

Whole of supply chain perspective on material flows in Asia and the Pacific

Knowledge products for sustainability policy

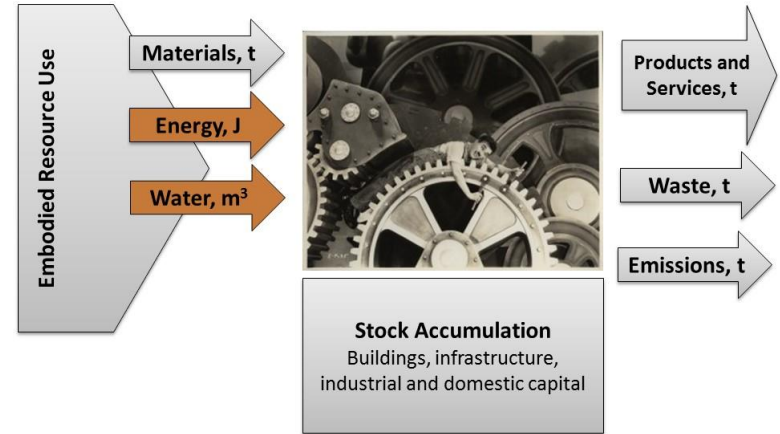
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Knowledge products for sustainability policy

- Sustainability policy – complexity, contestation, uncertainty and ignorance
- Sustainability science – theory, methods, data and indicators to measure and model sustainability
- Sustainability policy – practical and actionable knowledgebase

Material flow accounting

- resource efficiency – SDG 8.4
- sustainable materials management SDG 12.2
- waste minimization – SDG 12.5
- greenhouse gas abatement – SDG 13



UN Regional office for Asia and the Pacific

- ESCAP and UNEP spearheading international data and indicator development
- Resource Efficiency: Economics and Outlook (2011)
- SCP policy needs assessment (2014) and Handbook for Policy Makers
- Indicators for a Resource Efficient and Green Asia and the Pacific (2015)
<https://www.unenvironment.org/regions/asia-and-pacific/regional-initiatives/supporting-resource-efficiency/indicators-resource>
- Complementarities report

IRP Global Material Flow and Resource Productivity Database

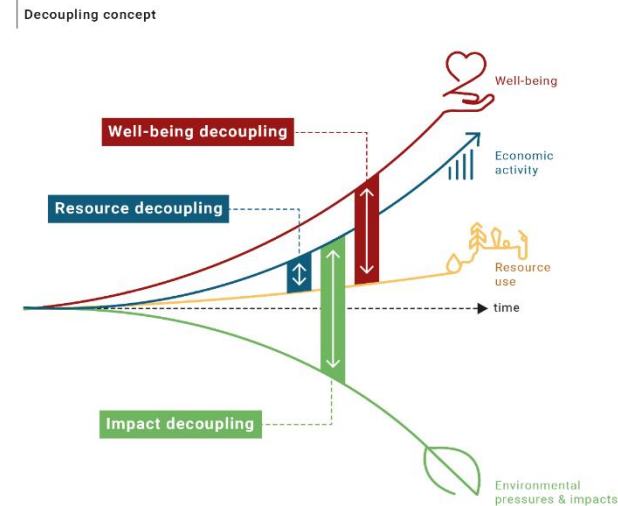
- A **coherent account of material use in the global economy** and for every nation, complementary to the System of National Accounts
- A **large data set for 1970-2017** and most countries of the world. Direct and consumption-based material flow indicators for seven world regions and for individual countries, covering total usage, per capita use and material use per US\$.
- **Data is available at <http://www.resourcepanel.org/global-material-flows-database>**
- The new information will **help identify opportunities, risks and vulnerabilities related to the global supply of primary materials** and show the potential for efficiency gains and reductions in material use in the global economy

IRP Modelling and Scenarios

- A modelling and scenario capability of the IRP
- Multi-model framework with a core multisector, multi-region general equilibrium economic model
- Baseline scenario 'Historical Trends' for material use, GHG emissions and land use
- Population and GDP trends from OECD
- Alternative Scenarios 'Resource Efficiency', 'Climate Mitigation' and 'Towards Sustainability'

IRP Global Resource Outlook

- IRP **regular flagship report** for UNEA
- historical trends for material, water and land use
- **environmental impacts** of resource use consistent with pressures
- **four scenarios** for global and country by country population, economic growth, material and energy use, GHG emissions, land use
- **policy options** for accelerating decoupling



Source: Redrawn from IRP, 2017.

Sustainable Consumption and Production Hotspot Analysis Tool

- **Online tool** to inform policy community, statistical offices and general public at <http://scp-hat.dsan.eu/>
- Based on a global, multi regional input output database and satellite accounts to establish territorial and footprint data
- Module 1 – **Visualization of trends** for materials and GHG emissions
- Module 2 - **Identification of hotspots** (sectors, trade)
- Module 3 – Facility for analysing national data in a global context

Thank you

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