

Expert Webinar: Co-creation process on CE Monitoring



- Welcome! We will start at 10.00 am.
- Thanks for checking audio / video settings. While not presenting we kindly ask you to **mute yourself and switch off your camera**.
- Note that this webinar **will be recorded** for documentation purposes and to inform other interested country representatives.



Agenda overview

10.00 – 10.10 Welcome (*Peder Jensen, EEA*)

10.10 – 10.25 Key learning co-creation process (*Dirk Nelen, ETC*)

10.25 – 10.50 Poll questions on learnings and used interactive elements during process
(*Nora Brüggemann, ETC*)

10.50 – 11.00 Bellagio principles for CE monitoring (*Peder Jensen, EEA*)

11.00 - 11.15 Bellagio principles and co-creation process retrospectively (*Theo Geerken, ETC*)

11.15 – 11.25 Reflections from participants

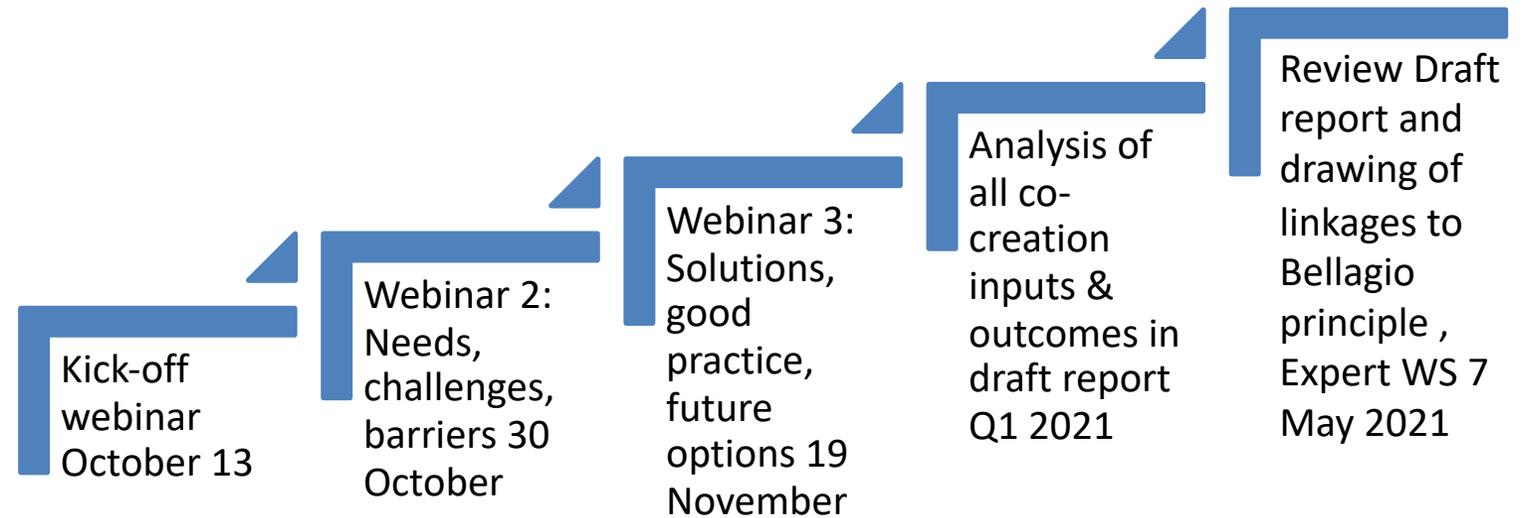
11.25 – 11.40 Revision of the EU CE Monitoring Framework (Barbara Bacigalupi, DG ENV)

11.40 – 11.55 Q&A

11.55 - 12.00 Follow-up and closing (EEA)

Review: Co-creation process on CE Monitoring

15 countries, approx.
35 participants overall



Inputs gathered in

Kick-off webinar	Webinar 2	Webinar 3	Expert Workshop
Status in countries	Reflections on EU CE monitoring framework	Reflections on CE indicators across policy cycle	Learnings, feedback on interactive elements
Most important issues to be addressed	4 country presentations + suggestions	4 country presentations + suggestions + poll questions	Reflections on linkages to Bellagio Principles

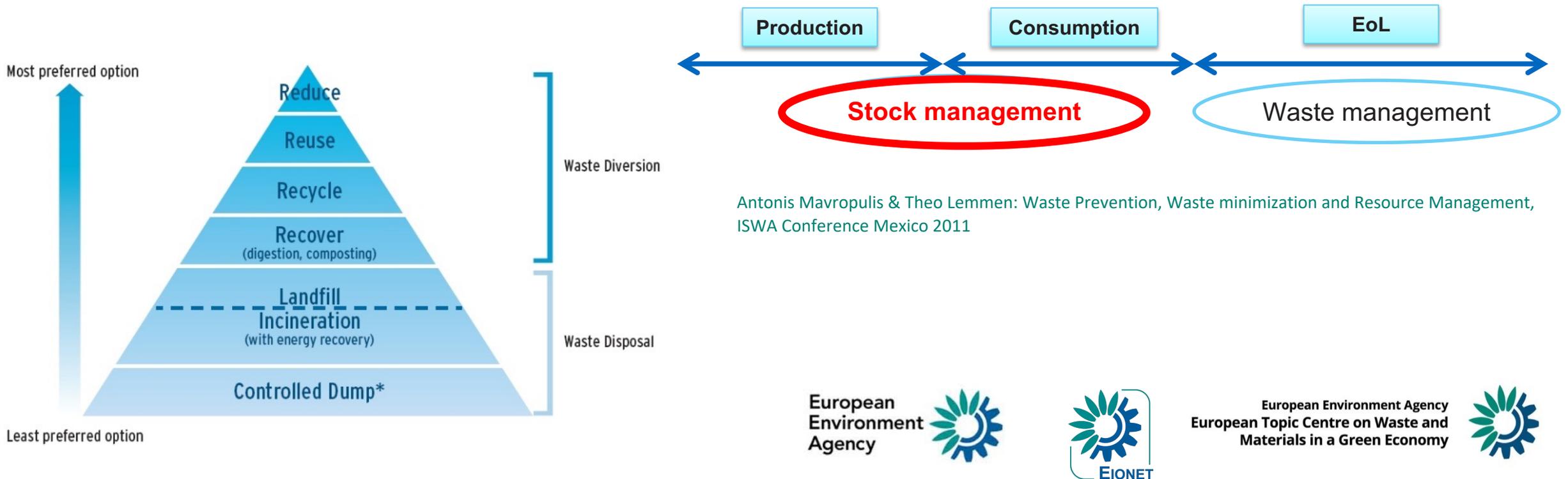
Workshop objective 1

- Finalizing co-creation learnings (regarding both, content as well as interaction formats) from the preceding 3 webinars.

Reflections on needs, challenges and barriers for CE monitoring

In a circular economy, the value of products, materials and resources is maintained in the economy for as long as possible, and the generation of waste minimized.

EC (2015). Closing the loop - An EU action plan for the Circular Economy - COM(2015) 614 final



Reflections on needs, challenges and barriers for CE monitoring

Linear or recycling economy

- (Raw) materials
 - Flows
- Adding value to materials
 - Waste management
 - Efficiency
- Material composition
- Life cycle optimization
- Energy & resource use minimization
 - Mining & cropping key stages
- WM driven by environment, volume, value
 - Design for recycling

Circular economy

- Products – components – materials
- Stocks
- Preserving value of products
- Sink management
- Performance & effectiveness
- Product ‘mineralogy’ and architecture
- Life time extension
- Entropy change minimization
- Collection & sorting key stages
- WM driven by resource scarcity and security of supply
- Design for maintenance, repair, remanufacturing, reuse

Different key elements define performance

Different indicators to measure performance

Different sources of information and data in the domains of interest (social, environmental, economic)

Reflections on needs, challenges and barriers for CE monitoring

- ❑ **Secondary resource use by industry.** Linear economy = weight based recycling targets; CE = substitution potential of secondary resources to be measured/monitored;
- ❑ **Economic impact of CE strategies on employment and added value.** In CE maintain functionality of products, components and materials over time is key (longevity), to avoid extraction + new production. Impact of CE strategies at the production side is intensively researched;
- ❑ **Carbon and material footprints of consumption.** Linear economy = restoring or maintaining elevate national consumption levels. Footprint indicators refer to global chains → new concepts as 'RME', 'DMC' and 'embedded energy', not obvious to calculate nor to understand;
- ❑ **Data and information on the performance levels of the so-called 'inner circles'** (repair, refurbishing, remanufacturing), still marginal economic added value and employment, rarely considered for more detailed analysis and systematic data collection;
- ❑ **Established circular economy strategies and policies** focus on a macro-economic level → macro-economic indicators → macro-economic data available. Knowledge on effects of implementation of CE strategies (beyond waste prevention and management) applicable to individual organization, installation or industrial sector (micro and meso-level) is still limited.

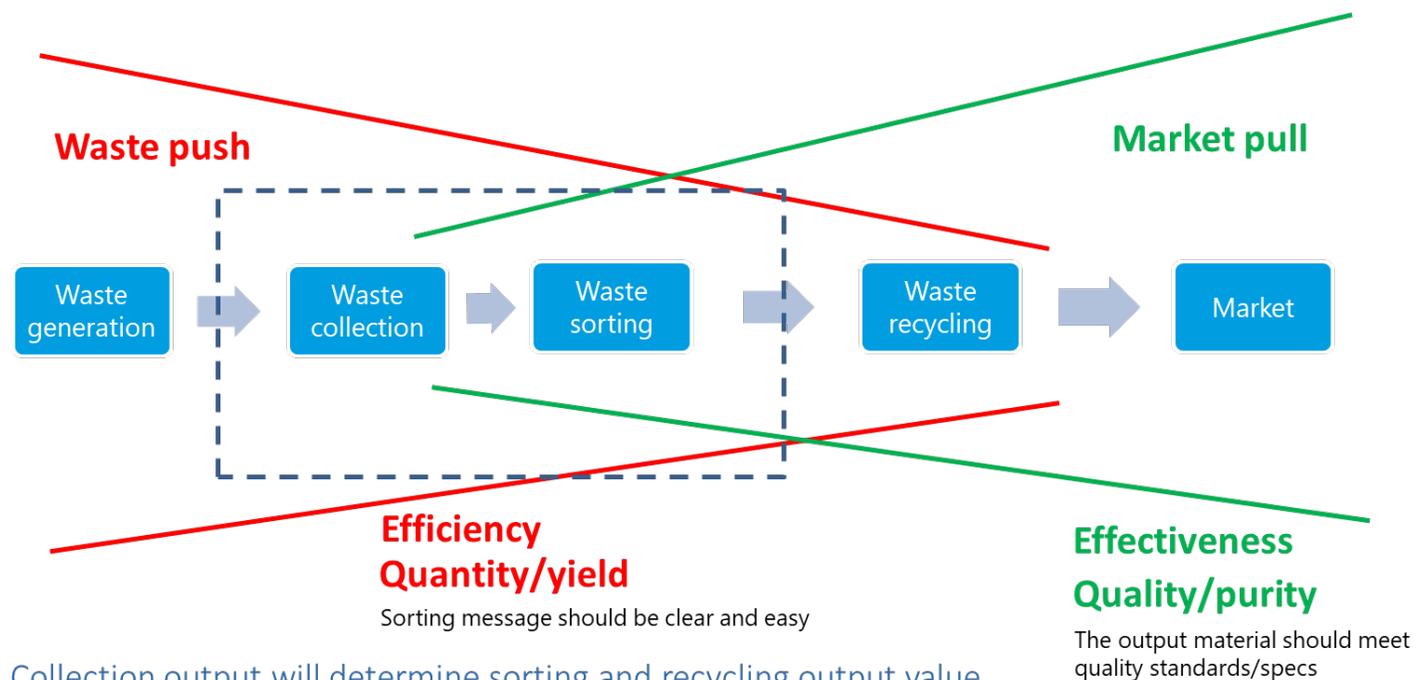
Reflections on solutions, good practice, future options for CE monitoring

- ❑ **Resource-efficiency metrics**, often focusing on circular economy elements such as waste disposal, primary versus secondary use, resource efficiency/productivity and recycling efficiency (always relative!);
- ❑ **Materials stocks and flows metrics**, e.g. material or waste flow destinations, waste disposal, stock availability/concentration, downcycling and quality loss, cascading use, and recycling/remanufacturing potential;
- ❑ **Product-centric metrics**, connected to the elements which relate to the conservation of value over time, like value change, retention, product longevity, and others.

Assessment of value maintenance over time (key aspect of CE) on an economic system level, or on an integrated product-system level, must be improved as to contribute to the validity of the circular economy concept

Reflections on solutions, good practice, future options for CE monitoring

- Multiple and diverse interpretations with respect to the goals and objectives of CE = **OK** → avoid one size fits all approach + sole focus on environment → tailoring of CE strategies and policies according to their priorities, specific needs and preferences;



Always start with defining the desired effects on those CE elements that have been previously identified in a policy cycle as most relevant, preferred or urgent
FOR YOU

Collection output will determine sorting and recycling output value

<https://www.collectors2020.eu/>

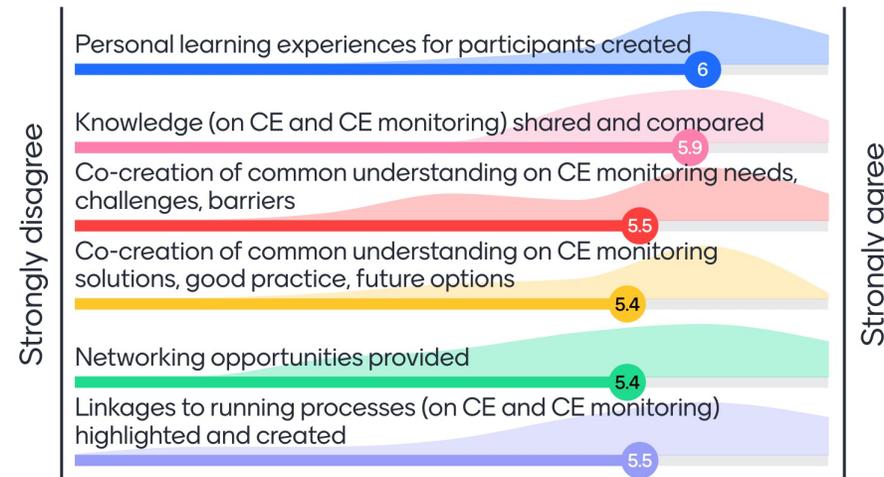


Interactive survey (1)

Go to www.menti.com and use the code 2356 2140

How did the CE co-creation process met your expectations in view of:

Mentimeter



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Interactive survey (1)

Go to www.menti.com and use the code 2356 2140

How useful did you find the different elements used during the CE co-creation process?

Mentimeter

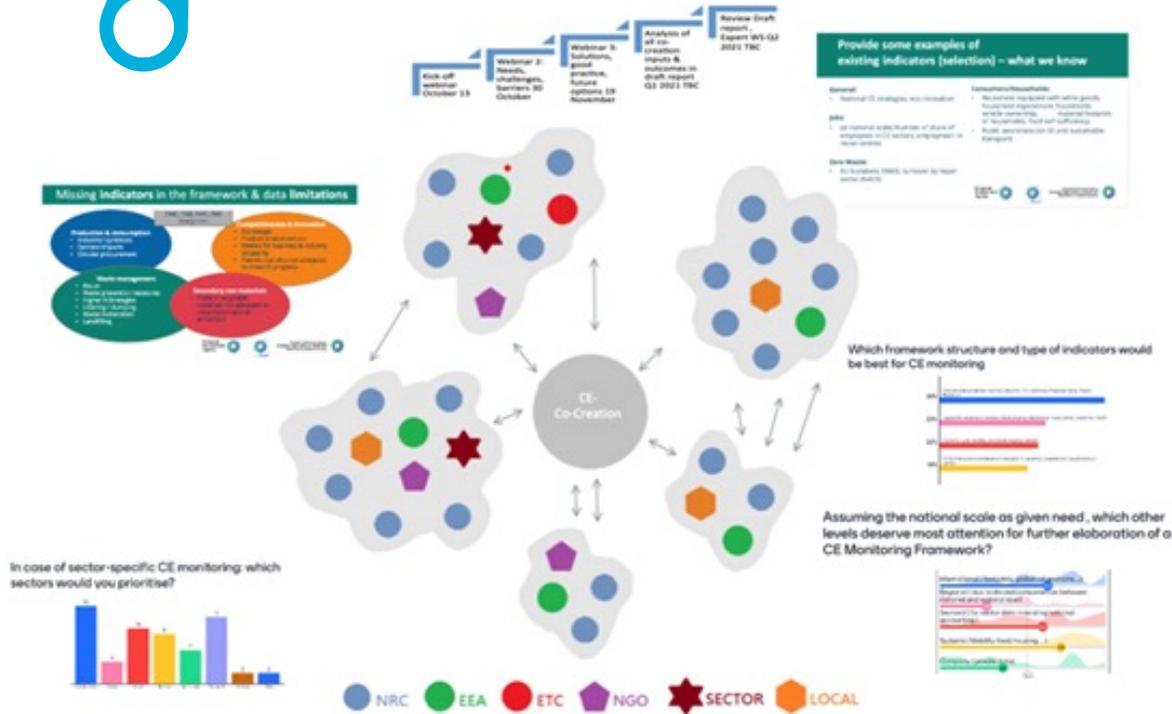
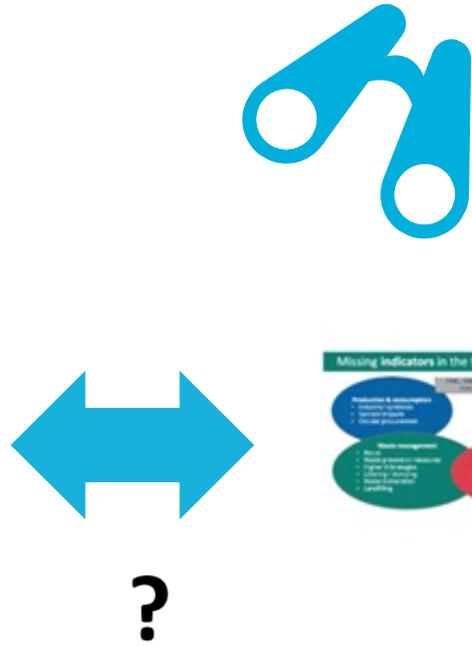
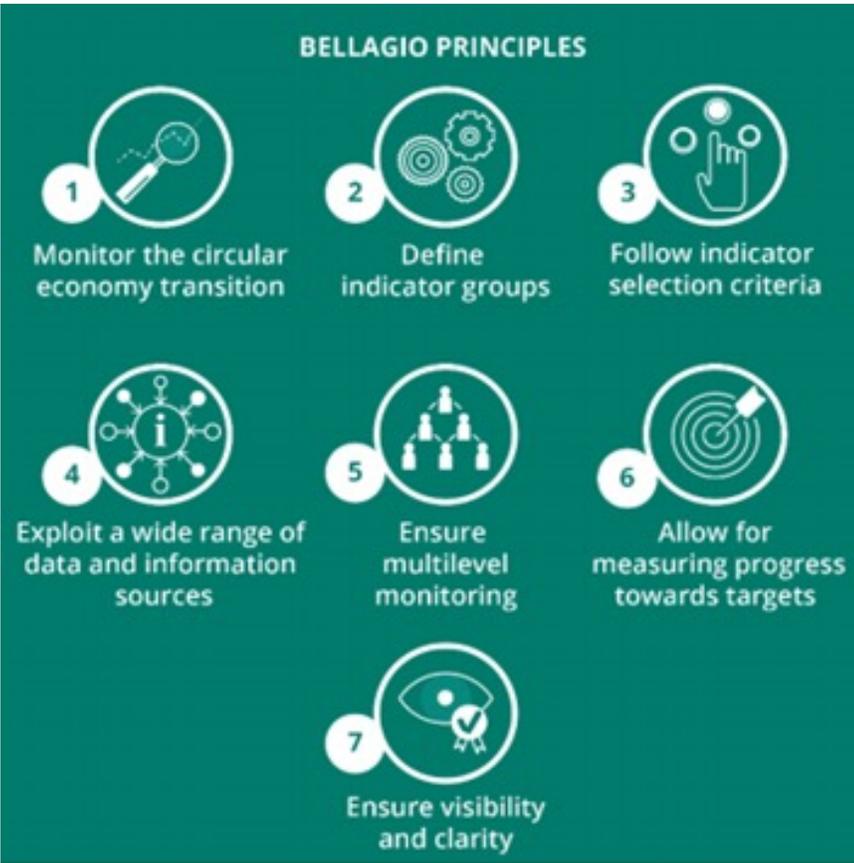


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Workshop objective 2

- Discovering the links between the Bellagio principles and issues addressed during co-creation.

Bellagio principles and Co-creation process retrospectively



Bellagio principle 1: Monitor the Circular Economy Transition

- The co-creation process was about (national) CE Monitoring → so practically all presentations and inputs showed elements within the scope of CE monitoring
- Examples of expectations :
 - 'converging to a shared set of indicators' for resources and their effects
 - 'develop a common understanding of CE'
- higher circularity and 'inner circles' (Refuse, Rethink, Reduce, Repair, Refurbish, Remanufacture) were often addressed
- Kosovo called for specific **transition indicators** for the process **from WM to CE**

Bellagio principle 1: Monitor the Circular Economy Transition

- Spain presented their initiative to involve the private sector
- Netherlands: for **transition monitoring** there is a need for both private and public process indicators that show underlying changes
- Belgium-Flanders: CE transition monitoring of effects at the **level of societal needs** that are shaped in systems with more specific available data.
- Poland moved from waste management focus to value chain approaches (including **network and cluster innovation approaches**)
- Other countries, such as Estonia, France and Germany presented their **frameworks**, specific indicators and running updating processes

Bellagio principle 2: Define indicator groups

- All four domains of indicators were mentioned
- demand to come to a shared set of indicators
- comparability/complementarity to other indicator sets like the SDG's
- Germany presented the possibilities and challenges for footprint indicators
- Special interest was shown for indicators on secondary materials, footprints, jobs/employment, process type of indicators

Bellagio principle 2: Define indicator groups

- The poll question about the types of existing indicator frameworks shows:

Context	Type of indicators	Relative importance scored by this group
Economic (includes time aspect!)	Leading, coincident, lagging	22 %
Environmental (causal chain)	Driving forces, Pressures, State, Impact, Response (DPSIR)	36 %
Logical (for projects, innovation, impact assessment)	input, output, outcome, impact	23 %
Sustainable development (covering complexity by using different levels)	1. headline 2. operational 3. explanatory 4. context	19 %

- Where do types of indicators fit within Bellagio principles ?
- Estonia presented their choice for the logical framework to structure the CE indicators.



Bellagio principle 3: Follow indicator selection (RACER)

- Netherlands : challenge fulfilling RACER criteria when experimenting with indicators for a transition process: not always easy and robust
- Estonia proposes 9 indicator selection criteria : is this an extension to RACER or more sub-criteria, like provisionally indicated below ?

Bellagio 5	Relevant	Accepted	Credible	Easy to monitor	Robust
Estonia 9	Relevance	Measurability	Clarity	Cost-effectiveness	Reliability
	Comprehensiveness	Long term stability			
	Comparability	Validity			

Bellagio principle 3: Follow indicator selection (RACER)

- Other countries also showed experiments with indicators:
 - the Green deal part of CE pact from Spain with bottom-up indicators from private stakeholders
 - Germany with footprint indicators
 - Flanders Belgium with societal need system indicators.

Eurostat paper (Part 3) on the wiki:

“For indicators used to monitor a policy implementation, the EC’s Better Regulation Toolbox notes that indicators should be ‘RACER’ . These criteria are broadly similar to the Bellagio Principles”

PS. Bellagio principles for SD monitoring

RACER broadly similar to CE monitoring Bellagio Principles ?

European
Environment
Agency



European Environment Agency
European Topic Centre on Waste and
Materials in a Green Economy



Bellagio principle 4: Exploit a wide range of data and information sources

- Importance to have comparable data across countries
- Role for industry in providing more detailed data
- Should providing data be arranged by laws and regulation or on a voluntary basis ?
- Data limitations of existing data sources and official statistics were recognized
- Openness of data versus confidentiality ?

Bellagio principle 4: Exploit a wide range of data and information sources

- Transition requires new types of data: integrating bottom up/company data, web scraping (e.g. number & share CE companies, employees and added value) and new statistics (e.g. attitudes of consumers and businesses towards CE).
- Importance and limitations of surveys were presented by France for the challenge of including the functional economy : continuity !
- Modelling (not always based on official statistics) is currently needed for footprints (Germany)

Bellagio principle 5: Ensure multilevel monitoring

- Data comparability and data access
- Flanders addressed data governance : how one would bring together and manage data from different stakeholders in a safe and collaborative way
- Information provision : voluntary or a law/regulation (Serbia)
- connection to other relevant targets and indicators, for example SDGs
Agenda 2030 is important (Sweden)
- Slovenia stressed the importance of using Innovation Partnerships
Networks
- Spain encourages companies to play a stronger role



Bellagio principle 6: Allow for measuring progress towards targets

- Links to targets were addressed just a few times:
 - the importance to connect CE Monitoring to targets and indicators from the SDG framework.
 - some references to existing waste targets

Could this point to the belief “ data and indicators first and then targets” ?

Bellagio principle 7: Ensure visibility and clarity

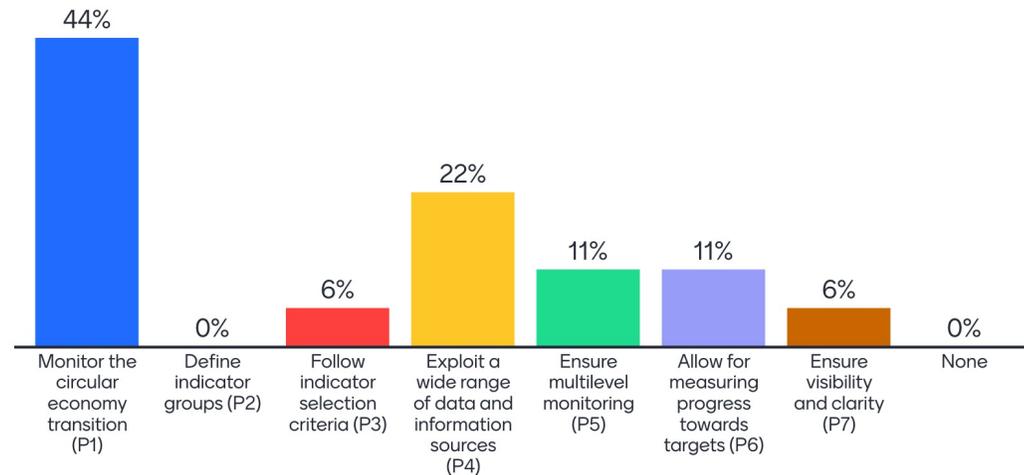
- Mainly addressed when it came to social issues and consumers.
- Transparency and openness of data is part of principle 7 : but how to balance openness with confidential private information
- In general visibility and clarity was not referred to very often , so probably not a major issue of concern for now
- Communication methods such as dashboards are also part of principle 7, these relate to frameworks and scope , so also to principle 1.

Interactive survey (2)

Go to www.menti.com and use the code 7129 3182

In your opinion, which 3 Bellagio principles, are best suited for a co-creation process with volunteering countries in the following years ?

Mentimeter



Disclaimer: Due to technical problems, participants could only choose 1 principle at the end (instead of 3).

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Workshop objective 3

- Learning about the latest developments on CE Monitoring at EU level

Next steps

- **EEA/ETC** to upload Webinar recordings and presentations
- **Countries:** Check your country contributions in the draft report about the co-creation process and send feedback to theo.geerken@vito.be .

Thank you for your participation in the
CE co-creation process!
It has been a pleasure working with you.