ISCC TECHNICAL STAKEHOLDER MEETING

SABIC: CURRENT USE OF ISCC AND CHALLENGES FOR SCALING UP

Marc Close – Leader Circular Economy
June 2020
SABIC’S COMMITMENT TO SUSTAINABILITY
THE COMMON CHALLENGE

EXISTING BENEFITS

ISSUES TO BE SOLVED

LIGHTWEIGHT – STIFFNESS – IMPACT – DURABILITY – COST – SAFETY - APPEARANCE
SABIC HAS CHOSEN 10 OUT OF UNITED NATIONS’ 17 SUSTAINABLE DEVELOPMENT GOALS THAT IT CAN CONTRIBUTE TO
Resource Efficiency  
SABIC’s ambitious goals are to reduce Material Loss intensity 50% and Water Intensity 25% by 2025 since 2010.

Innovation & Sust. Solutions  
Sustainability is the guiding light for SABIC’s product and process innovation – to support the development of effective solutions to some of the world’s greatest challenges.

Circular Economy  
Circular economy inspires SABIC to adapt our processes to the use of renewable and recycled feedstock, and to create durable, recyclable product design solutions for our customers.

Governance & Integrity  
Integrity is a core value and helps to maintain stakeholder trust. SABIC’s Code of Ethics provides guidance to meet stakeholder expectations.

Environment, Health, Safety  
SABIC is committed to our core EHSS values, with a supportive culture and focus on continuous performance improvement.

TRUCIRCLE™ trademark has been introduced as an umbrella to collectively showcase SABIC’s existing and new circular solutions and initiatives.

STRATEGIC SUSTAINABILITY PRIORITIES DERIVED FROM MATERIALITY

TRUCIRCLE™ June 2020
SABIC’s TRUCIRCLE™ portfolio and services for circular solutions has been introduced as an umbrella trademark for existing and new circular solutions to collectively showcase SABIC sustainable solutions and initiatives.

**INTRODUCTION TO TRUCIRCLE™ PORTFOLIO & SERVICES**

**DESIGN FOR RECYCLABILITY**
Tailored resins for the development of products that have improved recyclability characteristics

**MECHANICALLY RECYCLED PRODUCTS**
Compounds with high recycled content and booster resins for recyclate containing compounds that can improve processability and end-use properties

**CERTIFIED CIRCULAR PRODUCTS**
Virgin resins and chemicals from difficult to recycle used plastics produced through feedstock recycling

**CERTIFIED RENEWABLE PRODUCTS**
Resins and chemicals from bio-based feedstock that are not in competition with the human food chain and that can help mitigate effects of climate change

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

Maximize value for waste
Reduce use of fossil fuels

Circular Economy
Innovation & Sust. Solutions
CASE STUDIES FOR PACKAGING

SABIC’s new TRUCIRCLE™ portfolio and services for circular solutions

- DESIGN FOR RECYCLABILITY
- MECHANICALLY RECYCLED PRODUCTS
- CERTIFIED CIRCULAR PRODUCTS
- CERTIFIED RENEWABLE PRODUCTS

CLOSING THE LOOP AND CREATING A CIRCULAR ECONOMY FOR PLASTICS
CHALLENGES FOR SCALING UP
ACCEPTANCE OF THE MASS BALANCE CONCEPT IS A VITAL STEP

MASS BALANCE

PRODUCTION IN A MORE SUSTAINABLE WAY COMBINING ALTERNATIVE FEEDSTOCK WITH FOSSIL-BASED FEEDSTOCK

MASS BALANCE IS A SYSTEM WHERE THERE IS A CERTIFIED BALANCE BETWEEN THE AMOUNT OF ‘INPUT MATERIAL’ INTO A PROCESS AND THE AMOUNT OF ‘OUTPUT MATERIAL’ FROM THE PROCESS

https://www.youtube.com/watch?v=-imvDD6i6Lo
WHY MASS BALANCE APPROACH?

- A CRUCIAL BRIDGE between today’s linear economy and the sustainable circular plastics economy of the future

- The RELATIVELY SMALL VOLUMES of alternative feedstock have to be MIXED with conventional fossil-based feedstock

- An innovative & CRUCIAL INSTRUMENT to stimulate the FULL TRANSITION TO NEW FEEDSTOCK in SABIC’s current world-scale production units

- The MASS BALANCE & CERTIFICATION CONCEPT allows us to USE EXISTING COMMERCIAL ASSETS to convert our products

- TRACEABILITY / VERIFICATION OF CORRECT MASS BALANCE HANDLING OF INFORMATION; incoming alternative feedstock and outgoing product
OUR JOURNEY SO FAR, MANY FIRSTS

2008 first in
BOOSTER GRADE
SABIC® HDPE BOOSTER
to maximize PIR content

2014 first in
MASS BALANCE chain of custody
for polyolefins

2014 first in
CERTIFIED RENEWABLE PE and PP
from 2nd generation renewable feedstock

2019 first in
DESIGN FOR
RECYCLABILITY
WITH TF-BOPE
Mono-material solutions, to overcome limits of conventional PE film

2019 first in
POLYCARBONATE BASED ON
CERTIFIED RENEWABLE FEEDSTOCK
from 2nd generation renewable feedstock

2019 first in
CERTIFIED CIRCULAR PE / PP
from chemical recycled feedstock

2019 first in
CERTIFIED RENEWABLE PROPYLENE
Supporting launch of first sustainable acrylonitrile

2020 first in
SCALING UP
CHEMICAL AND
MECHANICAL
RECYCLING
CLOSED LOOP

NEXT

CERTIFIED RENEWABLE PE and PP
from 2nd generation renewable feedstock

POLYCARBONATE BASED ON
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SCALING UP
CHEMICAL AND
MECHANICAL
RECYCLING
CLOSED LOOP
TO STAY A LEADER WE NEED TO SECURE...

CREDIBILITY
• Trust is key and can affect the entire sector
• Believe in mass balance e.g. avoid green washing, reputational risks etc.
• Consumer credibility is needed within the entire value chain incl. end-consumer

PHYSICAL LINK
• Keep it understandable
• Guarantee full traceability
• Global credit transfer should be avoided

SPEED
• Consistent approach and ease of doing business with every certification body
• De-complex the network of certified structures, e.g. warehouses, sales entities
THANK YOU