UNECE Task Force on Measuring Circular Economy

An Expert Group established under the auspices of the Conference of European Statisticians (CES)

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What is the Conference of European Statisticians?

Term “European” is sometimes a bit misleading, the geographical scope is wider

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Conference of European Statisticians – UNECE governing body in statistics:

- **Heads of NSOs of 65 countries:**
  - 56 UNECE Member States, including EU, Canada, Russian Federation and United States
  - All other OECD countries: Australia, Chile, Colombia, Japan, Republic of Korea, Mexico, New Zealand
  - Some additional countries: Brazil, South Africa
- **Chief Statisticians of international organisations:**
  - CIS-STAT, Eurasian Economic Commission, Eurostat, OECD, IMF, World Bank, UNSD, etc.
- **A number of partner organisations:**
  - Specialized UN agencies, regional commissions and several organizations interested in statistics for SDGs

Why did the CES Bureau decide to establish a Task Force on measuring CE?

- CES select key topics for an in-depth review every year to
  - improve coordination of statistical activities in the UNECE region
  - identify gaps or duplication of work
  - address emerging issues
- Measuring Circular Economy was chosen for an in-depth review in February 2020; paper was presented to CES Bureau in October 2020:
  - Authors: Finland (lead), Belarus, Canada, Netherlands, the European Environment Agency (EEA), Eurostat and OECD
  - Inputs also provided by Colombia, UNECE, UNSD and UNEP
- The in-depth review recommended to establish a Task Force for developing guidance on measuring CE
- CES Bureau approved ToR in February 2021

Main measurement issues identified by the in-depth review

- **There is no single or internationally agreed upon definition of a circular economy**, but all definitions used have many common elements. This results in several important measurement issues related to:
  - Measurement scope
  - Definitions and classifications
  - Data availability and fitness
  - Coordination across institutions and within the NSO
  - Demand and expectations by users (e.g. policy makers, research etc.)
  - Dissemination
  - Other

Example Measurement Scope

Conceptual issues

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- Which **activities** are within the measurement scope?
  - Some economic activities are widely accepted as being integral aspects of circularity, e.g. recycling
  - For many activities (especially in the service sector) this is less clear, e.g. design, leasing and maintenance.
- Which **resources** are withing the measurement scope?
  - Clear for most materials and resources
  - What about freshwater and energy?
- Which **thematic areas** are in the measurement scope?
  - Clear for material flows and waste
  - Less clear for areas which are interlinked: climate change, social aspects and employment, etc.

Example Measurement Scope

Policy focus differs in countries and regions

- **Finland:** Measure the share of CE related activity in different industries
- **Canada:** Measure progress towards achieving the goals set out tin the Canada-Wide Action Plan on Zero Plastic Waste
- **Mexico:** Benefits obtained in each product cycle
- **Colombia:** Transformation of production chains
- **EU Action Plan themes:**
  - Climate change – link with resource extraction and processing
  - Employment
  - Product policies (design, sustainability principles)
  - Value chains: electronics and ICT, batteries and vehicles, packaging, plastics, textiles, construction and buildings, food, water and nutrients
  - Intermediary products such as steel, cement and chemicals
  - Business models
  - Secondary raw materials
  - Production processes
  - Waste
  - Urban/city level

Presentation of CE-related information

Different approaches

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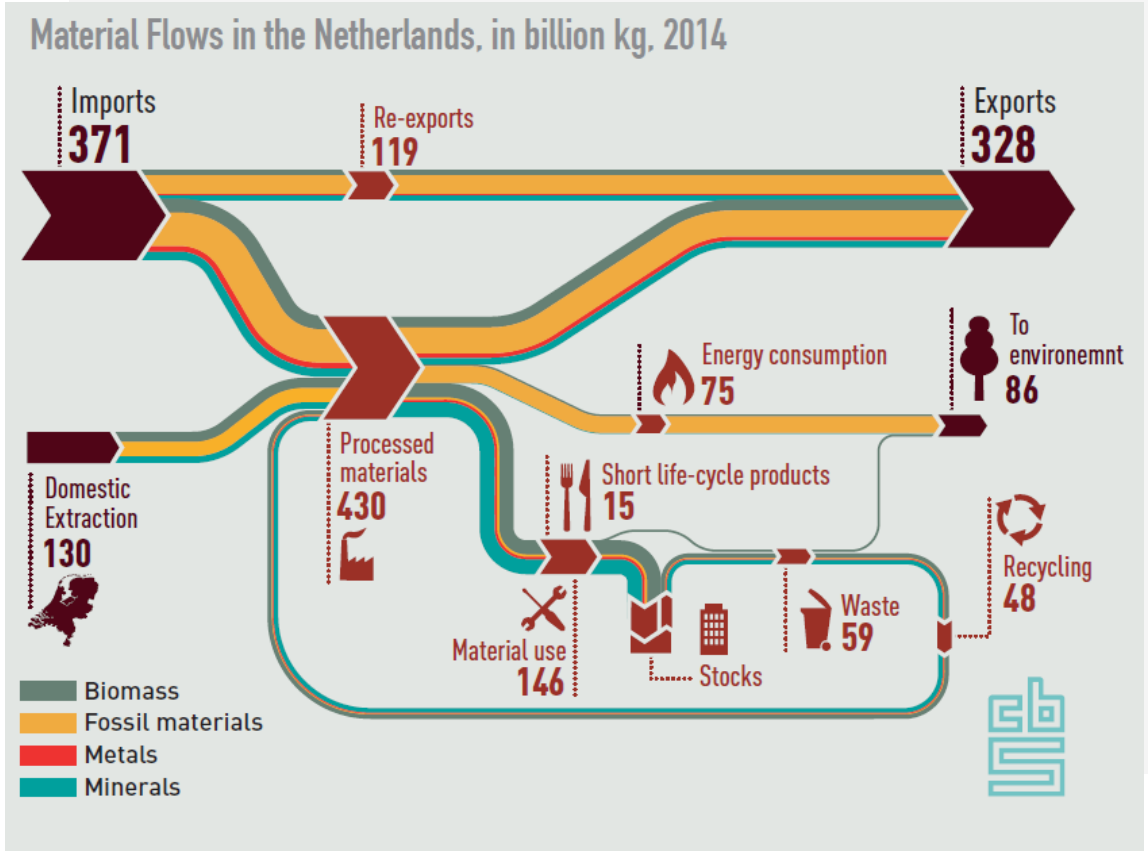
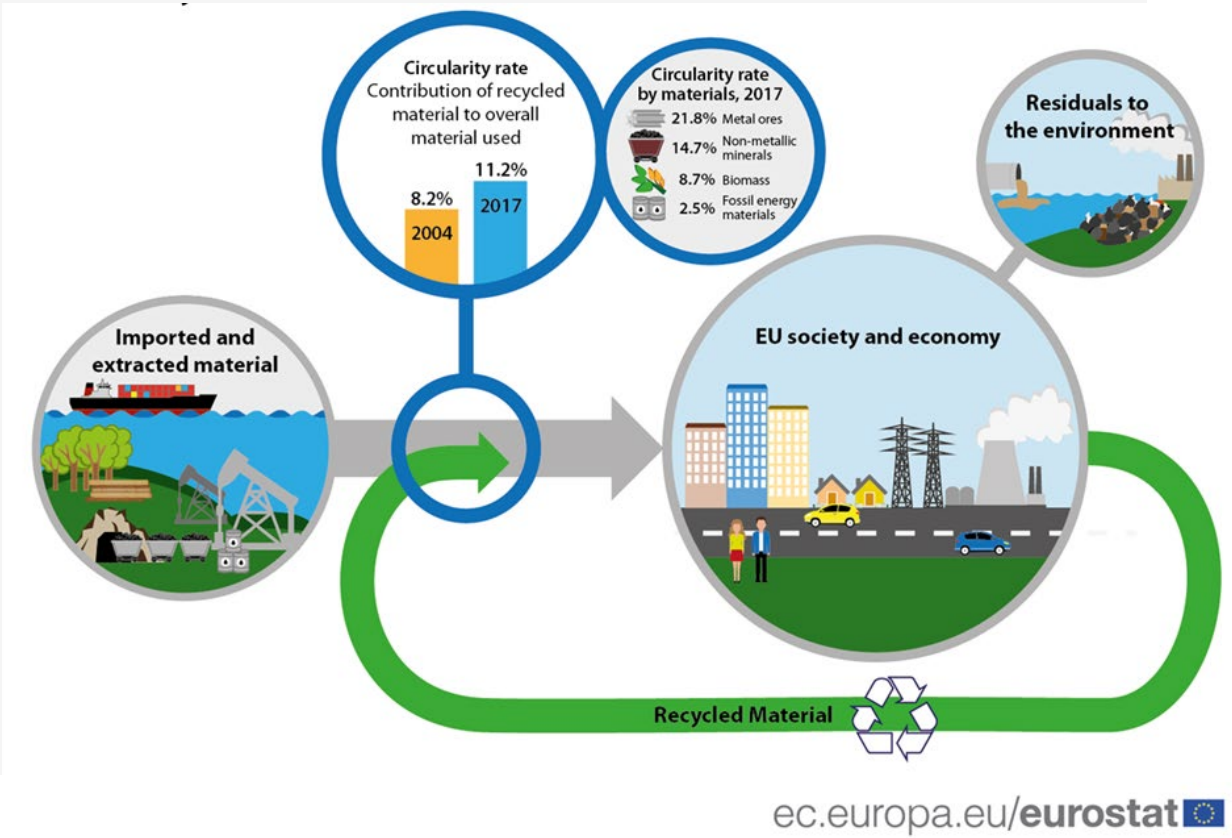
Sankey diagrams and infographics (material flows); examples from NL and Eurostat.
Requires integration of data from multiple sources / types of statistics



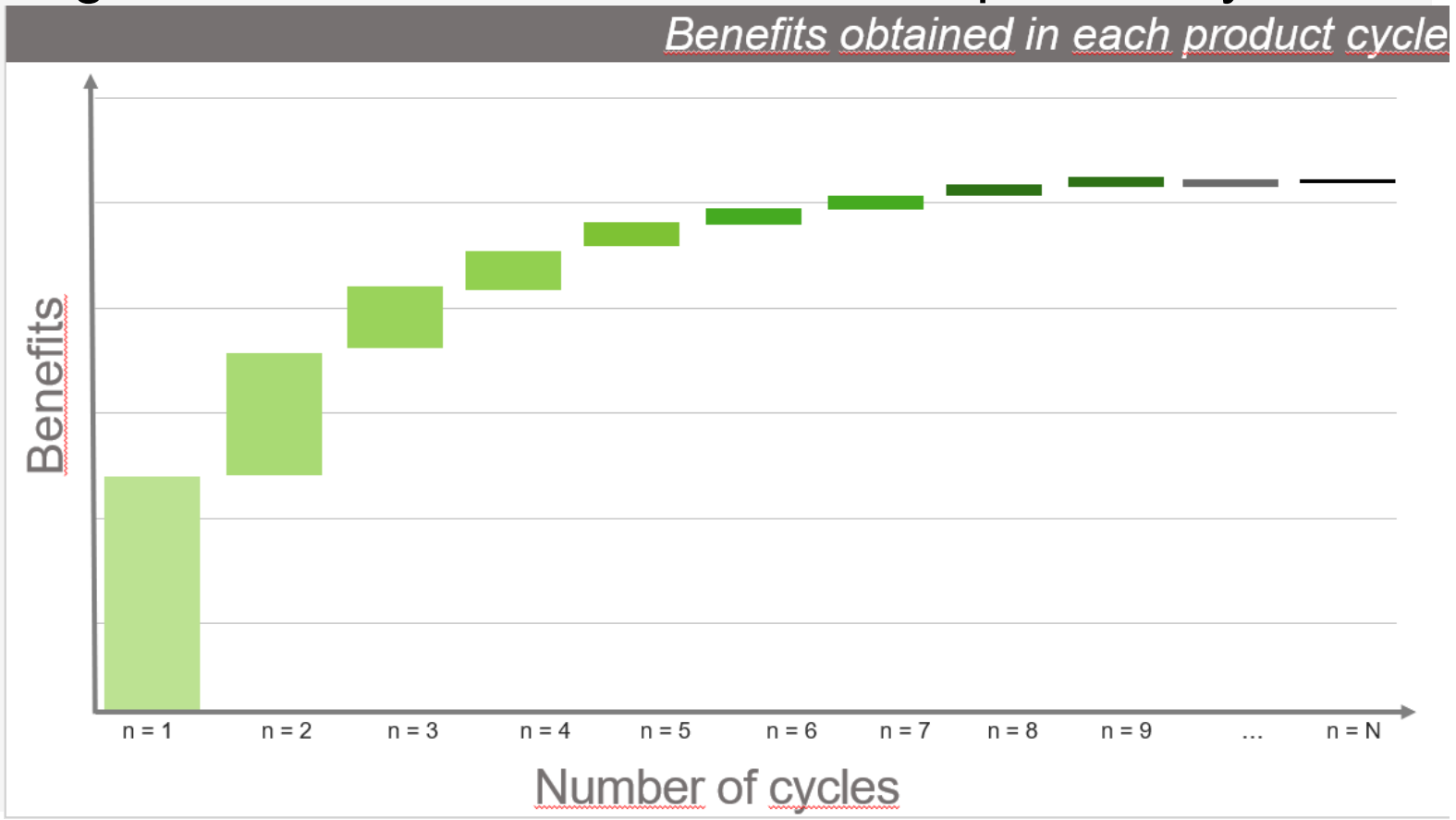


Presentation of CE-related information

Different approaches

Presentation of disadvantages and benefits obtained in each product cycle (Mexico):

- Operating costs
- Material costs
- Employment
- Economic benefits
- Recycled material value
- etc.



Presentation of CE-related information

Different approaches

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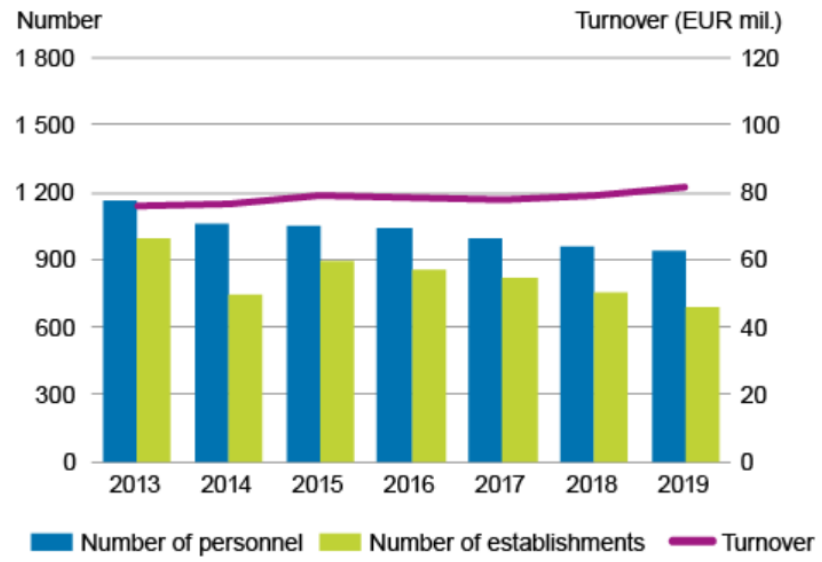
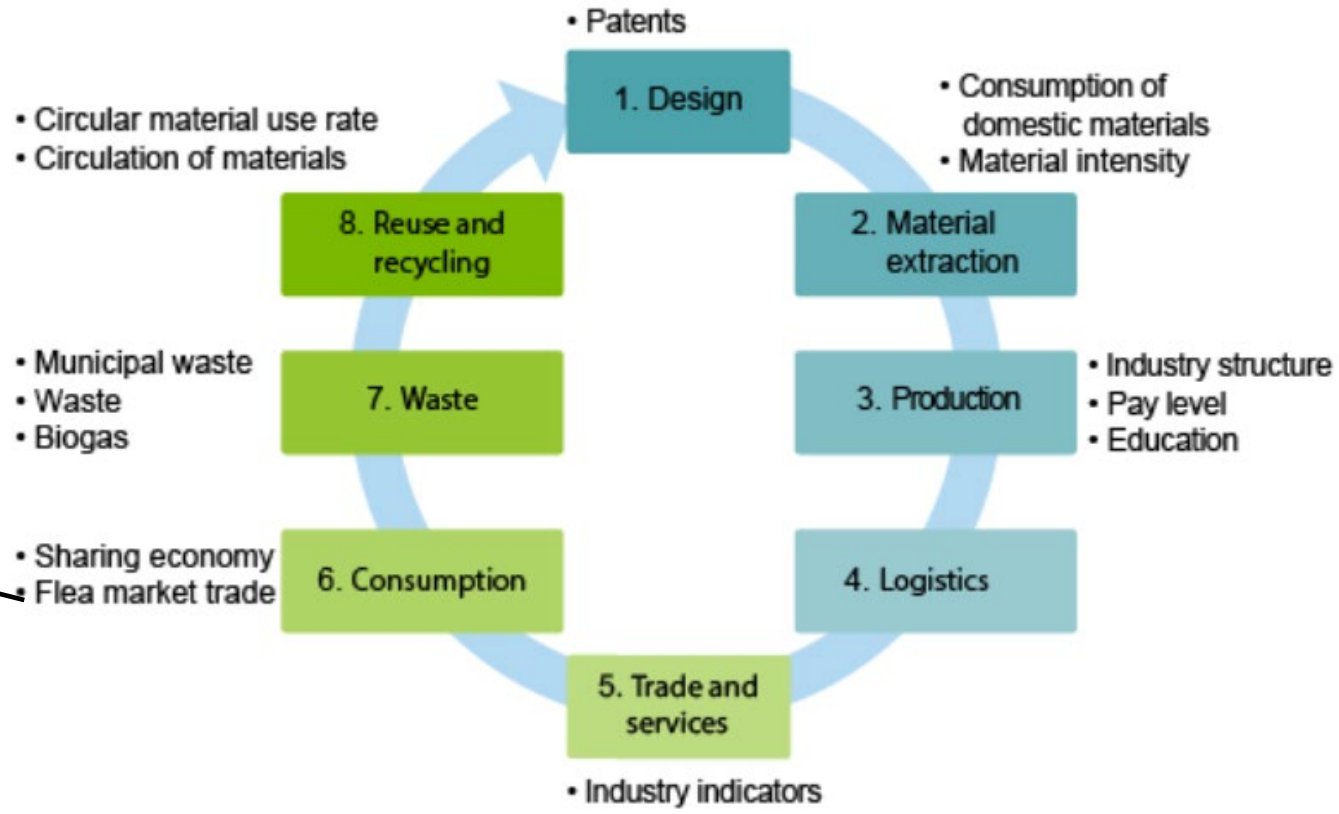
- Indicator sets (e.g. Finland, see https://www.stat.fi/tup/kiertotalous/kiertotalousliiketoiminnan-indikaattorit_en.html)

Number, turnover and number of personnel of establishments in flea market industries in 2013 to 2019





Main objectives and activities of the UNECE Task Force on Measuring Circular Economy

- Working period: February 2021 – December 2022
- Main objective: draft practical guidelines for measuring circular economy, including:
  a) Definition of the measurement scope;
  b) Clarification of key terms and definitions;
  c) Identifying key statistics and indicators needed from the policy point of view;
  d) Identifying data sources for measuring circular economy, with particular attention on SEEA and FDES;
  e) Describing the required institutional collaboration.
- Other objectives:
  a) Contribute to the coordination and collaboration of international organisations' related work; and
  b) Provide platforms for exchange of experience and knowledge (e.g. through Joint OECD/UNECE Seminars on SEEA Implementation).

Ensuring alignment of work and using synergies with other Expert Groups

- **Alignment of work needed in particular with:**
  - Related work of UNCEEA
  - OECD informal Expert Group on a new generation of information for a Resource Efficient and Circular Economy (RECE-XG)
  - EU Monitoring Framework
  - Bellagio Process
  - UNEP methodological work on EW-MFA
  - PACE (Platform for Accelerating the Circular Economy)
  - Related work of ISO
- **Means of alignment and using synergies:**
  - “Cross-pollination” of expert groups (same participants in several expert groups)
  - Aligned workplans and considering joint products (e.g. joint UNECE/OECD guidelines)
  - Participation in each other’s events

Status of work, some decisions already taken

- **Plan to develop joint OECD/UNECE Guidelines**
- **Work ongoing in 3 task teams until February 2022:**
    1. Conceptual monitoring framework (lead: OECD, EEA)
        - Main objective to agree on a widely acceptable CE definition
    2. Measurement framework (lead: Italian Environment Agency ISPRA)
        - “Translate” CE definition for measurement purposes (clarify terms, definitions and system boundaries)
        - Clarify most relevant terms and definitions
        - Identify the measurement scope
        - Explore the use of SEEA, FDES and other frameworks and data sources for measuring CE; SEEA will play a central role in the measurement FW
    3. Indicators for measuring CE (lead: UNEP)
        - Selection criteria: Policy relevance, Analytical soundness, Data availability
        - Presentation in form of an indicator framework

Members of the Task Force

Secretary: Michael Nagy, UNECE

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14. Louise Sörme (Statistics Sweden and link to ISO)
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18. Milla Neubauer (Statistics Austria)
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Thank you!

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