



Creating a Sustainable Circular Economy for Plastics

w / depoly.co

©2023

PLASTIC IS A HUGE, GLOBAL PROBLEM

PET, together with Polyester accounts for almost 50% of all plastic produced in the world.

PET is found in surprisingly diverse range of applications:

- plastic bottles
- food and beverage packaging
- personal care product packaging
- textiles and fabrics
- sporting equipment
- industrial films
- ...and many more consumer and industrial items



PET

The **most common plastic in the world** is made from:

- **PTA** (purified terephthalic acid)
- **MEG** (mono-ethylene glycol)

Both **sourced from fossil fuels.**

BY 2050

20%

OF ALL OIL WILL BE USED TO PRODUCE PLASTIC

OFFSETTING GLOBAL CO₂ REDUCTION EFFORTS BY

52%

THE CURRENT RECYCLING SYSTEM IS LIMITED

Only **perfect PET**, like clean beverage bottles, are recycled.

CAUSES PLASTIC DEGRADATION; FINITE PROCESS

The result is that **less than 10%** of all plastics are recycled.

FORCES NEW PRODUCTION FROM OIL

The rest end up **incinerated, landfilled**, or in our environment.

SUPPORTS A LINEAR ECONOMY, IMPACTING OUR ENVIRONMENT

A SUSTAINABLE CIRCULAR ECONOMY FOR PLASTICS



DePoly technology converts unsorted, dirty, post-consumer PET plastic items into **virgin-grade raw materials – PTA and MEG!**

This **infinite** process reduces industry dependency on Earth's natural resources and diverts valuable materials from landfills and incineration.

Our technology processes **unsorted, dirty plastic waste** that otherwise cannot be recycled

01

Our outputs are **virgin-quality monomers**, equivalent to their oil-based counterparts

02

These monomers are used by industry to produce **new plastics**... without the need for fossil fuels!

03



OUR INNOVATIVE TECHNOLOGY OFFERS MANY ADVANTAGES



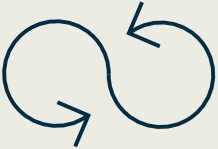
NO HEAT



**NO PRE-WASHING,
SORTING, OR
SEPARATION**



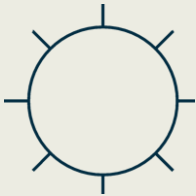
**MIXED
STREAMS**



**INFINITE,
CLOSED LOOP**



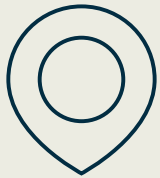
**GREEN
CHEMICALS**



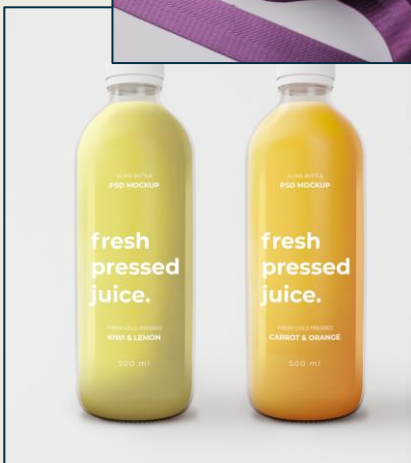
**LOWER ENERGY
AND CO2
FOOTPRINT**



**CAPEX
EFFICIENT**



**TAILORED, EASY,
QUICK
INSTALLATION**



• PURE RAW MATERIAL



PTA

PURITY – 99.9 %

Our technology has been tested on numerous use cases...

UNSORTED

- Mixed post-consumer and post-industrial plastic and textile streams
- Contaminated with food, cosmetics, chemicals, etc.

DYED

- Multi-colour

BLENDED with

- Cotton
- Leather
- Metals
- Nylon
- Silicone
- HDPE
- LDPE
- PVC
- PP
- PE
- etc.

...with the ability to separate and recover other materials in the process

APPLICATIONS & OPPORTUNITIES

Increase collection and recycling

Our robust technology can process any PET/polyester blends, diverting materials from landfill and incineration

Increase supply of rPET

Our virgin-grade raw materials can help companies to meet their r-polyester / r-PET objectives

Create a circular economy

Enabling local solutions for bottle to bottle, textile to textile, and everything in between

Increase supply chain resilience

New circular supply chains create resilience to oil price volatility and changing regulations (e.g. transport)

Reduce carbon footprint

New plastics can be produced without depleting Earth's natural resources, reducing CO₂ emissions

Increase accessibility to consumers

Our simple solution can reduce costs for r-PET / r-polyester production and waste collection... sustainability can be accessible!

Tackling the plastic problem for future generations



contact@depoly.co

www.depoly.co