

## Measuring What Matters

The critical role of data and statistics for managing and monitoring circular economy progress

#### **Dmytry Mariyasin**

Deputy Executive Secretary of the United Nations Economic Commission for Europe (UNECE)

World Circular Economy Forum 2023



# Common Elements of Circular Economy Definitions



Maintaining the value of materials in the economy

Preservation of natural capital in terms of sustainable use of natural resources and preventing negative environmental impacts

#### Non-controversial "headline" definition:

- Value of materials in the economy is maximized and maintained for as long as possible
- Input of materials and their consumption is minimized, and
- Generation of waste is prevented and negative environmental impacts **reduced** throughout the lifecycle of materials.



# Joint UNECE/OECD Guidelines for Measuring Circular Economy

HEADLINE DEFINITION

CONCEPTUAL FRAMEWORK

**INDICATORS** 

MONITORING FRAMEWORK



**Developed by UNECE and OECD Expert Groups + partners** 













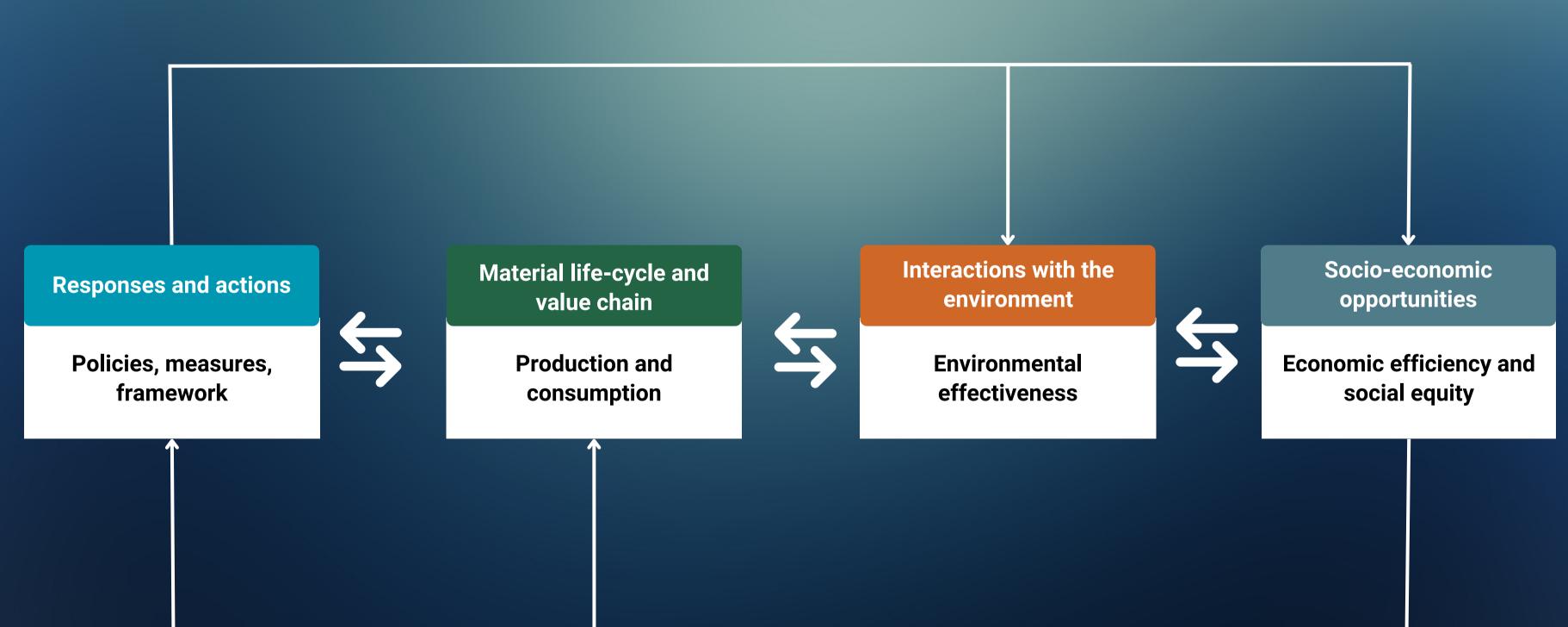






## Conceptual Monitoring Framework

- Building Blocks



## Indicator Examples



#### **Responses and actions**

#### **Support circular use of materials**

 Taxes and government support for CE business models

## Improve the efficiency of waste management

 Investments in waste management infrastructure

## **Boost innovation and orient technological change**

• R&D expenditure on CE technologies

## Material life-cycle and value chain

#### Material basis of the economy

Production-based material productivity (GDP/DMC)

#### **Circularity of material flows**

• Circular material use rate

#### Interactions with trade

• Physical trade balance

## Interactions with the environment

#### **Natural resource implications**

Intensity of use of renewable resources

## **Environmental quality implications**

• GHG emissions from production activities

## Socio-economic opportunities

## Market developments, new business models

- Gross value added related to circular economy sectors
- Jobs in CE sectors

#### **Trade developments**

• Trade in recycled materials

#### **Skills and awareness**

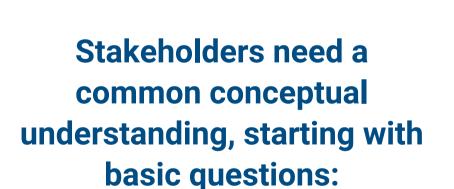
CE literacy



# Key issues for a successful implementation of CE



How is energy considered in a circular economy?





What is the definition of "waste" in a circular economy?



What are the natural resources conceptually included or excluded, for example, air, water and land?



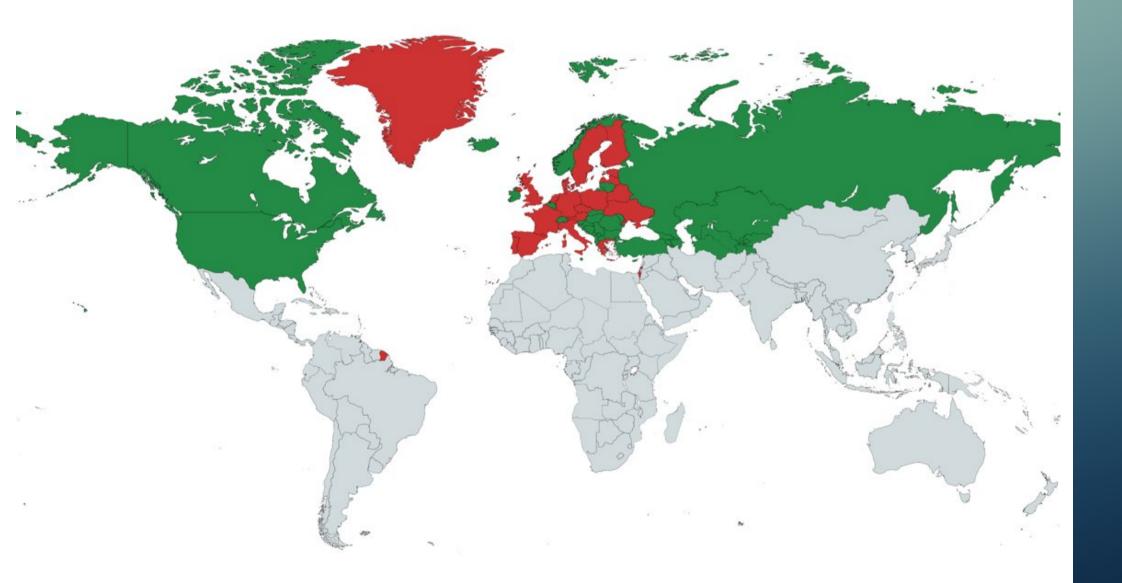
How to consider biological materials and cascading use of wood?

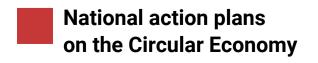


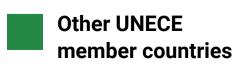
How does it relate to other policy areas, and the metrics used there?



### **UNECE Member States**









## **Resources and Contacts**

#### **Circular STEP:**

https://unece.org/trade/CircularEconomy roksolana.shelest@un.org\_

OECD/UNECE Guidelines for Measuring Circular Economy (draft):

michael.nagy@un.org