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Grant Programme against Marine Litter:
Marine Debris Framework – Regional Hubs around the Globe

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Overview

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Grant Programme against Marine Litter

Launch: in 2019 by the German Federal Ministry for the Environment, Climate Protection, Nature Conservation and Nuclear Safety (BMUKN)

Project agency: Zukunft – Umwelt – Gesellschaft (ZUG) gGmbH

Funding objective: Decreasing and preventing the generation of land-based marine litter

Funding priorities

- Measures to decrease the **production and consumption of plastic products and packaging**, e.g. through EPR
- Measures to establish integrated (plastic) **waste management systems**
- Measures to reduce marine litter **generation from significant point sources**, e.g. ports

Project stakeholders: Diverse consortia, consisting partly of organisations based in Germany and organisations from partner countries

75 Mio. Euro **Finanzierungsvolumen** in 18 Projekten seit 2019

18 Mio. Euro in weiteren **4 Projekten** sind vergabereif

25 Mio. Euro wurden in den **PROBLUE Fund** der Weltbank eingezahlt

Project insights from Egypt, Tunisia and Morocco

Learn more on how **TouMali** implements sustainable waste management systems including EPR in tourist regions here: https://www.z-u-g.org/en/marine-litter/project/toumali-nordafrika/

Source: S. Altvater

Project insights from Thailand

Learn more on how **MA-RE-DESIGN** reduces and prevents marine litter generation in Thailand here: https://www.z-u-g.org/en/marine-litter/project/ma-re-design-thailand-123/

Source: G. Biastoch

Project insights from Bangladesh

Learn more on how **SCIP Plastics** reduces and prevents marine litter generation in Bangladesh's urban centers, mangrove forests and river deltas here: https://www.z-u-g.org/en/marine-litter/project/scip-plastics-bangladesch/

Source: A. Khulna

Project insights from the Caribbean Sea

Learn more on how **PROMAR** reduces and prevents marine litter generation in the Dominican Republic, Costa Rica and Colombia here: https://www.z-u-g.org/en/marine-litter/project/prevention-of-marine-litter-in-the-caribbean-sea-71/

Source: UBA

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Project insights from Brazil

Learn more on how **SRS Brazil** expands waste collection and closes resource loops with its social recycling shipyard in Brazil here: https://www.z-u-g.org/en/marine-litter/project/SRS-Brazil/

Source: G. Biastoch

Policy brief on EPR

Read our **policy brief on Extended Producer Responsibility** (EPR) here:

Navigating Extended Producer Responsibility (EPR) Systems

Insights for Governments and Implementing Organisations

Introduction – Key facts

Plastics play a vital role in modern life, serving various industries and consumers from packaging to construction (de Vargas Mores et al., 2018). However, they present significant challenges for waste management, as a large proportion ends up in landfills or incineration plants (Plastics Europe, 2018). Plastics are derived mainly from non-renewable fossil fuels, and recycling efforts are hindered by the complexity of plastic types and the low demand for recycled materials (Van Eygen et al., 2017; Dahlbo et al., 2018). Furthermore, inadequate waste management of land-based sources contributes to environmental pollution, especially in marine ecosystems, highlighting the urgency of effective strategies (Jahnke et al., 2017; GESAMP, 2016).

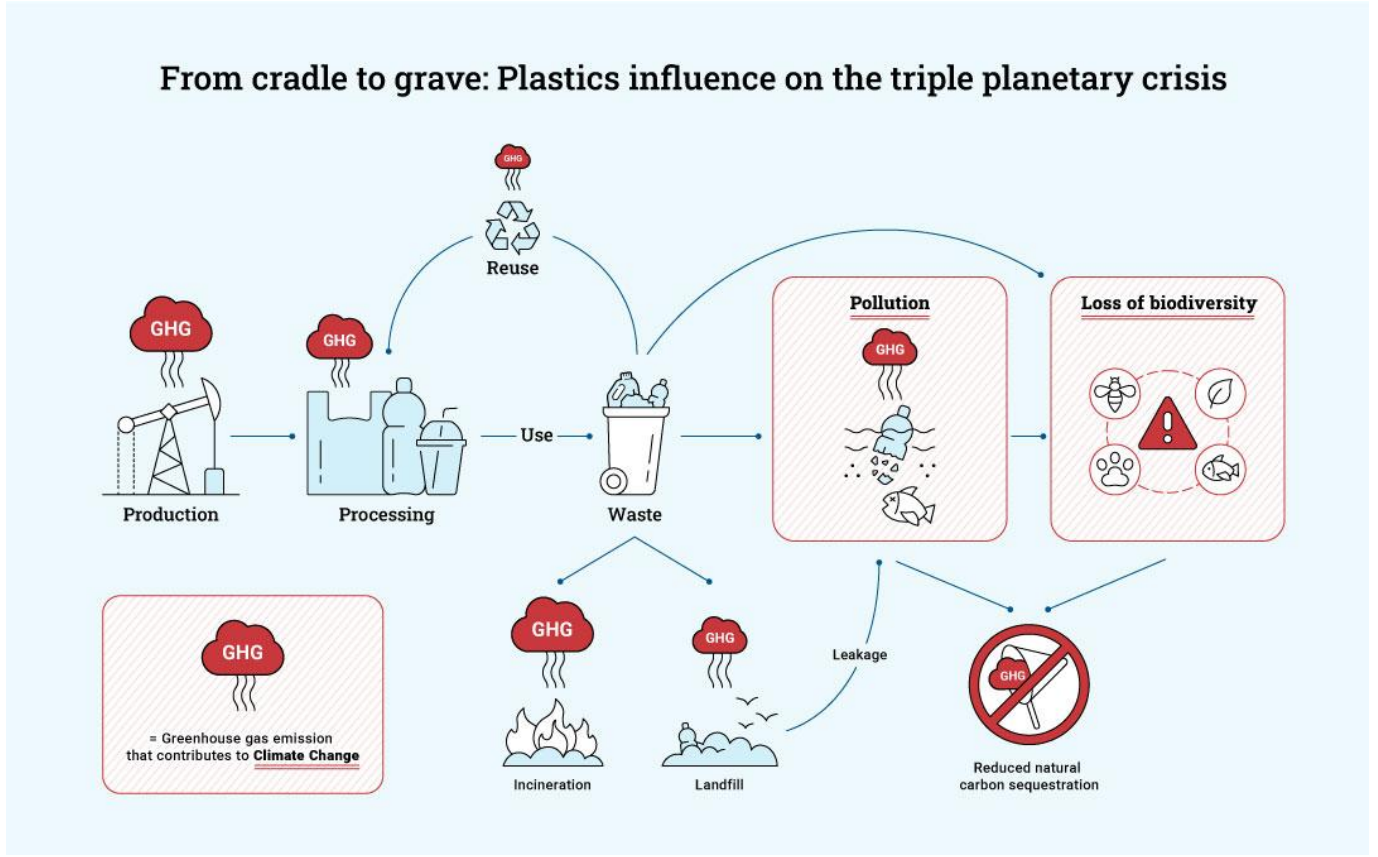
Ensuring the proper management of plastic waste, including collection, sorting, and treatment, is crucial for mitigating plastic pollution. However, financial constraints often hinder effective waste management efforts, which results in insufficient infrastructure and fragmented practices. Although recycling offers great opportunities, relying solely on material market value to cover all expenses is unfeasible (EMF, 2021). Without policy incentives for reduction, reuse, and recycling, society and future generations will bear the environmental costs (Renaud et al., 2018). Therefore, sustainable financing of circular economy systems is essential to effectively reduce plastic pollution, with Extended Producer Responsibility (EPR) being a key systemic approach.

"An effective EPR system should be country-specific and supported by evidence-based knowledge, incentives, strong commitment and collaboration between private sector, government and consumers."

Jan Møller Hansen, International Portfolio Manager, Ministry of Environment, Denmark (World Bank, 2022)

Policy brief on marine litter & climate change

Read our **policy brief on the marine litter and climate change nexus** here:



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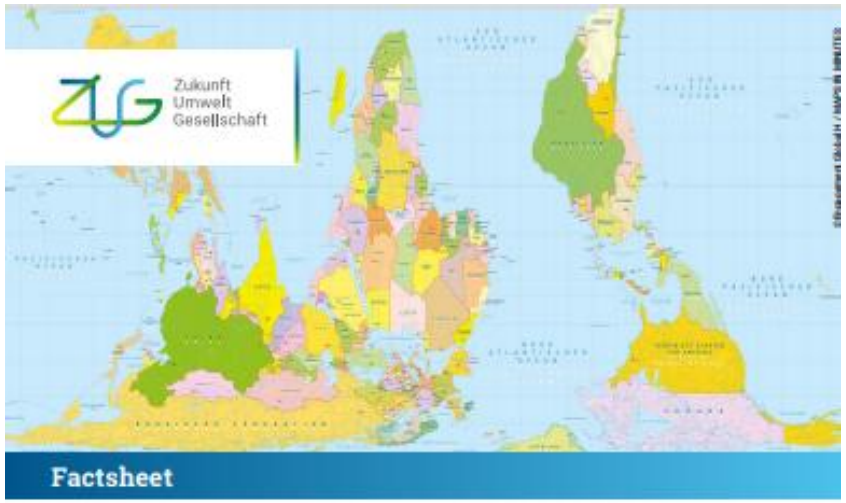
Background Paper
Plastic subtitutes

Find more about the **Background Paper:**

Factsheet Decolonialism

Read our new **factsheet on decolonial approaches** in the projets of the grant programm and learn mor about decolonial project work:



Dekoloniale Ansätze in Projekten gegen Meeresmüll

Kolonialen Kontinuitäten entgegenwirken

Dekolonialität beschreibt Ansätze, die sich mit den fortdauernden Auswirkungen kolonialer Strukturen und Geisteshaltungen beschäftigen. Für das Förderprogramm zur Vermeidung von Meeresmüll mit seinen weltweit verorteten Projekten spielt eine dekoloniale Perspektive in und auf Projekte eine wichtige Rolle. Dieses Factsheet dient dem Zweck, Impulse zu setzen und Beispiele aufzuzeigen, um Projekte der Meeresmüllvermeidung dekolonialer zu gestalten.

Kolonialismus
Bezeichnet die Kombination aus territorialer, rechtlicher, kultureller, sprachlicher, politischer, mentaler und/oder wirtschaftlicher Beherrschung einer Gruppe von Menschen oder Gruppen von Menschen durch eine andere (externe) Gruppe von Menschen (Murray, 2020).

Kolonialität
Bezieht sich auf die dauerhaften Auswirkungen und Strukturen des Kolonialismus, die auch nach der formellen Unabhängigkeit eines Landes bestehen bleiben. Dies umfasst soziale, kulturelle und wirtschaftliche Aspekte. Kolonialität ist mit einer Vielzahl von Diskriminierungsformen verknüpft (Quijano, 2000).

„Bis heute finden sich in der Entwicklungszusammenarbeit Strukturen und Denkmuster wieder, die aus der Zeit des Kolonialismus stammen. Diese kolonialen Kontinuitäten tragen dazu bei, dass die Beziehungen zwischen dem Globalen Süden und dem Globalen Norden noch immer ungleich und ungerecht sind. Abhängigkeitsverhältnisse prägen noch immer das Verhältnis zwischen Ländern, zwischen Wirtschafts- und Politikakteuren, zwischen Menschen. Ausbeutungsmechanismen bestehen weiterhin."

Quelle: Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung 2024, Themenseite Kolonialität

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Key Elements of Germany's Policy on Plastic Pollution

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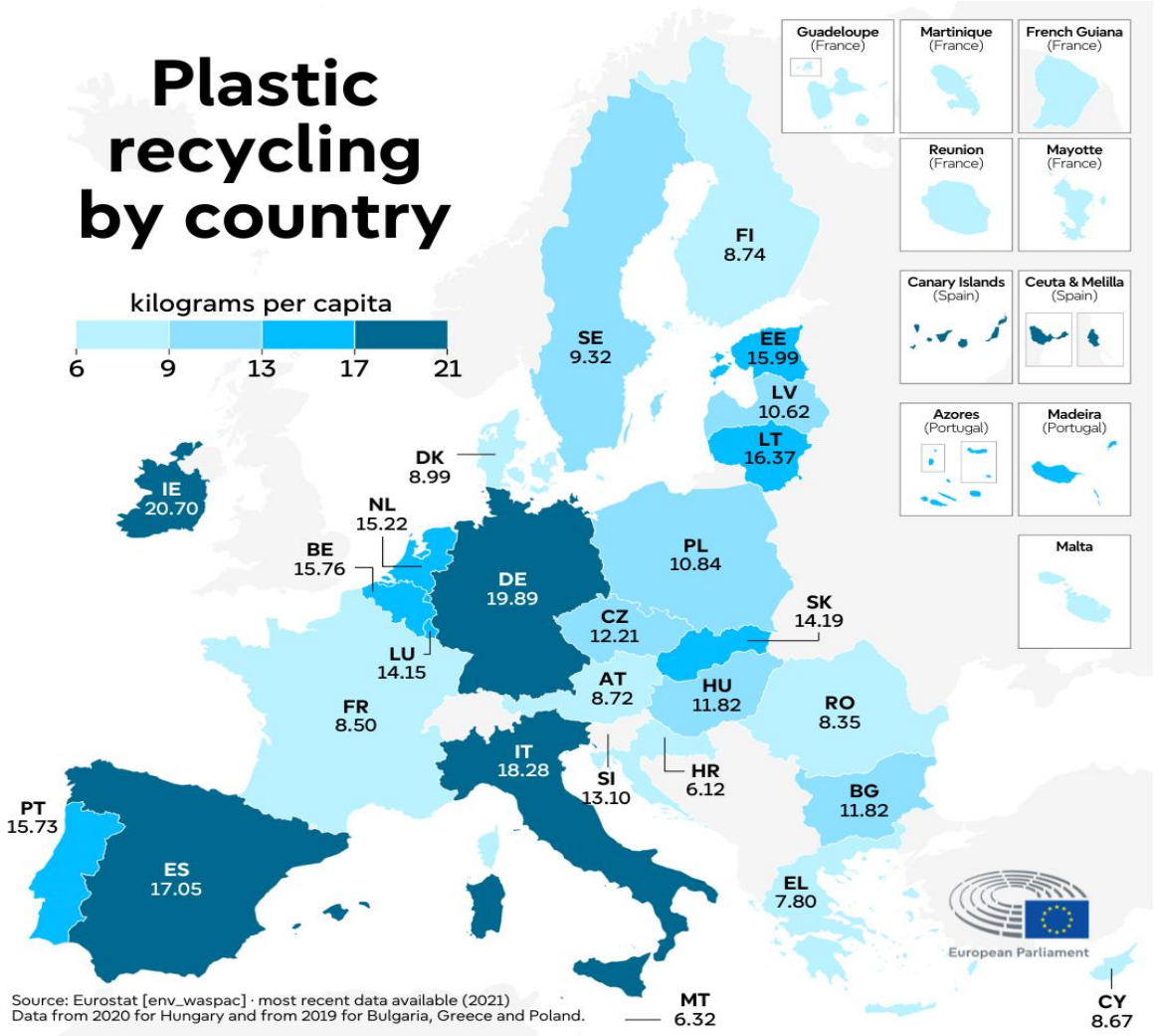
Recycling rates within the EU

- German (Italian and Spanish) **recycling rates are high** compared to other EU countries
- At the same time, **consumption rates peak** in Germany



https://www.europarl.europa.eu/topics/en/article/20181212STO21610/plastic-waste-and-recycling-in-the-eu-facts-and-figures

German recycling rates

- German recycling rates for plastic waste are close to 100 %
- The **definition of „recycling“** – especially the different treatment systems – must be taken into account

Table 1: **Development of recovery rates for packaging waste 1991 to 2020**
(packaging subject to a quota)

	1991	1997	2007	2012	2017	2019	2020
Glass	53.7	83.5	83.7	84.7	84.4	84.1	84.2
Aluminium	16.6	79.7	74.2	91.4	91.1	95.9	96.0
Tinplate	37.1	79.5	91.6	93	90.9	91.5	91.9
Plastics	11.6	61	62.2	99	99.4	99.6	99.7
Paper, cardboard	55.8	88.6	86.9	99.4	99.7	99.8	99.8
Beverage cardboard	0	61.6	66.7	98.8	99.4	99.6	99.6
Total recovery rate	39.2	82.6	79.2	96.3	96.8	96.8	96.9

Source: Gesellschaft für Verpackungsmarktforschung mbH (GVM), 2021; BMUV

https://www.bmuv.de/fileadmin/Daten_BMU/Pools/Broschueren/abfallwirtschaft_2023_en_bf.pdf

Recycling data

About **two thirds** (64.4% or 2.66 million tons) of all plastic waste in Germany were used for **energy recovery** (data from 2023). Of these, more than 2 million were treated in waste incineration plants, more than 1.5 million tons in cement production

More than one third (35% or 5.67 million tons) of all plastic waste in Germany were used for **mechanical and feedstock / chemical recycling** (data from 2023)

Around 0.6% of all plastic waste were **disposed of** (sent to landfills or incinerated in plants without sufficient energy extraction)

„Recycling“ rates in Germany not only include plastic waste treated in mechanical or chemical recycling plants, but also incinerated plastic waste

Plastic recycling system in Germany

1 **Packaging licencing**

Stakeholders: Producers/ Distributors, Dual System operators, Central Packaging Register (ZSVR)

- Packaging companies register with ZSVR and license their packaging. They pay fees to dual systems based on material type and volume

2 **Separate waste collection**

Stakeholders: Private Waste Management Companies, Households, Municipalities

- Households separate their packaging waste
- Municipalities organize waste collection
- Collection is carried out by contracted private collection companies
- Waste is transported to sorting facilities

https://www.how-to-germany.com/recycling-in-germany/

Plastic recycling system in Germany

- More than 280,000 employees
- in around 11,000 companies
- turnover of around 80 billion euros annually
- 14,500 facilities

3 **Waste sorting**

Stakeholders: Waste Management Companies, Sorting Facilities, Dual System operators

- Advanced technologies, are used to sort waste by material
- Plastics are further separated by type (e.g., PET, HDPE, LDPE)
- Manual sorting sometimes requ
- Recyclables are sent to recycling facilities

4 **Recycling and Recovery**

Stakeholders: Recycling Companies, Processing Plants, Dual System operators

Sorted waste is processed:

- **Plastics**: shredded, cleaned, melted down, and processed into granulates or pellets
- Non-recyclable waste -> Waste-to-energy plants
- Landfilling for residuals

Sorting facilities

Waste sorting facilities are indispensable for waste management

Waste disposal plant

How did Germany overcome landfills?

German Landfill Regulation (implementing the EU Landfill Directive, 1999):

- All kinds of waste must be treated before landfilling
- Organic waste must be lower than 5% to got to a landfill
- The landfill must be constructed in a very special way
- Strict observations by authorities
- Aftercare lasts 30 years at minimum

Effects ->

- After 2005 all old landfills are closed
- Landfills in work must follow the landfill regulation
- Separation is improved
- Increasing treatment costs
- Extremely decreasing of waste transport other countries to Germany

What else is Germany doing?

Combination of approaches to tackle plastic pollution

- economic measures (a levy on single-use plastics),
- stronger producer responsibility,
- regulatory design (like tethered caps), and
- a push toward a circular economy (recyclability, recycled content).
- active role internationally by pushing for a global treaty to regulate plastic across its lifecycle.

EU legislative structure for SWM (Sustainable Waste Management)

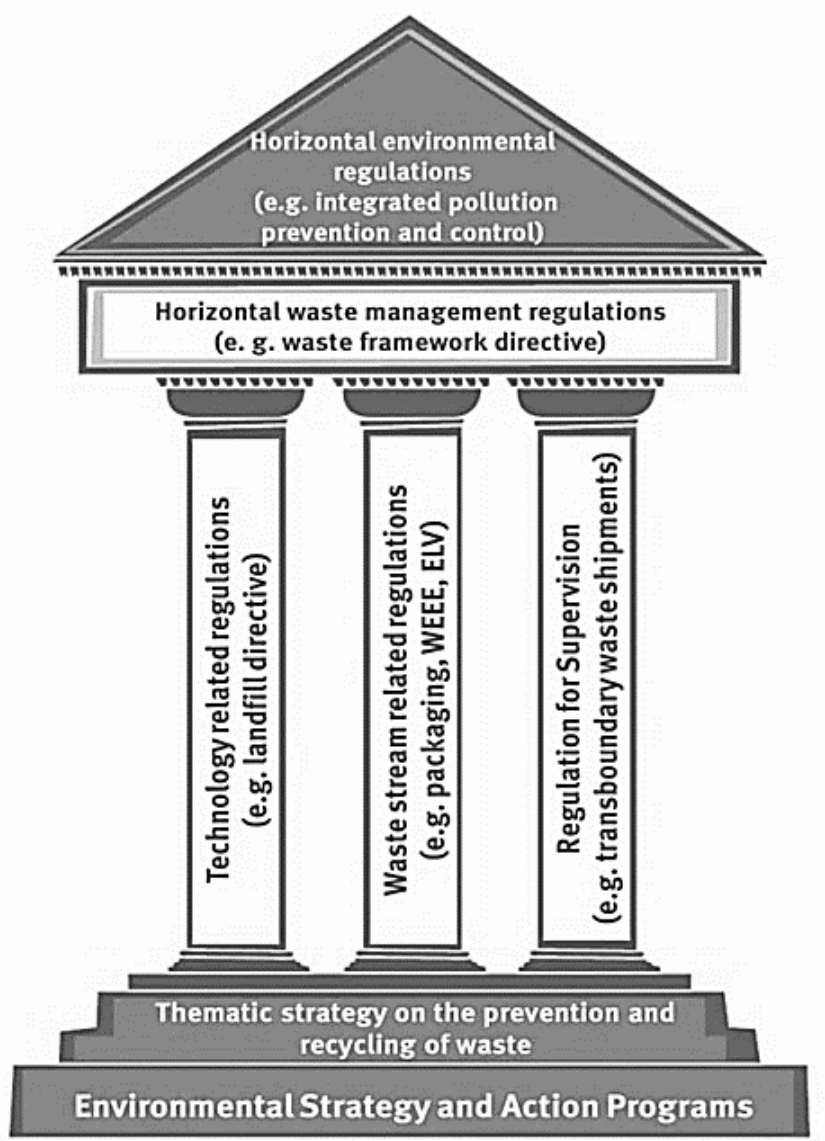
- Overarching aim by the waste hierarchy / based on the EU waste framework directive: **Preventing waste, closing resource loops, transitioning towards an EU-wide circular economy**

- New approaches:

✓ Ban of certain single-use plastics

✓ Almost all packaging must be recyclable

✓ By 2029, 90 % of single-use plastic must be collected separately



Source: UBA

Single-Use Plastics Levy (“Plastic Tax”)

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- Germany passed the *Single-Use Plastics Fund Act* (EWKFondsG), which came into force on **1 January 2024**.
- Under this law, manufacturers (and importers) of certain single-use plastic products must pay a levy into a central fund.
- The rate of the levy depends on the type of product. For example: beverage cups are taxed at €1.236/kg, lightweight plastic carrier bags at €3.801/kg, wet wipes at €0.061/kg, etc.
- Non-compliance can lead to fines (up to €100,000) or even a sales ban.
- The money collected goes into a “Single-Use Plastic Fund,” which helps reimburse public waste-management organizations for cleanup and disposal costs.

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Deposit System

- The *Verpackungsgesetz* (Packaging Act / VerpackG) is central: it regulates packaging, including plastic, under Germany's circular economy efforts.
- As of **1 January 2024**, the mandatory deposit ("Pfand") has been extended to include single-use plastic beverage bottles and cans with certain volumes (e.g., milk and drinkable milk products in plastic bottles).
- This deposit system is meant to incentivize return and recycling, reducing litter and waste.

Circular Economy Strategy

- Germany has a *National Circular Economy Strategy* that explicitly addresses plastics.
- Under this strategy: all packaging must be recyclable; “large-scale recyclability” is to become mandatory by **2035**.
- There are also targets for recycled content in plastic packaging for **2030** and **2040**.
- As part of decarbonization and resource management, Germany has recently allowed (Oct.25) *carbon capture and utilization (CCU)* to produce plastic feedstocks from captured CO_2 (rather than purely fossil sources), which could complement recycled plastics.

Further activities

- **Regulation of Packaging under EU Rules**
  - Germany is aligning its *Packaging Act (VerpackG)* with upcoming **EU Packaging and Packaging Waste Regulation (PPWR)**.

  -> By mid-2026, German law is expected to incorporate the changes required by the PPWR.

  - **Litter Reduction – Design Requirements**

  -> As part of EU-aligned measures, Germany enforces design rules: for instance, since 3 July 2024, loose (detachable) plastic caps on bottles are banned — *tethered caps* (attached) are required.

  -> This reduces the risk of caps becoming litter, since they remain attached to the container and are less likely to be lost.

Challenges and Critics

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- the “plastic tax” doesn’t sufficiently encourage *reduction* of plastic use — it mainly makes producers pay for waste cleanup rather than pushing them to redesign or avoid single-use plastics.
- There is concern about potential bureaucratic burdens on companies (reporting requirements, classification of products).
- Aligning national laws with the PPWR (the upcoming **Packaging and Packaging Waste EU Regulation**) is complex; there are debates around how strict the domestic rules should be versus following the EU minimum.
- Recycling alone is not enough: Germany’s strategy must balance *prevention* (reducing plastic in the first place) with true *recycling*.

Thank you

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Foto: Maximilian Meisse

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