

SEPTEMBER 2022 | ISSUE 2

SYMBI Newsletter

SYMBI | Industrial Symbiosis for Regional Sustainable Growth and a Resource Efficient Circular Economy: 2nd Semester of Project's Implementation and Closure

Welcome to the second, and last, edition of Newsletter series of the SYMBI project's 5th Call for additional activities!

SYMBI is a European project funded by the INTERREG Europe Programme, bringing together 9 partners from 7 countries. It aims to support the implementation of policy instruments and measures for the diffusion of Industrial Symbiosis, in order to add value, reduce production costs, and relieve environmental pressures through increased resource efficiency and reduced greenhouse gas emissions. In the context of the **5th Call for additional activities**, SYMBI partners were able to **map the impact of COVID-19 on territorial supply chains** and identify pathways to utilize industrial symbiosis as a tool for **recovery and resilience**.

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In the following pages, you will find a description of **the project's second semester activities**. During the semester, partners held a steering group meeting, a workshop as well as regional stakeholder meetings in all SYMBI regions. The final workshop is scheduled to take place on 29.09.2022.

These activities will facilitate further cooperation and knowledge transfer between the participating regions, allowing them to employ circular economy and Industrial Symbiosis practices as tools for economic recovery and resilience.

Steering group meeting

HELD VIRTUALLY ON 25.05.2022

On the 25th of May the 2nd steering group meeting took place, with the participation of all project partners. Participants had the chance to **discuss the outcome** of the first semester activities, focusing on the **impact of COVID-19** on Industrial Symbiosis practices, opportunities to utilize Industrial Symbiosis as a tool to facilitate economic **recovery and resilience**, Industrial Symbiosis digitalization good practices to address new challenges and the results of the regional stakeholder meetings. Additionally, partners **discussed the upcoming project activities**, foreseen to take place within the 2nd semester, so as to ensure their successful implementation and, subsequently, the smooth project closure.

2nd SEMESTER Summary of activities

ACTIVITIES	TIME	PARTNER
7 Stakeholders Meetings Each partner will organise a meeting with local stakeholders (online) Conclusion Reports	2 nd Semester	All partners PANNON NOVUM
7 Info days Partners will organise an info day (online) Info day conclusion report	2 nd Semester	All partners PANNON NOVUM
Interregional Thematic Workshops: Exchange of good practices on synergetic actions with circular EU instruments to prescribe funding mechanisms for promoting IS as a recovery tool Lessons learnt paper (4 Good Practices)	8 June 2022 30 May 2022	HAMK
Interregional Thematic Workshops: Ways to integrate IS reporting and certification systems in resilience policy planning and promote their further adoption (physical) Conclusion paper (5 Good Practices)	20 or 28 September 2022	CoC Molise

ISSUES IMPACTING INDUSTRIAL SYMBIOSIS INITIATIVES

Barriers

- Lack of external support
- Lack of resources
- Lack of appropriately trained personnel
- Lack of cooperation between businesses

Enablers

- Geographical proximity
- Good cooperation between businesses
- Previous experience in similar activities

Still from zoom meeting at the time when the findings of the survey are discussed

The screenshot shows a Zoom meeting interface. On the left, a presentation slide titled "Findings of survey concerning the COVID-19 impact on Industrial Symbiosis" is displayed. The slide includes the SYMBI logo and the text "Strengths detected for regional recovery & resilience - Innovation capacity". Below this, a 3D pie chart shows the following data:

Strength	Percentage
Developed industrial networks	17%
Innovation capacity	20%
Trained workforce	12%
Economic outlook	6%
Proximity of industrial operations	12%
Conducive policy framework	15%
Relevant experience	6%
Accessibility to funding	12%

On the right side of the Zoom window, a grid of participants is visible. The participants shown are:

- Kozani team
- Roland Dancsics
- I. Zupančič (SVRO)
- SI - Marjana Dermelj
- Ida Holck
- Arto Saarinen
- Maria Pavlopou...
- Francesca Cuna...
- Katja Pouta
- Maria Pavlopoulou
- Francesca Cuna - CCMA MOUSE
- Katja Pouta

Peer-review Workshop "Circular Economy Action Plan and EU Green Deal synergies"

HELD VIRTUALLY BY HÄME UNIVERSITY OF APPLIED SCIENCES
AND REGIONAL COUNCIL OF HÄME, ON 08.06.2022

One of the main objectives of the SYMBI project has been to identify enabling and driving factors for the formation of industrial symbiosis. **Funding** is an essential enabler of industrial symbiosis practices. During the SYMBI project extension the consortium conducted a **peer review study** and a **workshop** about how different **funding schemes** are used to support industrial symbiosis and especially if there is a linkage to EU Green Deal and Circular Economy Action Plan (CEAP).

During the study, SYMBI **partners** identified which kind of **funding instruments** are used to fund successful CE and IS projects and initiatives. Each partner identified **1-2 national/regional practices**, described their link to EU Green Deal and/or CEAP and elaborated the funding that had enabled the practice. In total, **11 practices** were identified.

Most of the cases were funded through public funding (6/11) but also companies own capital investment (3/11) and joint public private funding (2/11) had been utilized.

The purpose of the activity was:

- To collect information about different funding instruments the partner countries have used to fund CE and IS activities, and
- To estimate the success of the good practices identified.

5 CRITERIA USED FOR THE PEER-REVIEW PROCESS THAT TOOK PLACE DURING THE WORKSHOP:

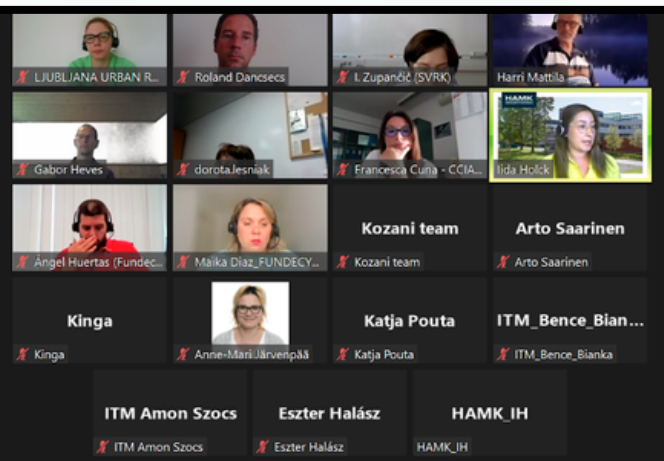
- 1) Economic impact
- 2) Environmental impact
- 3) General success
- 4) Alignment with the objectives of the Circular Economy Action Plan and/or Green Deal
- 5) Transferability

Still from the virtual workshop

ExpandFibre Ecosystem aims at developing novel bioproducts with a reduced environmental impact

Vision	New bioproducts based on sustainable biomass contribute significantly to the reduction of the negative environmental impact of our everyday lives
Mission	ExpandFibre Ecosystem strives to meet the growing demand for sustainable bioproducts by developing ground-breaking materials and technologies and smart business concepts
Short term objectives (2020-2024)	
— Build knowledge-based competitive advantage among the ecosystem members	
— Create/strengthen test-beds for piloting and proof-of-concept validations in the theme areas	
— Identify and fill in gaps in the R&D landscape within ExpandFibre themes	
— Create a thriving business-driven innovation ecosystem for new biomass-based textile fibres	
Long-term objectives (2030 and beyond)	
— Provide markets with new bioproducts that have less than 20% of the carbon footprint of the current products	
— Bring new revenue to ecosystem partners through the increasing production and sale of new value-added bioproducts and technologies.	
— Significantly increase investments into biomass-based value chains	

PANDFIBRE fortum Metsä



Peer-review Workshop "Circular Economy Action Plan and EU Green Deal synergies"

RESULTS OF THE PEER REVIEW PROCESS

During the **peer review process**, SYMBI partners evaluated the **transferability** of the identified cases. The ranking of the practices was very even, but **the most transferrable** were:

- **Waste Heat Recovery System (WHRS)** - IT: Surplus heat from the clinker cooking line at the Sesto Campano production facility to produce electricity for self-consumption, giving it to an innovative ORC (Organic Rankine Cycle) turbine system with which it will be able to produce from 2 to 3 MW of electricity. The companies involved obtain white certificates (which are a contribution to the investment) and Colacem will be able to purchase electricity at a lower price than the market price. (National public funding)
- **Electricity production with recycled photovoltaic panels** - ES: Reuse of photovoltaic solar panels for the production of electricity consumed by "El Raposo" Spa. All the panels are purchased from the "La Hormiga Verde" company, which is a Waste Electrical and Electronic Equipment (WEEE) manager. (Private funding)
- **Life Cycle Assessment (LCA) Voucher Scheme** - SL: Financial aid for companies to carry out life cycle assessment. (EU funding)
- **ExpandFibre** - FI: R&D collaboration and an Ecosystem launched by Fortum and Metsä Group to accelerate the development of sustainable bioproducts. (Public-private-partnership funding)

As indicated earlier, the identified practices were also evaluated based on their **environmental** and **economic** impact. The practices with the highest impact were:

- **ExpandFibre** - FI
- **Packaging to Polymers (P2P)** - IT: Joint venture with Unilever and Seri Plast to convert Unilever's detergent site to plastic recycling plant. (National public funding)
- **Integrated Waste Management System (IWMS) of the Region of Western Macedonia** - GR: Design, financing, construction, maintenance and operation of infrastructure of the Integrated Waste Management System (IWMS). (Joint public-private funding)
- **Rehabilitation of an abandoned quarry in the Region of Attica** - GR: Management of construction, building and demolition waste. (Private funding)

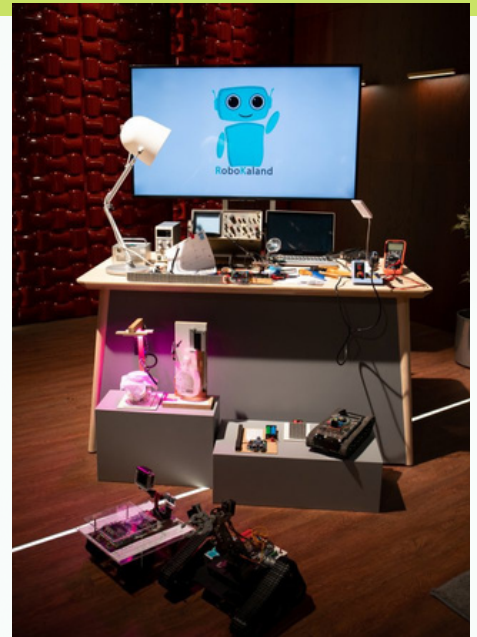
Based on the evaluation, one practice was ranked the most interesting, even though its impact evaluation was low, as it is a regional small-scale practice. This practice was **RoboKaland** (HU), which is elaborated on page 5.

A more detailed **report on the peer review process** will be published in the SYMBI project library: <https://projects2014-2020.interregeurope.eu/symbi/library/>

Good Practices

ROBOKALAND - AN ECO-CONSCIOUS, DIGITAL AND CREATIVE CHILDRENS' COMMUNITY

RoboKaland is a small family enterprise in Hungary, that organizes short events for children, including children with disabilities (e.g. autism), involving the dismantling of old electronic devices and the creation of new ones. The interactive workshops involve a team of IT experts and scientists. In less than 3 years of operation, RoboKaland has processed more than 15 tons of e-waste that would have otherwise ended in landfills and has organized programmes for hundreds of children. **Eco-consciousness is part of their mission:** they try to find the flaws in disassembled parts and try to correct them in newly built devices. Although this is a local initiative, it has very **high transferability potential**.



EL RAPOSO SPA, AN EXAMPLE OF GOOD PRACTICE IN INDUSTRIAL SYMBIOSIS IN THE REGION OF EXTREMADURA

El Raposo Spa is located in the Matanegra wine-growing area belonging to the municipalities of Puebla de Sancho Pérez and Usagre. The spa resort is **an example of sustainability**, reusing thermal waters in ecological plantations of aromatic herbs and vineyards. It also utilizes photovoltaic panels that have been reconstructed to provide thermal and photovoltaic solar energy. In addition, the spa has a biomass boiler that uses local pine wood chips as fuel. All these measures are aimed at **achieving energy self-sufficiency** and **improving the company's profitability** in the coming years.

LIFE CYCLE ASSESSMENT VOUCHER FUNDING MECHANISM THAT CAN BRING VARIOUS BENEFITS FOR SMES

The **Life Cycle Assessment (LCA) Voucher** is one of the fifteen vouchers that were set up by the Ministry of Economic Development and Technology and the Slovene Enterprise Fund. This voucher system brings many benefits along with a high transferability potential. It **reduces the overall environmental impact across the entire life cycle of goods and services**, **improves the competitiveness of a company's products** and **provides a single tool to measure upstream and downstream environmental trade-offs**. It thus presents the opportunity to promote the LCA as an internationally standardized methodology enabling Slovenian SMEs to quantify the environmental impact of goods and services and improve the full life cycle of products.



Regional Stakeholders Meetings

REGIONAL STAKEHOLDERS MEETING OF WESTERN TRANSDANUBIA, HELD VIRTUALLY ON 14.09.2022

Discussions between stakeholders during the 2nd semester focused on the **outcomes of the interregional workshop** "Circular Economy Action Plan and EU Green Deal synergies" and on the upcoming workshop on "Industrial Symbiosis reporting and certification systems" held on-site in Molise.

After the conclusion of all stakeholder meetings, Pannon Novum will collect their results and produce a report that presents and analyses the most important stakeholder views and recommendations from each region, in order to highlight the outcome of SYMBI partners' engagement with stakeholders.

Still from the meeting of Western Transdanubia



Partners' News

THE CIRCULAR ECONOMY - FROM THEORY TO PRACTICE, KRAKOW TECHNOLOGY PARK, 30.05.2022-31.05.2022

As a part of the European Commission initiative "Science Meets Regions", the Marshal Office of the Małopolska Region together with Krakow Technology Park organised on 30-31 May 2022 a two-day event on "Circular Economy - From Theory to Practice". Its purpose was to **present educational content, promote various circular economy solutions and good practices in the region**, as well as to **demonstrate initiatives supporting the transition to a circular economy**. More than 100 participants from business, science, academia, civil society and local administration came together and discussed prospective strategies toward a more sustainable future.



The participants, including SYMBI stakeholders, stressed the need to undertake horizontal cross-joint actions that are not limited to one sector. Conclusions drawn from this event will be exploited by regional authorities when designing policies related to circular economy in the Małopolska region.

Upcoming event

WORKSHOP ON INDUSTRIAL SYMBIOSIS REPORTING AND CERTIFICATION SYSTEMS, IN PALAZZO SAN FRANCISCO, ITERNIA, TO BE HELD ON 29.09.2022

The Molise Chamber of Commerce will organize the interregional Workshop "**Industrial Symbiosis reporting and certification Systems**" to be held in Isernia at the Council Room of Palazzo San Francesco, seat of the ancient Town Hall, on **September, 29th** at **9.30**.

The focal point of the workshop is **Industrial Symbiosis reporting and certification systems**. Despite the environmental, economic, and social benefits of Industrial Symbiosis, the lack of common standards for measuring and reporting in the EU discourages companies from participating in Industrial Symbiosis collaborations. In this context, certification and reporting can be an important and growing component of ensuring corporate responsibility and is expected to facilitate the proliferation of Industrial Symbiosis practices.

All partners will participate at the event. Presentations will be given, among others, by **Enea** - Italian National Agency for New Technologies, Energy and Sustainable Economic Development, **UNI** - Italian Standardization Body, the Scuola Superiore Sant'Anna of Pisa - and the **Institute of Management, Sustainability Management Laboratory (SUM Lab)**.

The event will wrap up the project after 6 year of activities.

Partnership



CAMERA DI COMMERCIO
DEL MOLISE



HÄMEEN LIITTO
Regional Council of Häme



REPUBLIC OF SLOVENIA
GOVERNMENT OFFICE FOR DEVELOPMENT
AND EUROPEAN COHESION POLICY

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