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The National Circular Economy Strategy (NCES): key facts at a glance

Why does Germany need a National Circular Economy Strategy?

Raw materials often involve high costs for the environment, climate and industry. An economy that needs more and more new (primary) raw materials is neither economically nor environmentally sustainable in the long term. The economy of the future will be a circular economy that preserves the value of raw materials and products for as long as possible. This will protect our environment and climate, secure the supply of raw materials and benefit industry as well as consumers:

- The extraction, transport and processing of raw materials is harmful to the **environment and climate**. These processes destroy nature, pollute our soil and water bodies with harmful substances, use large quantities of water and cause high carbon emissions. In our economy's key industries, the majority of emissions are indirectly caused by the amount of raw materials used. The reverse is also true: if we use circular economy to conserve raw materials and avoid long transport routes, we are far more likely to achieve our **climate targets** quickly and successfully. We will also preserve valuable natural resources.
- Circular economy is about actively managing risk for **industry**. And it is a market of the future with Germany playing a leading role. Raw materials are often scarce and expensive and supply chains are regularly disrupted or cut off. For many raw materials, we are also dependent on **imports** from a few, often unstable countries. In these geopolitically difficult times especially, this creates a high risk for our industrial society. Circular economy opens up opportunities for new, sustainable growth, reduces the need for primary raw materials, boosts competitiveness and lowers our dependency on imports.

- Circular economy presents **tremendous economic opportunities**: the Federation of German Industry (BDI) and the consulting firm Deloitte forecast an annual increase in gross added value in the German economy of 12 billion euros and the creation of around 120,000 new jobs by 2030. Consulting firm McKinsey estimates the global market potential for circular consumer goods at 650 billion euros per year in the medium term.
- **Consumers** seek genuine choices: products that can be reused instead of discarded after a single use, high-quality goods that last rather than throwaway goods, appliances that can be hired if they do not need to be purchased, and ways to repair items instead of throwing them away. They want environmentally friendly products. Circular economy makes sustainable consumption possible.

What is the National Circular Economy Strategy?

The strategy brings together all of the goals and measures of the German government on the path to a comprehensive circular economy. Every phase of the cycle has to be considered: product design, materials selection, production, a product lifespan that is as long as possible and finally, reuse or recycling. The NCES aims to make sure waste is avoided in the first place. This can be achieved if products are well designed, long lasting and easy to repair, and if raw materials – from building materials and textiles to industrial metals – are kept in circulation for as long as possible. This is technically feasible and makes good economic sense.

The NCES was drawn up on the basis of a broad dialogue with a wide range of stakeholders along the entire value chain. It creates the framework for Germany to be able to tap into the opportunities presented by circular economy and expand its technological leadership in this arena. The promise of quality “Made in Germany” will gain new appeal as “Circularity made in Germany”. We want to continue to drive forward this process together with all those involved.

What does the National Circular Economy Strategy aim to achieve?

1. Reduce the consumption of new (primary) raw materials. Our annual per capita use for consumption and investment in Germany is currently around 16 tonnes. The aim is to significantly reduce this figure by 2045. To achieve this goal, the proposal of the International Resource Panel of the United Nations Environment Programme (UNEP) to achieve an average intensity of raw material consumption of 6-8 tonnes per capita per year worldwide by 2050 serves as guidance. Efforts are already underway to achieve this goal. The energy transition, the phase-out of coal-fired power generation, more resource-

efficient lightweight construction and better waste prevention and recycling are just a few of the important levers we have already set in motion.

2. Close material cycles. Currently, the share of used and reprocessed materials in Germany, known as secondary raw materials, is only 13 percent. The remaining 87 percent are newly extracted (primary) raw materials. We are adopting the EU target of doubling the share of secondary raw materials in raw material consumption by 2030. We will significantly increase the use of recycled raw materials in all key material flows – building materials, plastics and many metals.
3. Increase the security of raw material supply and raw material sovereignty. With the Critical Raw Materials Act, the EU has set the goal of covering at least 25 percent of the demand for strategic raw materials through recycling by 2030. The NCES contributes to making sure this goal is achieved. This will help our economy secure industrial raw materials for the markets of the future, especially in the new geopolitical situation.
4. Prevent waste. We aim to produce ten percent less waste per capita by 2030 and 20 percent less by 2045, compared to 2020.

What measures are included in the National Circular Economy Strategy?

The strategy includes a broad set of measures for achieving the stated goals – from legislative proposals and the use of digital technologies to public procurement, support programmes, research, training and knowledge transfer. The measures cover all relevant areas of circular economy. Some examples include:

- Realign product design and apply a circular approach to industrial processes – because how well circularity works starts at the product design stage. Production must use resources efficiently and products must be designed for reuse. In future, the aim is for more and more products entering the EU internal market – from fridges and smartphones to jeans – to be designed from the outset to be durable, repairable and recyclable. The German government is working to achieve this goal through the design and implementation of the European Ecodesign Directive and the new Ecodesign Regulation.
- Promote sustainable consumption – to enable consumers to choose circular products. Many people want products to be durable and easier to repair. The German government will therefore effectively implement the European right to repair and support repair initiatives in Germany. To make environmentally friendly and resource-efficient products clearly recognisable upon purchase, the German government is

continuing efforts to combat greenwashing and supports the creation of an environmental label for resource-efficient software.

- Improve digitalisation – because digital information is essential to interlinking the individual parts of a cycle. What's more, digitalisation and new data spaces are technological drivers. The Digital Product Passport is the key tool here. The idea is for it to contain all relevant information about a product, for instance, the materials used and how to repair it. Germany is working to ensure that the passport is introduced across the EU by 2030 for all important product groups.
- Use public procurement as a lever – the federal government, federal states and municipal authorities are important market players. If the public sector collectively demands durable, efficient and recyclable products, the supply of these products will increase. In the process, they will also show other market players what is possible and economically viable in the long term. This is just as true for the purchase of computers as it is for the construction of public buildings. For example, recycled secondary raw materials can be used to construct buildings and existing components reused, also for renovations. This is why we want all legal requirements and procurement guidelines to be aligned with the principles of circular procurement.
- Further close material cycles – considerable potential still exists in many areas and the benefits, especially for our industry, are significant. This is why we want to gradually further develop the existing legal framework, for example, through minimum targets for recycled material content at EU level and new initiatives to secure the supply of strategic industrial raw materials through recycling.

What is next for the National Circular Economy Strategy?

The German government has adopted the National Circular Economy Strategy and created the necessary framework to reduce primary raw material consumption and close material cycles. The strategy therefore creates a comprehensive basis for future activities. To implement the strategy, the broad-based and successful dialogue with industry, civil society and the scientific community will continue as part of a circular economy platform.