# **Circular Economy Innovation:**

Advancing the SPECA Network of Business Incubators and Accelerators for Sustainable Development



# 75 YEARS OF ECONOMIC INTEGRATION AND COOPERATION IN THE REGION

# Transition to a circular economy is necessary in SPECA participating States



- Resource extractive industries, which form the foundation of economies in SPECA participating States, are primarily governed by traditional nonlinear business practices.
- Ecological deficit of 0.88: SPECA participating States consume natural resources and use ecosystem services at a rate that exceeds the capacity of their local ecosystems to regenerate and provide those resources.
- SPECA sub-region is among the territories that are most vulnerable to climate change, presenting a threat to food security and the overall well-being of a large portion of the population.

Kazakhstan		=	2.84 Earths
Turkmenistan		=	2.56 Earths
Azerbaijan		=	1.56 Earths
Uzbekistan	() +	=	1.4 Earths
Kyrkgystan		=	1 Earth
Tajikistan		=	0.7 Earth

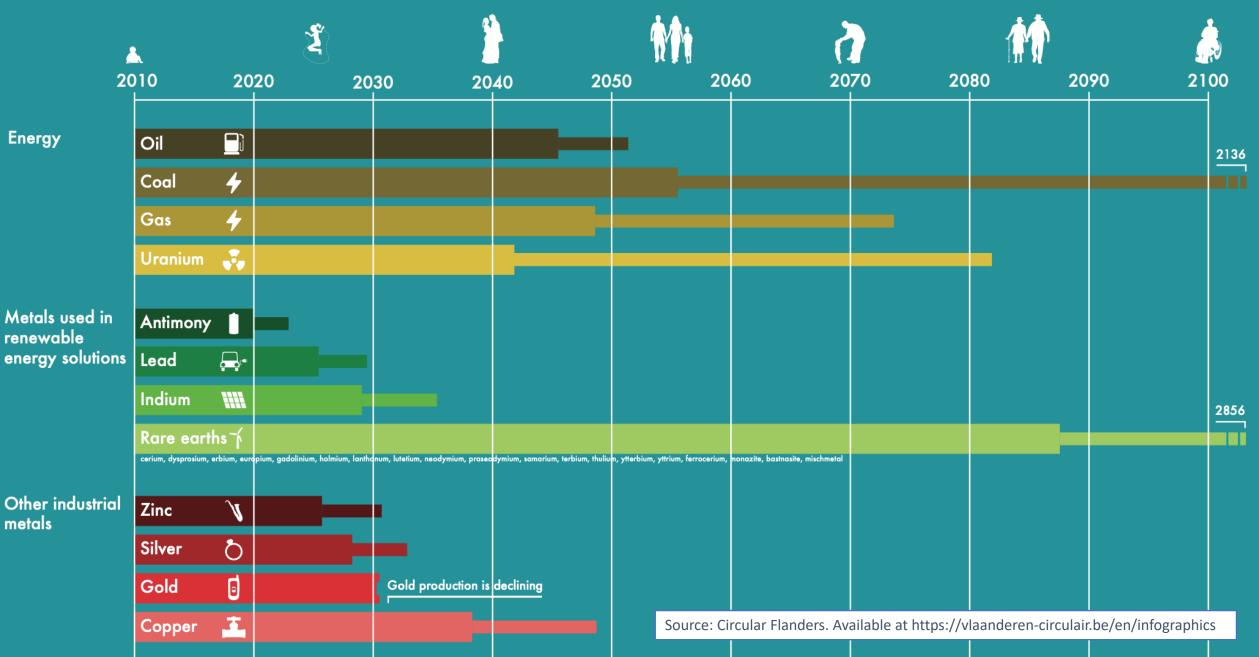
Figure 1. Ecological Footprint (number of Earths), 2022. Source: Author based on Global Footprint Network.

# Transition to a circular economy is necessary in SPECA participating States



Circular economy transition reduces dependency on finite natural resources and promotes sustainable industrial development across the region. Commitment of major oil and gas importing countries to achieve net-zero greenhouse gas emissions by the middle of the century underscore the significance of the structural transformation in the SPECA sub-region, with the circular economy at its core.

## Born in 2010: How much is left for me?



# What is it?

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## Innovation for the circular economy

### Circular economy\*:

- "One of the current sustainable economic models,
- in which products and materials are designed in such a way that they can be reused, remanufactured, recycled, or recovered and thus maintained in the economy for as long as possible, along with the resources of which they are made, and
- the generation of waste, especially hazardous waste, is avoided or minimized, and
- greenhouse gas emissions are prevented or reduced."

Innovative approaches to regulation for the provision of incentives and elimination of barriers

Enabling frameworks and incentives for private innovation

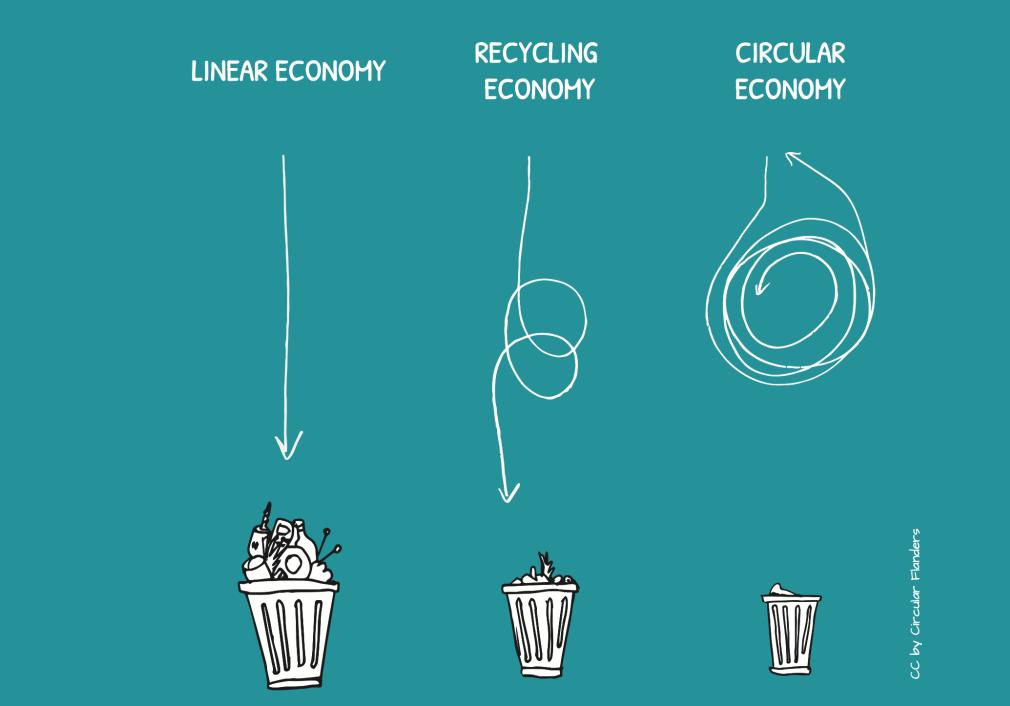
# Innovative solutions that transform industries

Material innovation Business model innovation Upstream innovation Facilitating technology innovation

\* United Nations Environmental Assembly

Source: Author based on the <u>Key Entry Points of the Circular Economy in State Policy for Enabling Innovative</u> <u>High-Growth Enterprises in the SPECA Sub-Region (UNECE, 2023).</u>

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# Innovation for the circular economy

UNECE

## is possible in SPECA participating States



MINISTRY OF HIGHER EDUCATION, SCIENCE AND INNOVATIONS OF THE

REPUBLIC OF UZBEKISTAN

### **B2B CONFERENCE**





**TIME** 09:00 - 12:00 (Tashkent time)

Subregional Workshop on Innovation and Digital Transformation in the SPECA subregion 1 18 October 2





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# Why me?



## Innovation policy in the circular economy ecosystem



- Adaptation to education programmes
- programmes

- Waste management
- Pollution and toxicity monitoring
- Climate action
- Energy efficiency policies
- Food loss and waste management
- Bio-economy and the use of biobased



#### Education

- Skill development

### Environment

- Science Technology Innovation
- Research and innovation programs and funding
- Business incubators, accelerators, and technology parks
- Science-industry linkages
- Digitalization, artificial intelligence, internet of things

- Government agencies
- Businesses and industry groups
- Technology companies
- Chamber of Commerce and Industry
- Academy of Science
- State procurement agencies

### **Finance/Investment/** Economy



- Strategic planning
- Fiscal measures, including economic incentives (e.g. extended producer responsibility)
- Investment policy
- Financial sector regulations
- Grants

- Tarif and non-tariff measures
- Supply chain policies
- Competition policy, consumer information
- Digital transition
- Bioeconomy and the use of biobased
- materials
- Entrepreneurship and incubators



# Theory of change





SPECA Network of Business Incubators and Accelerators for Sustainable Development (NBIASD):

- Accelerates the transition to a circular economy in the SPECA sub-region by inspiring new circular ventures and start-ups.
- It supports companies in transformative innovation of their business models towards the circular economy, which is designed to diminish waste and mitigate the depletion of natural resources.

# In 2023 UNECE developed

knowledge materials and recommendations for NBIASD in the circular economy



NECE

Innovation for the Circular Economy: Proposed activities for transforming Industries in Uzbekistan

> Prepared by the United Nations Economic Commission for Europe - Geneva, March 2023

**Road Map on Development of** Synergies Between **NBIASD** and Circular STEP. **UNECE's Stakeholder Engagement Network** for the Circular Economy

Development of Synergies

UNECE's Stakeholder Engagement

Network for Circular Economy

Road Map

**Activities for** Transforming Industries in Uzbekistan: Innovation for the Circular Economy

Available at: Fourth Session of the SPECA Working Group on Innovation and Technology for Sustainable Development and Subregional workshop (2023).

in the SPECA Sub-

Region

# In 2023 UNECE raised awareness

## among NBIASD members and partners





Workshop **"Innovation for the Circular Economy"** for Chief Innovation Officers in Uzbekistan (May 2, 2023, Tashkent). <u>Event</u> page. Policy dialogue **"Fostering Circular Solutions through Innovation"** (April 3, 2023, online). <u>Event page</u>. B2B conference **"Innovation for the Circular Economy: Bridging startups and Corporations"** (October 18, 2023, Tashkent). <u>Event page</u>.

**Call to action** 

Circularity happens across value chains, sectors, and ecosystems. **Collaboration between start-ups and big companies** can speed up the shift towards a circular economy and accelerate the innovation process.

Governments should accelerate startups through programs and partnerships with leading international research institutions and universities to create profitable business models in the circular economy.

A consistent approach and **a wholesystems perspective** are crucial for circular technological and business solutions to reach scale, including through an active consultation process between private and public sectors. Governments should integrate the circular economy more deeply into the educational process, especially in university-based business incubators and accelerators. Universities and industries should work closely together to transform processes and use more circular economy elements.

While it may take years for **new research and technology** to reach the business level, they will **have a huge impact on the circular transition**. Commercialization of innovative ideas for the circular economy is a challenge in the UNECE region. The **promotion of collaboration between scientists and entrepreneurs** is required.

There is currently a **lack of focus on long-term scenarios in R&D for the circular economy**, which risks hindering progress in the future.

Source: Author based on discussions during the UNECE policy dialogue Fostering Circular Solutions Through Innovation (2023).

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# **Thank you!**

Anastasia Pankova International Consultant

**UNECE** Date 18-19 | October | 2023, Tashkent 75 YEARS OF ECONOMIC INTEGRATION AND COOPERATION IN THE REGION