

# Accelerating a Circular Economy with Polyester Renewal Technology

Eastman's depolymerization drives system change

# A materials innovation company

Eastman is a materials innovation company that is:

- A Fortune 500 company with approx. 9.2 billion USD in revenue and more than 100 years of vital innovations
- Dedicated to enhancing the quality of life in a material way
- Celebrating the inclusion of its diverse global workforce; 14,000 employees
- Committed to mitigating climate change, mainstreaming circularity and caring for people and society



**EASTMAN**

# A rich history of polyester innovation

Eastman has 70 years experience as a PET producer and 30 years experience in depolymerization



**1940's**

Eastman first produces PET during WWII as a nylon substitute



**1960s**

Eastman expands in Columbia, SC to meet demand for polyester textiles



**1979**

Eastman produces its first PET for bottles.



**2006**

Eastman launches next-gen PET ParaStar



**2007**

Tritan™ copolyester enables BPA-free, dishwasher safe durable products

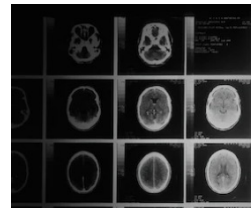


**2020**

Using molecular recycling technologies, Eastman Renew is launched

Eastman introduces Kodel, a thin-film polyester fiber.

**1958**



**1976**

Eastman opens its first methanolysis plant to recycle X-ray film.

**2010**

Eastman sells PET business to DAK Americas

**Now**

Kingsport methanolysis material-to-material recycling facility

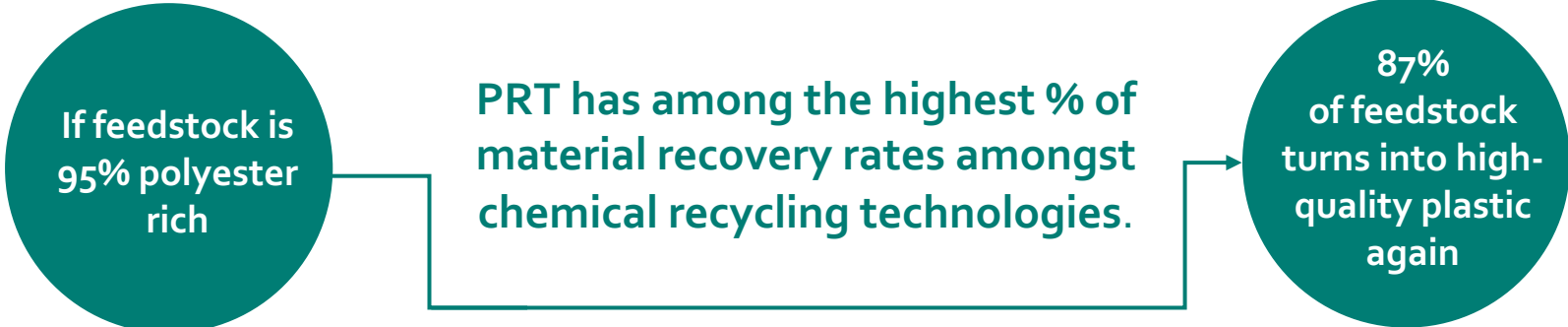
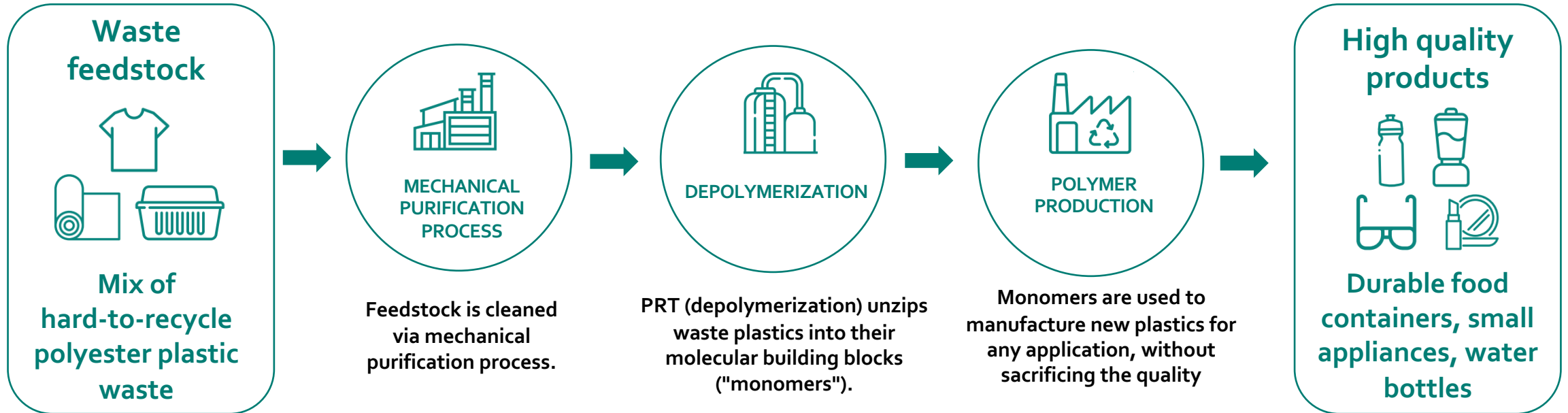


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# Methanolysis – Polyester Renewal Technology (PRT)

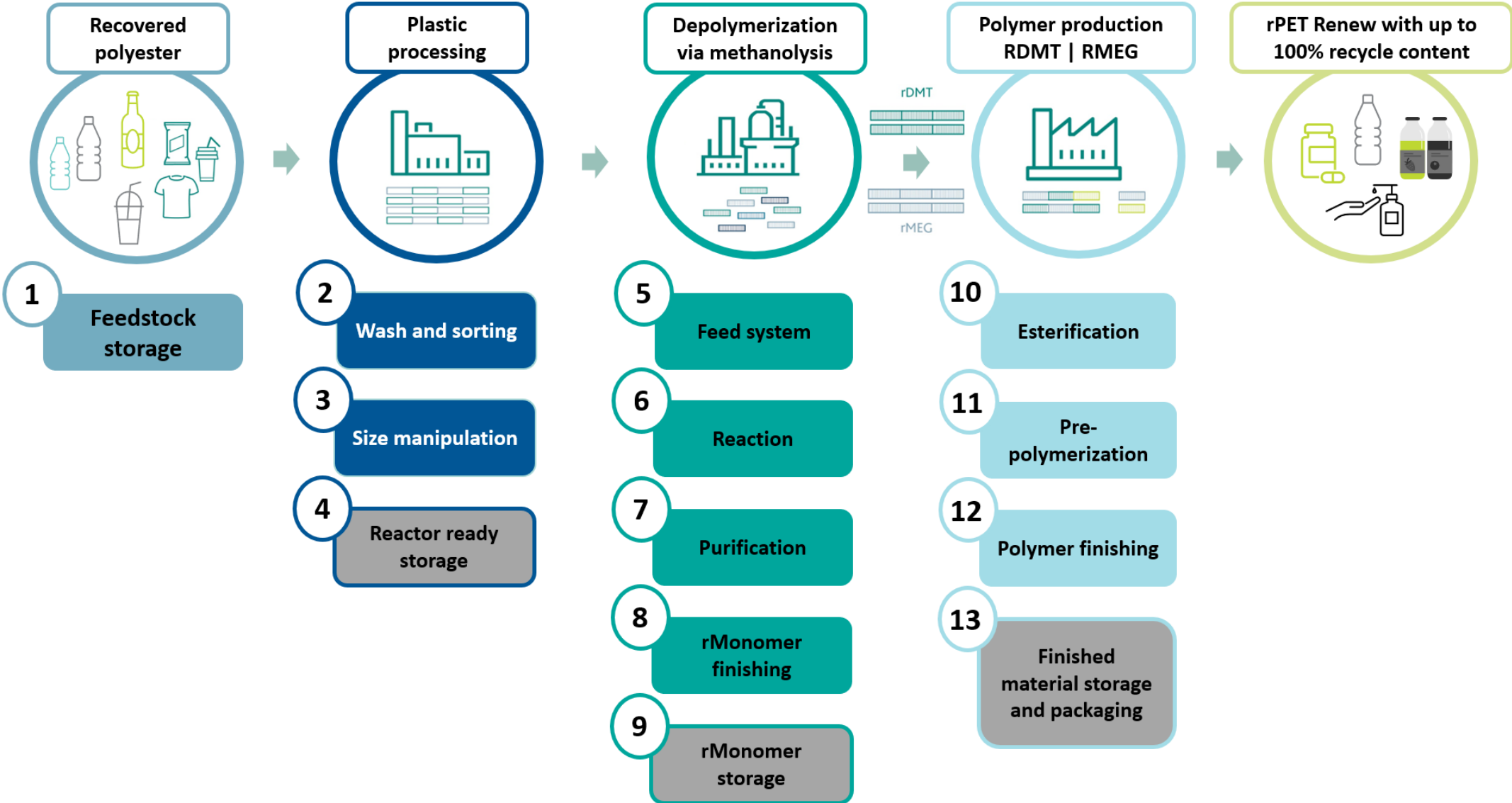
## What is PRT?

PRT does not turn plastic waste into fuels.

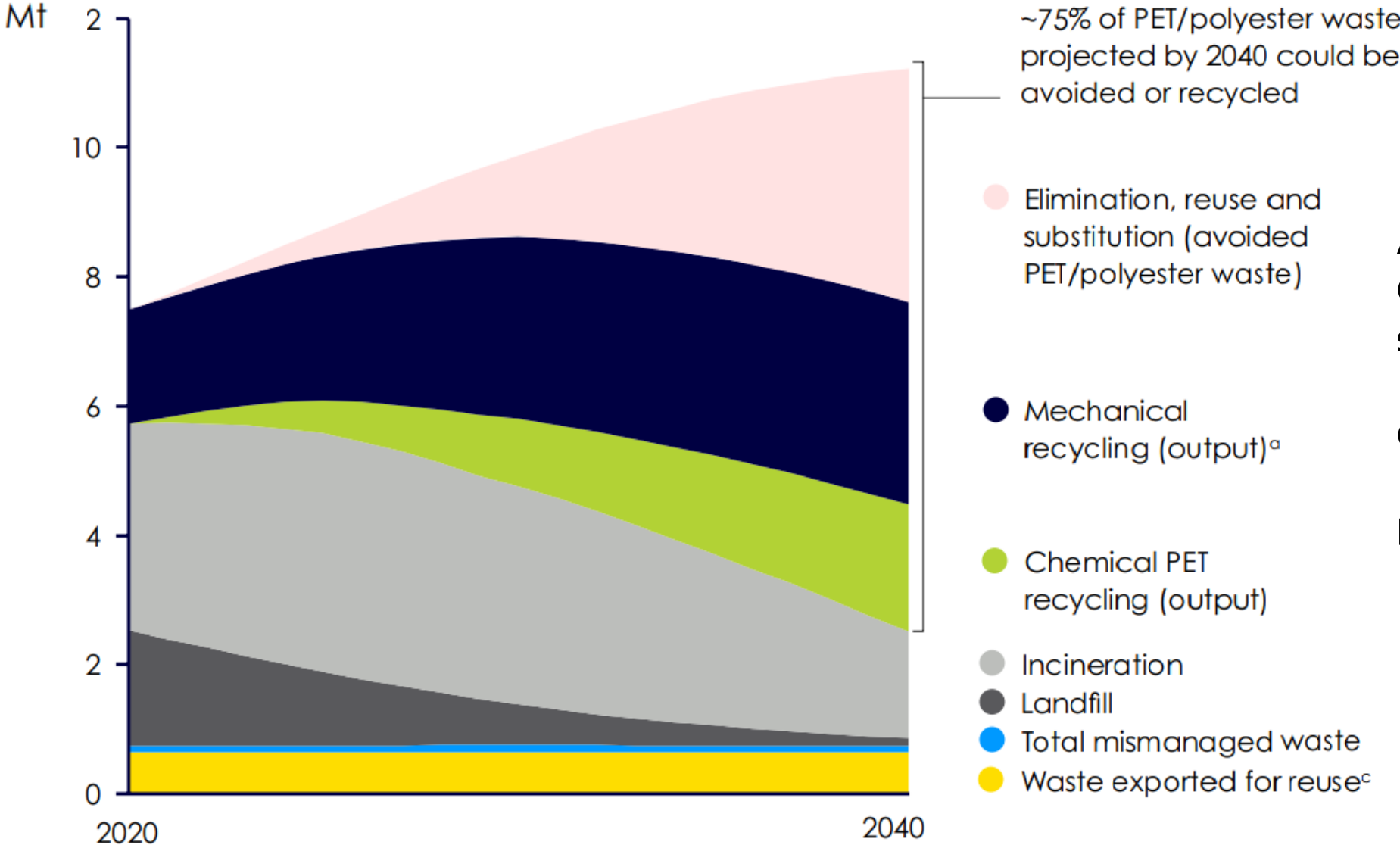


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# Understanding Eastman's polyester renewal technology



# Polyester waste - Scenario for 2040



**Ambitious  
Complementarity  
scenario:**

**Chemical recycling  
+  
Mechanical recycling**





# Input: Diverting hard-to-recycle material from landfill



Colored rejects from mechanical recyclers



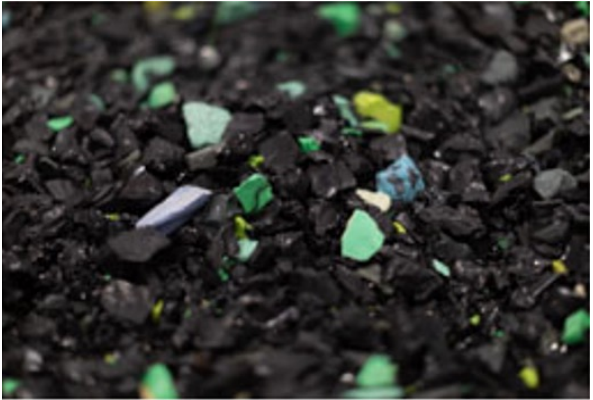
Post consumer purge from mechanical reclaimers



Green strapping  
Used strapping that held items to pallets.



PET trays  
Curbside collected consumer waste.



Textile purge  
Waste from the textile industry making dyed polyester fiber.



Pre-consumer fiber  
Waste generated in the textile value chain.

# Output: Molecular recycling enables virgin-quality



Eastman  
**Tritan™ Renew**

Eastman **Renew**  
Circular Solutions for packaging



Eastman  
**Cristal™ Renew**

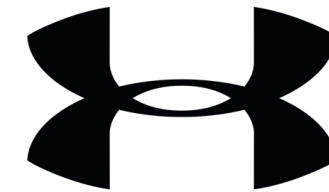
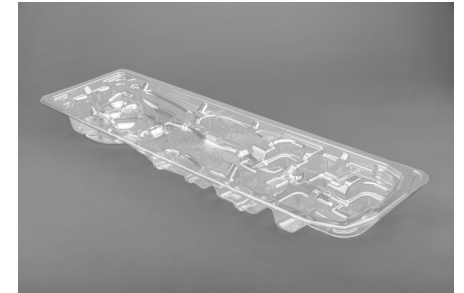
Eastman  
**Eastar™ Renew 6763**



Apparel | Appliances | Automotive | Cosmetic Packaging | Electronics | Eyewear | Food & Beverage Packaging | Healthcare Packaging | Hydration | Personal Care Packaging | Serveware & Storage | Textiles



# Strong customer engagement for Renew materials across broad range of markets and applications



# Building a better circle

Eastman is investing over \$2 billion in three new molecular recycling facilities globally.



2023-2024

KINGSPORT, TN	Processing 110K metric tonnes plastic waste annually	Now
Port Jérôme, NORMANDY FRANCE	Processing 110K metric tonnes annually, Phase 1 & 200K metric tonnes after phase 2	Expected on-line 2026/27
U.S., location TBD	Processing 110K metric tonnes annually	Expected on-line 2026/27



# The world's largest molecular recycling facility

*Kingsport, Tennessee, USA*



Status Update - February 2<sup>nd</sup> 2024:

**Commissioning of facility completed**

**Introduced plastic waste to the facility – achieving a significant milestone**

**Expect to produce on spec material soon**

**EASTMAN**



**25,000 MT of plastic waste has been pre-processed and ready for depolymerization.**



**When fully ramped, we will process 110 kMT each year.**





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## Questions?

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*Eastman's molecular recycling facility in Kingsport, Tenn.*