

G7 Berlin Roadmap on Resource Efficiency and Circular Economy (2022-2025)

Building on the Toyama Framework on Material Cycles adopted in 2016 and the Bologna Roadmap adopted in 2017,

Recalling the findings of the Global Resources Outlook 2019 by the IRP¹ and the Global Material Resources Outlook to 2060 by the OECD² that global resource consumption tripled between 1970 and 2017 and, in a business-as-usual scenario, is projected to double between 2017 and 2060,

Recognising that one third of air pollution, half of global greenhouse gas emissions and 90% of biodiversity loss and water stress are caused by the extraction and processing of material resources³, and that societies and economies depend on a healthy environment,

Understanding that, hence, the 2030 Agenda for Sustainable Development and its SDGs, the global climate goals of the Paris Agreement as well as our joint ambitions to protect, conserve, restore and sustainably use biodiversity as well as to prevent and fight pollution cannot be achieved without the transition to a more resource efficient and circular economy, leading to a reduction in global demand for primary resources and the sustainable use of resources across the whole life cycle,

Emphasising the important role of resource efficiency and circular economy in increasing the resilience of our economies, including supply chains, in particular with regard to critical minerals and raw materials, in line with relevant national and regional policies,

Highlighting the importance of the work of the G7 Alliance on Resource Efficiency as well as cooperation with other countries and stakeholders,

We decide to foster and intensify our joint work on resource efficiency and circular economy by committing to the following general approach and actions.

¹ <https://www.resourcepanel.org/reports/global-resources-outlook>

² <https://www.oecd.org/env/global-material-resources-outlook-to-2060-9789264307452-en.htm>

³ Biomass, fossil fuels, metals, non metallic minerals. See <https://www.resourcepanel.org/reports/global-resources-outlook>

General approach

With the Berlin Roadmap, the G7 Alliance on Resource Efficiency (ARE) adopts a systemic approach, aiming to promote resource efficiency and circular economy across all relevant sectors. In so doing, the Alliance members aim to contribute to reducing the climate, biodiversity and pollution impacts of material use, including by promoting the sound management of chemicals, throughout the entire life-cycle of products.

At the same time, we aim to maximise the effectiveness and efficiency of our action by taking into account the scientific research findings on high-impact sectors, products, materials and waste streams and the need for sector-specific measures, giving priority to those actions that simultaneously address multiple environmental challenges.

Relevant action should consider the social dimension of resource efficiency and circular economy measures, including the often disproportionate effect of environmental impacts on disadvantaged communities, and promote adequate and gender-inclusive engagement from Indigenous Peoples and stakeholders, in particular business, academia and civil society, including youth. In doing so, we also seek to explore cooperation and collaboration with other existing global and regional initiatives, including the G20 Resource Efficiency Dialogue.

Relevant actions should also promote policy complementarity between, inter alia, sustainable resource management, innovation and trade policies and strengthen implementation of policies for circularity coupled with decarbonisation.

In line with the approach adopted with the Bologna Roadmap, actions under the Berlin Roadmap maintain the necessary flexibility. During the three-year duration of the Roadmap, the respective G7 presidencies are invited to facilitate the implementation of the actions below, inter alia by convening meetings of the ARE and G7 workshops as well as ensuring stakeholder engagement.

Overarching actions:

With these considerations in mind, we will:

- Deepen our exchange on how resource efficiency and circular economy can be used to achieve our environmental goals,
- Continue and deepen the exchange within the G7 on methodologies and data used to develop and track progress towards relevant national or regional goals, indicators and targets,

- Deepen the exchange on eco-design of products with a life-cycle perspective, with a view to reducing the environmental impact and increasing, inter alia, resource efficiency, durability, reusability, reparability and recyclability, as well as on value retention processes, waste prevention, renewable materials, material substitution and the uptake of recycled content,
- Promote relevant research and development on, and facilitate the cross-sectoral application of, resource-efficient technologies and measures, e.g. regarding lightweighting or biobased solutions, taking into account the need for a net-positive environmental outcome,
- Exchange on sustainable and circular business models, such as product-as-a-service,
- Exchange on and promote measures and standards on product environmental information, including for the prevention of greenwashing and false green claims, and on best practices relating to sharing relevant product environmental information along value chains,
- Deepen the exchange on Green Public Procurement (GPP) and identify effective ways to leverage GPP for the transition to a more resource-efficient and circular economy, notably by giving preference to the most sustainable products,
- Share relevant information and promote sustainable material management and circularity at the international level,
- Promote integrated solutions with co-benefits for sustainable development, biodiversity protection and climate change adaptation and mitigation such as Nature-based Solutions.

High-Impact Value Chains

To maximise our impact and being informed by relevant research such as that of the IRP, the OECD, the European Commission's Joint Research Centre as well as national research agencies and stakeholders' research such as that of the Ellen MacArthur Foundation, we will focus in particular on the following sectors and topics:

- Construction and buildings
- Food loss and waste
- Information and Communication Technologies (ICT) and electronics
- Mobility
- Plastics
- Textiles and fashion
- Waste management, recycling technologies, transboundary movements of waste

List of specific activities (non-exhaustive)

| Topic |
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| Cross-sectoral activities |
| Establish a new workstream dedicated to identifying effective ways to use resource efficiency and circular economy as tools for achieving and stepping up our NDCs as well as global biodiversity targets and national biodiversity strategies and action plans |
| Continue and deepen the exchange within the G7 on methodologies and data used to develop and track progress towards relevant national or regional goals, indicators and targets (including the link between climate, biodiversity and pollution reduction goals), as well as global resource flows |
| Develop Circular Economy and Resource Efficiency Principles (CEREP), a set of principles to encourage companies to establish initiatives on circular economy, to promote engagement with the public and the financial sector, and to promote their voluntary circular economy and resource efficiency actions, |
| Share relevant information and promising methods for studying the environmental impacts of products (goods and services), focusing in particular on Life Cycle Assessment (LCA) based methods |
| Exchange on tools and best practices for the development and diffusion of high quality product environmental information and the prevention of greenwashing and false green claims, and on best practices relating to sharing relevant products information along value chains |
| Exchange on promoting circularity in technologies needed for decarbonisation (e.g., EV batteries, zero-emission equipment and vehicles, solar panels, wind turbines), in particular with regard to critical minerals and raw materials, contributing to securing the supply of these raw materials |
| Exchange on and promotion of lightweighting as an enabler of resource efficiency |
| Exchange on Green Public Procurement as enabler of circularity |
| Sector-specific activities |
| Exchange on value retention processes and circularity measures for ICT products, such as durability, repair, reuse, refurbishment |
| Exchange on measures to achieve SDG 12.3 on food loss and waste |
| Exchange on circularity in plastics |
| Exchange on circularity and resource efficiency in textiles and fashion |
| Exchange on circular bioeconomy |
| Exchange on the decarbonisation of the waste sector |