CARBON IN THE LOOP



TRANSITION TO A CIRCULAR CARBON ECONOMY



INDUSTRY CHALLENGE

Reducing the use of fossil-based resources and support full recyclability for packaging, help minimize plastic packaging waste and still meet stringent food packaging industry standards without compromising the quality of the packaged content.

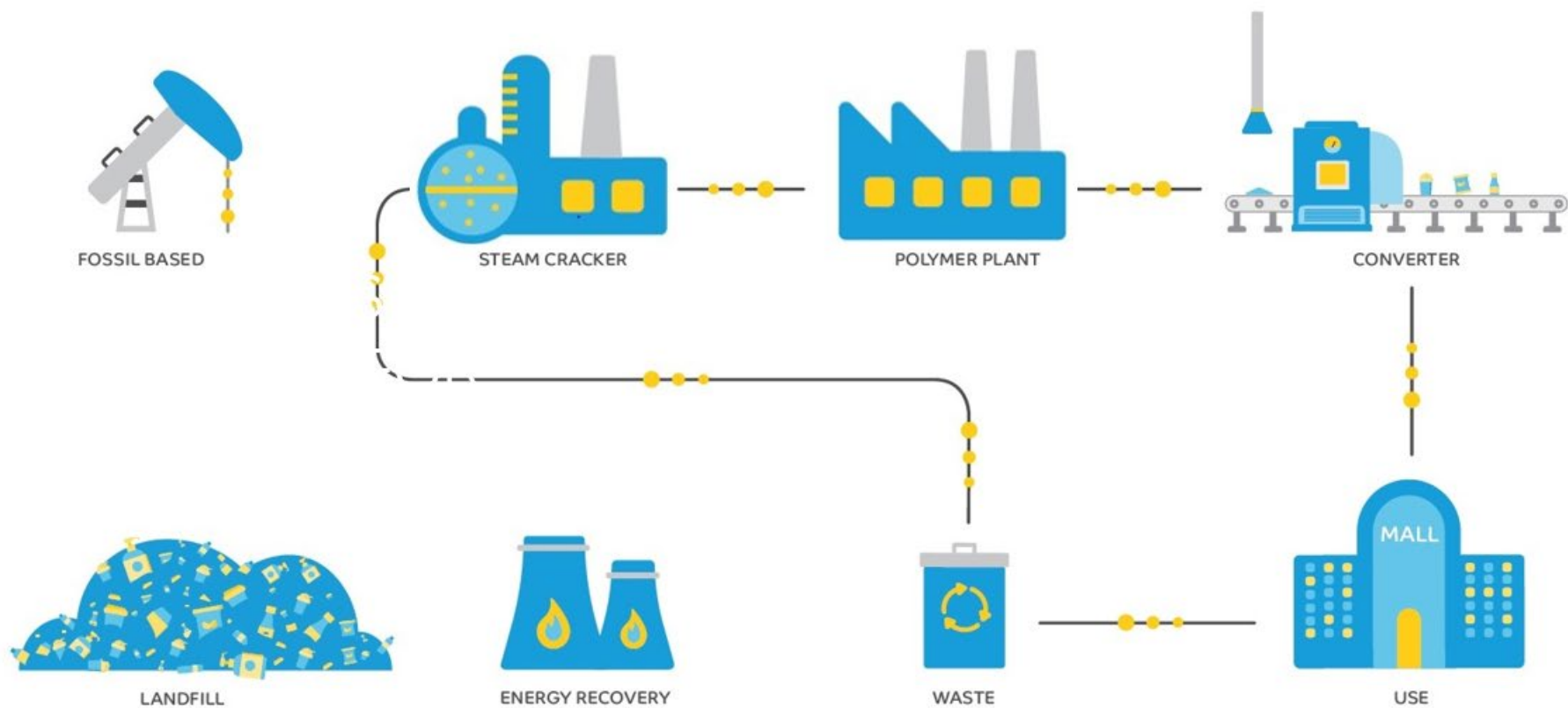
SOLUTION

SABIC creates virgin quality polymers from pyrolysis oil produced from low quality mixed plastic using a chemical recycling technology. This process contributes to a circular economy, reduces the need for (new) fossil-based feedstock and contributes to reutilizing used plastic.

SABIC's certified circular polymers have been accredited through the International Sustainability and Carbon Certification (ISCC PLUS).

PLASTIC WASTE TO FEEDSTOCK FOR POLYMERS

ADVANCED RECYCLING CREATES FEEDSTOCK FROM DIFFICULT-TO-RECYCLE-PLASTICS



BENEFITS OF ADVANCED RECYCLING



SUPPORTING CUSTOMERS IN ADDRESSING CORPORATE SUSTAINABILITY GOALS

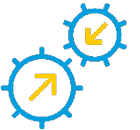
SABIC'S CERTIFIED CIRCULAR POLYMERS

VERSATILE



NO COMPROMISE ON PRODUCT PROPERTIES
BIG WINDOW OF APPLICATIONS IN E&E INCLUDING...

DROP-IN SOLUTION



IDENTICAL PRODUCT SPECIFICATIONS TO OUR CURRENT POLYOLEFIN GRADE PORTFOLIO
PROCESS ON EXISTING EQUIPMENT WITHOUT MODIFICATIONS
DOWN GAUGING OPPORTUNITIES (COMPARED TO MECHANICAL RECYCLING)

TRULY RECYCLABLE



NO LIMITATIONS IN NUMBER OF RECYCLING STEPS

WORLD'S FIRST COMMERCIAL UNIT FOR THE ADVANCED RECYCLING OF USED PLASTIC

SABIC and Plastic Energy are **in the final stages of construction** of world first commercial advanced recycling unit to significantly upscale production of **SABIC's certified circular polymers** derived from used plastic.



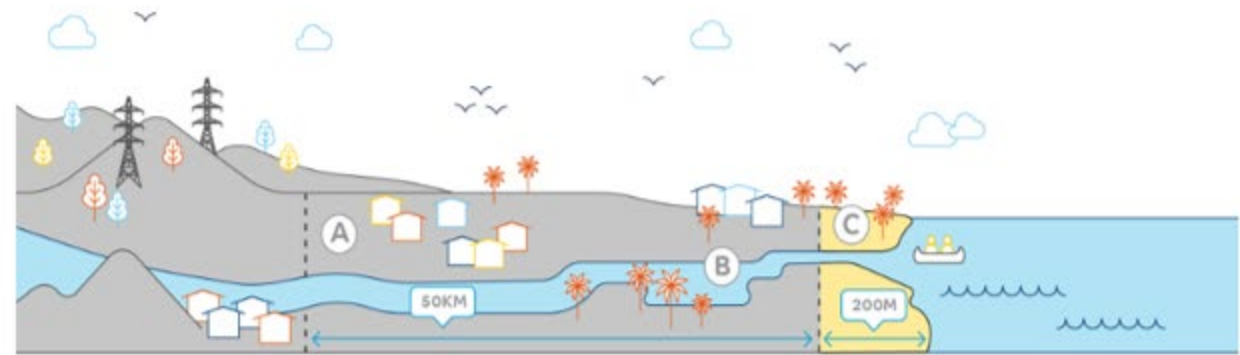
OCEAN BOUND PLASTICS:

Used mixed plastics that have been collected from land and river areas that are *at risk of flooding the plastic waste into the ocean* as proper disposal facilities are lacking.

→ areas A, B, and C

AREA WHERE WE MAKE IMPACT:

Collected from South-East Asian beaches and islands under ethical conditions, which are audited.



(A)

Areas up to 50km inland where waste is mismanaged

(B)

Waterways and 200m either side of a river stream

(C)

Shorelines within 200m of the highest tide limit

VALUE DRIVERS OF CERTIFIED CIRCULAR POLYMERS FROM OCEAN BOUND PLASTICS

DROP-IN SOLUTION

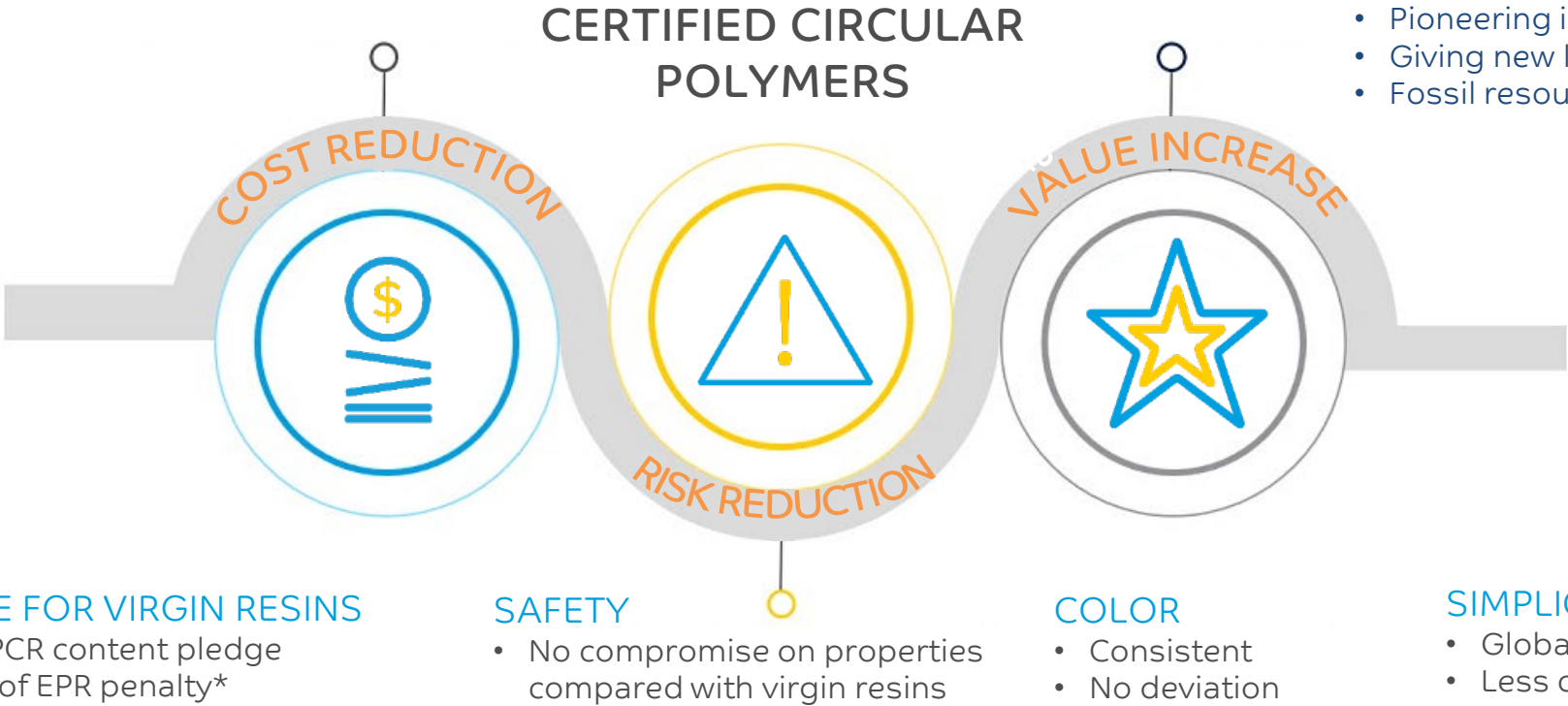
- Approx. time-to-market < 6 months
- Shortened qualification round
- Easy upscaling

POSITIVE BRAND EXPERIENCE

- Improved consumer satisfaction
- Brand attractiveness and loyalty
- Create positive social impact
- Attracting environmentally conscious customers

POSITIONING

- Preventing plastics from entering the oceans
- Pioneering in environmental clean up
- Giving new life to ocean bound plastic
- Fossil resource savings



SURFACE THUNDERBOLT™ 4 DOCK SABIC AND MICROSOFT COLLABORATION

CERTIFIED CIRCULAR LEXAN™ FLAME RETARDANT PC RESIN

SABIC SOLUTION

Application demonstrates feasibility of converting OBP into high-performance material used in consumer electronics, using advanced recycling

MATERIAL PROPERTIES



ENHANCED AESTHETICS



DIVERTS USED PLASTIC FROM ENTERING OCEAN



CONSUMER ACCEPTANCE



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