



CircLean Open Innovation Workshop

1 June 2022 - Kokkola, Finland

The workshop was held on Wednesday 1st of June 2022 at the Kokkola City Hall in Kokkola in Finland.

The workshop provided the opportunity to share experiences and knowledge regarding industrial symbiosis (IS) transactions to ensure that the work of the CircLean network remains relevant to its members. The workshops also provided the opportunity for Finnish companies, business associations, public authorities, and R&I institutions to share views and suggestions on how to increase the uptake of IS nationally and at the EU level. The event was organised in cooperation with Biovalley Finland and Motiva.

The workshop was a Partner Event of the EU Green Week.



Highlights

EU Strategic Landscape and CircLean Benefits

- The **European Green Deal** and the **EU Industrial Strategy** have emphasised the potential of industrial symbiosis (IS) as an innovative circular business model. One of the EU objectives on IS to be pursued through the CircLean project concerns the development of a European industry-led monitoring and reporting system for IS transactions.
- IS brings **twofold benefits** in terms of environmental protection and climate mitigation (decreased use of primary materials; decreased landfilling; reduction of GHG emissions; reduction of energy use, etc.) but also in terms of competitiveness and industrial innovation (decreased costs for primary raw materials; fostering innovation and R&D; improved sustainability image of the companies).
- **CircLean** is a network of businesses and SMEs for IS. The purpose is to set up a network of businesses to seize IS business opportunities. CircLean is targeted at industry actors; business associations; public authorities; and R&I stakeholders. CircLean is EU-wide, flexible, industry-led, sustainable, voluntary, and needs-centred.

CircLean Toolbox

- The CircLean Toolbox comprises a Self-assessment module and a Matching tool. The Self-assessment module prepares businesses for engaging in industrial symbiosis, with a three-stage assessment process of their site, resources, and potential match opportunities. The user is guided through identifying waste streams and other under-utilised resources that can be repurposed by companies in different sectors, and how to gather evidence and data for these resources. Ideas are presented to help the user identify substitutes for inputs leading to a diversified and more robust supply chain. More information on the Self-assessment module is available [here](#). Companies that are confident in these areas can move straight to the online Matching tool [here](#), which will offer them the opportunity to enter into regional or cross-border IS transactions.

Facilitation of Industrial Symbiosis - good practices

The good practices were presented by the following speakers with Nora Birkman Neunstedt, Kokkola Regional Development Company KOSEK moderating the session:

- Johanna Hylkilä, Marketing Chief, Kokkola Industrial Park (KIP)
- Suvi Mantsinen, CEO Humuspehtoori
- Paula Eskola, Senior Expert, Motiva (Introducing Finnish circular economy networks)

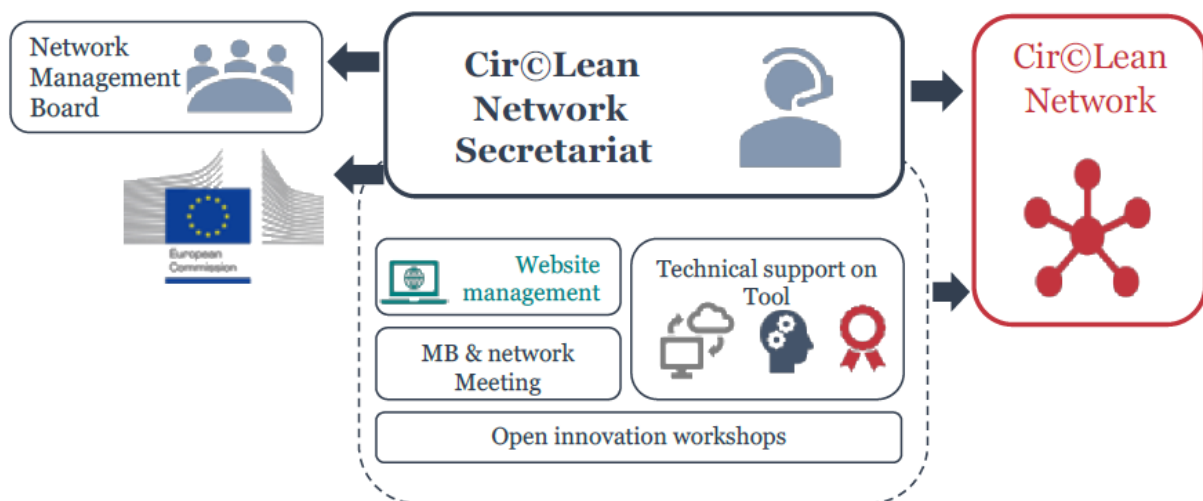
The presentation of the good practices are summarised by the following points:

- **Finnish industrial parks** play a strategic role in promoting and executing IS and act as facilitators for supporting the process of IS synergies in Finland. For example, Kokkola Industrial Park (KIP) is an international large-scale industrial area with 14 industrial companies, 19 industrial plants and 60 service companies. This is unique size of a park in the Nordics and in Finland. Central Ostrobothnia is the smallest region in mainland Finland, but the area is the biggest exporter of goods (when measured in per capita terms) of all regions in Finland, creating great opportunities for IS. The Common Area Strategy was developed to ensure actions to improve the competitive advantages of the area. KIP runs five networking groups to increase synergies, co-exchange of knowledge and stay updated on policy changes.
- **Smaller companies also contribute to IS in Finland.** The company Humuspehtoori offers the environment industry an opportunity to turn waste into organic fertilizers and soil improvements

to produce biogas. The slow delivery of environmental permit is the main obstacle to scaling up the business.

- **The Finnish Industrial Symbiosis System (FISS) offers at the national level in Finland, the opportunities for regions and companies to engage in IS and synergy opportunities.** Several examples of networks provide opportunities to exchange best practices and monitor the IS in Finland and abroad. This includes sectorial networks, such as the Centre of Expertise for the Circular Economy in the Built environment. The platform for exchange of IS possibilities is open access. Other relevant networks include [Hinku Network](#) (network towards carbon neutrality), [Network of Eco-industrial Parks](#) and the [Telaketju Network](#) (textile value chain).
- **The greatest benefits identified for joining an international IS network is the internal and external exchange of knowledge and capacity building.** There is an interest for Finnish industrial parks and companies to join international networks for this purpose. The challenge of IS in Finland is to find a way to collect and analyse the data coming from IS transactions and ensure reporting of these transactions.

CircLean Governance



How to join CircLean in 3 easy steps

Step 1: Express your interest by sending a signed Letter of Intent to the CircLean Secretariat at circlean.project@technopolis-group.com

Step 2: Fill in the Membership Application Form including information on industrial symbiosis activities; experience with industrial symbiosis, etc. There is a basic and an active membership.

Basic membership

- Contribute to the development of the CircLean resource tool with their details and availability for matchmaking
- Contribute to the overall progress of the network
- Register details and resources in the CircLean tool and agree to contribute to the "Network" of resources shared online
- Active involvement in the more-advanced network activities (e.g. network meetings) is not compulsory

Active membership

- Register details and resources in the CircLean tool and contribute to the "Network" of resources shared online
- Involvement in the Management Board and in specific network meetings playing a more prominent role in the activities organised to develop the network, establish it as a sustainable hub for industrial symbiosis in the EU, and expand its membership base.

Step 3: Sign the Network Charter/Code of Conduct which includes mutual respect, integrity-based relationships among members, etc. More information is available [here](#).

Discussions on the implementation of circular economy and industrial symbiosis

The discussion on the implementation of circular economy and industrial symbiosis was moderated by Nora Birkman Neunstedt, Kokkola Regional Development Company KOSEK and attended by a panellist of experts:

- Risto Rova, Project Manager, Battery Recycling Innovation Park
- Ulla Lassi, R & D, Professor University of Oulu
- Sari Tasa, Senior Adviser, Ministry of Economic Affairs and Employment of Finland
- Jonne Sandberg, Development Director at the City of Kokkola

During the roundtable of the event, the panellists worked out the following key points for industrial symbiosis in Finland and IS policies:

Circular economy as a concept and in practice must be im

- **plemented in the sustainability strategy of companies** to understand how to better implement at the local level.
- While Finland is active in several EU networks, stakeholder emphasised that **networks should be voluntary, collaborative and based on mutual benefits**.
- **When choosing a more sustainable way of doing business, it was emphasised that cost is a main barrier**. The easier it is for industry to adopt and develop sustainability into their business models, the more likely they are to integrate green solutions.
- **Another big challenge, especially for IS** is the collection of data about exchanges and impact, proving the sustainable actions taken by Finnish companies.
- **Awareness among companies of opportunities at the national and international level for IS** is important, especially with a reduction of funding from the EU level.
- **Environmental permits were emphasised as a main challenge for European companies in Finland** and these can be solved by increasing the collaboration between companies and the government.
- The speakers also emphasised that **Finland has potential to share IS knowledge and technology and contribute more internationally, despite being well integrated in the EU networks especially EU associations**. There are many business opportunities. It was added that not everything can be carried out in Finland and that “not everything has to be homemade”, subsequently emphasising the importance of international cooperation.
- In terms of the contributions from these sectors:
 - **the research sector** emphasised that they take care of the competence and knowledge in IS as well as skills about primary and secondary raw materials, mentioning that especially secondary materials can be complex materials.
 - **the national public authority** stressed that they are continuously developing regulations to incentivise IS and circular economy, especially with a focus on possibilities through funding. Digital parameters are coming in mid-June 2022 and will ensure that digitalisation makes circular economy increasingly possible.
 - **the regional public authority** emphasised that it must be attractive for companies to come. The planning phase must be clear on these opportunities and build up the layers of infrastructure and then finally, services. Moreover, the regional contribution is important is essential to carry out and develop IS, especially in Finland.

- the industry emphasised the need to enable for companies to engage in regional areas

Frequently Asked Questions (FAQ)

- ✓ **What will happen to the CircLean network after the end of the funded coming from the European Commission in November 2022?**

The CircLean network was designed with the ambition to become self-sustainable after the three years of EU funding. There are ongoing discussions with the members of the network that will be intensified in the coming months regarding this aspect, as the continuation of the network depends on the engagement of its members. The European Commission and the consortium implementing the CircLean project are supporting this process. The CircLean website and toolbox will remain online for one year after project end.

- ✓ **What are the benefits for my company/organisation in joining the CircLean network?**

Getting free access to an EU endorsed industry-led community of peers equipped with robust tools to discover, engage in, monitor and report about industrial symbiosis transactions across the EU, i.e. a self-assessment module, a matching tool to identify suitable opportunities for IS transactions, a common reporting methodology, and a EU label.

Opportunity to share views and suggestions for the Commission to increase the uptake of industrial symbiosis in the EU.

- ✓ **What are the benefits for my company/organisation to engage in industrial symbiosis?**
 - *Reducing cost:* Decreasing costs associated with inputs to production and waste disposal improves profitability and competitiveness.
 - *Fostering innovation:* Industrial symbiosis produces a demand-pull on innovation as industry identifies novel uses for underutilised resources. The OECD and UNEP identify industrial symbiosis as supporting eco-innovation.
 - *Increasing revenue and competitiveness through diversification:* Creating new business opportunities to sell what used to be a 'waste', thus converting the cost of waste management and disposal into a revenue opportunity.
 - *Mitigating resource risk:* Finding alternatives to traditional inputs, often outside the usual sector boundaries, decreases reliance on critical materials.
 - *Creating jobs and encouraging entrepreneurs and new business start-ups.*
 - *Reducing emissions and contributing to climate neutrality targets.*

- ✓ **To what do I commit by agreeing to become a member of the CircLean network?**

CircLean is a voluntary network and by joining it you only commit to respecting the CircLean Charter/Code of Conduct. Your active participation and contribution will be appreciated. Membership is free of charges.

- ✓ **Will I have any benefit if I follow the CircLean voluntary reporting methodology? When will it be developed?**

The protocol for the voluntary reporting methodology is ready. The main benefit associated to its implementation is the award of the EU CircLean label. The label will not only help businesses to participate in communicating their sustainability efforts, but will also signal that they are trustworthy partners to other operators.

- ✓ **Who holds the copyright of the Self-assessment module and the Matching tool?**

The European Commission holds those rights.

Other resources on IS

- [European Resource Efficiency Knowledge Centre](#)
- EC, [Cooperation fostering industrial symbiosis: market potential, good practice and policy actions, 2018](#)
- [Industrial Symbiosis in the Baltic Sea Region, Nordregio Policy Brief](#)
- [FISSAC Project](#)
- [Guidelines on how to capitalise GPP as an enabler of industrial symbiosis](#), SYMBI project
- Interreg Europe Policy Learning Platform, [Policy brief on industrial symbiosis](#)
- Interreg Europe Policy Learning Platform, [Policy brief on circular economy business models](#)
- Interreg Europe Policy Learning Platform's [webinar](#) on circular economy business models

Event agenda

10.30-10.35	Introduction	<i>Presentation of the agenda</i>	Janne Keränen, Expert, Motiva
10.35-10.50	Speech from the representative of the European Commission		Anestis Filopoulos, Policy Officer - Sustainable Industrial Policy, Circular economy and Construction Unit, Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs, DG GROW, European Commission
10.50-11.05	Presentation about the CircLean network and how to join	<i>A presentation of the CircLean project, how to join the network, and the opportunities offered as a CircLean member. Participants will be able to ask questions.</i>	Ruslan Zhechkov, Technopolis Group
11.05-11.25	Presentation of the CircLean toolbox: Self-assessment module and Matching tool	<i>The Self-assessment module and Matching tool will be presented. Participants will be able to ask questions.</i>	James Woodcock, International Synergies
11.25-11.35	Presentation of the communication toolbox for CircLean Ambassadors	<i>A presentation of the communication toolbox for CircLean that can be used by CircLean members and other industrial symbiosis stakeholders. Participants will be able to ask questions.</i>	Hannah Hayes, Arctik
11.35-11.50	Break		
11.50-13.05	Good examples of local industrial symbiosis initiatives and projects	<i>Good examples of local industrial symbiosis initiatives and projects will be presented. Participants will be able to ask questions.</i>	<p>Host: Nora Birkman Neunstedt, Kokkola regional Development Company KOSEK</p> <ul style="list-style-type: none"> • Johanna Hylkilä, Marketing Chief, Kokkola Industrial Park (KIP) • Suvi Mantsinen, CEO Humuspehtoori • Paula Eskola, Senior Expert, Motiva (Introducing Finnish circular economy networks)
13.05-14.05	Networking lunch		
14.05-14.45	Roundtable about the opportunities and challenges for the uptake of industrial symbiosis	<i>The roundtable will discuss the opportunities and challenges for the uptake of industrial symbiosis.</i>	<p>Moderator: Nora Birkman Neunstedt, Kokkola Regional Development Company KOSEK</p> <p>Panelists:</p> <ul style="list-style-type: none"> • Risto Rova, Project Manager, Battery Recycling Innovation Park • Ulla Lassi, R & D, Professor University of Oulu

			<ul style="list-style-type: none"> • Sari Tasa, Senior Adviser, Ministry of Economic Affairs and Employment of Finland • Jonne Sandberg, Development Director at the City of Kokkola
14:45-14.55	Q&A	<i>Participants will be able to ask questions throughout the event. An additional 10 minutes is reserved for remaining questions and comments from the audience.</i>	
14.45-15.00	Wrap up and conclusions	<i>Takeaways messages and next steps</i>	Ruslan Zhechkov, Technopolis Group
Networking coffee & End of the day			