

Joint Workshop of the G7 Alliance on Resource Efficiency and the Global Alliance on Circular Economy and Resource Efficiency

The Resources-Climate Nexus and the Circular Economy: Considerations for the COP28, Global Stocktake and the NDC updates

Summary and main takeaways

Concept:

The workshop was part of the [newly established work stream of the G7 Alliance on Resource Efficiency \(ARE\)](#) on the resources-climate-biodiversity-nexus.¹ It was jointly organised by the German Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV) and the [Global Alliance on Circular Economy and Resource Efficiency \(GACERE\)](#), with valuable contributions from the [International Resource Panel \(IRP\)](#) and the [One Planet Network](#). High-level speakers included Janez Potočnik (Co-Chair, IRP), Jim Skea (Chair, IPCC) and Jorge Laguna Celis (Director, One Planet Network).

The event was part of a series of activities linked to the abovementioned G7 work stream, including a side event on the same topic at the German pavilion at COP27 (see summary [here](#)). Building on previous discussions and with COP28 around the corner, the workshop zoomed in on the role of resource efficiency and circular economy for global climate action at COP28, in the [Global Stocktake](#) and in upcoming NDC updates.

Contents and structure:

After opening remarks by BMUV (Dr. Bodo Linscheidt) and UNEP (Djaheezah Subratty, on behalf of GACERE), the first half of the workshop was focussed on scientific evidence for the climate action potential of resource efficiency and circular economy, as well as practical solutions and tools, with contributions from Janez Potočnik, Jim Skea and Jorge Laguna Celis. The second half consisted of presentations by government representatives (Japan, Switzerland, Morocco, Ecuador, Netherlands) on national policies and examples of international cooperation. Both workshop parts provided opportunities for all participants to contribute to the discussions and engage with speakers.

Key conclusions from the discussions:

- The current way in which we extract, transform and use natural resources is a main driver for the triple planetary crisis of climate change, biodiversity loss and pollution.
- Current NDCs are not sufficient to limit global warming to 1.5 or even 2 degrees Celsius; only 27% of NDCs explicitly mention circular economy.

¹ For further information on the G7 ARE, please visit <https://www.g7are.com/>



- There is strong scientific evidence in the work of the IRP², the IPCC³ and other institutions⁴ that resource efficiency and circular economy can have a significant GHG-mitigation effect.
- Shared view that while supply-side measures such as circular production processes must be fully leveraged, additional attention should be given to the demand side (e.g. behaviour change, sufficiency measures).
- The upcoming Global Resources Outlook 2024 by the IRP will provide further insights into this nexus. While the 7th assessment cycle of the IPCC is only beginning, existing research points to the necessity to study the mitigation potential of resources-related and demand-side measures more in-depth.
- A recurring challenge is that through circular economy and resource efficiency interventions there are mitigation and adaptation benefits along entire value chains that can raise climate ambition and benefits. However, emissions mitigation accounting methodologies that consider the life-cycle emissions of materials have not been developed yet and it is difficult to attribute life-cycle emissions across the (IPCC GHG inventory) sectoral categories.
- A practical solution for governments can be the new toolbox “[Building Circularity into Nationally Determined Contributions \(NDCs\)](#)”, jointly developed by UNEP’s One Planet Network, UNDP and UNFCCC with funding from [Sitra](#) and the Government of the Netherlands, that aims to support countries to assess, integrate, implement and track circular economy interventions to raise the ambition of their nationally determined contributions.
- A particularly important area for future cooperation, especially for the IRP and the IPCC, could be the improvement of databases, the quantification and modelling of the mitigation effects of resource-related interventions as well as the harmonisation of different approaches globally. A starting point could be leveraging and building on existing databases and multi-regional input-output tables (MRIOT), including the [IRP’s Global Material Flows Database](#).⁵
- Governments need to show leadership by taking scientific results into consideration when updating their NDCs. Another decisive lever is setting the right market signals to avoid disincentives for environmentally responsible behaviour.
- Some governments already show concrete leadership, for example by systematically considering circularity in their NDC (e.g. Japan), linking circular economy to their long-term climate strategy (e.g. Morocco), implementing cleaner production agreements (e.g. Ecuador), setting an ambitious climate goal linked to an implementation programme for the circular

² e.g. <https://www.resourcepanel.org/reports/global-resources-outlook>

³ e.g. <https://www.ipcc.ch/report/sixth-assessment-report-working-group-3/>

⁴ e.g. by GACERE

(https://wedocs.unep.org/bitstream/handle/20.500.11822/40296/GACERE_WPCECC.pdf?sequence=1&isAllowed=y), GIZ (<https://www.giz.de/de/downloads/giz2021-en-circular-economy-cornerstones-paris-agreement-3.pdf>) or the Ellen MacArthur Foundation (<https://emf.thirdlight.com/file/24/cDm30tVcDDexwg2cD1ZEczjU51g/Completing%20the%20Picture%20-%20How%20the%20circular%20economy%20tackles%20climate%20change.pdf>)

⁵ e.g. [GLORIA](#), [Exiobase](#), [OECD ICIO](#)

economy (e.g. the Netherlands) or linking circular economy measures and climate policy in the construction sector and public procurement (e.g. Switzerland).

- Leveraging resource efficiency and circularity for climate action must be a cross-regional, multi-stakeholder and interdisciplinary effort. Frontrunners on the topic should join forces to give it an adequate platform at COP28 and beyond.

Knowledge partners:

