Webinar 2: Co-creation process on CE Monitoring

- Welcome! We will start at 10am.
- 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.

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Agenda overview

10.00 – 10.10 Introduction and context setting *(Peder Jensen, EEA)*

10.10 – 10.25 Highlights of collective homework assignment and Q&A *(Bettina Bahn-Walkowiak, ETC)*

10.25 – 11.40 Presentations on challenges and gathering of suggestions from the audience.

- **Kosovo**: The challenge of going from waste to CE indicators (*Tafë Veselaj)*
- **Poland**: Challenges in the process of development CE indicators for sustainable production and consumption *(Ewa Dziobek)*
- **France**: The challenge of indicators for the functional economy *(Chrystel Scribe)*
- **Netherlands**: The challenge of indicators for CE transition monitoring *(Aldert Hanemaaijer)*

11.40 – 11.55 Short interactive group surveys

11.55 – 12.00 Closing and next steps *(Theo Geerken, ETC WMGE)*

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Analysis of your responses to homework question

Circular economy monitoring framework

EU self-sufficiency in raw materials
Green public procurement
Waste generation
Food waste

Overall recycling rates
Recycling rates for specific waste streams

Contribution of recycled materials to raw materials demand
Trade in recyclable raw materials

Private investments, jobs and gross value added
Patents

Thanks for your responses !!

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Critique is always easy……the intention is to collectively learn

There were **acknowledgements** for this first EU CE Monitoring Framework:

- a step to more holistically view indicators covering the full life-cycle of materials as well as including some socio-economic aspects
- helps to better integrate material flow and waste statistics
- enhances the communication between different policy directorate generals in the Commission
- most of indicators available for all countries, also with a time series
- waste indicators pretty complete, but ….

What is your assessment of missing elements and/or limitations in the current EU CE Monitoring Framework to monitor CE ?

Responses:

- focus on waste and recycling too distinct
- mainly macro indicators, but the micro level (e.g. local level, business, sectors, consumption behaviour) important for CE
- by leaving out specific indicators and neglecting specific domains, the framework is insufficiently equipped to depict a real picture of a circular economy
- measuring issues are not adequately addressed → data limitations

Missing **indicators** in the framework & data **limitations**

DMC, DMI, RMC, RMI
Footprints

Production & consumption

- Industrial symbiosis
- Sectoral impacts
- Circular procurement

Competitiveness & innovation

- Eco-design
- Product related metrics
- Metrics for business & industry circularity
- Patents statistics not adequate to show CE progress

Waste management

- Reuse
- Waste prevention measures
- Higher R-Strategies
- Littering / dumping
- Waste incineration
- Landfilling

Secondary raw materials

- Trade in recyclable materials not adequate to show local/regional processes

Missing **domains** in the framework

Society:

- Consumption sphere (→ products, packaging put on the market)
- Societal behaviour (e.g. citizen choosing alternatives, using repair)
- Stakeholders' engagement in the CE process
- Education (change of curriculums, new items in relevant programmes...)

Economy:

- Innovation not comprehensive/detailed enough
- Investment based on too narrow CE definition
- Business operations (e.g. numbers of enterprises facilitating recycling, extending product life cycle; numbers of enterprise with a CE strategy, turnover of new CE industries)

Policy:

- Policy intended to increase CE efficiency (measures, instruments, governance, strategies…)
- Measures & communication to accelerate CE process on country/local level

Further issues

Cross-cutting challenges

- Multi-actor collaboration across the value chain
- Reduction of dangerous chemicals in the CE cycles
- Links to climate, nexus

Informational needs

- Financing sources for CE activities
- Limits of circularity

Presentations on challenges and gathering of suggestions from the audience

- Each country will present 5 minutes
- Please “Raise hands” via the Teams control panel when you like to react by sharing relevant experiences, offer suggestions or give answers.
- Kindly share questions via the chat function.

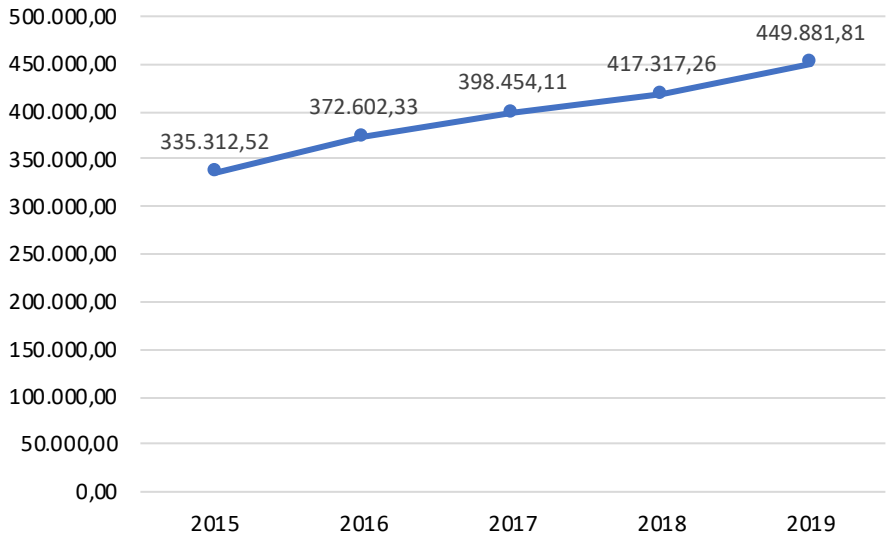
Kosovo - The challenge of going from waste to CE

Kosovo faces a triple challenge: Improving our waste management system, making the transition from WM to CE and having indication to measure progress in this direction

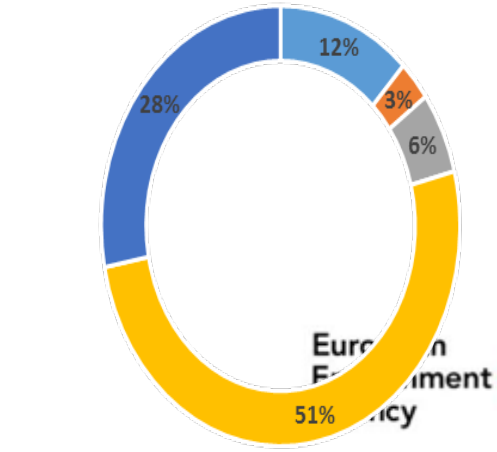
Currently status of WM:

- The waste management system collection rate is 79.20% /2019
- Generation of municipal waste per capita - 0.78 kg/d, 266.24 kg/y
- Landfill still raised 12.5% in period 2018/2019 (http://www.ammk-rks.net/repository/docs/Municipal_Waste_Managment_in_Kosovo_Status_Report_2018.pdf)
- Low level of waste separation at source
- 2019/ 2020, 1489 illegal dumpsite are still present

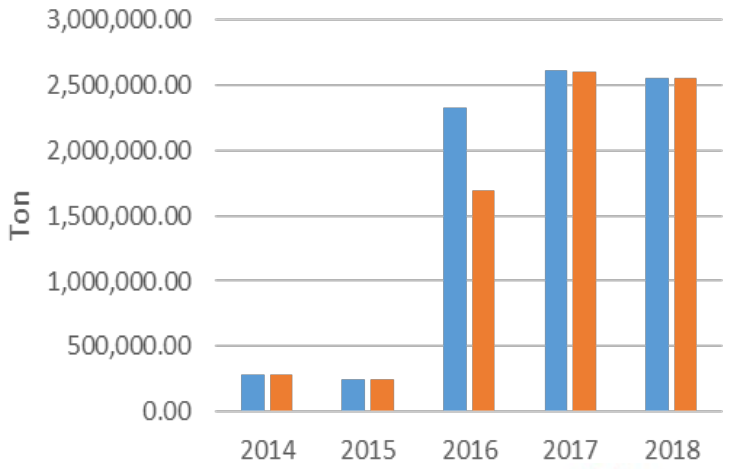
Trend of municipal waste deposited, 2015-2019



Waste treatment in Kosovo, 2018/2019



Trend of generation and treatment of industrial waste-Kosovo



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Kosovo

Barriers

- CE is not a priority within environmental policies
- CE action are at the beginning also due to lack of clear understanding of the CE concept itself
- Laws and sublegal acts should be adapted to include the concept of CE
- A specific strategy for the CE has not been drafted(Strategy for WM-2013-2022- some of the objectives foreseen are indirectly related to CE)
- Drafting strategy(2020 -2030), includes 4 strategic objective (CE-Public awareness & education, Waste prevention and reuse and recycling)
- Limited budget to advance the concept of CE
- Infrastructure – only 7 municipalities have provides access to waste separation infrastructure, (3.4% household)

Kosovo

Challenges

The biggest challenges are; **financial sustainability, infrastructures and transition to CE**

➢ These points affects the slowdown the development of circular economy;

- Funding for promotion the concept of the CE and beneficiaries
- Creat infrastructure to implement CE requirements
- Raise interest among businesses to develop new products according to CE concepts
- Create incentive models for citizens to participate in the creation of the circular economy
- Governmental incentives that would stimulate and support circular economy
- **So our main challenge is**: collaboration and partnerships between Government, business and civil society to move the circular economy from idea to action at scale.

Pre-information slide challenges - Kosovo

Kosovo faces a triple challenge: Improving our waste management system
making the transition from WM to CE and
having indication to measure progress in this direction

Questions:

1. What would be the most appropriate model for the implementation of CE in countries that are in the process of transition from WM to CE ? Any suggestions for indicators to monitor that ?

2. Could we save time and efforts by “jumping” to CE in stead of first making the WM system much better and only then start moving towards CE ?

3. Would it be better to develop a specific strategy and Action Plan for CE, or should the concept of CE be included in sectoral strategies (waste, water, nature… etc.)?

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The National Centre
for Research and Development

Project co-financed by the National Center for Research and Development under the GOSPOSTRATEG program

Monitoring circular economy in Poland

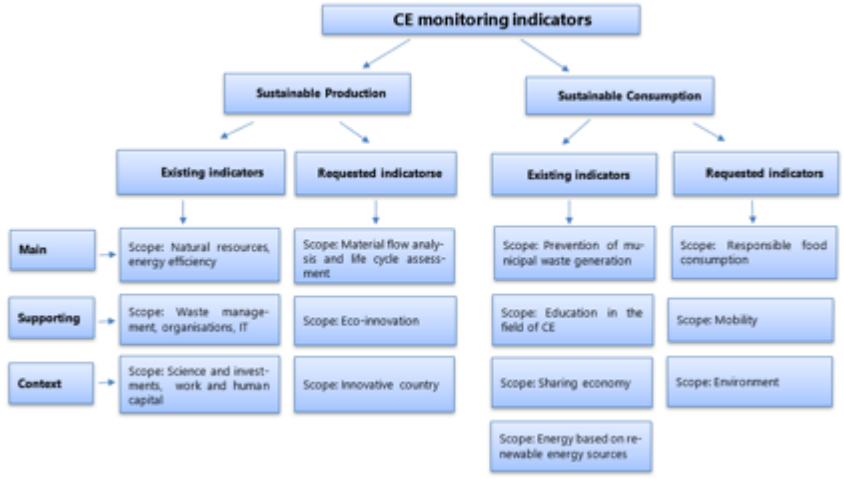
Challenges in the process of developing indicators

Ewa Dziobek, Joanna Kulczycka, Anna Bączyk, Agnieszka Nowaczek

POLAND

Challenges in the process of development CE indicators for sustainable production and consumption:

1. Selection of the most important sectors for transformation towards CE in Poland
2. Convincing stakeholders that CE is about the new business model and organizational solutions and less technology
3. Conviction of local administration that CE is not waste management but resource management
4. CE is not a competition but cooperation in value chain



Level	Indicator name/unit	Direction of indicator change
Main	Resource productivity - domestic material consumption (DMC) in relation to GDP	↓
	Renewable energy share in gross final energy consumption by enterprises (%)	↑
	R&D expenditure in relation to GDP (%)	↑
Supporting	Volume of water consumption in industry in relation to GDP (%)	↓
	Amount of industrial waste generated in relation to GDP (%)	↓
	The share of produced secondary raw materials in total production (%)	↑
	Greenhouse gas emissions from industrial activities in CO2 equivalent (CO2e / year)	↓
	Number of e-government services for entrepreneurs (pcs.)	↑
	Number of environmental certificates held (pcs.)	↑
Context	Share of funds spent on environmental investments in relation to total investments (%)	↑
	Share of FTEs in entities related to CE activities in relation to total employment (%)	↑
	Value of public procurement related to CE in total public procurement (%)	↑

Question: Do you agree that cooperation in value chain is one of the key success factors in implementing CE, and if so, can you provide examples how to create/support it i.e. by creating networks like clusters (Key National Waste Management and Recycling Cluster in Poland*) or consortium of scientists and economy leaders (HighWay to Technology and Innovation Institute IATI**)?

*www.klasterodpadowy.com
**iati.pl

POLAND

Challenges in the process of development CE indicators for sustainable production and consumption:

1. Selection of the most important sectors for transformation towards CE in Poland

Analysis of material and energy consumption

Analysis of the amount of generated waste

Five sectors selected:

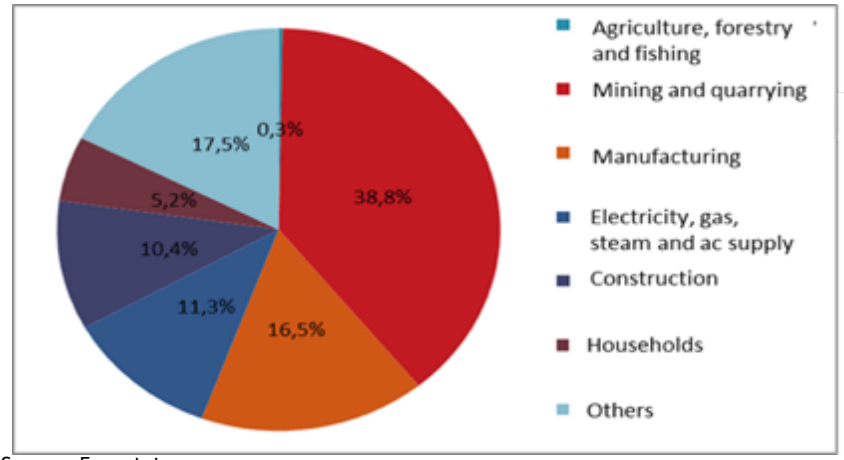
1. Construction
2. Energy sector
3. Chemical industry
4. Agro-food industry
5. Mining and quarrying

Material consumption for Section C. Industrial processing in 2016

Wyszczególnienie	Jednostka	Sekcja/Dział																								
		C	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
Wielkość zużywanych surowców																										
Surowce	mln Mg	83,3	3,5	0,6	0,1	0,4	0,1	0,0	7,6	9,9	0,9	5,9	9,3	0,2	3,8	13,8	11,8	5,5	0,2	1,2	1,3	2,2	0,4	4,3	0,2	0,3
Woda	mln Mg	721,4	88,7	28,9	0,2	4,2	0,4	0,6	6,5	107,5	0,0	42,7	365,5	3,8	7,0	13,1	43,3	1,5	0,1	1,3	1,8	0,9	1,5	0,4	0,0	1,2
Razem	mln Mg	804,7	92,2	29,5	0,3	4,6	0,5	0,6	14,1	117,4	0,9	48,6	374,8	4,0	10,8	26,9	55,1	7,0	0,3	2,5	3,1	3,1	1,9	4,7	0,2	1,5
Procentowy udział poszczególnych działów w zużyciu materiałów i wody																										
Surowce	%	100,0	4,2	0,7	0,1	0,5	0,1	0,0	9,1	11,9	1,0	7,1	11,1	0,3	4,5	16,6	14,1	6,6	0,2	1,4	1,5	2,6	0,5	5,2	0,3	0,4
Woda	%	100,0	11,5	3,7	0,0	0,6	0,1	0,1	1,7	14,6	0,1	6,0	46,6	0,5	1,3	3,3	6,8	0,9	0,0	0,3	0,4	0,4	0,2	0,6	0,0	0,2

Source: Own calculation based on GUS data

Sources of waste generation in Poland in 2016



Source: Eurostat

POLAND

Challenges in the process of development CE indicators for sustainable production and consumption:

2. ***Convincing stakeholders that CE is mainly about the business model and organizational solutions and less technology***

New technology is not enough for transformation towards CE, more focus should be on:

- **Business models:**
  - ✓ **Eco-design and production stage - reuse parts / components of the product in order to restore functionality while ensuring quality; change some functionalities by e.g. changing the appearance, repairing, regeneration; recover and use by-products in a different process or value chain; obtain recycled or renewable materials that can be returned to the technical or biological cycle**
  - ✓ **use stage - access without ownership, the provision of a certain package combining product and service (product-as-a-service, performance)**
  - ✓ **end-of-life stage of a product - raw materials or parts recovery and reuse in another product or value chain, often through upcycling (resource recovery)**
- **Organizational solutions – i.e technology parks with an integration function focused on industrial symbiosis, sharing at each life cycle stage**

POLAND

Challenges in the process of development CE indicators for sustainable production and consumption:

3. Conviction of local administration that CE is not waste management but resource management

Based on the answers received from 16 regions answers to the question asked about the developed / planned CE strategy and CE indicators:

- **Waste Management Plan** – obligatory for each region (in 4 Plans CE/resource management aspects identified)
- **Development strategy** – optional (3 introduced, 6 in progress – all with CE aspects)
- **CE strategy** – optional and voluntary (1 planned)

Joint programmes and projects at national level (with ministry, scientists) started more holistic approach to CE at regional level. What would accelerate the process according to regions?

Modernized Regional Development and Cohesion Policy 2021-2027 according to EC proposal – focusing on key investment priorities, including funds allocating to a shift towards CE within 1 of 5 objectives: a greener, low carbon Europe

(https://ec.europa.eu/regional_policy/en/policy/themes/environment/circular_economy/)

POLAND

Challenges in the process of development CE indicators for sustainable production and consumption:

4. CE is not a competition but cooperation in value chain (1)

Klaster Gospodarki Odpadowej i Recyklingu

Waste Management and Recycling Cluster

Year of creation: 2011 (since 2017 Key National Cluster)

No of members: ca 100 (70% SMEs, research institutes, NGOs)

Sector of activity: industrial waste management in the whole value chain (collecting, recycling, reusing, refurbishment, upcycling), WEEE and municipal waste, R&D, consulting

Cluster mission: consolidation of waste management and recycling sector

Participation objectives: strengthening cooperation, connecting science with business, promoting recycling, circular economy

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Challenges in the process of development CE indicators for sustainable production and consumption:

4. CE is not a competition but cooperation in value chain (2)

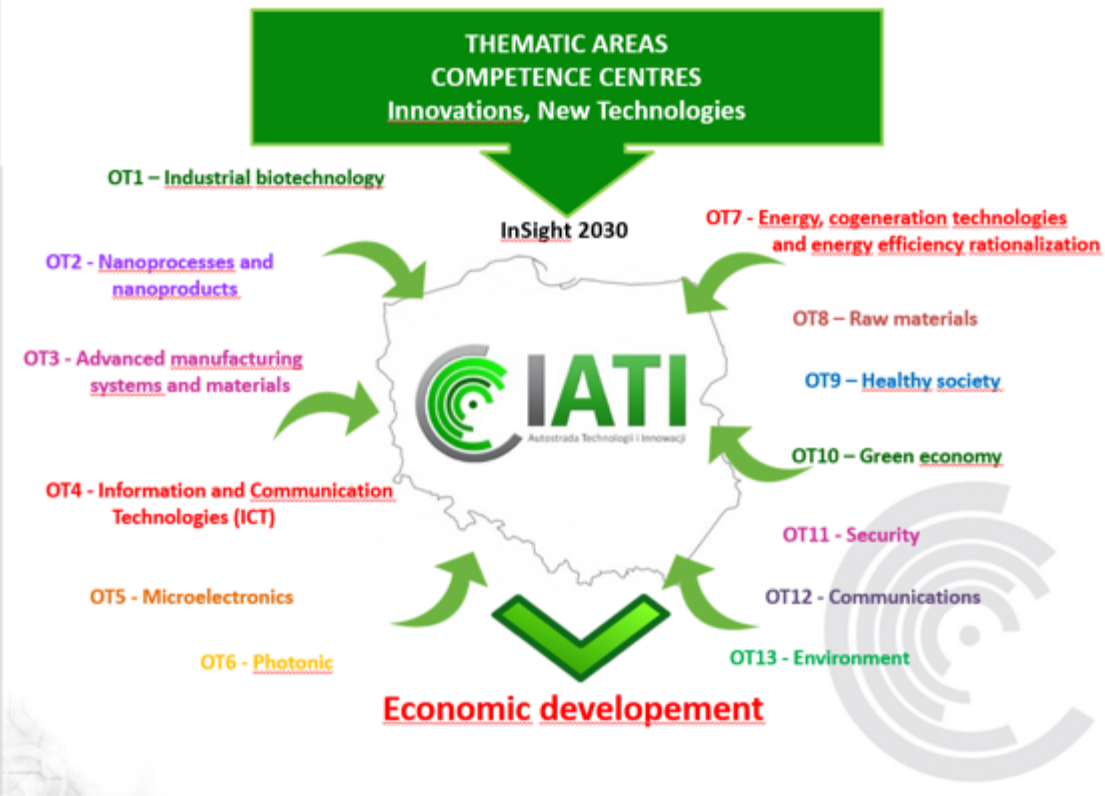
HighWay to Technology and Innovation Institute (IATI)

Year of creation: 2014

No of consortium Partners: 51 (24 universities, 8 research institutes, 17 companies)

Sector of activity: the largest virtual institute in Poland bringing together an interdisciplinary team of researchers, entrepreneurs, administrators and consultants offering conditions for innovation in the domestic and international markets

Main objective: initiate, prepare and create conditions for all Partners to apply and implement specific research, development and implementation projects with the active participation of business entities interested in innovation in general, and in particular the generation of innovation and their subsequent economic use *(Consortium agreement, §1, pkt. 1)*



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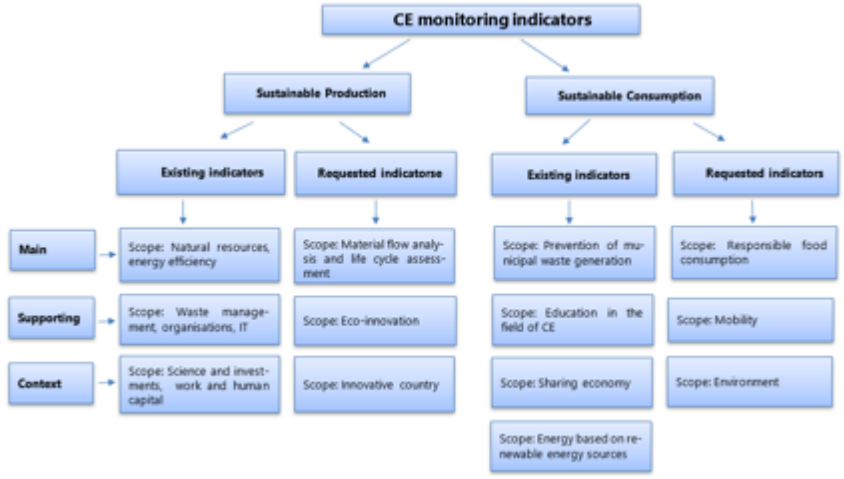

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Liberté
Égalité
Fraternité

Webinar 2 (needs, challenges, barriers)

Chrystel SCRIBE - FRANCE

Commissariat Général au Développement Durable
Service des données et études statistiques
Sous-Direction de l'information environnementale

In 2017, we published a document available in English :

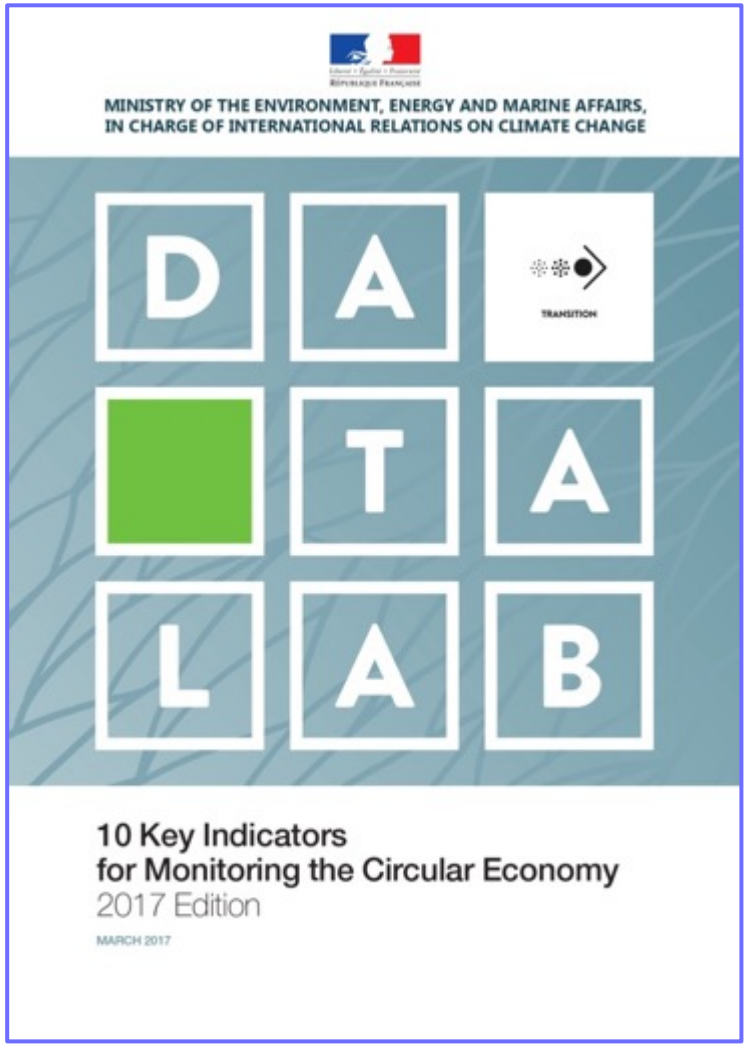
10 Key Indicators for monitoring the Circular Economy.

We are in the process of updating it.

It should be published at the end of the year.

Specifications for indicators :

- entire field of EC ;
- long period (trend) ;
- international comparisons.



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CIRCULAR ECONOMY

3 areas
7 pillars

Extraction/Manufacturing and Sustainable Supply Chain

- Domestic Material Comsumption per Capita
- Resource Productivity
- Material Footprint

Eco-design (products and procedures)

- Ecolabel

Industrial and Territorial Ecology

- Number of industrial symbiosis ecology projects (no international comparisons)

Functional Economy

- Car-Sharing (cannot be updated)
- Number of companies having benefited from a support system on the functional economy (no international comparisons)

Extension of Product Lifespan

- **Reuse**
- **Repair**
- **Recycle**

- Household spending on product repair and maintenance (no international comparisons)
- Number of repair Cafés

Responsible Consumption

- **Purchasing**
- **Collective Consumption**
- **Use** - Food Waste

Recycling (materials and organic matter)

- Quantities of waste sent to landfill
- Use of recycled raw materials in production processes

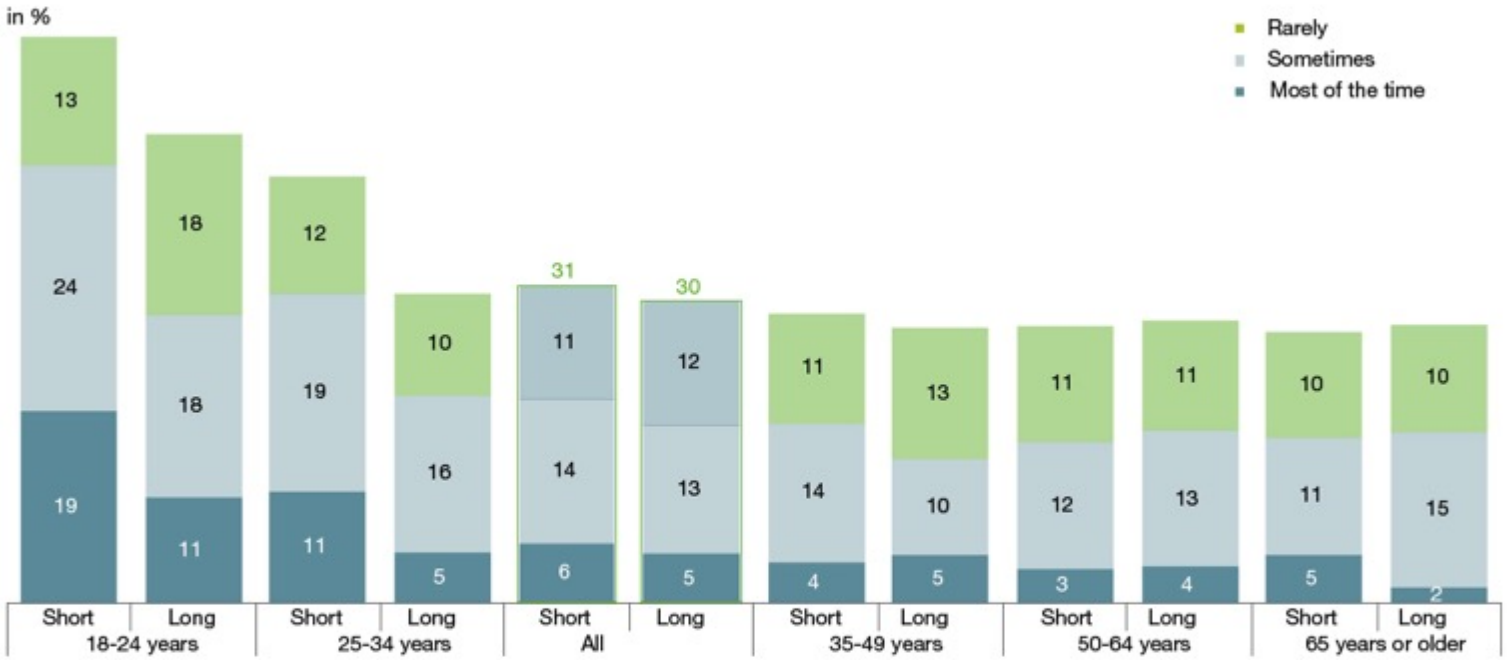
Employment in repair and recycling

Functional economy in the 2017 publication

Main issues

- Only one aspect of FE = example
- The survey used is dated 2016 and may be repeated in 2021
- The addition of a question planned in the "Camme" survey : results in February 2022

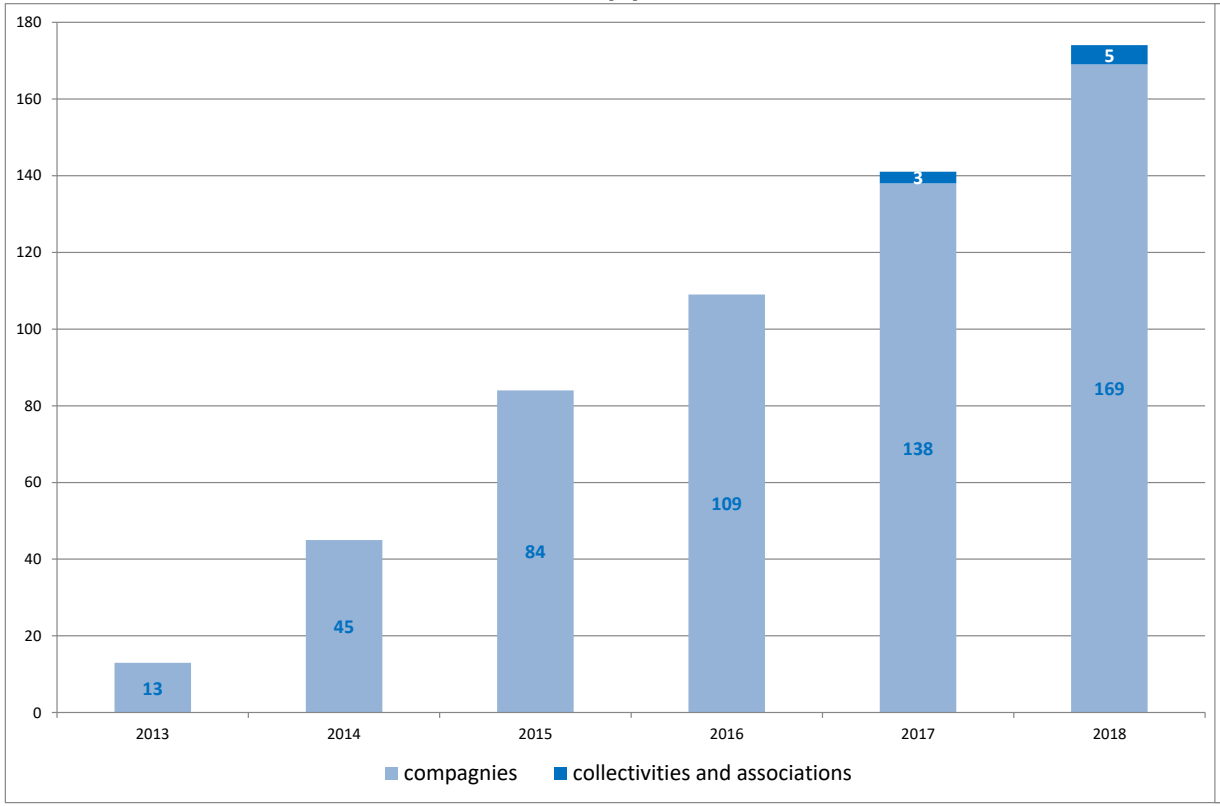
Frequency of car-sharing by journey type and age



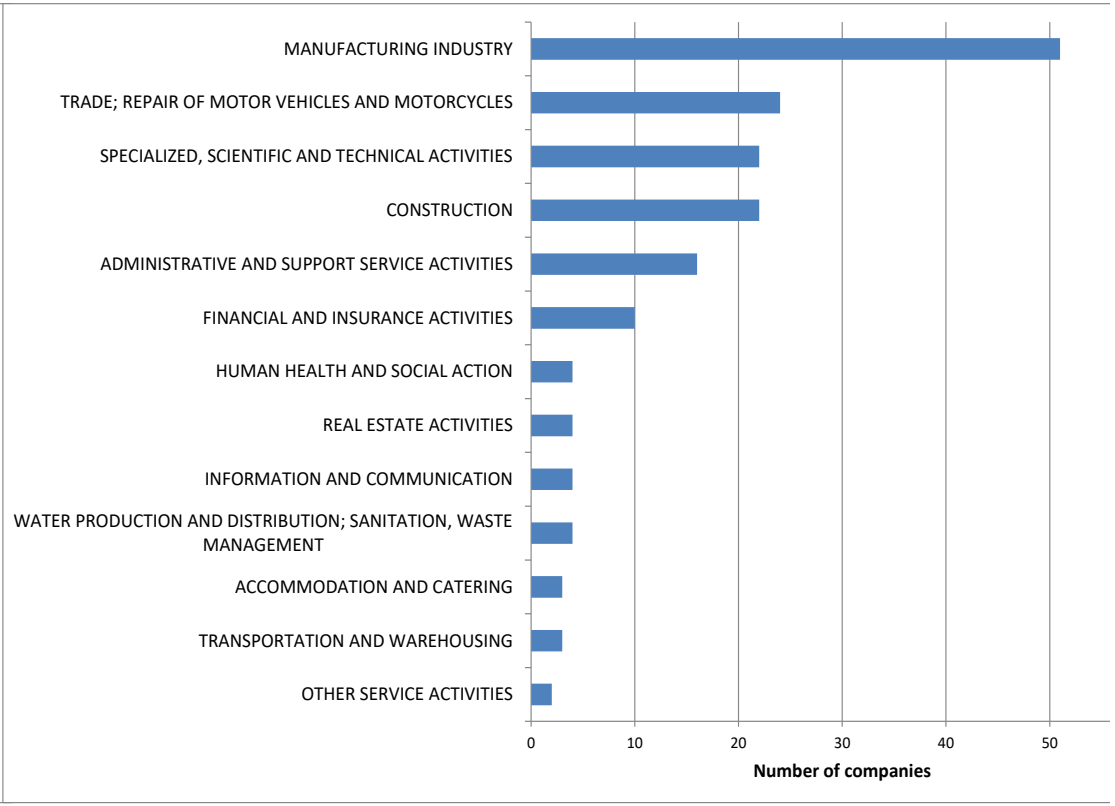
Sources : CGDD/SDES, enquête sur les pratiques environnementales des ménages, 2016

Functional economy in the 2020 publication

Evolution of the cumulative number of companies, local authorities and associations supported



Breakdown of companies supported by sector



***Source** : Ademe, panorama national et pistes d'action sur l'économie de la fonctionnalité, février 2020*

Functional economy in the 2020 publication : this indicator does not meet our requirements : it remains a challenge

- Not complete: it only takes into account the projects supported by Ademe, not the others.
- biased indicator : We know that not all projects go all the way: there are only a few dozen companies that have really successfully marketed an offer in functional economy
- International comparisons are not possible
- Doesn’t show the interest of functional economy : The ideal would be to quantify the benefits from functional Economy in terms of saved resources

***Source** : Ademe, panorama national et pistes d'action sur l'économie de la fonctionnalité, février 2020*

Functional economy refers to a new business model whose goal is to replace the sale of a product or service with the sale of the use of the good. The aim is to base its revenue not on a volume of sales but on a performance of use. It is a more sparing economic model in terms of resources and pollution thanks to the decoupling of production and income.

We seek to illustrate the functional economy with an indicator that allows :

- **Monitoring over time**
- **An international comparison**

Description of the challenge :
How and where to get the data, easy (=cheap), comparable and continuously !

Questions
Q1 : Would it be easier to get data on functional economy from the consumers/users side or from the producers side ?

Q2 : Any thoughts/ideas for quantifying the benefits from functional economy in terms of saved resources ?

Elements of monitoring transition process

- Necessary to get an overview of actions, means, results:

1. What's going on in society?
   - CE companies, CE patents, CE innovation programs, consumers attitude to CE, etc.

2. What policy instruments are prepared or implemented?
   - Laws and barriers, GPP, EPR, etc.

Framework monitoring transition proces Circular Economy in NL

Examples of indicators used for CE report

- Knowledge development: number of scientific publications and research projects
- Knowledge exchange: number of events and gov support
- Entrepeneurship: number of CE companies and CE projects supported by gov. Funding
- Market formation: GPP and fiscal subsidy schemes
- Mobilising means: total financial CE teams and CE education
- Overcoming opposition: barriers in law and consumers attitude CE

PBL Netherlands Environmental Assessment Agency

Challenges for monitoring CE transition proces NL

- Data is often not available in current statistics; needed:
  - New Research (f.e. monitoring progress policy instruments)
  - New Methods as bottom up / company data and web scraping (f.e. number & share CE companies, employees and added value)
  - New Statistics (f.e attitude consumers and business to CE)
- Tension between RACER criteria (Relevant, Accepted, Credible, Easy and Robust) and room for experimentation
  - Especially for indicators transition process: not always easy and robust
- Is it possible to come to a shared set of indicators for the process?
  - How to realize comparable data across countries?

Interactive survey

1. Please grab your laptop or smart phone.
2. Visit **www.menti.com** and enter the code **682399.**

   Alternatively we provide a direct link in the chat.

3. Then answer we would like you to answer 3 different questions. We will guide you!

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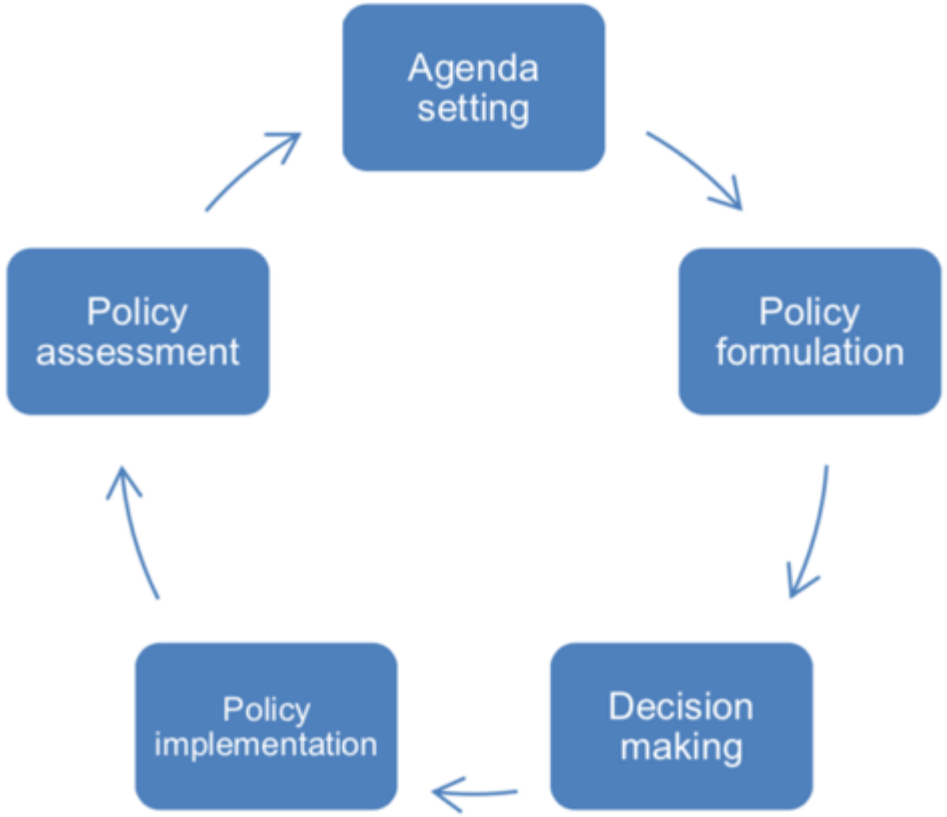
Homework question, input for Webinar 3

- Choose **one CE policy objective** (e.g. CE Jobs, zero final waste, less dependency on natural resources, CE's contribution to climate change, ... etc.) and
- Provide some **examples of existing and potential future options for indicators** useful across the policy cycle (agenda setting , policy formulation, decision making, policy implementation and policy assessment)

The policy cycle



Inspiration may be found in Eurostat Manuals and guidelines (2017), Towards a harmonised methodology for statistical indicators, Part 3: Relevance for policy making, https://ec.europa.eu/eurostat/documents/3859598/8071770/KS-GQ-17-007-EN-N.pdf/7d34c904-2d07-4e71-bd6f-8fe9ee373b60

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Next steps

Webinar 3 “solutions, good practices, future options”

Thursday 19 November 2020 10-12 CET

- **EEA/ETC** to upload Webinar recordings and presentations
- **EEA/ETC** to select countries/regions to present in Webinar 3 and provide guidance. We already have offers from Belgium (Flanders), Estonia, Germany and Spain (TBC).
- **Countries**: email your response on new homework question (individual selection of a CE objective) by Wednesday 11/11/20 to theo.geerken@vito.be.
- **Countries** that did not send in the previous assignment can still do so to be included in overall analysis and reporting. Reminder: information is shared for collective learning and co-creation, not for formal positioning from countries towards EU.
- **All**: to share by mail favorite (shareable/Global Commons) documents on CE monitoring
  include a short explanation about the content and conclusions of the document.
  provide at least a weblink or doi, or the full document if open source

Thank you for your participation and looking forward to continuing the co-creation with you!

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