



## EUROPEAN PERSPECTIVE ON 3R AND OCEANS

Bart Mantels







# THE OCEAN<sup>®</sup> CLEANUP



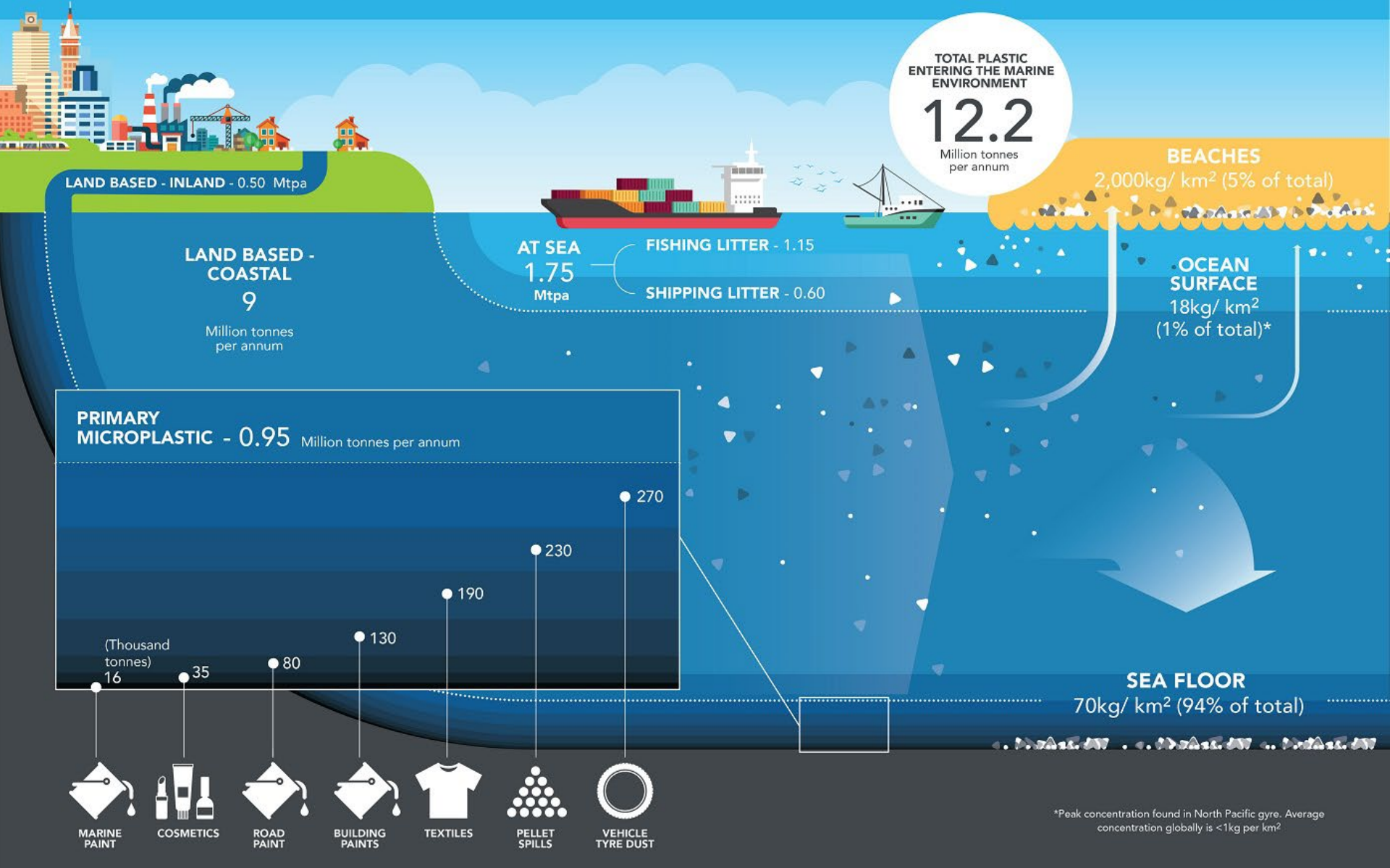


ecover



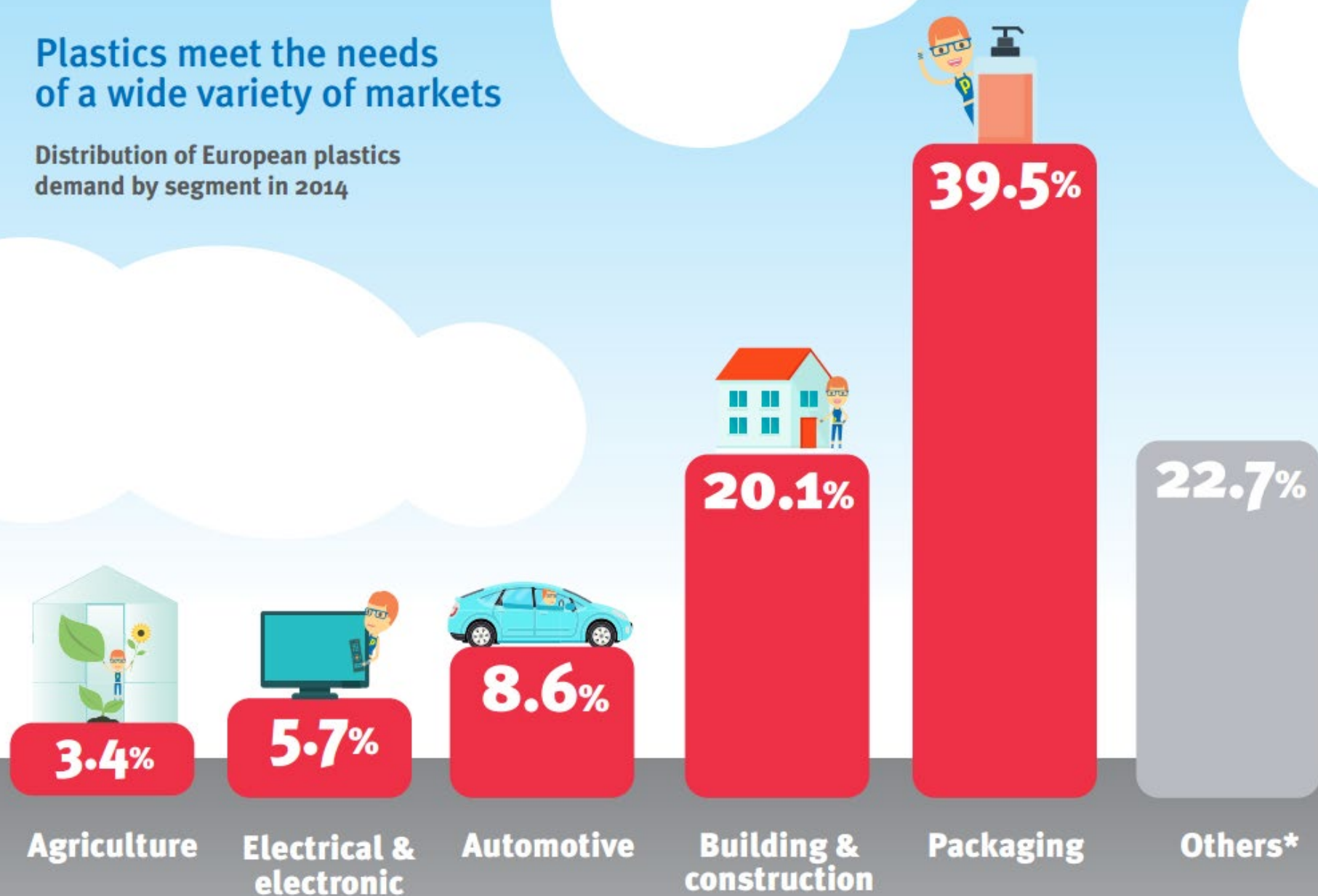
# PLASTICS IN THE MARINE ENVIRONMENT: WHERE DO THEY COME FROM? WHERE DO THEY GO?

eunomia 



# Plastics meet the needs of a wide variety of markets

Distribution of European plastics demand by segment in 2014



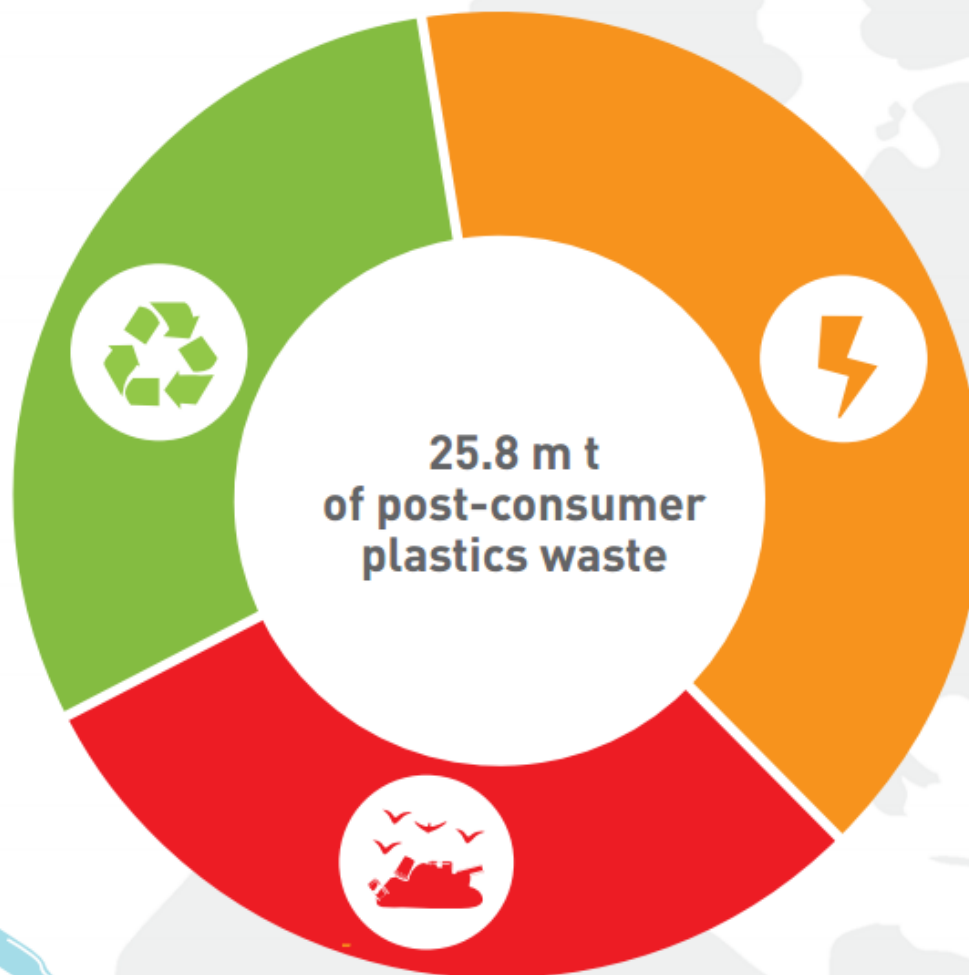
## In 2014 plastics recycling and energy recovery reached 69.2%

In 2014, 25.8 million tonnes of post-consumer plastics waste ended up in the waste upstream. 69.2% was recovered through recycling and energy recovery processes while 30.8% still went to landfill.

**Recycling**  
**29.7%**

**Energy recovery**  
**39.5%**

**Landfill**  
**30.8%**



Treatment for post-consumer plastics waste in the EU28 + Norway and Switzerland  
Source: Consultic

PERSONAL AND HOME CARE BOTTLES



5%

CARRIER BAGS



3%

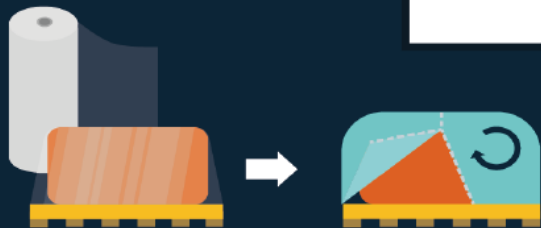
BEVERAGE BOTTLES



2%

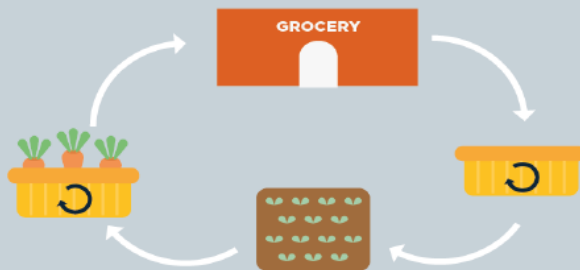
**TOTAL REUSE POTENTIAL  
>20%**

OF PLASTICS PACKAGING MARKET



7%

PALLET WRAPS



LARGE RIGID PACKAGING

3%

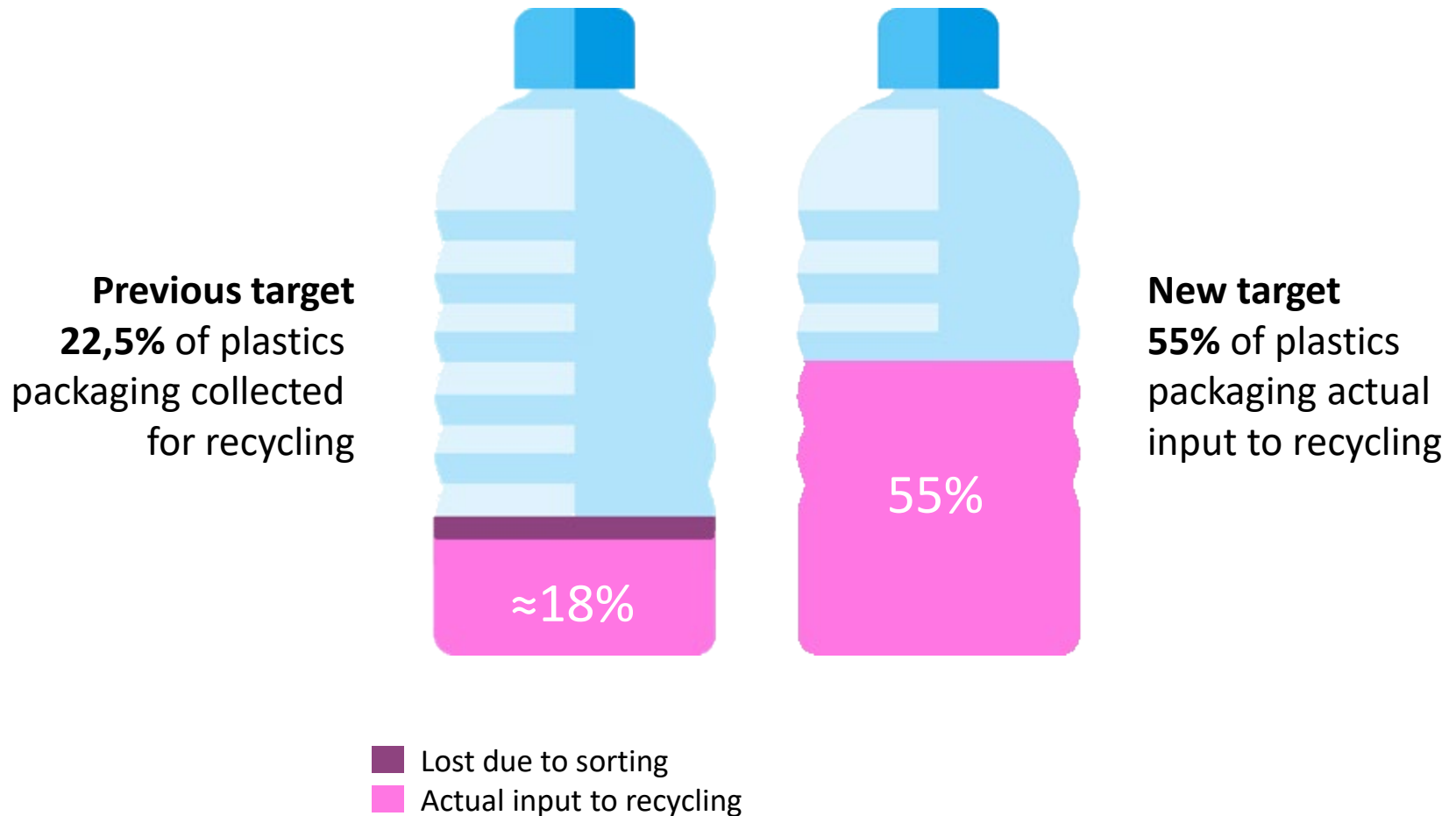
?%

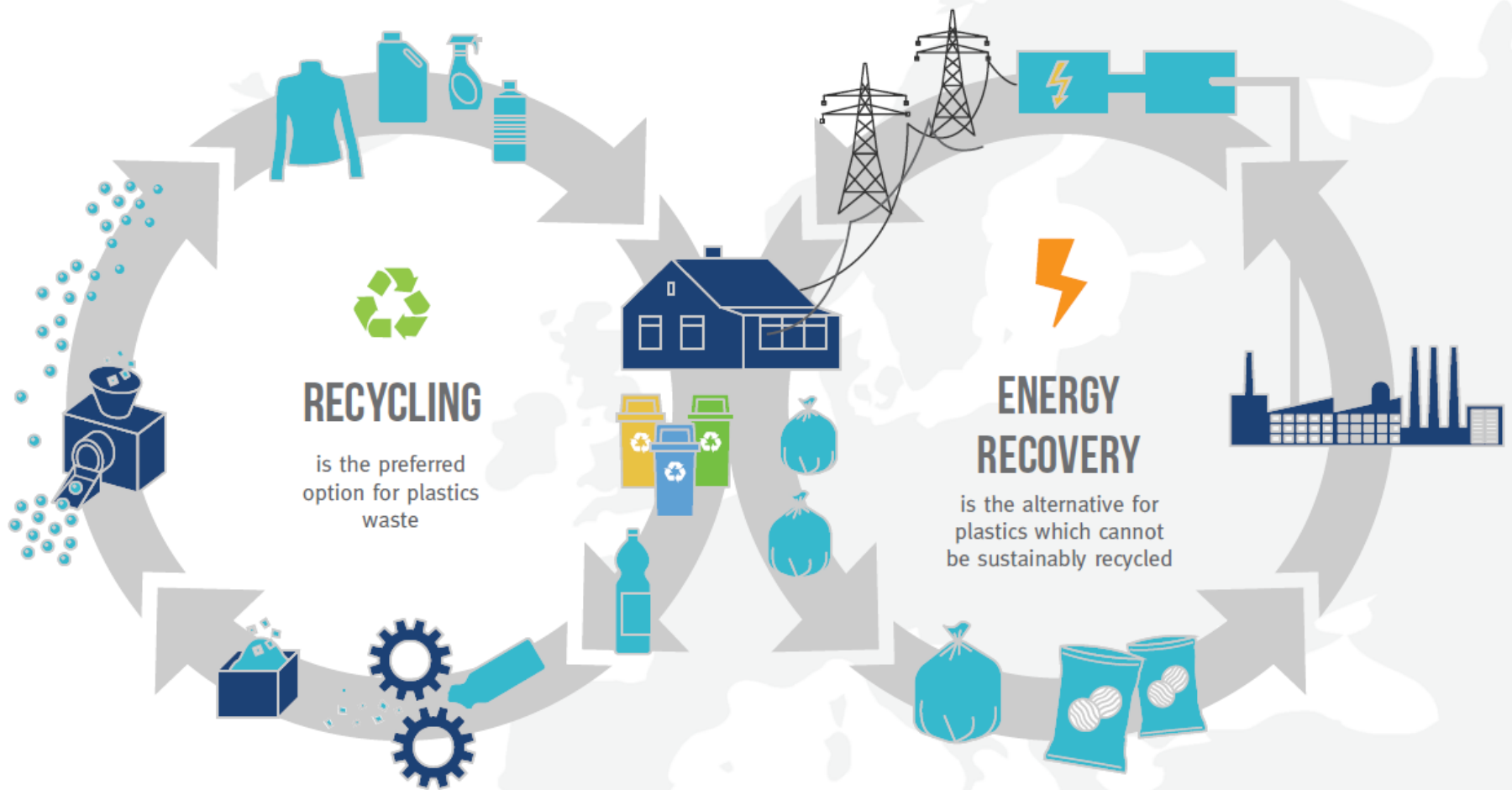


OTHER REUSE OPPORTUNITIES  
(E.G. E-COMMERCE PACKAGING)



## EUROPEAN COMMISSION CIRCULAR ECONOMY PACKAGE





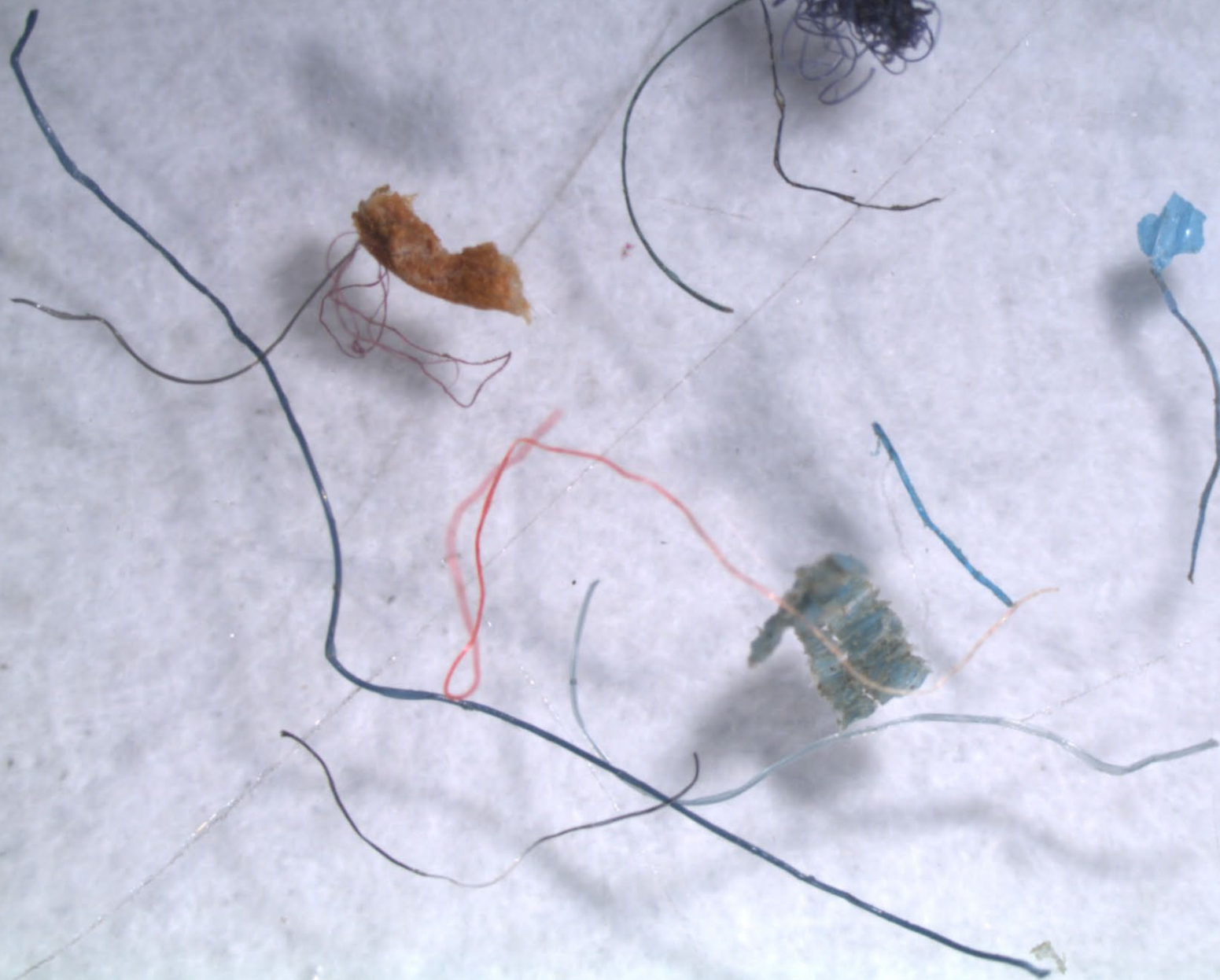
Recycling is the preferred option for plastics waste. However, when recycling is no longer the most sustainable option, energy recovery is the alternative. Both options complement each other and help realise the full potential of plastics waste.







2 mm





## WHAT ARE THE MAIN ROADBLOCKS FOR PLASTICS RECYCLING ?

- Sub-optimal recycling system
  - Limited source separation
  - Performance of sorting technology
  - Performance of recycling technology
- Uncertain and insufficient supply for a market to develop
- Product design not suitable for easy recycling
  - Small formats (e.g. tear-offs, lids...)
  - Mix of different materials, hard to separate
  - Colouring in the mass
- Virgin plastics materials are not optimized to be mixed with recycled materials
- Contamination by food



New**inn**Net



**G·STIC**  
2017

GLOBAL  
SCIENCE  
TECHNOLOGY &  
INNOVATION  
CONFERENCES

**BRUSSELS**  
**23 – 25 OCTOBER 2017**

**Integrated Technological Solutions  
for the SDGs**

[www.gstic.org](http://www.gstic.org)



# THEMATIC CLUSTERS G-STIC 2017

