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International Webinar

Digital Industrial Symbiosis

Advancing Sustainability and Innovation

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FReINDs

Future-ready industries: Smart, sustainable, and circular resource management through Industrial Symbiosis (IS)

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Project Presentation

Ali Turkeyilmaz, PhD

*University of Stavanger
School of Business and Law*



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Project Partners

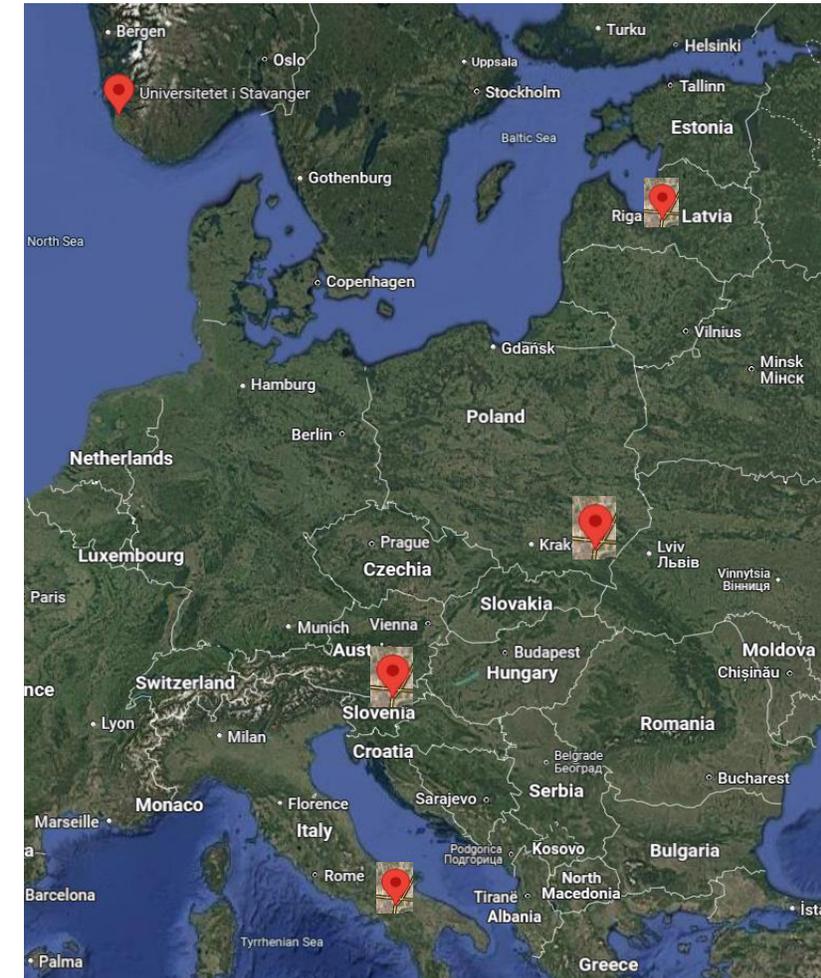
University of Stavanger – Norway (Coord.)

International School of Social and Business Studies
- Slovenia

Danmar Computer - Poland

BANKU AUGSTSKOLA - Latvia

EXEO LAB - Italy



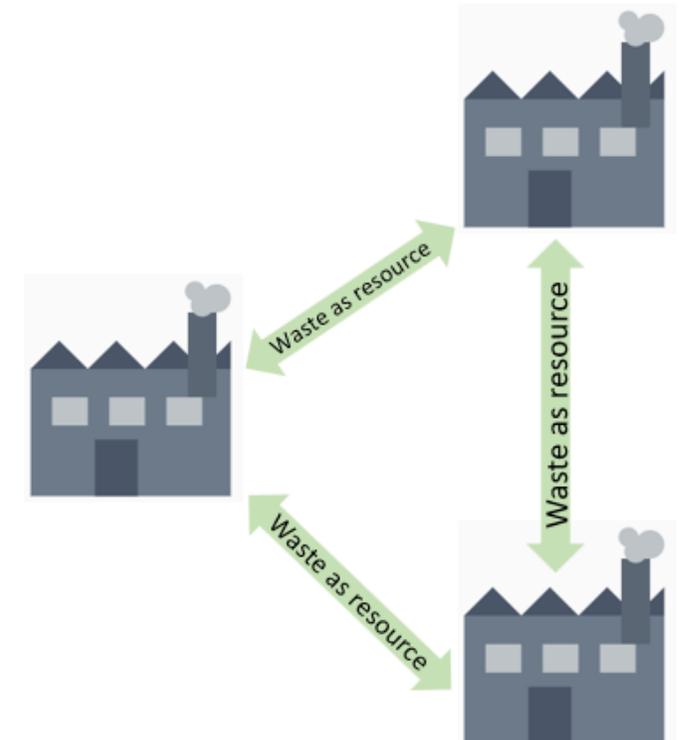


What is Industrial Symbiosis (IS)?

*The transition to the circular economy
... cannot be achieved by acting alone,
... it should be systemic, deep, and transformative,
... requiring cooperation at all levels.*

Industrial Symbiosis (IS) refers to the **collaboration** between industries to **exchange materials, energy, water, and by-products** to enhance **resource efficiency** and achieve mutual benefits.

A **network** of symbiotic exchanges (between and within organizations)





Why Industrial Symbiosis Matters

The EU promotes **IS** as part of its **Circular Economy Action Plan**, and ***considers IS as a key tool for***

- achieving the EU's sustainability goals, including reducing greenhouse gas emissions and transitioning to a climate-neutral economy,
- reducing waste,
- extending lifetime of critical / scarce resources,
- cost savings *through shared resources* -new revenue streams from by-products-,
- job creation and fostering innovation.

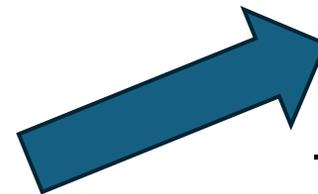


The FReINDs project

The gap:

While IS is suggested as one of the key tools to facilitate the transition to a sustainable economic system,

its consolidation is limited by a range of barriers, such as environmental regulations, low cooperation between industries, economic issues, lack of IS knowledge, relevant resources and culture (such as information sharing).



FReINDs goal is to

- address this gap,
- contribute to the field of IS,
- increase IS awareness
- support sustainable, circular and green transition.



Objectives:

- Strengthen collaborative research between HEI and industries to innovate and develop technologies or business models that advance IS.
- Helping to overcome the blocking points through innovative IS training, learning and management tools
- Ensuring the sustainability of the project results over time and after the project end date

Planned Outputs:

- **DIS research report** based on literature, interviews, surveys and case studies
- **Curriculum Modules**: Five modules developed based on research/literature and interviews with organizations
- **Interactive course** for HEI and VET students (hybrid MOOC)
- **IS Toolkit**: Assessing IS readiness
- **Final Report**: Comprehensive project summary



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Project Sustainability



FReINDs MOOC

A powerful OER for advanced training, which will be based on the 5 modules of the tested and validated training curriculum



FReINDs Toolkit

An innovative toolkit targeting future ISMs, immediately empowering them to diagnose the starting situation of digital IS and CE.



FReINDs Networking

An international network offering practical examples to complement theoretical learning, exchange of knowledge, ideas, and best practices among its members



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*'If you want to go fast, go alone.
If you want to go far, go together.'*

With FReINDs, we want to go far towards a
smarter and more sustainable future.

Please join us on this journey!

THANK YOU!



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for Social and Business Studies
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