

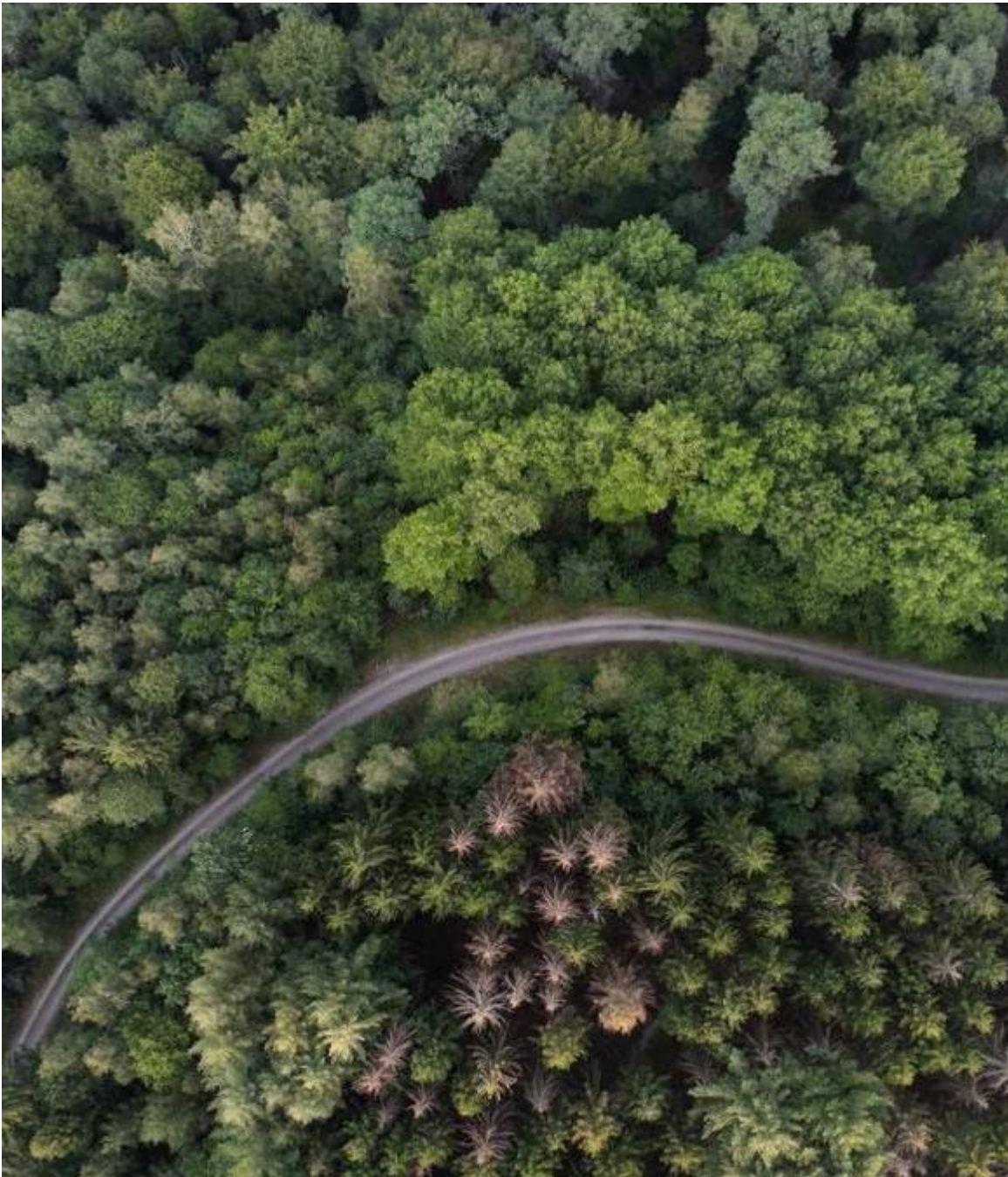


Circular Economy
BDIinitativ

Europes new approach for circular value creation

5. Juli 2024

Dr. Thomas Holtmann, Head of department Environment, Technics and Sustainability



OUR MISSION

The BDI Initiative Circular Economy (CE) is a network of more than **+50 members** that defines the potential of CE and the necessary framework conditions through practical exchange.

To this end, we are in close dialogue with policy makers in **Berlin and Brussels** and with the sciences community.

The concept of CE only works through cooperation and exchange - we are the industry's platform enabling this.

STRUCTURE OF THE INITIATIVE

An overview of our committee structure

Structure

Executive Board

Office

Plenum

30 companies

10 other organisations and associations

25 BDI members-/professionals associations

Ad Hoc Working Groups

- WG Raw Materials, products and services of the circular economy
- WG Technology, digitalisation and standardisation
- WG Climate protection and circular economy

BDI departments and committees

Environment, technology & sustainability

AK CE, SCP & resource efficiency

AK Technology policy

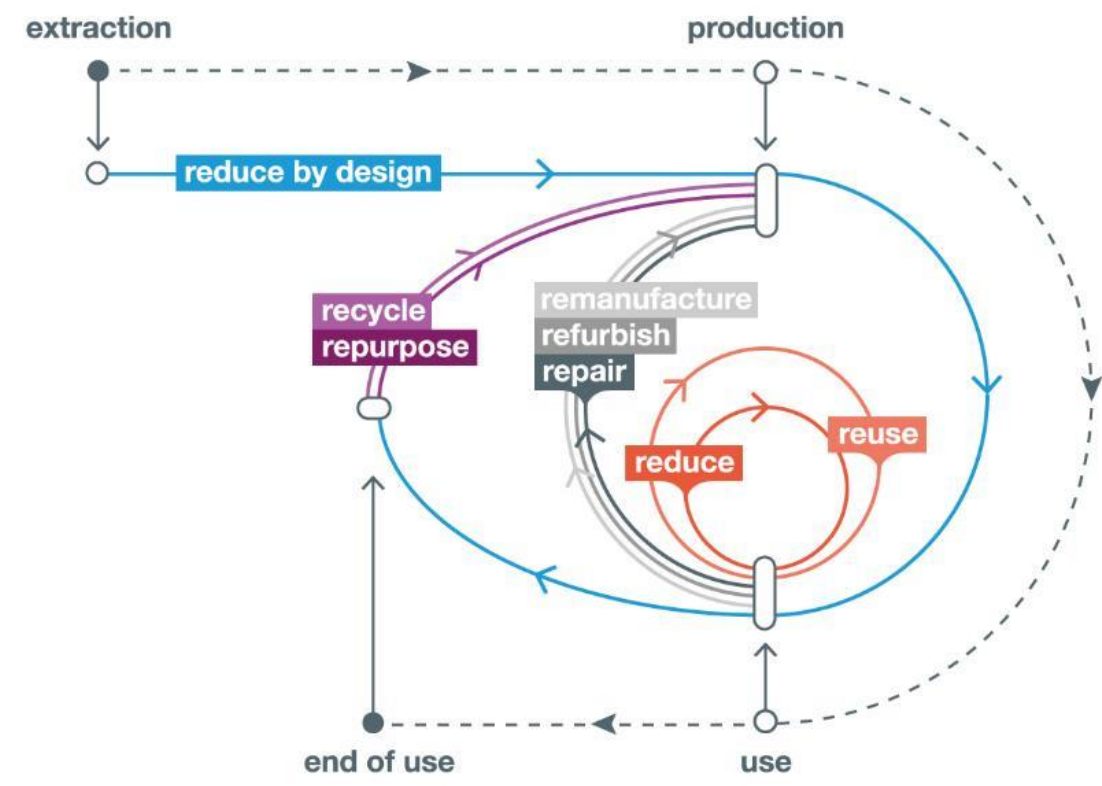
Energy and climate policy

Digitalisation and innovation

Raw materials and safety

STRATEGIES OF THE CIRCULAR ECONOMY

We take the whole life cycle into consideration.



Guiding principle: **reduce by design**

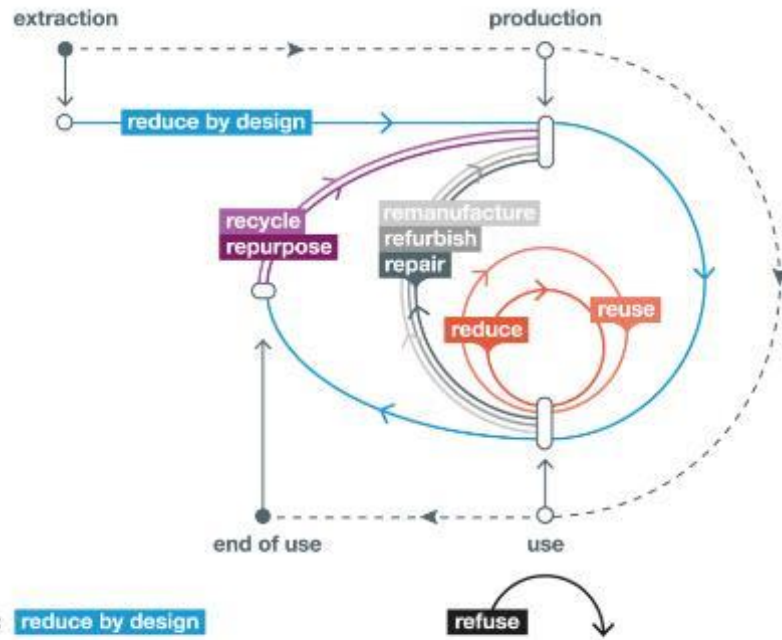


CIRCULAR ECONOMY AS A HOLISTIC CONCEPT

UNEP Circularity-Model & Waste hierarchy



UNEP Circularity Model buildingcircularity.com



Guiding principle: **reduce by design**

Waste hierarchy



EU-Kommission

STATUS QUO

CMU (EU, 2022) = 11,5 %

- Germany 13 %
- Spain 7.1 %

([EUROSTAT](#))

Global Economy is **only 7,2 % circular (2023)**

([Circularity Gap Report](#))

How circular is the German Industry?

- **One quarter** of the manufacturing industry in Germany is already implementing **one** singular circular strategy.
- **Another quarter** of companies also pursue a holistic circular approach that encompasses all strategies.
- **Companies that pursue at least one circular strategy are more successful than non-circular competitors.**

([IW-Studie](#))

CONTRIBUTON OF CIRCULAR ECONOMY TO OUR CLIMATE GOALS

Raw material processing & extraction are responsible for half of global CO2 emissions

([Global Resources Outlook](#), UNEP)

Circular Economy

→ Reduction potential of 56% of CO2 emissions from the use of raw materials in the EU by 2050.

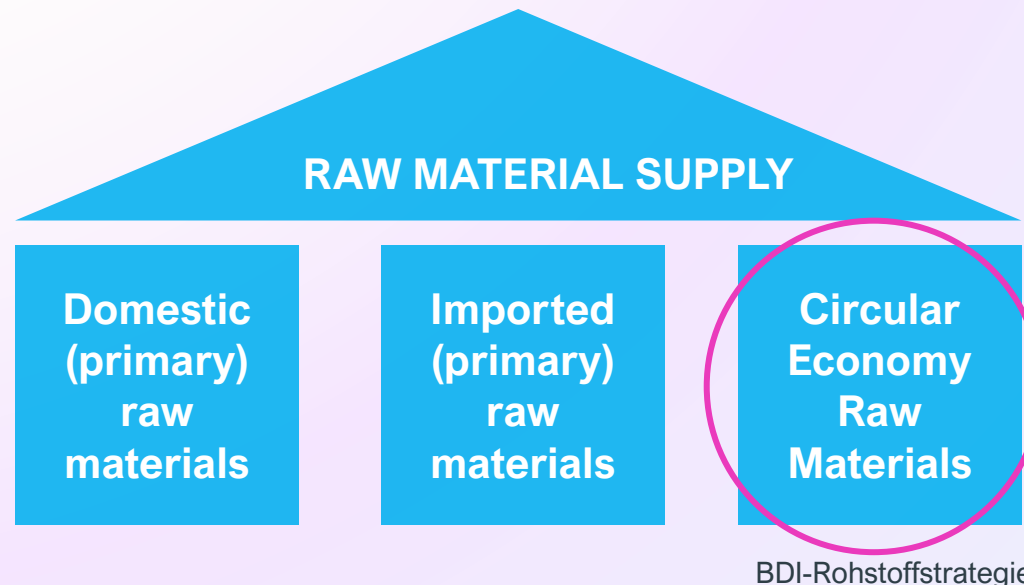
→ Greatest potential in material recirculation, followed by material efficiency and circular business models. ([Material Economics](#))

CONTRIBUTION OF CIRCULAR ECONOMY TO OUR RAW MATERIAL SUPPLY

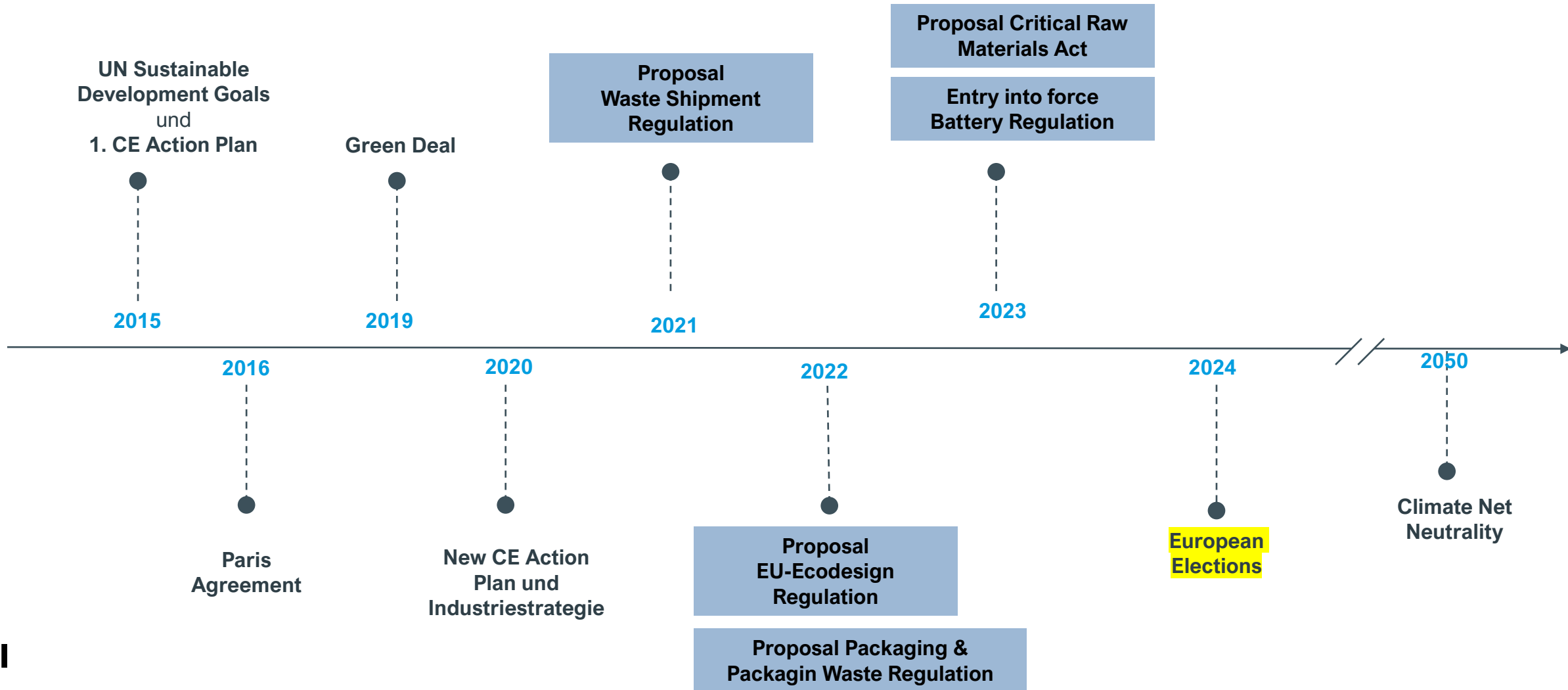
CIRCULAR ECONOMY RAW MATERIALS

The aim of using Circular Economy Raw Materials is to conserve and replace primary raw materials, including fossil fuels, and to return raw materials to the product cycle. This is intended to reduce dependency on imports of primary raw materials, reduce CO2 emissions and achieve greater resilience in value creation networks.

Circular Economy Raw Materials include recyclates and waste in general, which are fed back into the cycle, but also by-products, renewable raw materials and CO2 extracted from processes and the air, when treated in accordance with the waste hierarchy under the German Circular Economy Act.

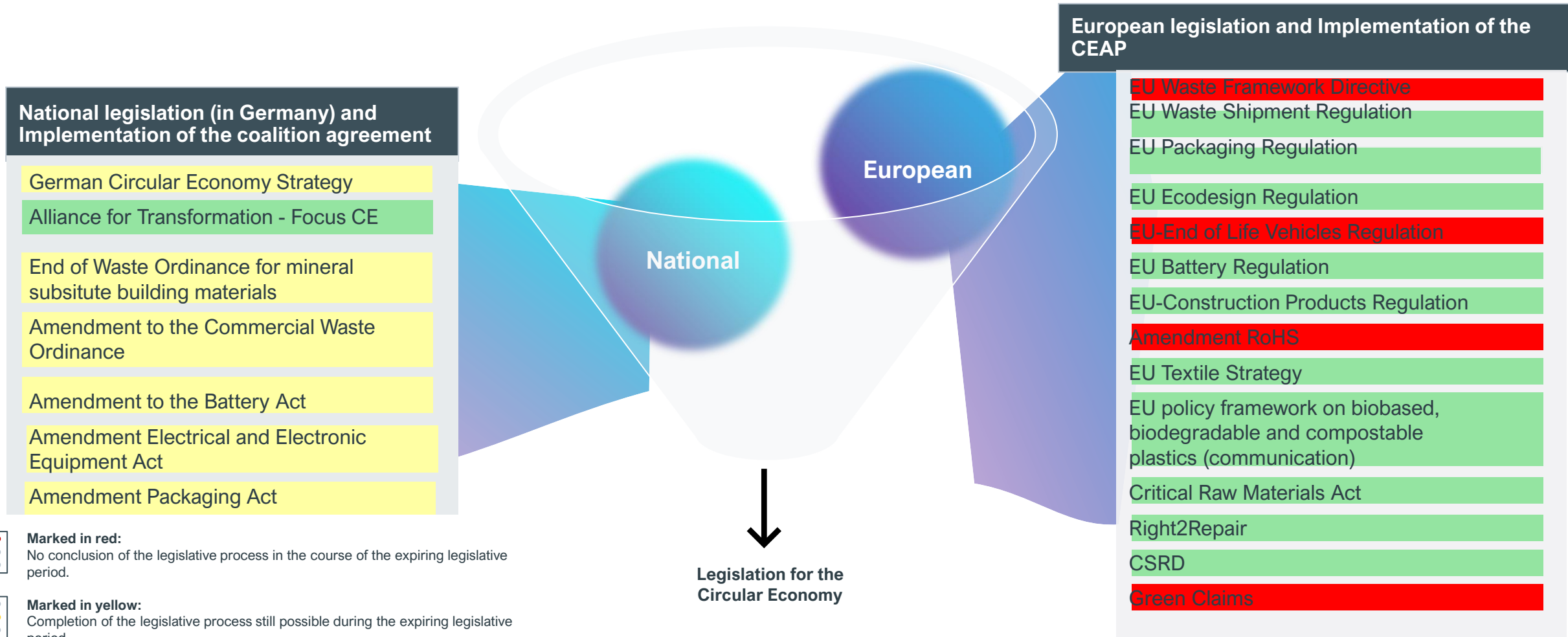


CHRONICLE OF THE EU FRAMEWORK CONDITIONS



CE LEGISLATION AT A GLANCE

Current state at national and European level



Legislation for the Circular Economy

FIELDS OF ACTION

CREATING MARKETS FOR CIRCULAR ECONOMY RAW MATERIALS

- In some material flows, the levers are in the market, in others they are in the legal sphere. Depending on the material flow, the end of the waste property and the by-product property play a central role.
- Improvement of the data situation and measurability for better monitoring of material flows
- Material flow-specific evaluation of “push” and “pull” measures and proportionality of measures
- Coordination of the interfaces of waste, product and chemicals legislation
- In the overall assessment, the ecological advantage of the use of recyclates and by-products should always be examined and ensured
- **There is no single instrument for improving the Circular Economy - rather, a mix of measures is needed that must be designed differently depending on the material flow!**

FIELDS OF ACTION

USING DIGITALISATION & STANDARDISATION FOR CIRCULAR VALUE CREATION

- If implemented correctly, a Digital Product Passport (DPP) is an important lever for new, secure and, above all, standardised product-related data.
- Complex forecasting models can help in product design with real-time data, e.g. on the availability and costs of specific raw materials, and support more precise design for circularity.
- Data rooms for the circular economy are important projects that enable the interfaces for a cross-stakeholder transfer of (sensitive) company data.
- A development and existence of quality standards and norms increases market confidence in recyclates and by-products. When developing norms and standards, the “bottom-up approach” is crucial, i.e., norms and standards should be developed by industry for industry.
- **Digitalisation and standardization can be decisive levers in every step of the value cycle!**

FIELDS OF ACTION

REACHING CLIMATE GOALS WITH CIRCULAR ECONOMY

- Landfill ban on untreated municipal waste in the EU
- In order to be able to evaluate in a holistic approach whether the use of Circular Economy Raw Materials offers a better CO2 balance than the use of primary raw materials, **the development of accounting methods for CO2 savings along the entire value chain is necessary**. For a holistic approach, it must also be considered that (adverse) effects can also arise outside the "own" value cycle.

FIELDS OF ACTION

HARMONISING REQUIREMENTS FOR CIRCULAR PRODUCTS

- Product design will also be based on criteria such as durability, reusability, reparability, recyclability and the use of Circular Economy Raw Materials, particularly as part of the implementation of the EU Ecodesign Regulation. **Those requirements are set for all products put on the European market, including imported goods.**
- The planned requirements are to be created in the coming years through the development of a large number of delegated and implementing acts, as well as through the development of standards. It is of central importance for companies that these criteria are developed in a comprehensible, reliable, realisable, transparent and product-specific manner.
- right balance between a sensible framework and degrees of freedom for companies.
- **We need harmonized regulation and clear intersection to ensure legal certainty for companies!**

CONTACT DETAILS

Get in touch with us.



Dr. Claas Oehlmann

Managing Director BDI-Initiative
Circular Economy

C.Oehlmann@ice.bdi.eu

+49 30 20281606



Inken Carina Sittler

Senior Manager BDI-Initiative
Circular Economy

I.Sittler@ice.bdi.eu

+49 30 20281725



Annika Stuckenhoff

Senior Manager BDI-Initiative
Circular Economy

a.stuckenhoff@ice.bdi.eu

T. +49 30 20281585

MEMBERS OF THE BDI-INITIATIVE CIRCULAR ECONOMY

BDI-Initiative Circular Economy: Platform for industry!

Amazon | **ArcelorMittal S.A.** | **Aurubis AG** | Verband der **Automobilindustrie e. V. (VDA)** | Hauptverband der Deutschen **Bauindustrie e. V. (HDB)** | **BASF SE** | Bundesverband **Baustoffe – Steine und Erden e. V. (bbs)** | **Biotechnologie-Industrie-Organisation Deutschland e. V. (BIO Deutschland)** | **BSH Hausgeräte GmbH** | Verband der **Chemischen Industrie e. V. (VCI)** | **Cirplus GmbH** | **Covestro AG** | **ContainerGrid** | **Cyclize GmbH** | **Deutsche Bahn AG (DB)** | Zentralverband der **Elektro- und Digitalindustrie e. V. (ZVEI)** | Bundesverband der Deutschen **Entsorgungs-, Wasser- und Rohstoffwirtschaft e. V. (BDE)** | **Econsense e.V.** | Wirtschaftsverband **Fuels & Energie e. V. (en2x)** | **Energy from Waste GmbH (EEW)** | **E.ON SE** | **Evonik Industries AG** | **Institut für Baustoff-Forschung (FEhS)** | **Fraunhofer IPK** | Industrieverband **Garten (IVG)** | **Georgsmarienhütte GmbH (GMH)** | Bundesverband der Deutschen **Gießerei-Industrie e. V. (BDG)** | Bundesverband **Glasindustrie e. V. (BV Glas)** | **Heraeus Gruppe** | Industrieverband **Hygiene & Oberflächenschutz (IHO)** | Verband der Deutschen **Holzwerkstoffindustrie e.V. (VHI)** | **Instagrid** | Verband der **Kali- und Salzindustrie e. V. (VKS)** | Fachvereinigung **Kaltwalzwerke (FVK)** | Bundesverband **Keramische Industrie e. V. (BVKI)** | **Knauf Gruppe** | **Kirchhoff Ecotec** | **Karlsruher Institut für Technologie (KIT)** | Gesamtverband **Kunststoffverarbeitende Industrie (GKV)** | **Lanxess AG** | **Leipfinger-Bader GmbH** | Bundesverband der Deutschen **Luft- und Raumfahrtindustrie e. V. (BDLI)** | **LyondellBasell** | **VDMA – Verband Deutscher Maschinen- und Anlagenbau e. V.** | **Wirtschaftsvereinigung Metalle (WV Metalle)** | **Nehlsen AG** | Verband der **Nordwestdeutschen Textil- und Bekleidungsindustrie (vti)** | Unternehmerverbände **Niedersachsen e.V. (UVN)** | Ost-Ausschuss der Deutschen Wirtschaft e.V. (oa) | Bundesverband der Deutschen **Sicherheits- und Verteidigungsindustrie e. V. (BDSV)** | Bundesverband **Deutsche Ziegelindustrie (BVZI)** | **Wirtschaftsvereinigung Metalle e. V. (WVMetalle)** | Die **Papierindustrie e. V.** | **PlasticsEurope Deutschland e.V.** | **PreZero Stiftung & Co. KG** | **Remondis SE & Co. KG** | **Stiftung Gemeinsames Rücknahmesystem Batterien (GRS)** | **Rockwool Group** | Vereinigung **Rohstoffe und Bergbau e. V. (VRB)** | **RWE AG** | **RWTH Aachen – Center for Circular Economy** | **Siemens AG** | Vereinigung der Saarländische Unternehmenverbände e.V. (VSU) | Verband der Deutschen **Sägeindustrie (VSH)** | Wirtschaftsvereinigung **Stahl (WV Stahl)** | Wirtschaftsverband **Stahl- und Metallverarbeitung e. V. (WSM)** | **TecPart e.V.** | Gesamtverband der deutschen **Textil- und Modeindustrie e. V. (textil+mode)** | **Trimet Aluminium SE** | Verband der **TÜV e. V. (VdTÜV)** | **UnternehmerTUM** | **Upstream** | **Veolia S.A.** | Verband der **deutschen Verbundwirtschaft e. V. (VdV)** | Institut der **deutschen Wirtschaft (IW)**

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