



Plastics Industry tackling Plastic Waste

International High Level Conference on Marine Litter

Sofia, 4 April 2019

Giuseppe Riva, PlasticsEurope Italia

PlasticsEurope
Association of Plastics Manufacturers

- Too often the way plastics are currently produced, used and discarded fails to capture the economic benefits of a more 'circular' approach and harms the environment.
- There is an urgent need to tackle the environmental problems that today cast a long shadow over the production, use and consumption of plastics.
- The million tonnes of plastic litter that end up in the oceans every year are one of their most visible and alarming signs of these problems, causing growing public concern.

Plastics Strategy

European Commission's action plan



A European Strategy for Plastics in a Circular Economy



Area 1



Area 2



Area 3



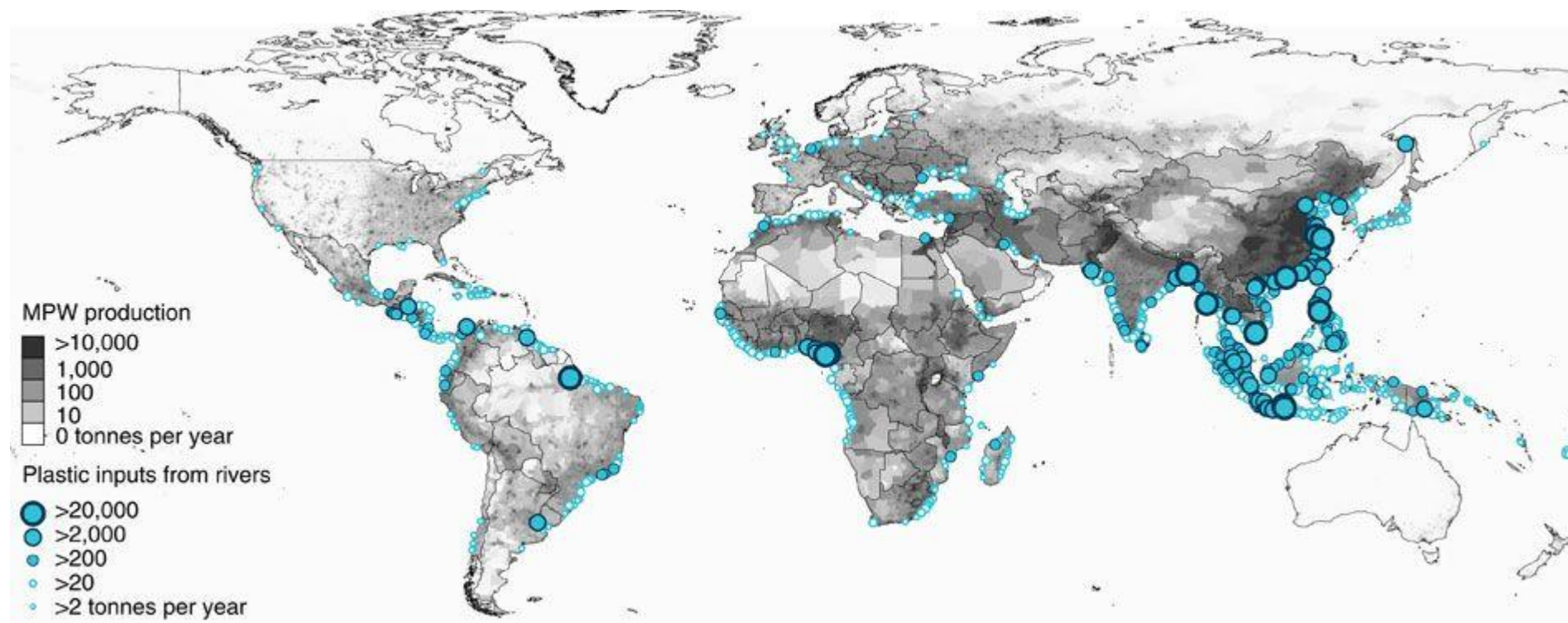
Area 4



River Plastic Emissions to the world's ocean

(Lebreton & Al., Nature Communication 7 June 2018)

Rivers come to the oceans bringing, every year, between 1,15 and 2,41 millions tons. 67% of this quantity is from 20 rivers mainly located in Asia





The voluntary commitment of the Plastics Industry

Proposing Solutions – Initiating Actions

- 1. Preventing leakage of plastics into the environment**
- 2. Increase Re-Use and Recycling of plastics packaging**
- 3. Accelerate Resource Efficiency**



Increase Re-Use and Recycling of Plastics Packaging

- Ensure high rates of **re-use and recycling with the ambition to reach 60% for plastics packaging by 2030.**
- Leading to achievement of our **goal of 100% re-use, recycling and/or recovery of all plastics packaging by 2040.**
- Sector Specific Commitments: via Platforms





Actions to Prevent Pellet Loss

Goals:

- **100% of PlasticsEurope member companies to be signatories of Operation Clean Sweep ®**
- Development of **harmonized monitoring** scheme for **progress report**
- Involve the **entire value chain**, including transport and logistics as well as engagement in major port authorities

Actions to Prevent Littering

- Launch of **new research** into top plastic items being littered in the marine environment; to **identify suitable solutions** to reduce littering
- Support **educational programmes**



ALLIANCE TO
END PLASTIC WASTE

A new global alliance to help end plastic waste

The new alliance is the largest **global, CEO-driven, cross-value chain initiative** of its kind, working and investing to find common solutions to reduce plastic waste and prevent it from entering the environment

The new initiative will **invest \$1.5B USD over the next five years into initiatives and projects**, including on-the-ground waste management and infrastructure development in the geographies needing it most, beginning in the Asia-Pacific region

Alliance strategic pillars



Prevention

Catalyze investment in enhanced waste infrastructure to prevent plastic from reaching the environment



Innovation

Innovate new, sustainable technologies and business models based on sound science and economics



Education and Engagement

Engage and collaborate with governments, industry and consumers to drive effective solutions



Clean Up

Develop solutions to address and clean up areas of existing plastic waste in the environment



ALLIANCE TO END PLASTIC WASTE

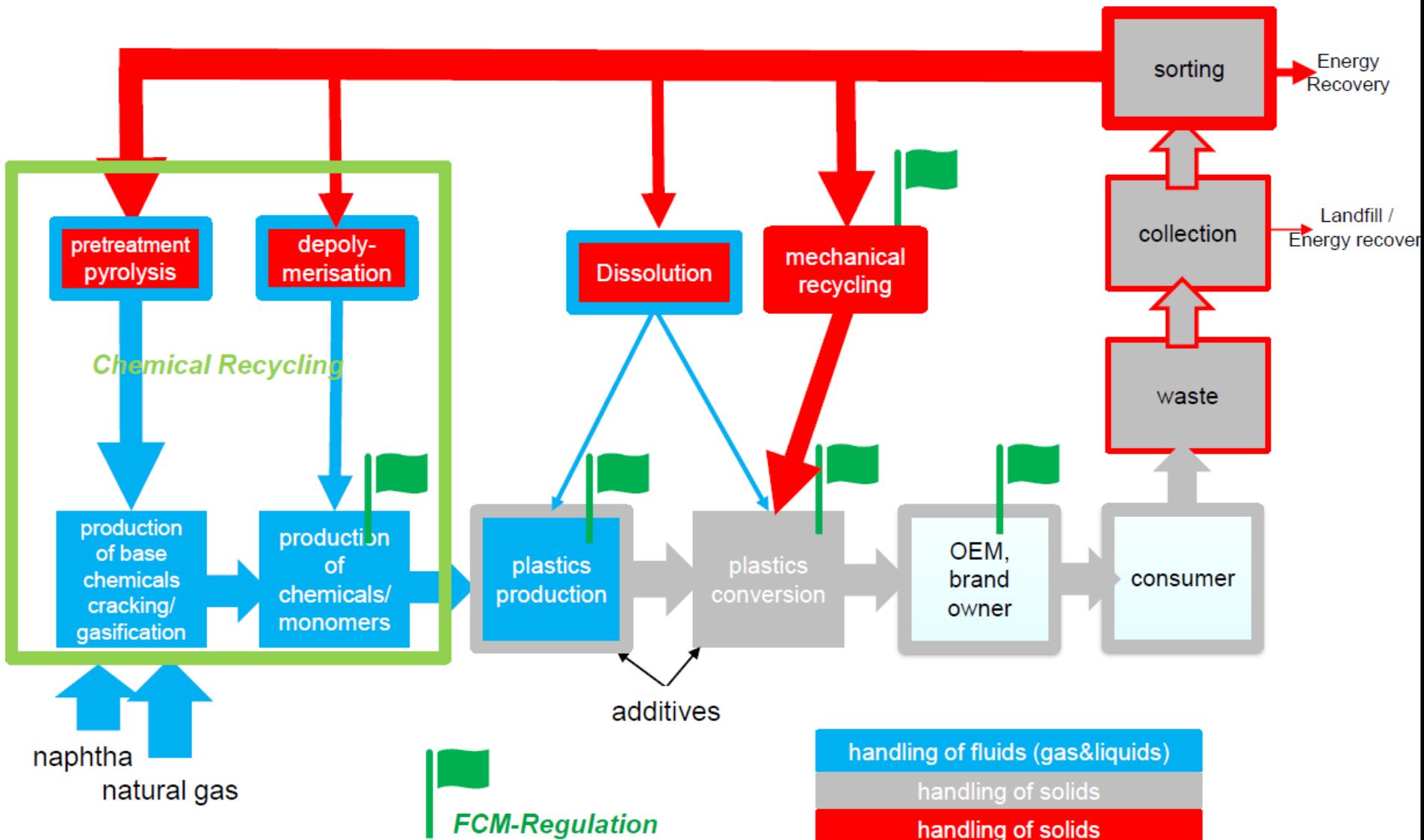
BASF, Berry Global, Braskem, Chevron Phillips Chemical Company LLC, Clariant, Covestro, Dow, DSM, ExxonMobil, Formosa Plastics Corporation USA, Henkel, LyondellBasell, Mitsubishi Chemical Holdings, Mitsui Chemicals, NOVA Chemicals, OxyChem, Procter & Gamble, Reliance Industries, SABIC, Sasol, SUEZ, Shell, SCG Chemicals, Sumitomo Chemical, Total, Veolia e Versalis (Eni).





The Chemical Recycling

Plastics Cycle: Production, Mechanical Recycling and Chemical Recycling



- Past experience in chemical recycling has shown that technologies in that field have faced, until now, economic and technical challenges preventing their commercial development in Europe.
- Today we are seeing a number of new developments and initiatives in this area; however, further innovation and funding is needed to make chemical recycling technically and economically a reality in the future.

Chemical Recycling

No time to waste: What plastics recycling could offer

PlasticsEurope
Association of Plastics Manufacturers

McKinsey
& Company

NESTE

Waste plastics to replace crude oil



What if chemical recycling could radically transform the way plastic is recycled?



CHEMICAL RECYCLING 101

BY TIM SYKES

28 February 2018



Braskem launches new chemical recycling study



TNO innovation for life

CHEMICAL RECYCLING - THE ANSWER TO PLASTIC WASTE?



SABIC SIGNS MEMORANDUM OF UNDERSTANDING WITH PLASTIC ENERGY FOR SUPPLY OF RECYCLED FEEDSTOCK

Plastic to Chemicals as part of Indaver's Molecular Management



No time to waste -
Chemical recycling and its contribution to a circular economy



BASF for the first time makes products with chemically recycled plastics

Chemical Recycling - The Missing Piece to Plastics Circularity

In 2018, BASF will be the first chemical company to use chemically recycled plastics in its products. This is a significant milestone in the transition to a circular economy.

Chemical recycling is a process that breaks down plastic into its basic building blocks, which can then be used to create new plastic products.

This process is more efficient and sustainable than traditional mechanical recycling, which often results in lower quality plastic.

BASF is committed to reducing its carbon footprint and improving its environmental performance. Chemical recycling is a key part of this strategy.

February 20, 2018
10:00 - 11:00
Chemical Recycling - The Missing Piece to Plastics Circularity

Basf is a global leader in chemical recycling. The company has invested heavily in research and development to create a sustainable and efficient process.

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New innovative process by MMA two for recycling end-of-life PMMA waste



Chemical Recycling Europe
Established February 2019



"Potentially, chemical recycling could be used for difficult to recycle streams where conventional mechanical recycling cannot provide an adequate solution."
"chemical recycling could become a complement to mechanical recycling today for that market share of products that are not conventionally recyclable."



TOTAL Total acquires France's Synova



LyondellBasell advances chemical recycling by signing agreement with the Karlsruhe Institute of Technology



Plastics

The Material for the 21st Century