

For our environment

Umwelt 
Bundesamt

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Management of Packaging Waste in Germany

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Section III 1.2, subsection „Implementation of the Packaging Act“

German Environment Agency - UBA

Agenda

1. **Legal framework**
2. **Status quo and current challenges**
3. **Main stakeholders and their obligations**
4. **Recycling targets**
5. **Packaging design and the environment**



1. Legal framework



Waste Framework Directive
(2008/98/EC, last amended 2018)

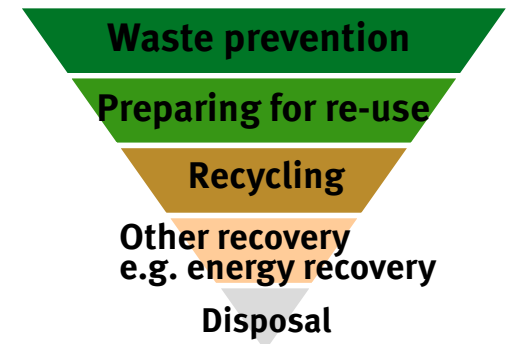


German Circular Economy Act (KrWG)



Main principle: the Waste Hierarchy

Basic prerequisite of all sustainable waste management systems



Packaging Directive
(94/62/EC, last amended 2018)
= Directive on packaging and packaging waste



German Packaging Act (VerpackG)



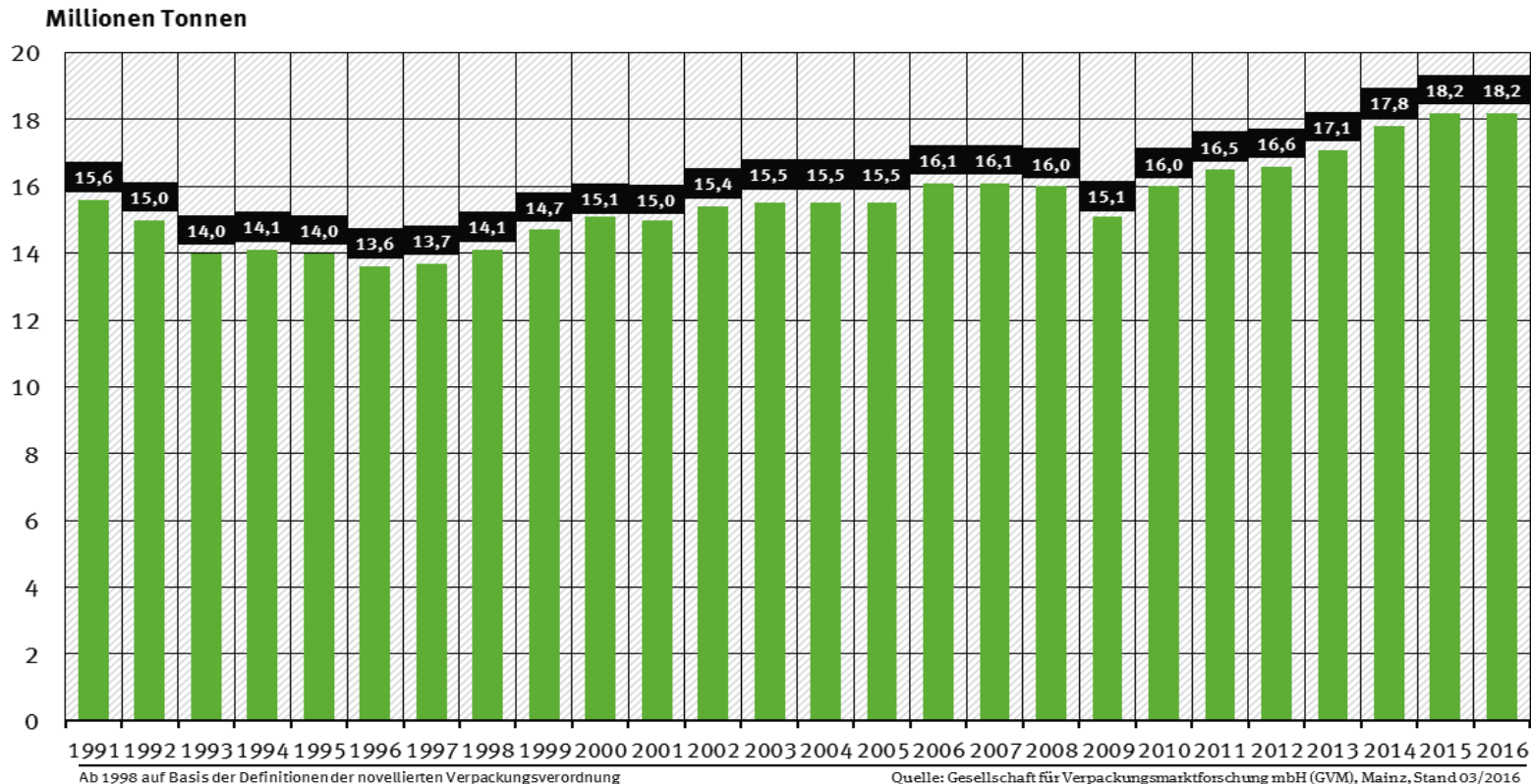
Main principle: extended producer responsibility

Producers of packaging are financially and organizationally responsible for waste management and public information

2. Status quo and current challenges



a. Amount of packaging consumption in Germany

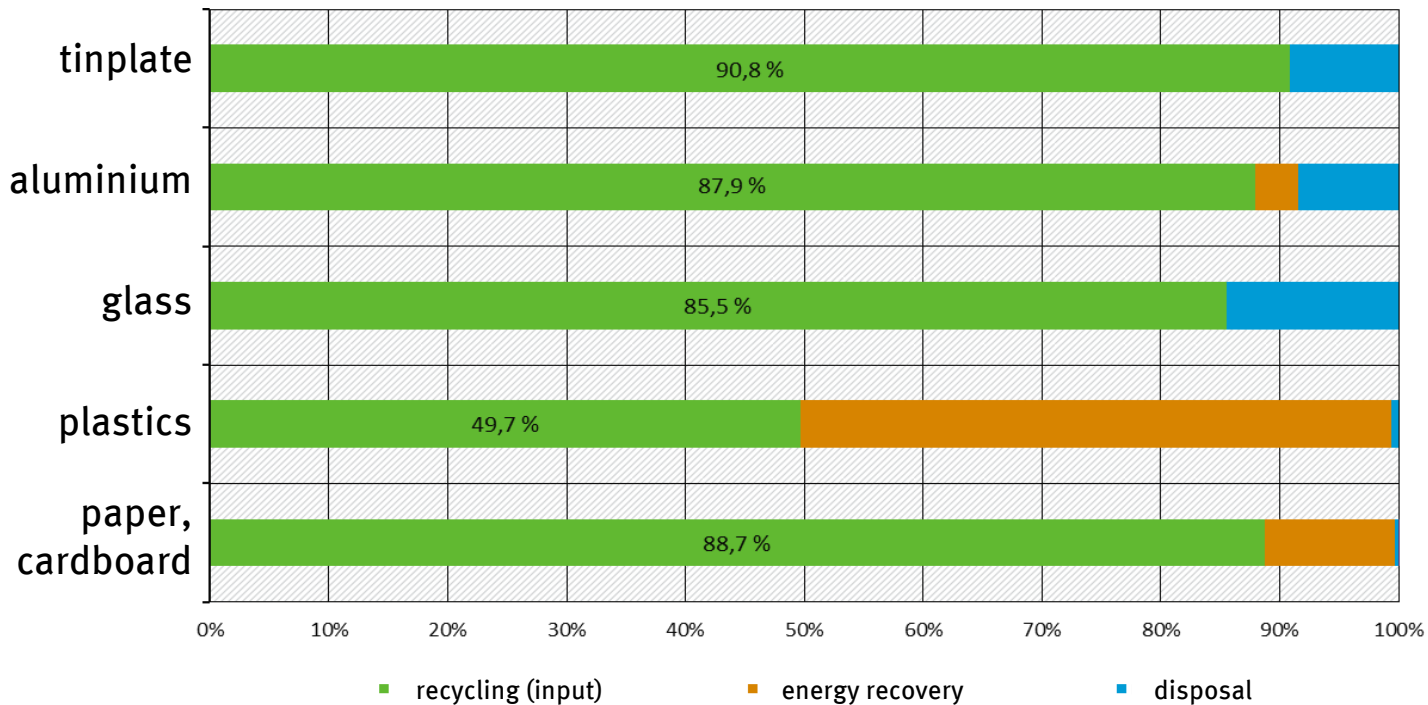


- 16,7 percent increase from 1991 to 2016, 18,5 million tonnes in 2016.
- 220,5 kg per capita in 2016 (all packaging including commerce and industry).
- Private final users/consumers: 103,5 kg per capita in 2016 (about 8.5 million).

2. Status quo and current challenges



b. Input to the recycling process in 2016 (all packaging):



➔ Recycling of plastics needs to be improved.
Businesses need incentives to invest in sorting technology,
recyclability of packaging has to be increased to get better results, ...

2. Status quo and current challenges



c. Participation in the EPR schemes

- There are about 720,000 producers / first distributors of packaging in Germany.
- Estimate: about 30 percent of packaging is not properly licensed at EPR schemes.



**Sufficient oversight over the market is required to ensure fair competition.
Transparency and self-control of competitors supports participation in the EPR schemes.**

d. Provision of information for the general public

- Consumers play an important role: they must dispose of their waste in a proper way and can decide which products to buy.



**Strengthen public awareness and information
Clarification of responsibilities for public information**



3. Main stakeholders and their obligations

Management of packaging waste from private households (except beverage bottles)





4. Recycling targets

Recycling targets* in Germany

Material	Before 2019**	Starting 2019**	Starting 2022**
Glass	75	80	90
Paper and cardboard	70	85	90
Ferrous metals	70***	80	90
Aluminium	60	80	90
Composites	60	--	--
Beverage carton packaging	--	75	80
Other composites	--	55	70
Plastics****	36	58,5	63

*Input to the preparing for re-use or recycling process; ** All values in mass-percent; *** Target for tin only; **** Counting exclusively material that is recycled back into plastics
Source: German Environment Agency

Total recycling target: at least 50 percent by weight of all waste collected in the collection of plastic, metal and composite packaging.



If EPR schemes miss the targets there are financial penalties and authorities can revoke the permission to operate.

6. Packaging design and the environment

The best packaging waste is waste, that does not exist.

➔ **Packaging only where needed!**

Use re-useable packaging!

- Target for refillable beverage packaging: 70 %



If single-use packaging is needed:

- Reduce material input!
- Increase recyclability!
- Use secondary raw materials!

Probably not a good idea:

- Bioplastics, if not recyclable
- Other non-recyclable materials and combinations
- Biodegradable plastics? It probably depends on...





6. Packaging design and the environment

Reduce packaging to a minimum (volume, mass)

(section 4 number 1 VerpackG)

Enable re-use or recovery, reduce impact on the environment to a minimum

(section 4 number 2 VerpackG)

Legal obligations of producers

Environmentally friendly disposal

(section 4 number 3 VerpackG)

Percentage of secondary raw materials as high as possible

(section 4 number 4 VerpackG)



Legal limits for Pb, Cd, Hg, Cr IV

(section 5 VerpackG)



6. Packaging design and the environment

EPR schemes have to give incentives for environmentally friendly packaging

- Packaging which is recyclable to high degree ✓
- Packaging using secondary raw materials ✓
- Packaging consisting of renewable resources   ?

How to determine the recyclability of packaging?

- Recyclability
 - ...is a gradual characteristic
 - ...can only be determined looking at the specific packaging as a whole
 - ...has to be ascertained under real conditions of the market, not in theory or the lab
- Three requirements have to be met:
 - ✓ There is infrastructure available for sorting and high-quality recycling for this packaging
 - ✓ The packaging can be sorted and its components can be separated
 - ✓ No components of the packaging or substances therein prevent successful recycling

Method developed by the Central Agency Packaging Register and the German Environment Agency:

<https://www.verpackungsregister.org/stiftung-behoerde/mindeststandard-21-verpackg/>

Thank you for your attention

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This presentation is based i.a. on material by other colleagues
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