CIRCULAR ECONOMY FOR PLASTICS

GERMANY - 2020

COLLECTION AND TREATMENT OF POST-CONSUMER PLASTIC WASTE

- **CONSUMPTION**: 10,670 kt
- **WASTE collection & sorting**: 5,419 kt
- **LANDFILL**: 39 kt
- **ENERGY recovery**: 3,120 kt

POST-CONSUMER RECYCLED PLASTICS IN MANUFACTURED PRODUCTS

- **Conversion**: 12,522 kt
- **Pre-consumer recycled plastics output**: 900 kt
- **Post-consumer recycled plastics output**: 1,050 kt

FEEDSTOCKS

- Chemical recycled feedstock: ~9,910 kt
- Bio-based feedstock: ~6,300 kt
- Carbon-captured feedstock: ~2,051 kt
- Fossil feedstock: ~260 kt

**CIRCULAR FEEDSTOCKS**

- Input into national recycling plants (post-consumed): ~1,610 kt
- Export surplus: ~650 kt
- Process losses: ~540 kt

**PLASTICS**

- Production (polymerisation): ~1,710 kt
- To plastic parts and products: ~7.7% (520 kt)
- To private and industrial end-users: ~13.3% (811 kt)
- Unused: ~1,050 kt

**CONVERSION**

- To plastic parts and products: ~7.7% (520 kt)
- To pre-consumer recycled plastics: ~13.3% (811 kt)
- To post-consumer recycled plastics: ~22.2% (907 kt)
- Unused: ~8.3% (1,050 kt)

**INPUT INTO NATIONAL RECYCLING PLANTS**

- Pre-consumer recycled plastics output: ~900 kt
- Post-consumer recycled plastics output: ~1,050 kt
- Total: ~1,950 kt

**PROCESS LOSSES**

- ~540 kt

**ENERGY CONVERSION**

- Energy recovery: ~3,120 kt

**LANDFILL**

- ~39 kt

**WASTE**

- Collection & sorting: ~5,419 kt

**CONSUMPTION**

- Private and industrial end-users: ~13,670 kt

**POST-CONSUMER RECYCLED PLASTICS IN MANUFACTURED PRODUCTS**

- 2020: ~1,050 kt
- Import/Export: ~22.2% (220 kt)

**IMPORT/EXPORT**

- ~220 kt
- ~1,039 kt

**PRODUCTS IN USE**

- (1 to >50 years): ~1,252 kt

**TIMEFRAME**

- 2019 available figures. The beside data were rounded.

**DATA SOURCES**

1. Does not include elastomers, adhesives, coatings and sealants.
2. Based on interviews with recyclers.
3. Comprising 10,644 kt from plastics and waste data used for the beside calculation.