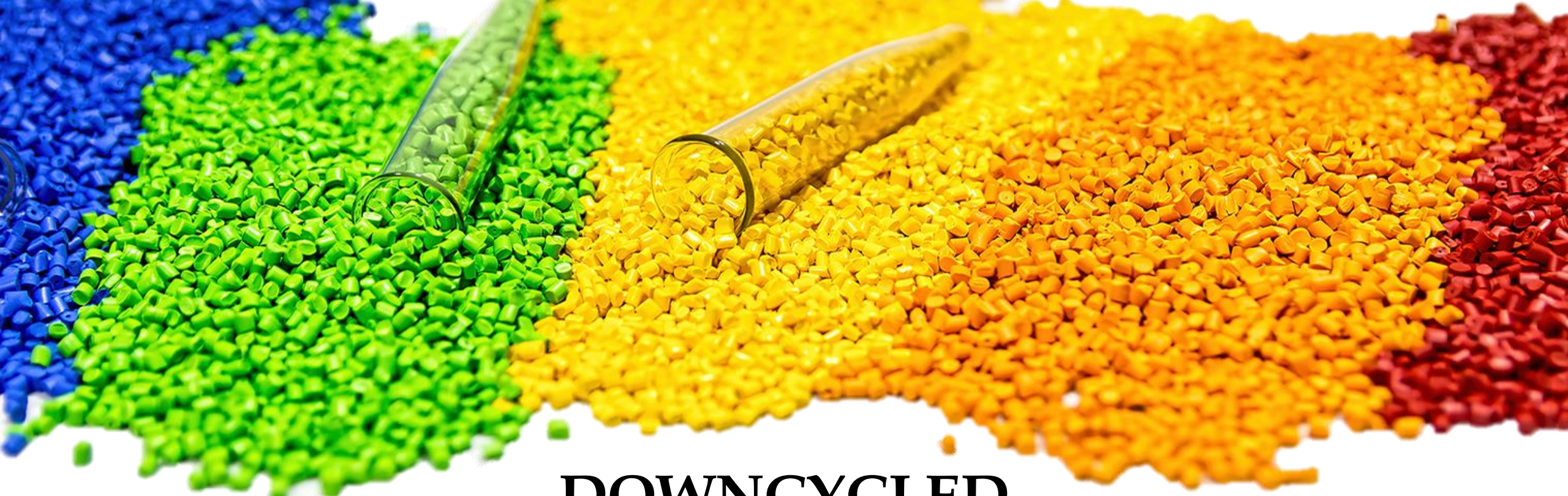


DYSTOPIA OF PLASTIC



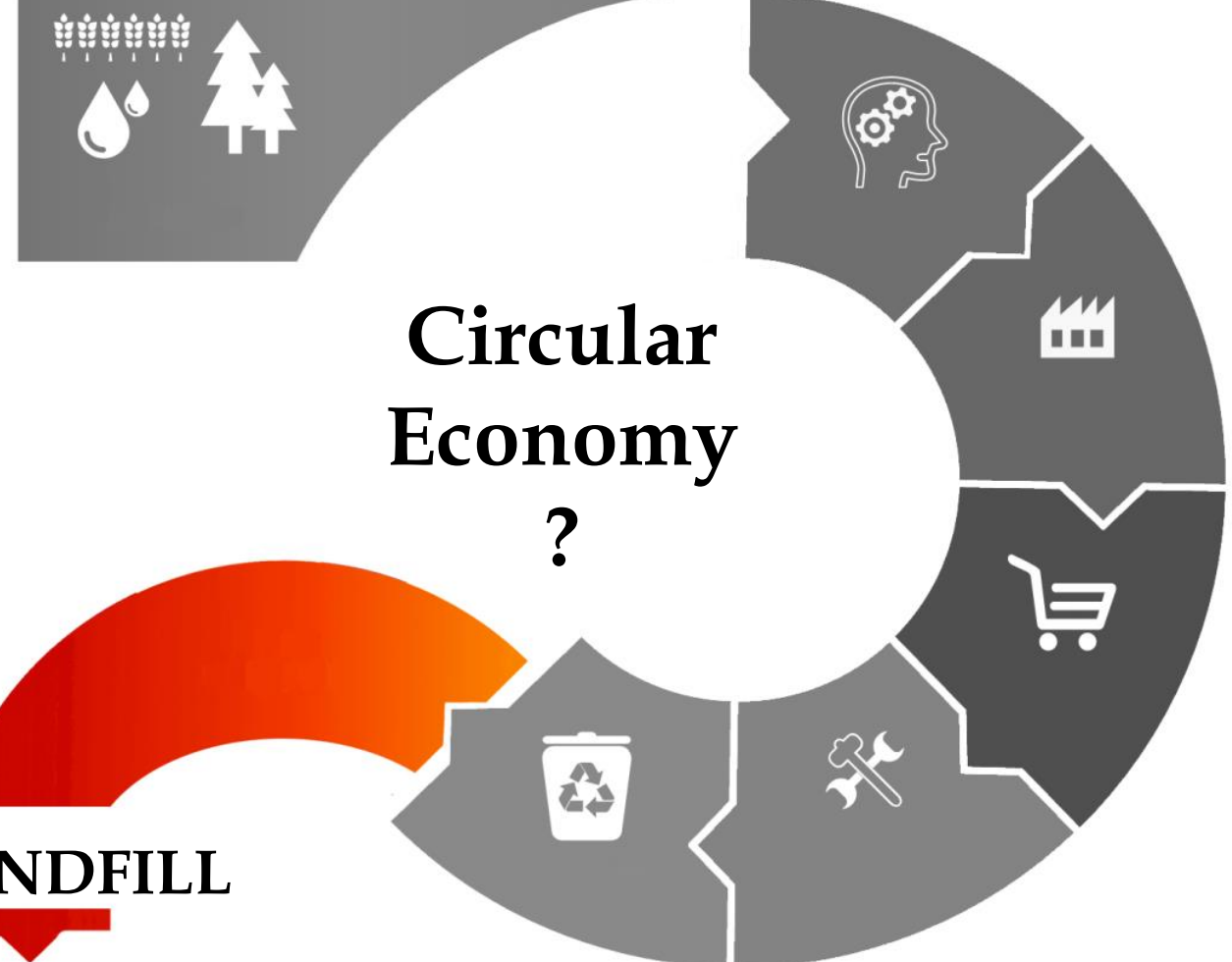
+900
MILLIONS
TONS





**DOWNCYCLED
AND
LIMITED**



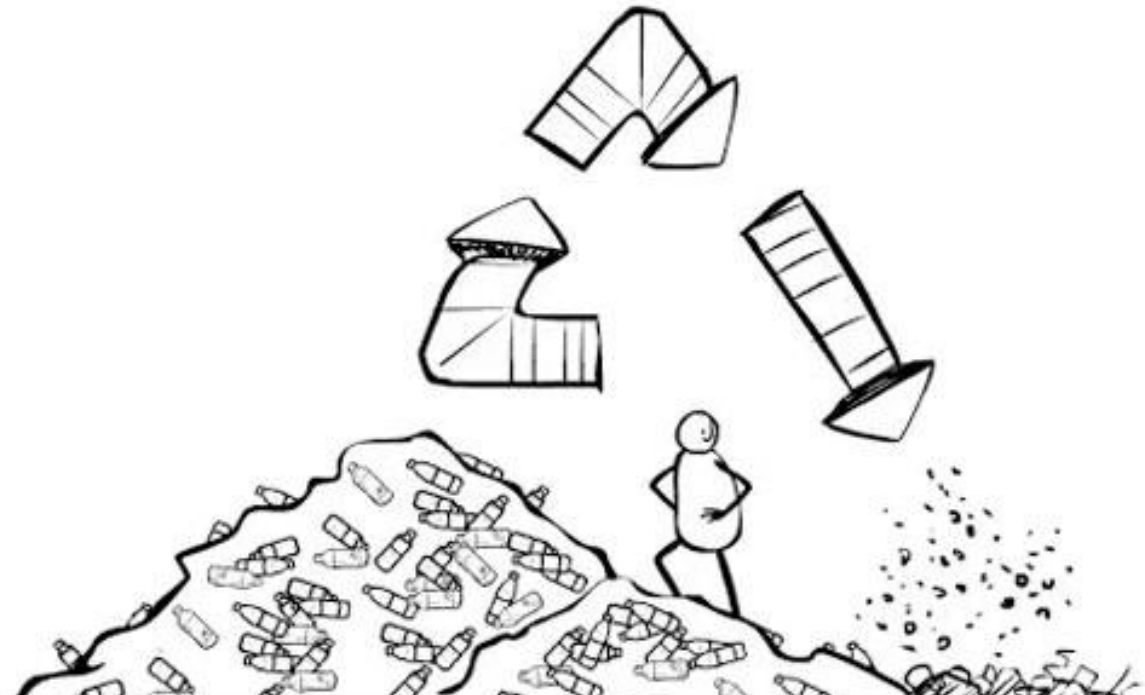


A circular diagram representing the Circular Economy cycle. It consists of a ring divided into seven segments, each containing a white icon on a dark gray background. Starting from the top and moving clockwise, the segments contain: a head with gears (representing innovation or design), a factory (representing production), a shopping cart (representing distribution or consumption), a crossed wrench and screwdriver (representing repair or maintenance), a recycling symbol (representing recycling), a trash can (representing waste management), and a segment with icons of wheat, trees, and a water drop (representing natural resources). The center of the ring is white and contains the text "Circular Economy ?".

Circular Economy ?

**Mechanical
"Recycle"**

DOWNCYCLED



LANDFILL



+ EMISSIONS
+30%
ASHES

**+ 2000 DUMPED
TONS / YEAR**



CILE 2024

ATACAMA DESERT





An aerial photograph of the Great Pacific Garbage Patch. The image shows a large, irregularly shaped area of ocean water with a distinct turquoise color, contrasting with the surrounding deep blue sea. This area is surrounded by a thick, light-brown, fibrous material, likely plastic debris, which forms a barrier. The sky above is dark blue with large, white, fluffy clouds. The overall scene depicts the scale and impact of marine plastic pollution.

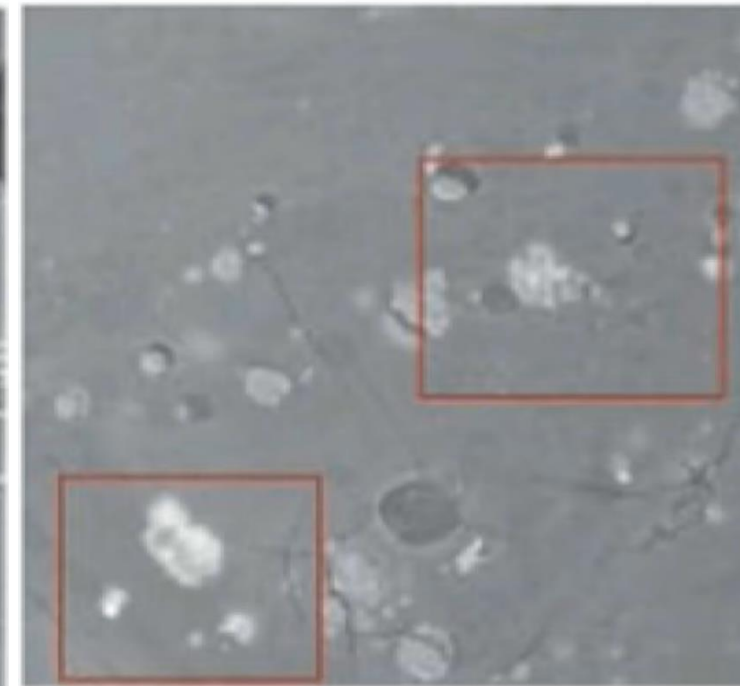
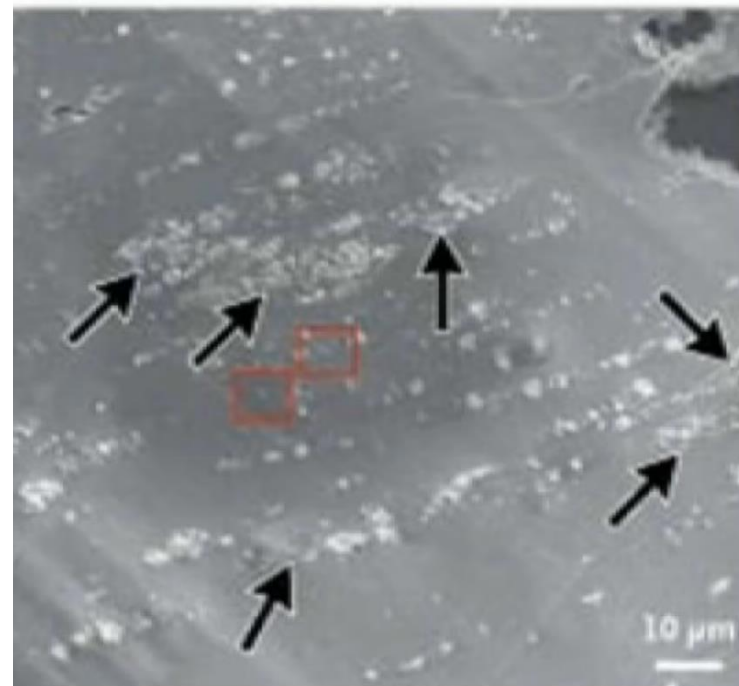
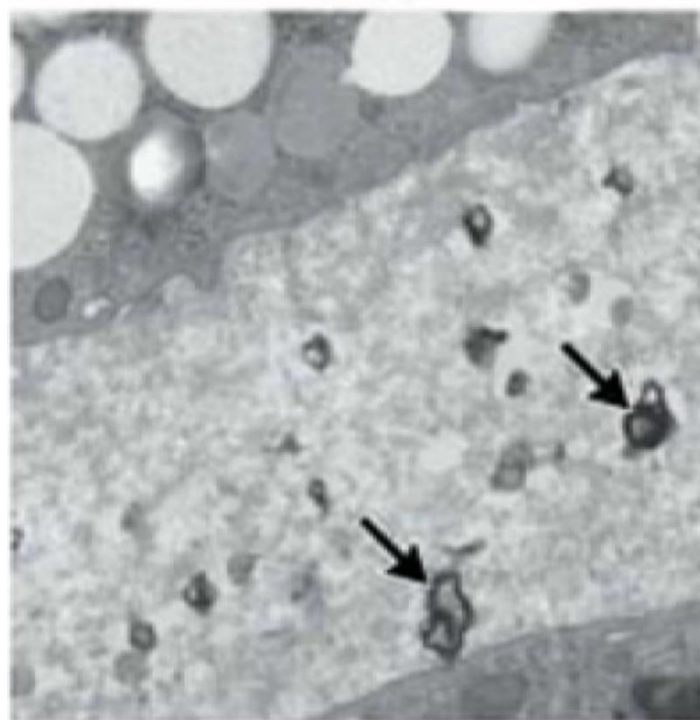
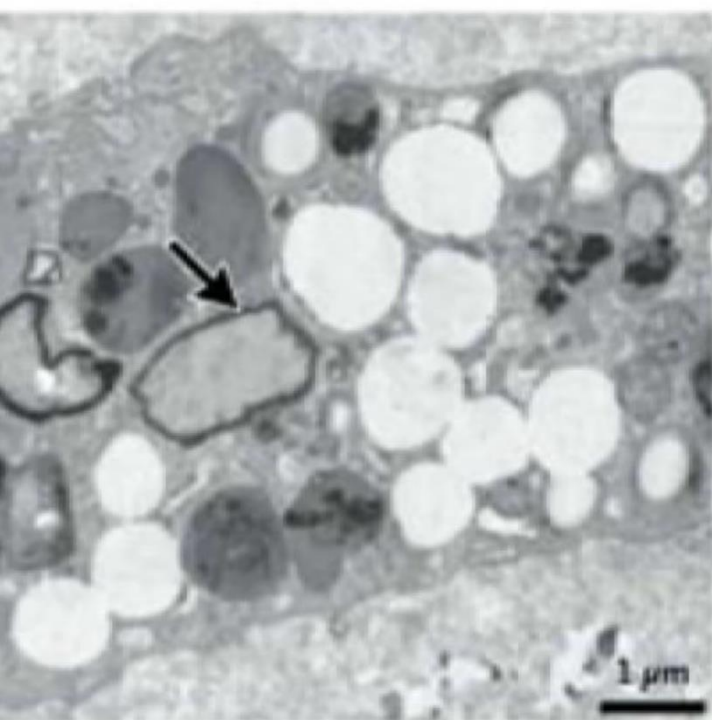
GREAT PACIFIC GARBAGE PATCH



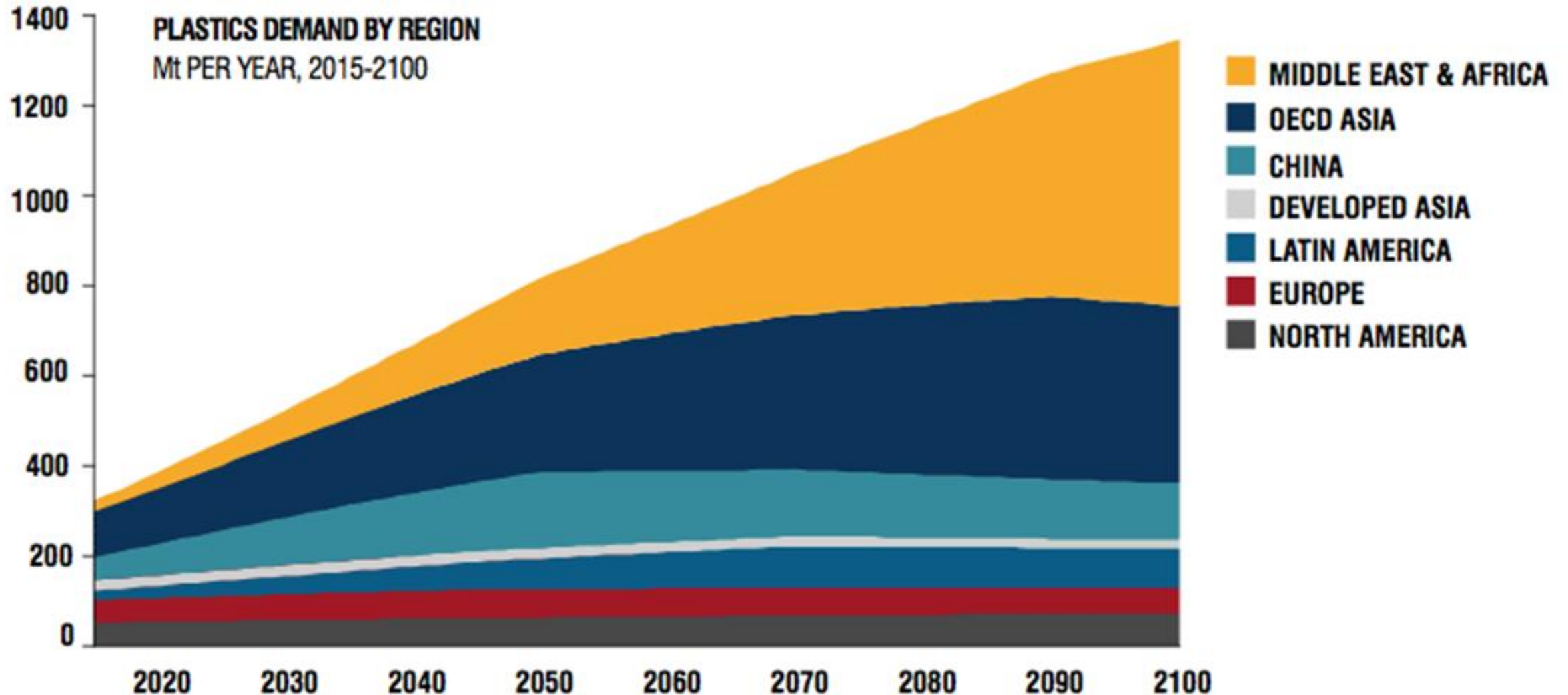


**NEW ENGLAND
JOURNAL OF
MEDICINE**

**NANO PLASTIC
INSIDE
HUMAN TISSUES**

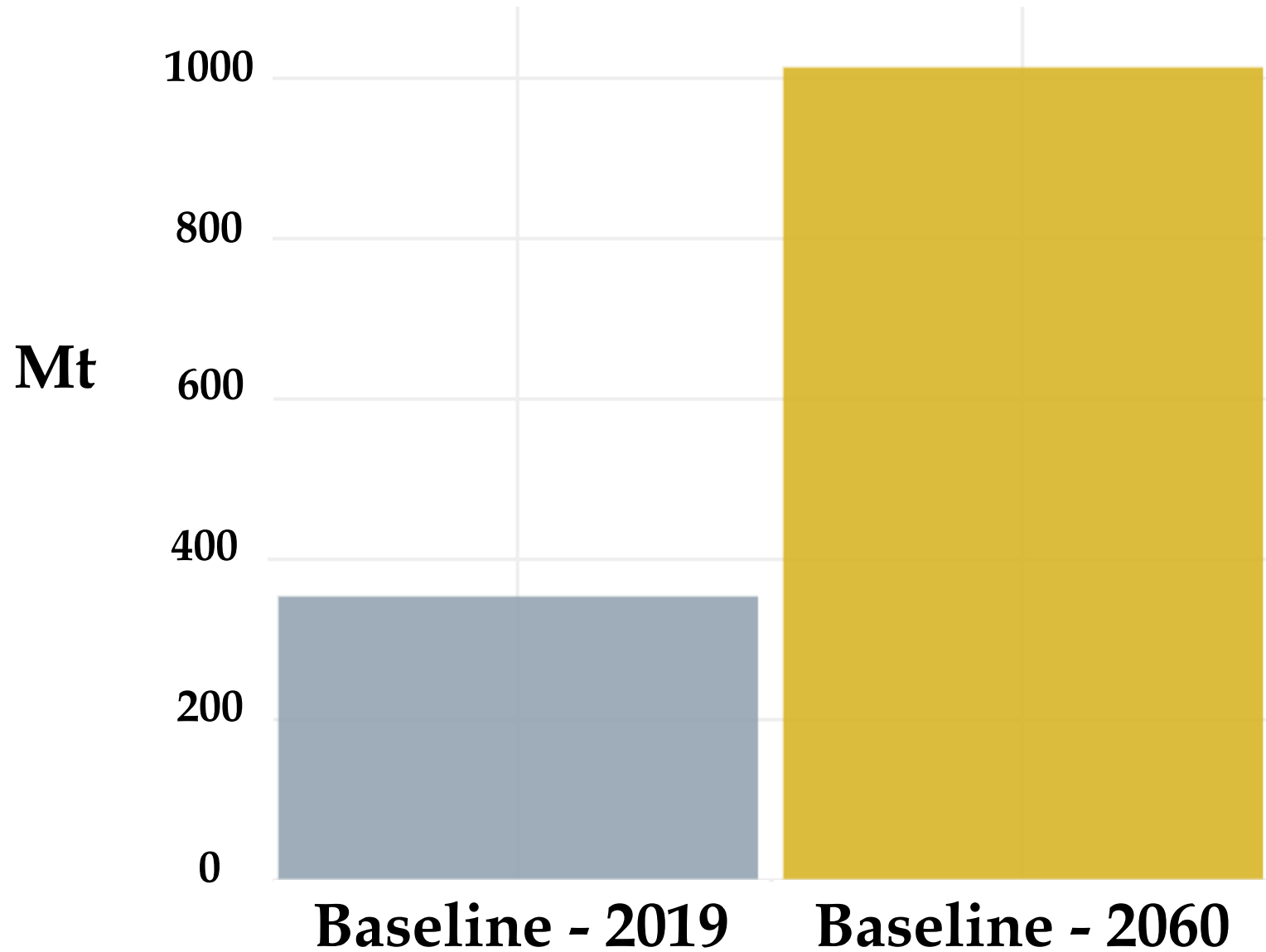


GLOBAL PLASTIC TREND



SOURCE MATERIAL ECONOMICS - THE CIRCULAR ECONOMY - A POWERFUL FORCE FOR CLIMATE MITIGATION (2018)

GLOBAL PLASTIC WASTE FORECAST



SOURCE OECD (2022), GLOBAL PLASTICS OUTLOOK: POLICY SCENARIOS TO 2060

**REGULATED
LANDFILLS**

DUMPED

PLASTIC WASTE MANAGEMENT (2021)

**RECYCLED
(9%)**

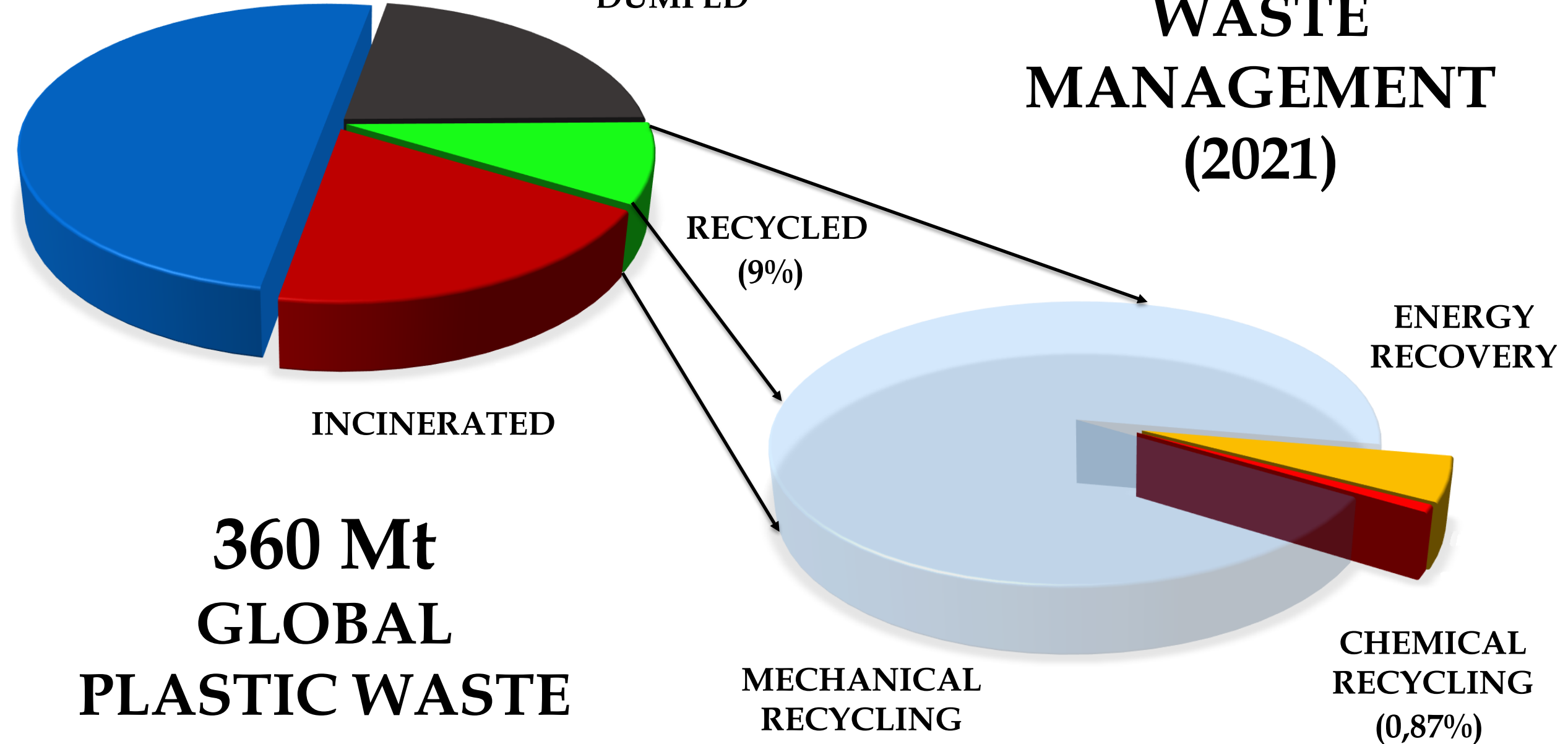
INCINERATED

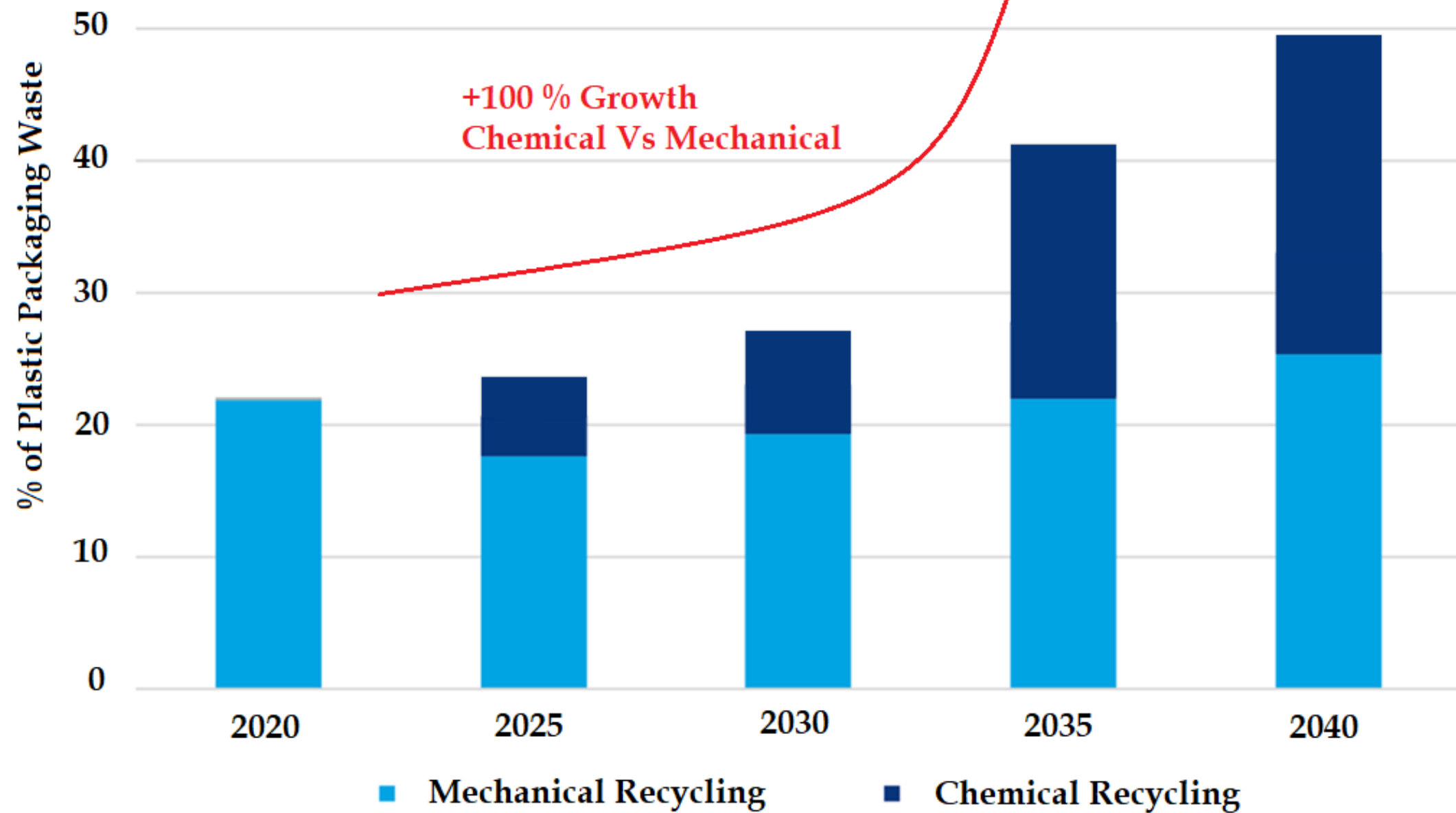
**ENERGY
RECOVERY**

**360 Mt
GLOBAL
PLASTIC WASTE**













**MECHANICAL
RECYCLING**

**CHEMICAL
RECYCLING
(0,87%)**





SOURCE DERIVED FROM WOOD MACKENZIE'S CROSS-POLYMER DEMAND MODEL

	LANDFILLS / INCINERATION	MECHANICAL RECYCLING	CHEMICAL RECYCLING
CAN HANDLE MIXED MATERIALS			
OFFERS SCALABLE RECYCLING			
CONTRIBUTES TO CURB DOWN THE OVERALL CO2 EMISSIONS			
FURTHER DEVELOPMENT POTENTIAL			

“dCSdT” CHEMICAL SOLUTION

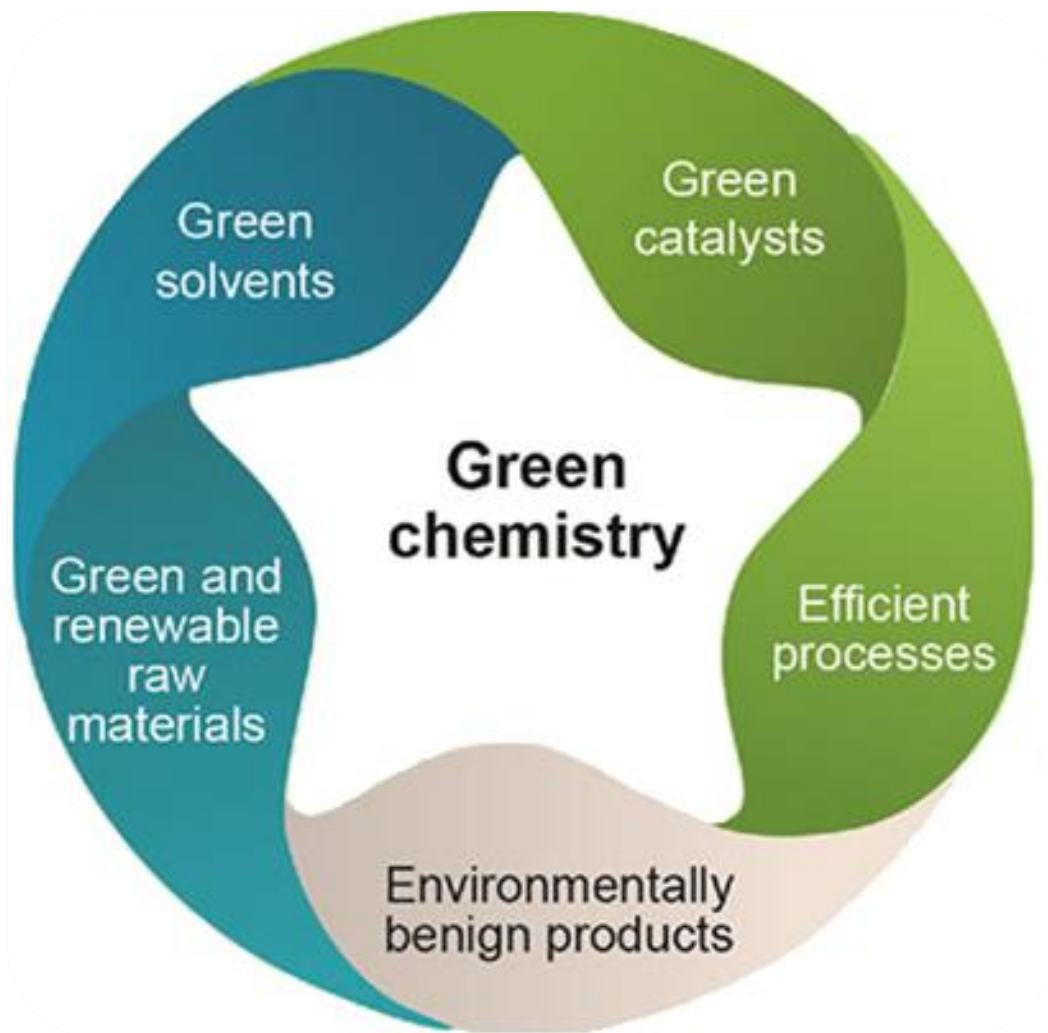


***OUR
WAY***

The Innovative Catalyst And Process

dCSdT
– *Patented* –
PCT Ready





ROOM TEMPERATURE

ROOM PRESSURE

METAL FREE

BIODEGRADABLE

NO TOXIC

CHEAP

**LOW ENERGY
EXPENDITURE**



**PET
WASTE**



**Restored
Cotton**



**Ethylene
Glycol**



**Terephthalic
Acid**



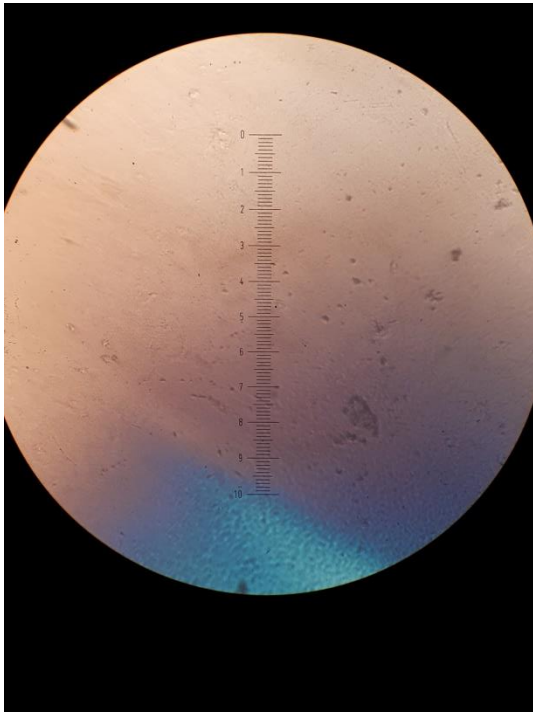
Additives



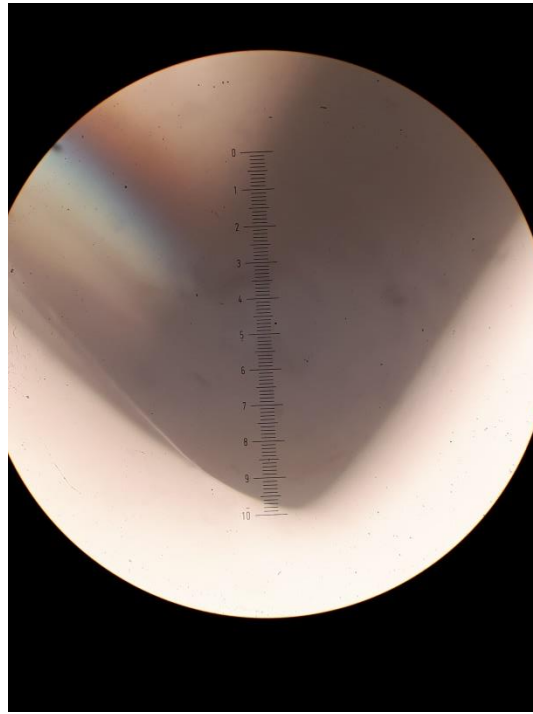
**100%
PURE**

dCSdT ON PET PELLET

PRE APPLICATION
dCSdT

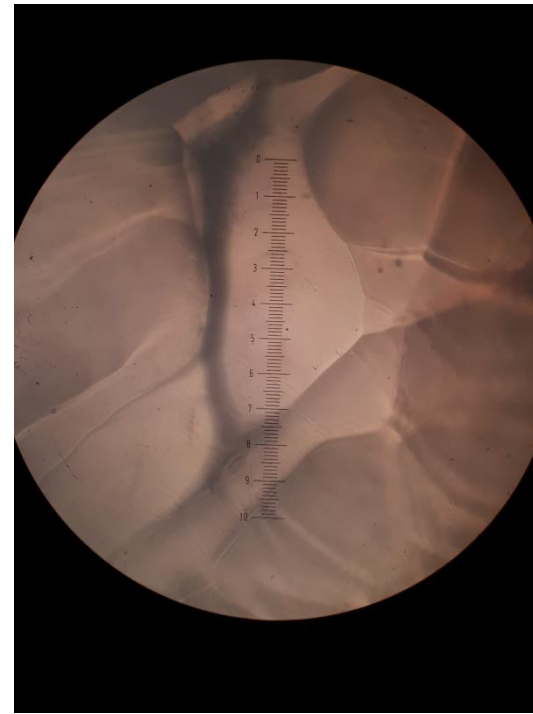


SURFACE

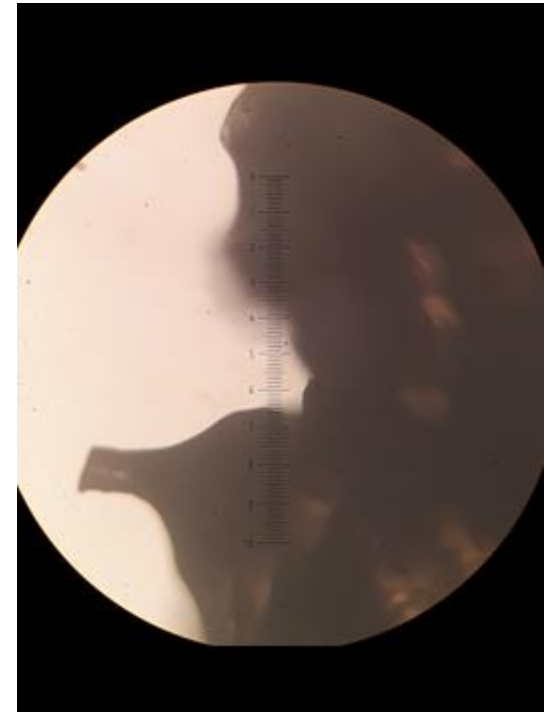


EDGE

POST APPLICATION
dCSdT



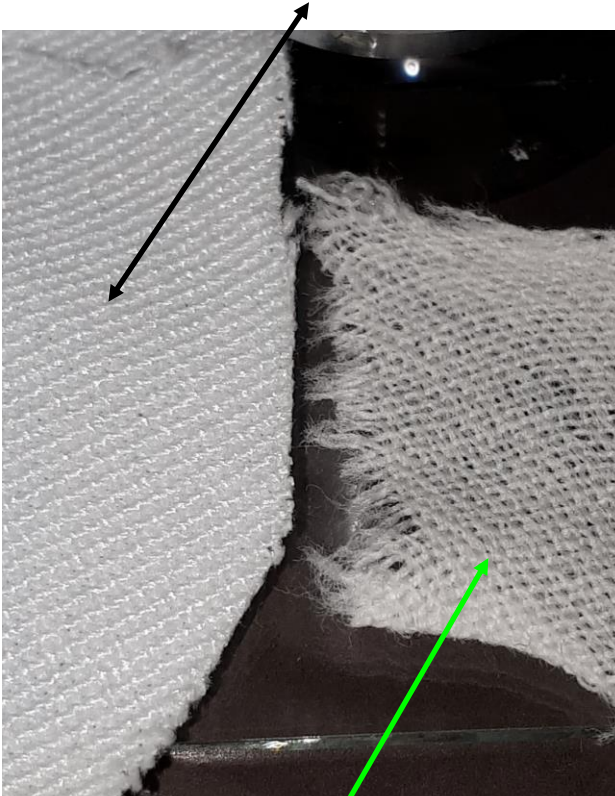
SURFACE



EDGE

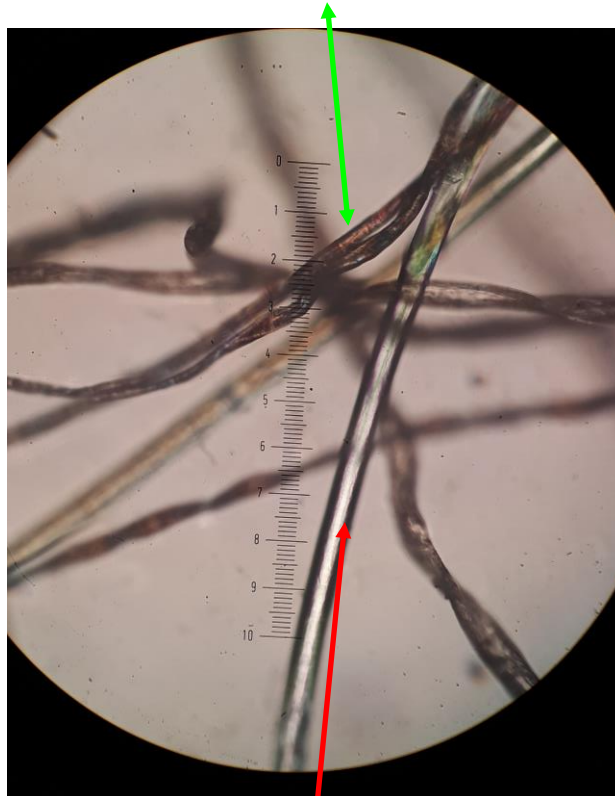
dCSdT ON TEXTILE FIBERS

Composite sample
cotton + polyester fibres (PET)
pre-application



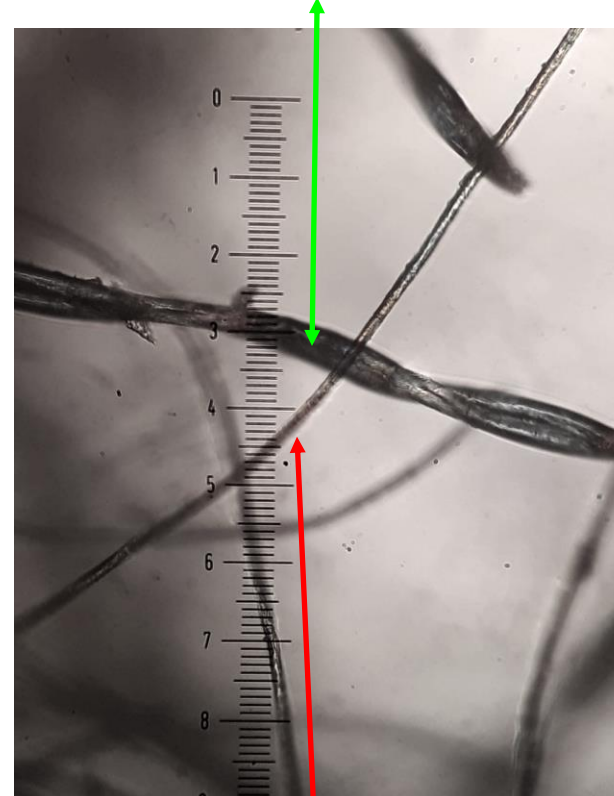
Composite sample
cotton + polyester fibres (PET)
post-application

Cotton fibre **pre-**
application, typical ribbon
shape



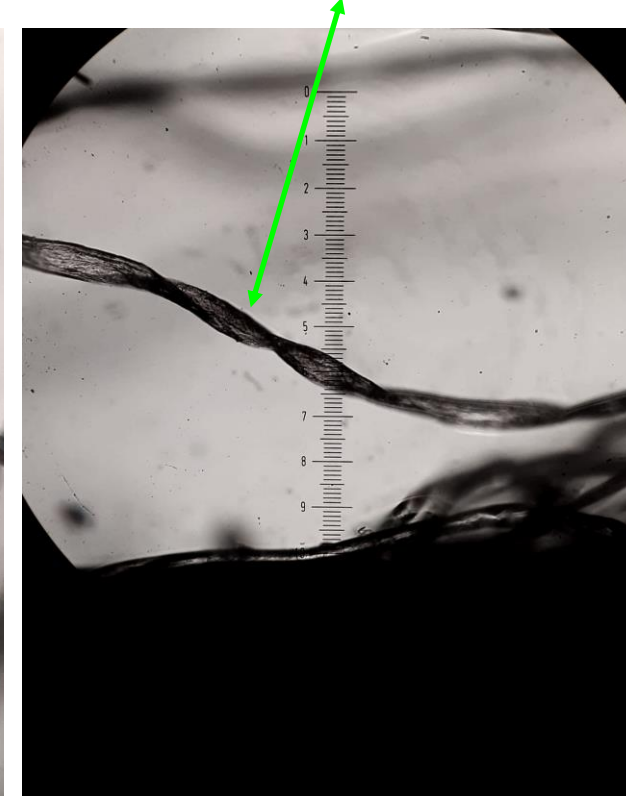
Polyester fibre **pre-**
application, typical
tubular shape

Cotton fibre **during**
depolymerization process
(intact)

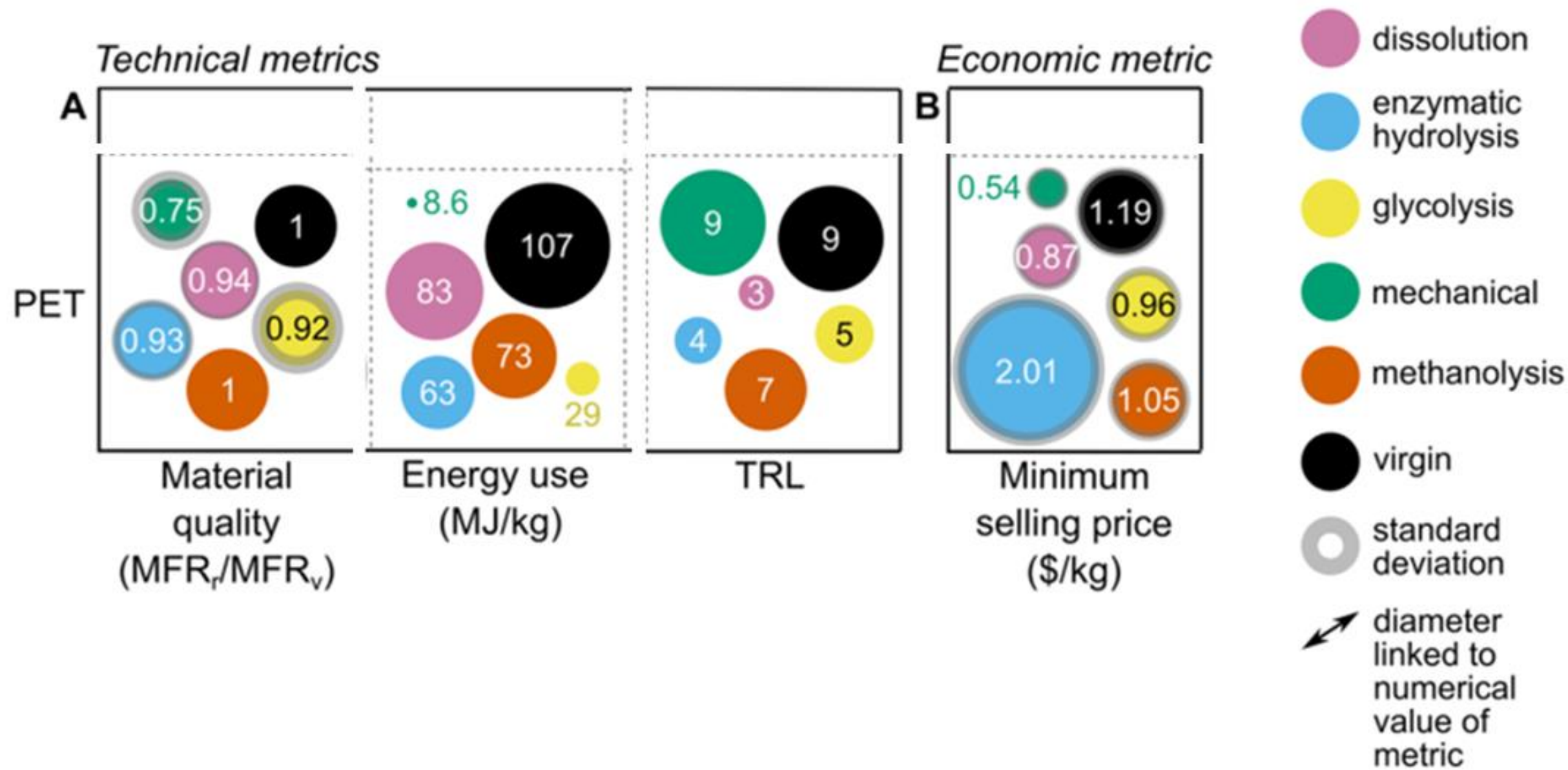


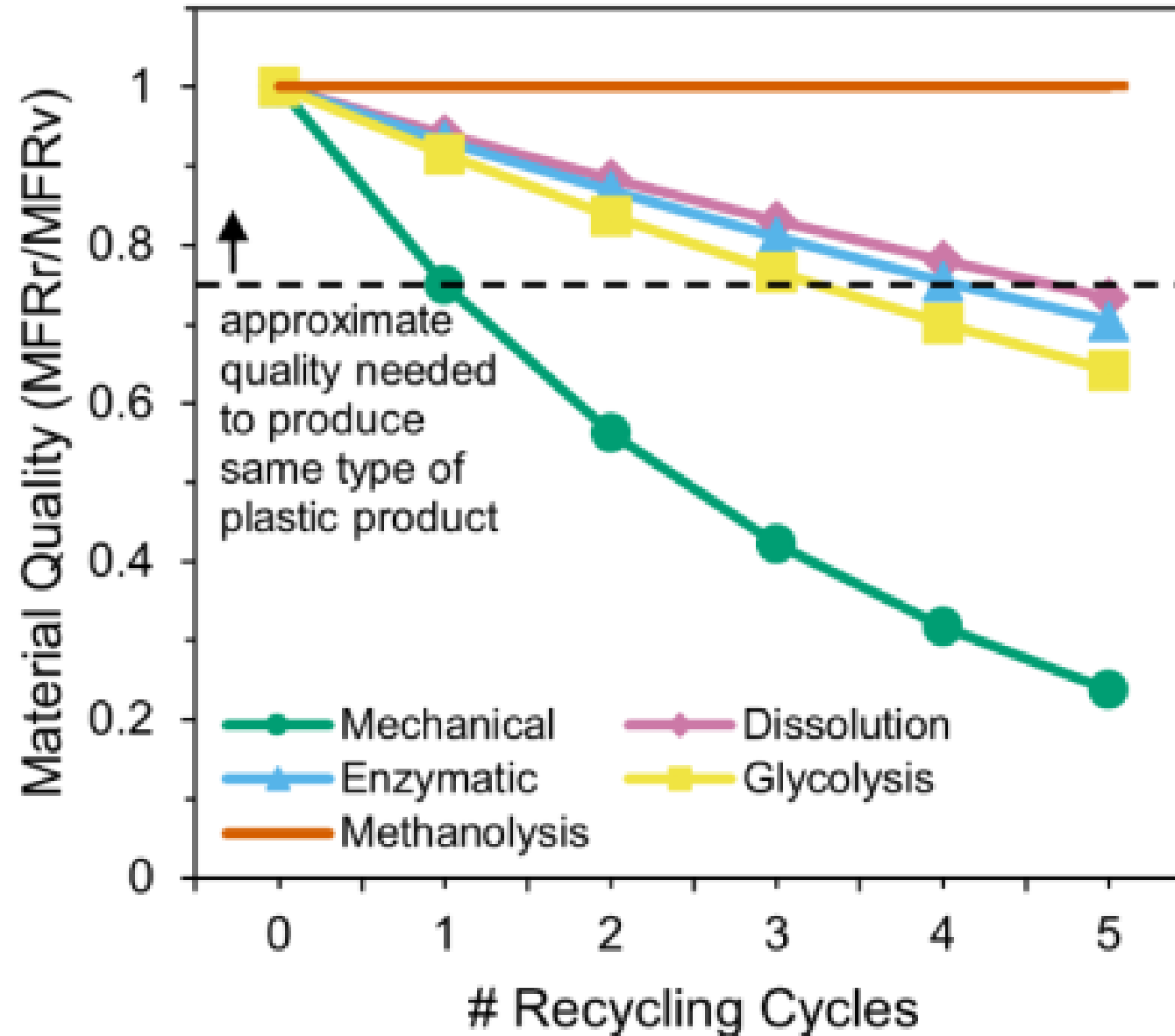
Polyester fibre **during**
depolymerization process
(thinning)

Cotton fibre recovered
after chemical treatment
(intact)



All the polyester fibres are
disappeared from the web
of composite sample





SOURCE ACS SUSTAINABLE CHEM. ENG 2023, 11, 3, 965-978



Recycle of Polyethylenterephthalate with Enhanced Technology

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Chemistry Department, Sapienza University of Rome



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UNIVERSITÀ DI ROMA