

Closing loops, securing raw material supplies. Modern waste management in Germany

April 19th, 2024

BDE – Quick facts about us



- BDE is the Federation of the German Waste, Water and Circular Economy Management Industry
- with offices in Berlin and Brussels and more than 750 member companies, we are largest federation of the private waste and water management industry in Europe
- from international groups to medium and small specialized companies
- our working groups, include more than 500 specialists from member companies
- as an **employers association**, BDE is negotiating partner for general collective agreements and wage tariffs.
- specialist committees, ex: Logistics, Waste treatment, Biological waste, Hazardous waste, Recycling, Water, Environmental law, Climate protection, Tax and Competition, Collective employment law



Waste (Mis-)Management: Highly emotional political issue worldwide



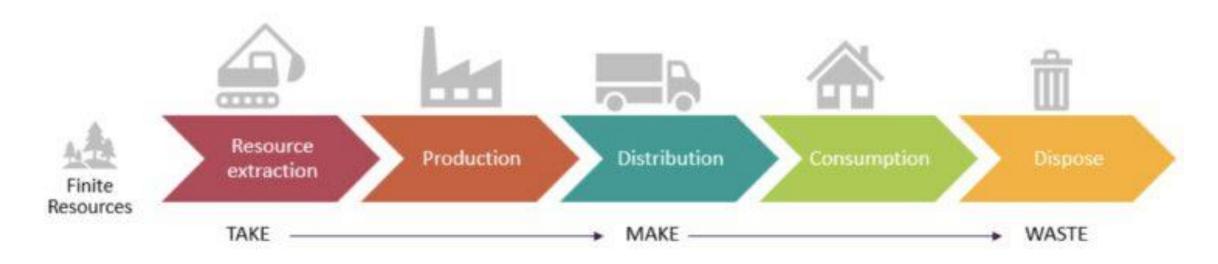






Principle of linear economy





Source : BIL

The five step waste hierarchy



Prevention

Preparing for re-use

Recycling

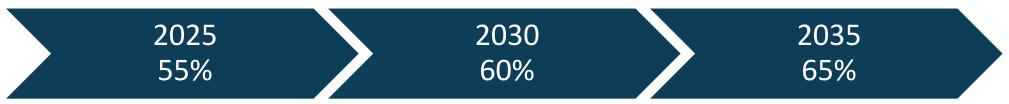
Recovery

Disposal





Common EU target for Recycling of municipal waste



- binding landfill target: reduce to maximum of 10% of municipal waste by 2035
- Minimum requirements are established for extended producer responsibility schemes to improve their governance and cost efficiency

Separate collection obligations of specific waste-streams:



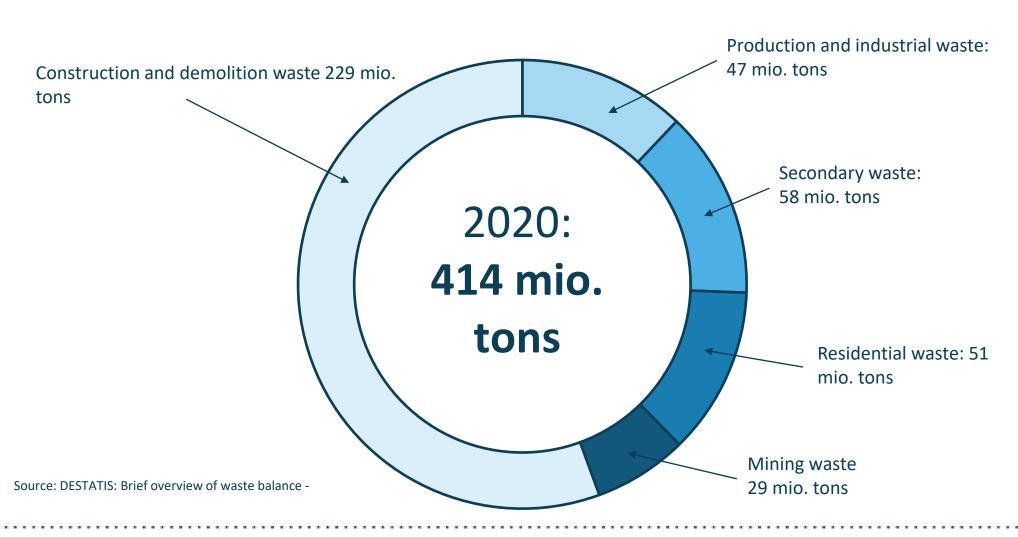
EU Circular Economy Package 2018 Packaging Waste



	by 2025	by 2030
Packaging Waste	65 %	70 %
Plastic	50 %	55 %
Wood	25 %	30 %
Ferrous metals	70 %	80 %
Aluminium	50 %	60 %
Glass	70 %	75 %
Paper and Cardboard	75 %	85 %

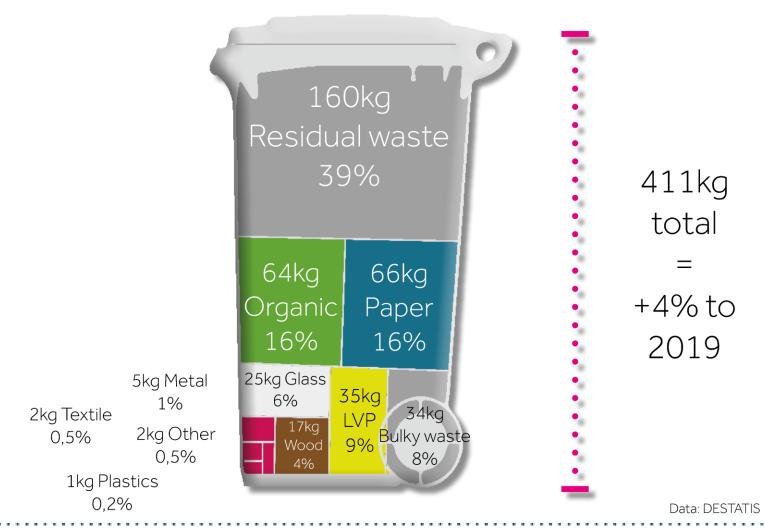
Waste input in Germany





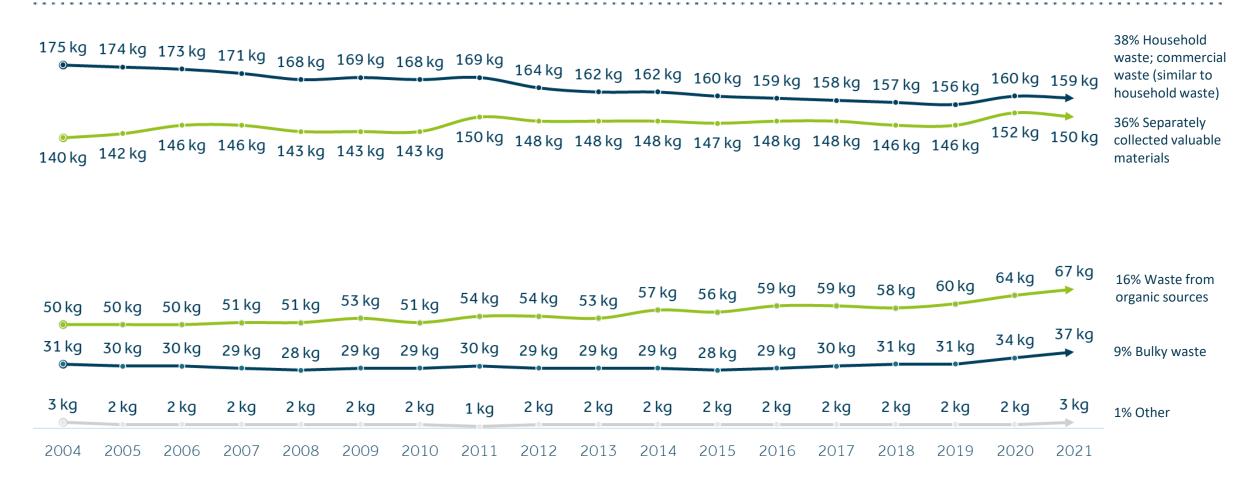
Household-related waste per capita 2020





Household-related waste per capita 2004-2021





Waste Intensity Net-Waste/GDP





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The three pillars of Germany's raw material supply



Energetic and non-energetic raw materials

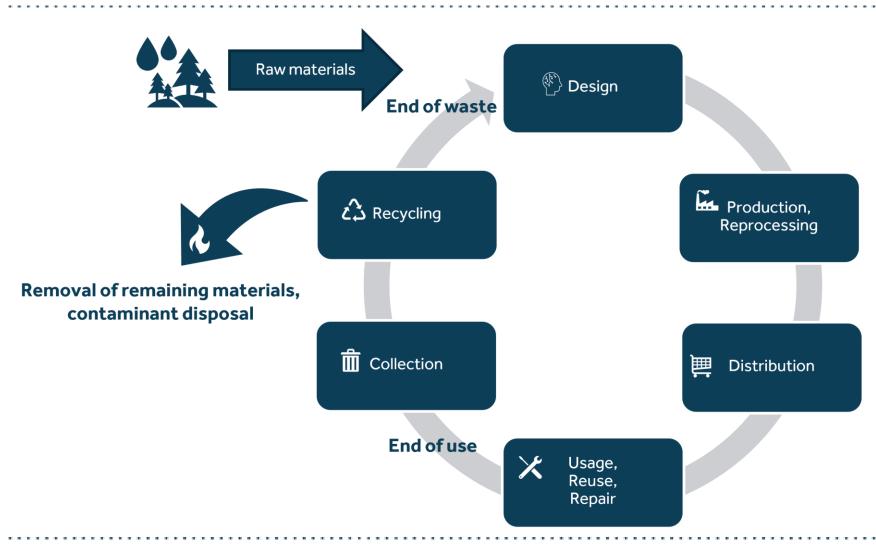
Mining of natural raw materials from domestic sources

Import of raw materials from other countries

Obtaining recycled raw materials

Circular economy





Today's economic value of waste in Germany



- **310.000** employees
- **85** billion € sales volume
- 28 billion € value added
- 14.600 facilities
- **11.000** companies
- **5.1 billion €** of technology exports

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Ways to deal with waste



1. Landfill

Problem: bad for the environment, "waste" of space and recources

2. Waste incineration

Problem: Emits CO2 and is only efficient if waste could not be treated in better ways

3. Treatment in form of recycling

Problem: Infrastructure is not advanced enough to solve all waste problems

But: With the right incentives, said infrastructure can be build up and the save reuse of most

resources can be ensured

Waste management in Germany



In 2020, there was a total **input of 414 mio. tons of waste** in Germany.

- 1. Recycling: 290.2 mio. tons
 - Resources are treated to be used in new products
- 2. Waste incineration for energy production: 48.3 mio. tons
 - Burning waste instead of using fossils like oil or gas

82% of waste is used to substitute primary material!

- 3. Landfill: 67.5 mio. tons
 - Mostly hazardous and mineral waste
- 4. Elimination: 8.2 mio. tons
 - Treatment and incineration of otherways unusable waste

18% of waste leaves the supply chain.

Requirements for good waste management



Treatment of waste beyond incineration and landfill is key for good waste management.

- Sorting of waste into clear waste streams, that are easy to treat
- Overnment incentives that make investments in the industry more profitable
- Regulations that do **not hinder** harmless **waste shipment**
- Landfill must be highly regulated and prevented for moste waste streams

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Let's talk about waste as a resource!



There are only three ways to get resources:

- 1. From abroad through classical import
 - Problem: Increases dependency on forein powers and stable conditions, which can change any time and are therefore unreliable
- 2. Out of the ground by mining recources
 - Problem: People, environment and climate suffer regularly
- 3. From waste by recycling
 - Problem: Infrastructure is not advanced enough to solve all recource problems
 - **But:** With the right incentives, said infrastructure can be build up and the save reuse of most recources can be ensured



Thank you for your attention!