Material flows and resource productivity - OECD work

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OECD work on material flows and resource productivity

Background

• **Initiated in 2000**
  - Recommendations by OECD Council (2004, 2008)
  - Requests by G8 / G7 Heads of State and Government

• **Embedded in work on**
  - Environmental performance and information
  - Green growth

• **Two main works streams**
  - Information, knowledge and reporting → data, indicators, accounts
  - Policy analysis and guidance
  - International co-operation: Eurostat, UNEP IRP
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Work streams

Knowledge base

Measurement and reporting
- Data, indicators
- Reports

Methods, principles & guidance
- Material flow analysis/accounts
- Indicator development, use and interpretation

Policy analysis & guidance

Policy principles and guidelines
- Sustainable materials management
- Circular economy
- Sustainable manufacturing
- Eco-innovation, trade
- Green growth

Policy assessments
- Country peer reviews

International work and initiatives
- OECD Council Recommendations
- OECD Green Growth Strategy
- G8 / G7 initiatives: 3R Action Plan
- UNEP International Resource Panel
- EU Resource efficiency roadmap / circular economy package
- System of environmental-economic accounting (SEEA)
- Sustainable development goals
- Business sector
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Main outputs

• **OECD guide on measuring MF & RP, including MF accounts (2008)**
• **Database on material flows (since 2006)**
  • Eurostat methodology
  • EU data, expanded to OECD countries and beyond, BRIICS, …
  • Collaboration with research institutes
  • Time series from (1980) 1990-2012

• **Indicators**
• **Reports**
  • Material resources, productivity and the environment(2014)
  • Policy Guidance on Resource Efficiency (2016): response to G7 request, coordinated with UNEP
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Headline indicator

Green Growth indicators

Core Set of environmental indicators

(Raw) Material productivity

(Raw) Material consumption intensity

Thematic set of MF and RP indicators

Database on MF

(Raw) Material productivity

total, non energy, by material group

Changes in stocks of mineral resources
Recycling and recovery rates for selected materials

Database on MF
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Key messages from OECD report

- Unprecedented growth in demands for raw materials world-wide
- Slower growth in OECD countries; first signs of decoupling
- But material consumption in OECD countries is still 60% higher than the world average
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Current work and planned developments

• **Further development of the information basis**
  • Demand-based measures of material flows (footprints) with UNEP-IRP and Eurostat; expert workshops on methodologies and indicators (2014, 2015, 2016-17)
  • **Filling data gaps** concerning secondary raw materials, recycling, recovery, circular economy, → link to waste flows
  • Linking MF to **natural resource stocks/reserves** (asset accounts)
  • Updating the OECD guide on **Material flow accounts** (tbc)

• **International cooperation to set up a global capacity for monitoring material flows**
  • Cooperation with UNEP IRP and Eurostat to ensure global coherence: Eurostat database (mandatory) ↔ OECD database ↔ UNEP-IRP database (2015) on UNEP life
  • Cooperation with UNSD to ensure coherence with the SEEA
  • Link to the monitoring of the SDGs: global and regional reporting