Für Mensch & Umwelt



European Resources Forum (ERF) 2022

Welcome to Parallel Session 5: Indicators, targets, data

"Monitoring Europe's resource flows and stocks and defining targets"

Philip Nuss (session host) Section I 1.1: Fundamental Aspects, Sustainability Strategies and Scenarios, Sustainable Resource Use German Environment Agency (UBA)

Agenda

Welcome and session introduction (*Philip Nuss, UBA*)

- 1. New methods and indicators supporting policies for sustainable consumption in Sweden (*Nils Brown, Statistics Sweden*)
- 2. The central role of material stocks for resource and energy efficiency (*Tomer Fishman (CML Leiden) and Dominik Wiedenhofer (BOKU Vienna*))
- 3. Comparing the EU consumption footprint against planetary boundaries (*Esther Sanyé-Mengual, European Commission Joint Research Centre (EC JRC)*)

10 min presentation, 5 min Q&A (using the chat function)

Resource / CE Monitoring

- Monitoring natural resource use is a central part of the German Resource Efficiency Programme (ProgRess) (BMUV)
- Overarching goal is to decouple economic growth from resource consumption and associated environmental impacts and foster the competitiveness of the economy
- Natural resources are "means found in nature that can be beneficial for humans. These include renewable and non-renewable primary raw materials, physical space (or surface), flow resources such as geothermal, wind, tide, and solar energy, environmental media (water, soil, air), and ecosystems" (VDI, 2018).
- <u>Current indicators:</u> Total raw materials productivity, material footprint, recycling, material stocks, and others
- Necessary future indicator developments as highlighted in <u>ProgRess III</u> (2020):
 - Cover additional resource categories and environmental implications
 - Make use of footprint indicators (life-cycle perspective)
 - Differentiate impacts by life-cycle stage



Ideas for a possible monitoring framework structure

Resource category (examples)	Resource use (pressures)		Resource consumption (impacts/damages)	
	Territorial	Footprint	Territorial	Footprint
(Raw) Materials	(Raw) mat	erials use	Materia	losses
Materials sub- indicators*	Level of circularity, material stocks, material losses/dissipation, progress toward 1.5°C society, etc.			
Land & Soil	Land	use	Reduced lan	d/soil function
Water	Water	ruse	Water	stress
Atmosphere	GHG & air	emissions	GHG / air emi	ssions footprint
Ecosystems	Nature's contrib	ution to people	Ecosystem	impacts
(Single score)			Consumption	n footprint

Source: UBA Ideas for Resource Indicators based on https://doi.org/10.1016/j.resconrec.2021.105858