

CIRCULAR ECONOMY

PET Bottle Recycling Process

Step-by-Step Process



Beverage



Usage



Bales of used bottles



Washing



Flakes

CIRCULAR ECONOMY PET BOTTLES



Granulator



Granules



PET Bottles



Bottling Plant



Beverages

- PET bottles are filled with beverages such as soda, water, or juices. These bottles are lightweight, durable, and convenient for consumer use.
- Thus they are super popular amongst users.



Usage

- Consumers use these PET bottles to enjoy their beverages. After consumption, these empty bottles are either put in trash to be wasted or are disposed off responsibly.



Bales of Used Bottles

- The waste bottles are collected as waste from various places.
- Collected used PET bottles are compressed into bales to optimize transportation and storage for further processing.



Washing

- These bales of waste and crushed PET bottles are sent to washing facilities where advanced systems clean the bottles, removing impurities like labels and other residues to be able to process further.



Flakes

- Clean PET bottles are then shredded into small flakes. These flakes are categorized by color and quality, ready for further transformation.
- These flakes are categorised according to their color and cleanliness levels to be used further.



Granulator

- The flakes are processed in granulators, converting them into uniform PET granules. These granules are the building blocks for new PET products.



Granules

- PET granules are high-quality raw materials that can be used to create new products, such as bottles or other packaging.
- Our input of highly cleaned and processed flakes allows us to make use of clean PET granules again for making bottles.



PET Bottles

- The r-PET granules are molded into new PET bottles, maintaining durability and versatility for packaging beverages.
- As a part of circular economy, each company is mandated to use 30% recycled PET to make bottles, hence it is very important to have highly efficient way to make PET Granules.



Bottling Plant

- New PET bottles are sent to bottling plants, filled with beverages, and distributed back to consumers, completing the circular economy.
- And thus the cycle of consuming beverages from PET bottles continue and it keeps on running like a wheel.



Benefits and Sustainability

- Benefits of Using PET and Recycling It:
- Durability and Versatility: PET bottles are lightweight, strong, and suitable for a wide range of uses.
- Recyclability: PET is 100% recyclable and can be reused multiple times without compromising quality.
- Energy Savings: Recycling PET uses significantly less energy compared to producing new materials.
- Cost Efficiency: Lower manufacturing costs due to reusing PET in production processes.
- Waste Reduction: Decreases plastic waste in landfills, contributing to a cleaner environment.

- Sustainability:
- Eco-Friendly Practices: Recycling PET supports a greener planet by reducing carbon emissions and conserving natural resources.
- Circular Economy: Reusing PET materials ensures a sustainable loop of production and recycling, minimizing environmental impact.
- Corporate Responsibility: Businesses adopting PET recycling demonstrate commitment to sustainability, attracting eco-conscious customers.
- Consumer Impact: By choosing recycled PET products, consumers play an active role in reducing environmental degradation.

Contact Information

- Website: www.safeflex.org
- Phone: +91-8953176210
- Email: info@safeflex.org;
info@endurafab.org