

CES Guidelines for Measuring Circular Economy (prepared jointly with OECD)

PART A: Conceptual Framework, Indicators and Measurement Framework

Conceptual framework pillar “socio-economic opportunities of a circular economy”: indicator themes and indicators

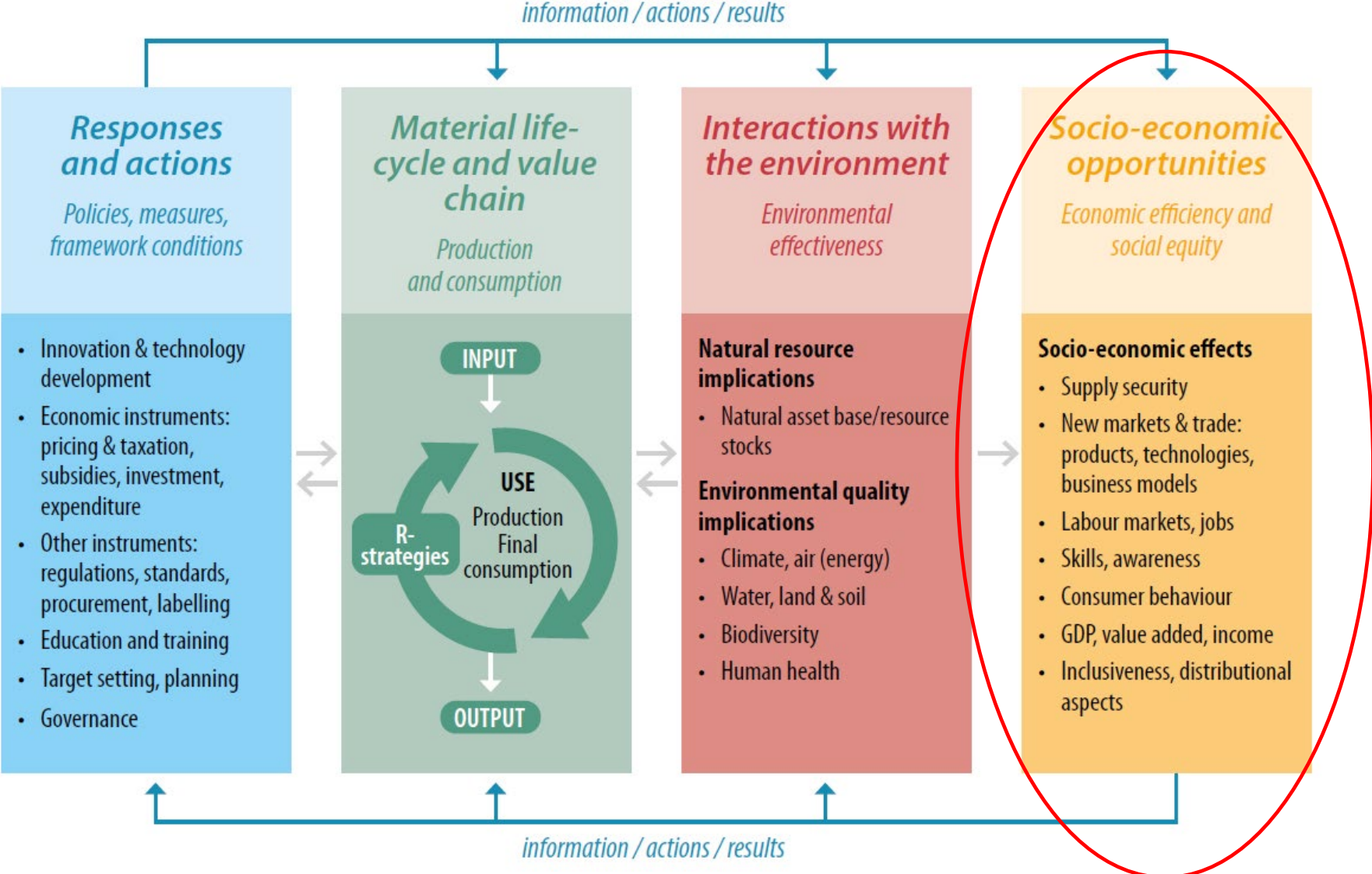
Michael Nagy (UNECE) on behalf of the UNECE Task Force on Measuring Circular Economy



UNECE



Conceptual monitoring framework – building blocks



Building block “Socio-economic opportunities for a just transition“



- Describes the **social and economic outcomes of a circular economy**, taking into account aspects of economic efficiency and social equity that are central to a just transition.
- Related indicators capture the development of **new markets, trade and employment** opportunities, changes in **supply security** or autonomy, levels of **education, skills** development (closely linked to the capacity to innovate), and **behavioural changes** (households, consumers, firms). They also capture **new developments**, which are not visible through broader recycling and material flow indicators, such as the **uptake of new circular business models** and industrial ecology/symbiosis initiatives with links to entrepreneurship, and sharing economy initiatives, as well as **distributional aspects** of CE policies and actions, such as environmental justice.

Socio-economic opportunities for a just transition – indicator topics



Market developments and new business models

- CE entrepreneurship, goods and services; business models, start-ups, industrial ecology/symbiosis initiatives
- Employment markets and jobs; Recycling markets

Trade developments

- Trade in CE related goods and services
- Supply security/autonomy/resilience

Skills, awareness and behaviour

- CE literacy and skills
- Public opinion on CE issues
- Behavioural changes (households, consumers, firms)

Inclusiveness of the transition (*distributional aspects of CE policies*)

to be defined; to reflect how different territories and population groups are affected or benefit from CE policies and actions (young people, women, vulnerable communities, etc.)

Framework themes and indicator topics	Proposed indicators (a)	Type (b)	Rel. (c)	Meas. (d)	Related indicator sets (e)
1. Market developments and new business models					
1.1 CE entrepreneurship, goods & services incl. uptake of new circular business models, industrial ecology/symbiosis initiatives	Gross value added of circular economy sectors: % contribution to GDP and change over time	Core	H	H/L	EU MF; WP3 Core
	<ul style="list-style-type: none"> CE start-ups and trademarks CE certification of companies 	Comp	M	L	
1.2 Employment markets and jobs	Jobs in CE sectors: proportion in total employment and change over time	Core	H	H/L	EU MF, WP3 Core
	<ul style="list-style-type: none"> Jobs in sharing economy, reuse and repair activities: number and change over time 	Comp	H	L	
1.3 Recycling markets	<ul style="list-style-type: none"> Markets for recycled materials 	Comp	H	L	



Framework themes and indicator topics

Proposed indicators (a)

Type (b)

Rel. (c)

Meas. (d)

Related indicator sets (e)

2. Trade developments

2.1 Trade in CE related goods and services

- | | | | | |
|---|------|---|-----|-----------|
| • Trade in recovered (secondary) materials (volume, proportion in imports & exports) | Comp | M | M/L | |
| • Trade in recycled (secondary raw) materials (volume, % contribution to imports & exports) | Comp | M | M/L | OECD MFRP |
| • Trade in recyclable raw materials (proportion in imports & exports) | Comp | M | L | EU MF |

2.2 Supply security

- | | | | | |
|---|------|---|---|----------------------------|
| Domestic material autonomy (aggregate, by material group) | Comp | H | H | OECD MFRP, EU MF, WP3 Core |
| a. proportion of domestic extraction in DMI or DMC | | | | |
| b. proportion of domestic extraction in RMI or RMC | | | | |
| • Supply security of “strategic” raw materials, by material or material group | Comp | H | M | OECD MFRP, EU MF |

- | | | | |
|-------------------|------|---|---|
| • Food security | Comp | H | M |
| • Energy security | | | |



Framework themes and indicator topics	Proposed indicators (a)	Type (b)	Rel. (c)	Meas. (d)	Related indicator sets (e)
---------------------------------------	-------------------------	----------	----------	-----------	----------------------------

3. Skills, awareness and behaviour (Placeholders)

3.1 Skills	Placeholders <ul style="list-style-type: none"> • CE literacy • CE skills : indicator tbd 	Comp	H	L	
3.2 Awareness	<ul style="list-style-type: none"> • Public opinion on CE issues and actions 	Comp	M	L	
3.3 Behaviour	Placeholder: Change in household, consumer, firm behaviour	Core	H	L	

4. Inclusiveness of the transition

	Placeholder: Distributional aspects & socio-economic inequality of CE	Core	M	L	
--	---	------	---	---	--