

RECYCLING OF PET WASTE

The CPS solution enables a paradigm step in the delivery of a circular economy: The perpetual PET recycling technology loop starts with washed and pelletised post- consumer waste materials, such as pots, tubs, and trays. By using the CPS proprietary green reactive extrusion technology, the material is depolymerised to terephthalic acid, which is purified, ready again for repolymerisation as virgin PET resin. This “new” virgin PET can be regenerated perpetually and used in the same or similar applications as the equivalent fossil fuel produced virgin polymer, thereby reducing the carbon footprint.

The CPS breakthrough proprietary technology process delivers effective high throughput depolymerization for a broad span of PET material grades into their base monomers, TPA, BHET – bis (2-hydroxyethyl terephthalate) and multimers. This is highly amenable for ready deployment within the industries for a broad spectrum of PET applications. A suite of novel proprietary mechano-green chemical-enzymatic depolymerisation technologies are available to further increase the conversion rate and significantly improve the quality of the monomer output across a span of pure to contaminated mixed recalcitrant post-use PET plastic waste streams.