

**Session at the 4th EU Macro-regional Strategies Week 2023 *Transform to thrive* of EUSDR
PAC 8 in cooperation with EUSALP and EUSBR**

Leading point of contact:

PA 8 Coordinators

Carmen Hawkins

Ministry of Economics, Labour and Tourism Baden-Württemberg

Coordinator of Priority Area 8 of the EU Strategy for the Danube Region

Competitiveness of the companies

Schlossplatz 4 (Neues Schloss), 70173 Stuttgart

Phone: +49 (0)711 123-2953 Mobile: +49 (0)162 1306154

E-mail: carmen.hawkins@wm.bwl.de

Internet: www.wm.baden-wuerttemberg.de; <http://competitiveness.danube-region.eu>

Nirvana Kapitan Butkovic

Ministry of Economy and Sustainable Development

Head of Service / Coordinator of Priority Area 8 of the EU Strategy for the Danube Region

Competitiveness of the companies

Directorate for EU Programmes and Projects, European and International Affairs

EU Territorial Cooperation and Macro-Regional Development Policy Unit

Ulica grada Vukovara 78

10 000 Zagreb

Tel. + 385 1 6106068

E-mail: nirvana.kapitanbutkovic@mingor.hr

Potential partner organisations:

RegioClusterAgency for Innovation and Change in Baden-Württemberg

Dr.-Ing. Gerd Meier zu Köcker

[About the RegioClusterAgency BW: Clusterportal BW \(clusterportal-bw.de\)](http://clusterportal-bw.de)

Reutlingen University

Prof. Dr Dieter Hertweck

[Reutlingen University - Reutlingen University: international, practical, entrepreneurial \(reutlingen-university.de\)](http://reutlingen-university.de)

Anteja

Mateja Dermastia

[Anteja | Enabling Sustainable Growth \(anteja-ecg.com\)](http://anteja-ecg.com)

Erik Sindhöj

Researcher at RiSe in Sweden, specialist about recycling of nutrients. RISE RESEARCH INSTITUTES OF SWEDEN. RISE is Sweden's research institute and innovation partner. [Swedish research creating sustainable growth | RISE](http://swedishresearchcreatingustainablegrowth.com)

Marko Mitrovič

Founder of Optifood, CirEco d.o.o./Optifood, Maribor, Slovenia, <https://optifood.eu/>

Thematic connection:

"Developing resilient value chains" in all sectors, including energy, circular economy and bioeconomy
Examples from the field of recycled nutrients including fertilizers and circular economy especially in regard of the avoidance of food waste

MRS cross-cutting focus

The issues are relevant for the whole EU and all macro-regional strategies.
Discussion between experts from EUSDR, EUSALP and EUSBR.

Session title:

"Development of resilient value chains and their impact on a sustainable energy supply and its energy saving potentials with examples from the fields of circular economy and bioeconomy".
Stakeholder session of EUSDR Priority Area 8 in cooperation with EUSALP and EUSBR at the MRS
Week 24-28.04.2023 transform to thrive

Concept of the session:

The international diversification of supply and value chains as a key factor in maintaining competitiveness and reducing risk dependency for SMEs, as well as ensuring the supply of energy, food and goods to the population throughout Europe. In the session approaches will be presented which also include examples from the fields of bioeconomy by using nutrient resource from agriculture or circular economy by avoiding food waste. The discussion and the examples will show how energy and further resources will be saved, even more a more resilient supply be possible.

In particular, the impact of the Corona pandemic and the Russian war of aggression on Ukraine have shown us how important it is to make international supply chains sustainable and stable while saving on energy consumption and securing supply with raw materials by f.e. using available nutrients and avoiding waste. The goal is to support companies in further diversifying their supply chains and making them future-proof, with a focus on systemic value creation partners. Furthermore, for cost and environmental reasons, it is important to avoid resource-intensive economies and energy-intensive supply routes.

Another positive aspect of resilient value chains is a more local and vertically integrated value creation that includes energy self-sufficiency. The new methods of the bioeconomy e.g. make an important contribution to resource efficiency. It is already possible today to replace nitrogen fertilisers produced with fossil energy with recycled fertilisers. ERDF-funded demonstration plants have shown that the recovery of ammonium sulphate and the critical raw material phosphorus from wastewater works. The advantage is a resilient supply of fertiliser with simultaneous local value creation, a more diverse supply, and savings in energy and transport costs. Also the increase of nutrient resource use from livestock manure and other organic fertilizers create sustainable and profitable handling chains that also lead to reducing negative environmental impacts of agriculture.

Equally important, circular economy offers a wide range of possibilities to secure the supply with raw materials for SME and industry. A use of so called recycled materials is saving energy at the same time value chains become more resilient and local or regional value creation is possible. Approaches which avoid that valuable products like food become waste at all are also part of the session. It will be presented how to prevent food waste with innovative and technological solutions in food management. Again here are next to economic, environmental and energy also social aspects in the picture.

Increased cooperation within Europe and at macro-regional level makes sense not only in circular economy and bio-economic approaches to resource efficiency but also in the area of decentralised and sustainable energy production. Only with a circular economy paradigm regarding resource use and energy efficiency will it be possible to transform the European economy in the long term.

Thematically, this is on one hand about the provision of energy in the form of biomass, gas, electricity, heat, etc. central energy systems and the transport of energy over long distances are historically conditioned, resource-intensive and expensive. Decentralised energy production using renewable energies (PV, wind, biomass) and digital services can be an option to meet this challenge. However, the necessary smart grids, value chains, digital systems and policies are not yet sufficiently developed.

On other hand, in decentralised scenarios, the raw material sources are often close to the consumers, but there is usually a lack of smaller and medium-sized distribution and storage infrastructures to convert the raw materials available f.e. from agriculture in energy or fertilizers.

Approaches like avoiding waste at first hand will certainly also contribute to the solution.

The panel discussion will highlight the state of the art and provide information on and discuss concepts and tools to address the above challenges.

Agenda:

Introduction and Welcome (5 min)

Nirvana Kapitan Butkovic, Coordinator of EUSDR Priority Area 8 Competitiveness of Enterprises

Facilitator:

Welcome, outline of session and introduction of speakers (15 min (5 min Moderator + 2 min per panellist)

Dr. Gerd Meier zu Köcker

Panel discussion (50 min)

10 min speaking time per panelist (at least two rounds)

Presentations possible, not obligatory

Dr Gerd Meier zu Köcker

Managing Director RegioClusterAgentur Baden-Württemberg

Co-coordinator of EUSDR PA 8 Cluster and Regional Development Working Group and Coordinator of EUSALP Action Group 2 Sub-Group on Bioeconomy, Thematic Priority (Subgroup)

Bioeconomy/Cluster Development.

Prof. Dieter Hertweck

Research Professor for Service Science at Reutlingen University of Applied Sciences

Coordinator of the EUSDR PA 8 Digital Danube Working Group

Expert on the topic of "Digital tools for identifying and implementing circular economy value chains in SMEs". As the head of the EUSDR PA 8 working group, one tries both to actively anchor the topic of digitization in the Danube Region Strategy and to practically network universities, business promoters, politics and companies in such a way that the topic of digitization in the Danube Region as a whole makes progress.

Mateja Dermastia

CEO of Anteja ECG, a women-led international consultancy dedicated to promoting sustainable economic development. Partner in the Danube Transnational Programme Interreg project GoDanuBio (EUSDR) and representative of EUSALP and EUSAIR Presentation of VCG.AI, which is an AI-powered circular value chain generator to match material, waste, and residual streams with advanced technologies and provides matches between sellers, buyers, and technology providers for minimizing waste and CO2 emissions and improving efficiency and profitability (VCG.AI).

Erik Sindhöj

Researcher at RiSe in Sweden, specialist about recycling of nutrients at RISE RESEARCH INSTITUTES OF SWEDEN, Representative of EUSBR.

The goal of Eric Sindhöj's research is to increase nutrient resource use efficiency from livestock manure and other organic fertilizers to create sustainable and profitable handling chains that also lead to reducing negative environmental impacts of agriculture.

Marko Mitrovič

Founder of Optifood, Maribor, Slovenia, <https://optifood.eu/>

Representative of EUSALP

The mission of Marko Mitrovič and Optifood is to prevent food waste with innovative and technological solutions in food management. In his work, he is combining economic optimization with environmental protection and social responsibility. Contribution to the discussion in regard of Circular economy, avoiding waste of resources including raw materials and energy

open Q&A (15 min)

final comment each speaker and thanks (5 min)