

Fourth CircLean Network & Management Board Meeting

Monday 10th of October 2022

CircLean - European Network of businesses and SMEs for industrial symbiosis

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1 Introduction

1.1 The Fourth CircLean Network & Management Board meeting

This is the event report of the Fourth CircLean Network & Management Board meeting held online on the 11th of October 2022. The event was organised by Technopolis Group, as part of the activities of the EU-funded project, *CircLean - the European network of businesses and SMEs for Industrial Symbiosis (IS)*. The participants included stakeholders from the industry, public authorities, R&I organisations and consultancies, as well as the European Commission and project consortium members. The agenda of the event is available in Annex 1.

Mr. Luigi Lo Piparo, Partner at Technopolis and CircLean Project Manager, opened the event by presenting the key objectives of the meeting:

- Evaluate recent updates on the implementation and promotion of the CircLean Network
- Exchange highlights and lessons learned for IS from preceding Open Innovation Workshops (OIWs)
- Discuss potential avenues for the uptake of the platform after the EU funding for the project

1.2 About the CircLean Network & Management Board meetings

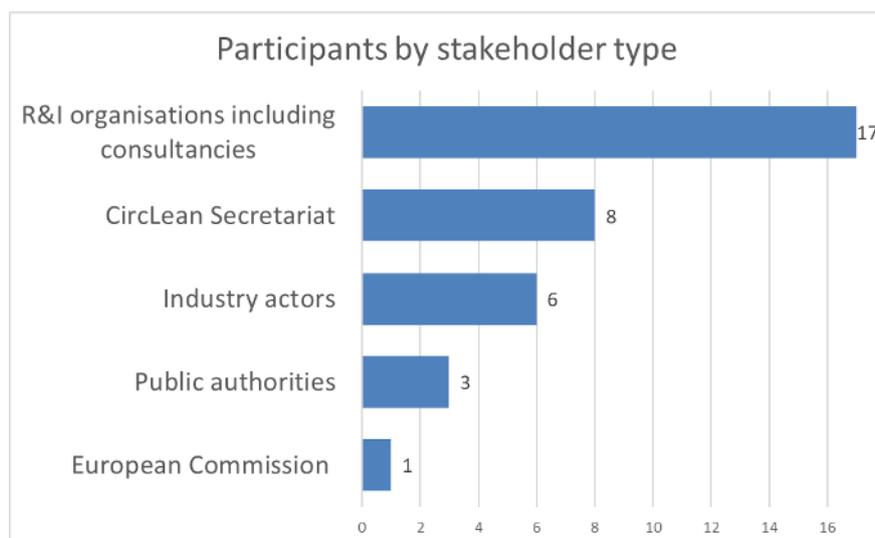
The CircLean Network and Management Board meetings are arranged twice per year as either open meetings for all stakeholders interested in joining the network or as closed meetings for network members.

The events aim at stimulating the network community to exchange experiences and knowledge regarding industrial symbiosis (IS) transactions within CircLean. Thereby, it intends to ensure that CircLean remains relevant to its members and ideally that they continue to run the network and use its tools after the end of the project. This was the fourth and last network meeting before the end of EU funding for the project.

2 Participants

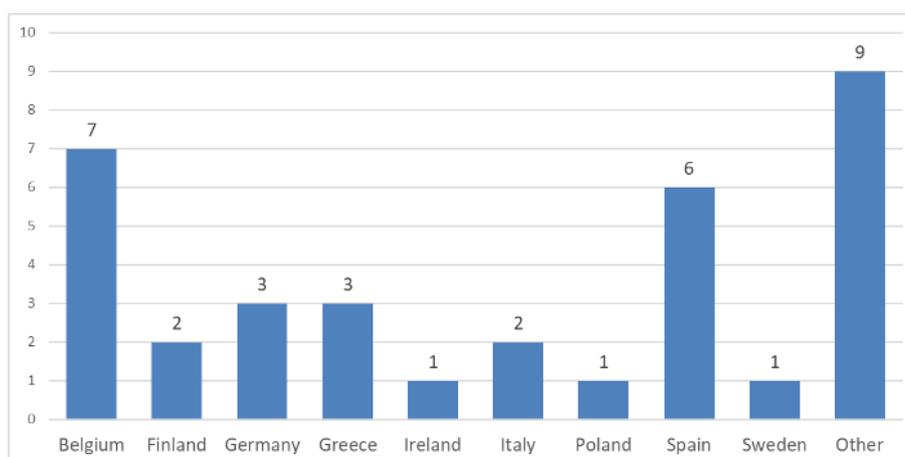
In total, 36 stakeholders registered for the event and a total of 35 stakeholders attended. The participants represented 26 Network Members, including 17 R&I organisations including consultancies, six industry actors, and three public authorities. The rest of the participants were one representative from the European Commission and eight from the Secretariat. This is illustrated in Figure 1 below.

Figure 1 Workshop participants by stakeholder category



As illustrated in Figure 2, the participants represented nine different EU member states; under the category 'Other' were indicated the representative from the European Commission and from the CircLean Secretariat. From the EU member states, participants from Belgium (seven participants) and Spain (six participants) were the most represented.

Figure 2 Workshop participants by country



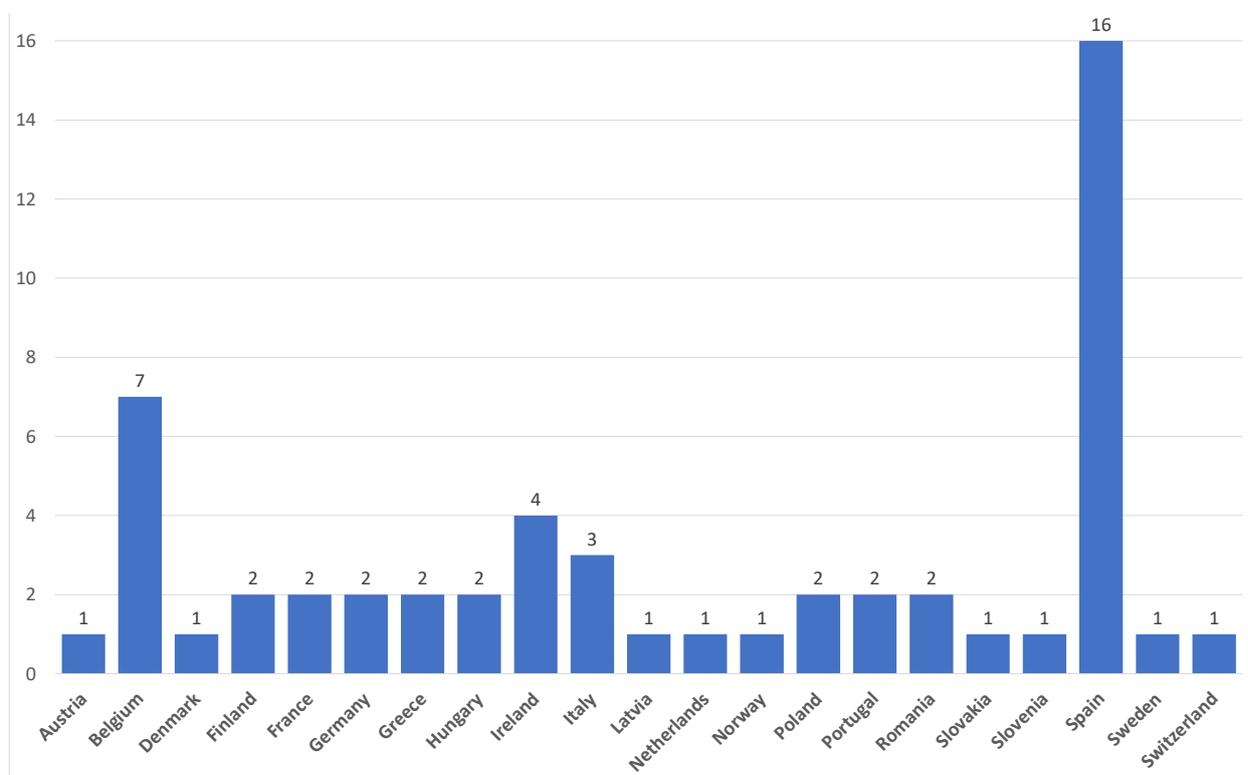
3 Update on the implementation of the CircLean Network and its promotion

Ms. Margrethe Steinert (Technopolis Group) moderated the first session focusing on updating the participants about the recent achievements of the CircLean network.

3.1 CircLean membership base

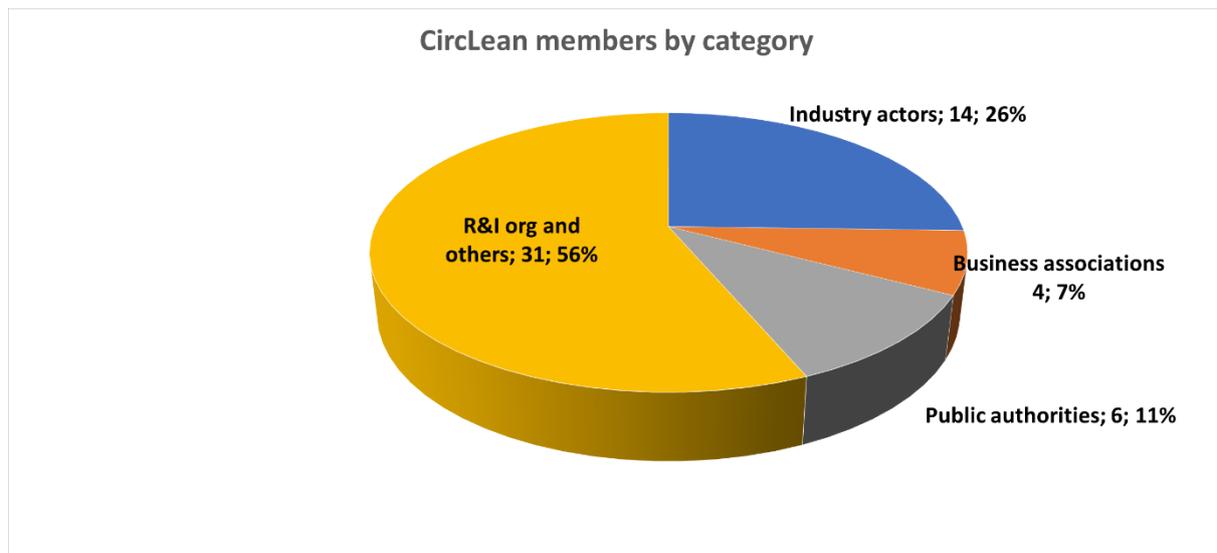
Ms. Steinert (Technopolis Group) shared an update on the membership base of CircLean (updated at the date of October 2022). Currently, the network counts 55 members from 19 different EU Member States, and two from non-EU member states (Norway and Switzerland).

Figure 3 CircLean members by country



As regards the distribution of members per country, a large proportion of them comes from Spain, followed by Belgium, Ireland, and Italy. She explained that the CircLean members represent four main categories, namely industry actors, business associations, public authorities, and R&I organisations.

Figure 4 CircLean members by category



3.2 CircLean tools: Self-assessment module & Matching tool

Next, Mr. James Woodcock (International Synergies) presented the toolbox produced by the CircLean project and confirmed that all the tools are operational and can be freely accessed from the project website:

- The **Self-assessment module** (<https://circlean-symbiosis.eu/self-assessment-module/>) is a guided learning module that introduces the concept of IS to the user and guides them towards the Matching tool by providing knowledge and illustrative examples of IS. Further, it offers training exercises and all necessary guidance for various activities to be carried out within one's organisation, including supporting documents. The process is streamlined allowing for all data collected in the process to be tailored for the matchmaking process. The Self-assessment module has four main functions:
 1. Introducing IS as a concept
 2. Mapping user processes (and identifying resources in those processes)
 3. Quantifying resources
 4. Prioritising resources
- By completing these steps, the website takes the user to the **Matching Tool**, where the user is invited to create an account. By registering, the user can choose from a variety of actions that are offered by the tool, such as searching for resources or adding a new 'have'- or 'want'-resource. Further, the tool monitors all matches and reports on their impact.

Lastly, Mr. Woodcock presented an overview of registered members and their country of origin. Mr. Woodcock emphasised that a large proportion of members come from the R&I organisations. The tool should however be industry-led, so industry actors are highly encouraged to register their resources in the tool.

3.3 CircLean Communication Toolkit

Ms. Anya Gregory (Arctik) presented the CircLean Communication Toolkit. The Communication Toolkit encompasses a package of communication materials that are designed to help members promote their CircLean membership and spread awareness about the benefits of joining the network (e.g. on social media and newsletters).

Using the communication material will amplify the reach of the network through the channels of the members and reach more local organisations. The package includes a series of social media posts (Twitter, Facebook, LinkedIn), visuals, links and tags and are available on the website here: <https://circlean-symbiosis.eu/communication-toolkit/>

3.4 CircLean Label

Mr. Laurent Zibell (Trinomics) described the CircLean Label, which is a voluntary protocol for a specific European IS Label. The CircLean Label is attributable to network members, both businesses and supporting organisations. The voluntary protocol was co-designed with stakeholders and finalised in 2021. It outlines the purpose of and eligibility for the CircLean Label and its main features (e.g., process, types, validity, legal aspects, requirements).

There are two categories of CircLean label: one is for organisations adhering to the Circlean network and providing information and data on the activities carried out to support industrial symbiosis, and the other is for industries and businesses joining the CircLean and complying with its reporting methodology.

The **CircLean Label for organisations** is rewarded to locally and regionally based Member organisations that have provided data on specific activities carried out in support of IS. Such data can include the number of companies motivated to engage in IS transactions, the number of training courses on IS provided, the number of events organised on IS, etc. This first category of label is called the **Champion Label**.

The **CircLean Label for businesses**, is awarded to entities with physical material flows for IS. They need to comply with the CircLean monitoring and reporting approach for IS transactions. There are three different levels for this type of label:

- **Bronze:** Companies have joined the CircLean network as a member, have registered in the matching tools, and have provided the necessary data on the matching tool
- **Silver:** Companies that have reported one match/transaction
- **Gold:** The registered transaction has been included in a company's yearly report and has thus been verified

3.5 Q&A and Comments

After the presentations, a Q&A session followed. Mr. Jordi Sebastià representing IVACE, the regional development agency from the region of Valencia (Spain), asked:

- **Question: Who has the role of verifying whether companies use the CircLean tool properly and fulfil the criteria of the CircLean Label?**
- **Answer:** Mr Zibell (Trinomics) explained that there are two modes of verification:
 1. For the **Bronze** and **Silver** Labels, the attribution is solely based on providing data to the system. Thus, no additional verification is needed.
 2. On the contrary, the **Gold** label verification relies on existing financial auditors that review the applicant company's yearly report. This institutional arrangement was found to be the most convenient solution for participating companies to enable third-party verification and limits entry hurdles for enterprises.
- **Comment:** Mr. Nazim Kuyer from RedEco, a consultancy specialising in industrial symbiosis and circular economy based in Valencia, noted that research and development entities can play a larger role in the verification process. This might enhance the appeal of joining the network for such entities.
- **Comment:** Mr. Luigi Lo Piparo (Technopolis Group) noted that, while the primary target group of the network are industries, other organisations have contributed eagerly since the beginning. As such, there might be a larger role for them to play.

4 Highlights on how to unlock the potential of industrial symbiosis from the ongoing CircLean Open Innovation Workshops

4.1 Preliminary results: Trends, benefits and challenges

Ms. Steinert provided an overview of the recent CircLean Open Innovation Workshops (OIWs), which have taken place in several countries that have been selected in agreement with the European Commission on the basis of the level of interest, capacity, engagement in their IS activities, as well as to guarantee a fair balance. The preceding workshops were carried out successfully with between 50 - 100 participants in each event. Two more events will take place in Germany on the 11th of October and in France on the 19th -20th of October. Registration remains open for these two events and online participation is also possible.

4.1.1 General Trends and Similarities

Ms. Steinert outlined the preliminary conclusions and lessons learned from the OIWs. Generally, there is a positive view on IS and stakeholders agree on its potential, both on the local and national as well as the EU level.

However, it has become apparent that needs differ from country to country. Countries with a relatively high level of existing and thriving national IS networks seek participation in the CircLean network primarily for the sake of knowledge exchange (e.g. Finland). Countries with relatively low-level activity within their national IS networks, generally see more potential to participate in the EU IS transaction platform (e.g. Hungary, Poland). Nevertheless, all participating actors acknowledge that **IS can help SMEs and industries increase their competitiveness, productivity, and sustainability.**

The IS networks across the organised OIWs stressed that it should remain voluntary, collaborative, and based on mutual benefits. Furthermore, there are some more specific key takeaways:

- **Having the ‘right’ kind of partnership/cross-sectorial collaboration** is important for further developing IS transactions.
- **Industrial parks** can play a crucial role in promoting and implementing IS and may be key to pushing IS further (e.g. Finland).
- **Good facilitation is key to the promotion of IS in the EU. Public authorities and other entities can be good facilitators** for businesses and industry stakeholders interested in IS and can **contribute to raising their awareness**, especially where interest is low.
- **R&I activities nationally broaden the application of IS** to new materials and value chains.
- **EU, national and local incentives (both economic and reputational)** are needed and very helpful towards unlocking the IS potential further.

4.1.2 Benefits

Regarding the benefits of the CircLean network, some key points have also been mentioned by stakeholders. First, CircLean’s methodology as an EU-wide voluntary monitoring and reporting system based on companies’ needs and capacity is greatly appreciated. Companies see CircLean as an opportunity to enhance a company’s sustainability track record and corporate social responsibility and increase its impact visibility.

The CircLean platform also allows entities to exchange with peers and learn about new approaches for keeping resources within the production loop for longer. Lastly, the specific CircLean Label awarded for IS stakeholders’ involvement and performance, is understood to facilitate the tracking of stakeholder engagement at the EU level.

4.1.3 Challenges

The project has also identified the following key challenges facing the further development of IS activities at the EU level:

- **Economic and administrative costs** of sustainability remain the main barrier
- There is a **lack of legislative consistency across the Member States** (i.e. for the classification of waste in regulation and the requirements defined for handling resources classified as waste), which makes transport over geographic boundaries complicated and administratively burdensome.
- **Language** is another barrier, especially for businesses located in several countries
- There is a **lack of national policy support and financial incentives** to support economic actors in carrying out IS activities. This is related to a general uncertainty regarding the national and regional legal framework defined for secondary materials (end-of-waste - by-product)
- **Data sharing remains limited** between businesses and already existing initiatives (GDPR, costs, etc.)
- Acquiring **environmental permits** is a time-consuming and quite complex process (e.g. Finland, Belgium)

4.1.4 Gaps and needs

Based on the above-mentioned points, Ms. Steinert presented the gaps and needs that should be addressed in the future to encourage IS. Firstly, companies are encouraged to implement IS elements in their business models and sustainability strategies. Best practice cases or information on financial & reputational incentives can ensure continued interest by other parties. Secondly, an EU platform for IS facilitation and knowledge exchange are needed, even though the intensity of this need varies between countries. Third, public awareness-raising of the benefits of IS is crucial. Lastly, IS activities must be adapted to the local context. For example, more engagement is sometimes possible when the local language is used (e.g. Poland, Hungary, France, Germany).

Further, Ms. Rachel Lombardi from International Synergies stressed that there is great potential for innovative entrepreneurs to be involved in the development of IS activities. However, legislative barriers often hinder their involvement. This can even be the case when barriers are solely **perceived** to be substantial. Thus, reputational efforts are key to removing barriers to investment.

Mr. Laurent Zibell from Trinomics added that the need for localisation should be addressed by making the platform multilingual. Additionally, he highlighted that different countries often face specific challenges. For example, in the Netherlands, there is a strong interest in the reuse of industrial, urban, and wastewater due to increased water scarcity.

4.2 Q&A

- **Question:** Mr. Nazim Kuyer (RedEco) commented that in the OIW in Spain, stakeholders mentioned that they face difficulties developing European projects. He suggested creating a division within the CircLean network, specialised to support and promote EU-funded projects.
- **Answer:** Mr. Luigi Lo Piparo (Technopolis) responded that the consortium had previously received requests for CircLean and its members to join EU projects. In principle, this is very welcome and could be one of the ways to continue the project after the EU funding period.

5 Avenues for the uptake of the Network and its tools by the CircLean Members after the end of the EU funding

5.1 Views from European Commissions DG GROW

Mr. Anestis Filopoulos from the European Commission (DG GROW) shared the perspectives on avenues for a potential uptake of the CircLean platform after the end of EU funding.

He noted the challenging context in which this transition takes place, notably that the effects of the energy crisis cascade to every raw material and result in high prices and scarcity. Improving resilience and managing the risks in this moment of crisis is relatively high on the EU's agenda. In that context, IS holds tremendous potential to reduce scarcity by reducing energy and raw material consumption. A wide variety of resources and studies on this topic are available on the European Commission's website.

Mr Filopoulos also invited the participants to use that moment to reflect upon the envisaged future infrastructure of the Network and to the assets that were created thanks to the financial intervention of the European Commission.

The project website will remain operational for additional 12 months after the project end, as will the CircLean tools, who will continue to be fully available for use by the Network members, although no updates will be carried out during that period.

Mr. Filopoulos agreed with Mr. Kuyer (RedEco) on the potential for synergies with other EU projects, and that it could be promising to establish CircLean as a base for such projects, e.g. Horizon Europe project or local initiatives.

For the CircLean network to acquire independence, two main options were explored: one is to become completely autonomous; the other is to cooperate with financial stakeholders. Mr. Filopoulos indicated some conditions upon which the European Commission would be gladly willing to hand over the rights to the Network and its tools to another entity coming with a credible plan including the following features:

- The CircLean network should retain its open, inclusive, and European character
- It should continue to be representative of the most affected sectors, namely energy-intensive industries and companies.
- It must remain a non-profit initiative.

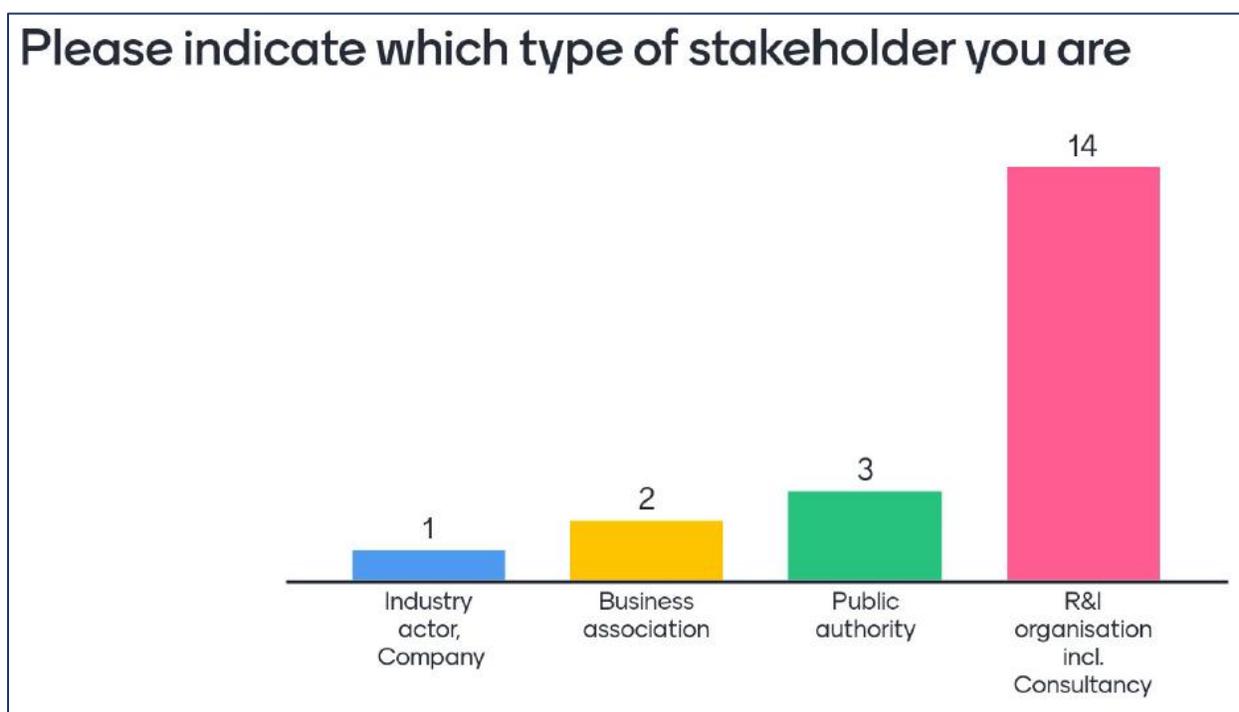
Mr. Filopoulos invited the network to a discussion and suggestions on how to enable this transition.

5.2 Interactive session regarding the medium-/long-term sustainability strategy for the network

Mr. Lo Piparo (Technopolis Group) invited all participants to share their views regarding the medium-/long-term sustainability strategy for the network, using an online live polling software, *Mentimeter*.

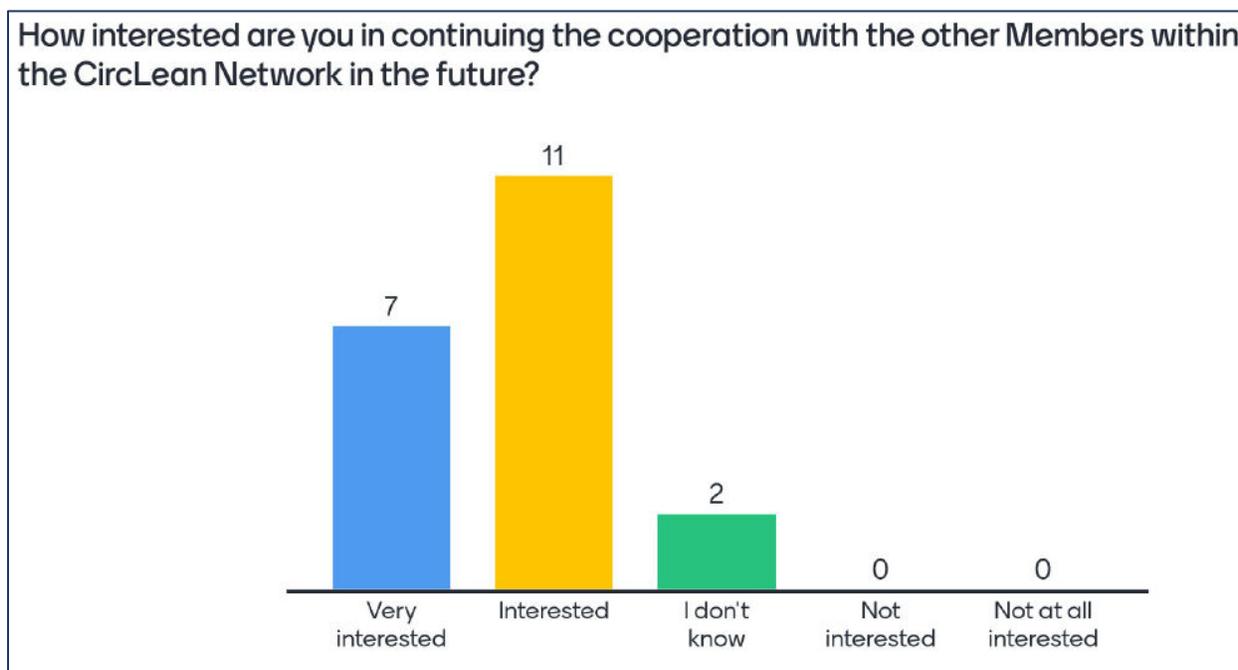
The first question depicted in Figure 4, asked the participants to indicate the kind of stakeholder category they belong to. Most of them represented R&I organisations and consultancies (14), followed by public authorities (3), business associations (2) and industry actors (1).

Figure 5 Results from Mentimeter question no.1



The second question asked how interested the stakeholders are in continuing the cooperation with other members within CircLean. Figure 5 illustrates the distribution of responses, reflecting the high interest among the stakeholder to continue the cooperation within the network, with a result of 18 of 20 votes in total. Only 2 votes emphasise that they are not certain.

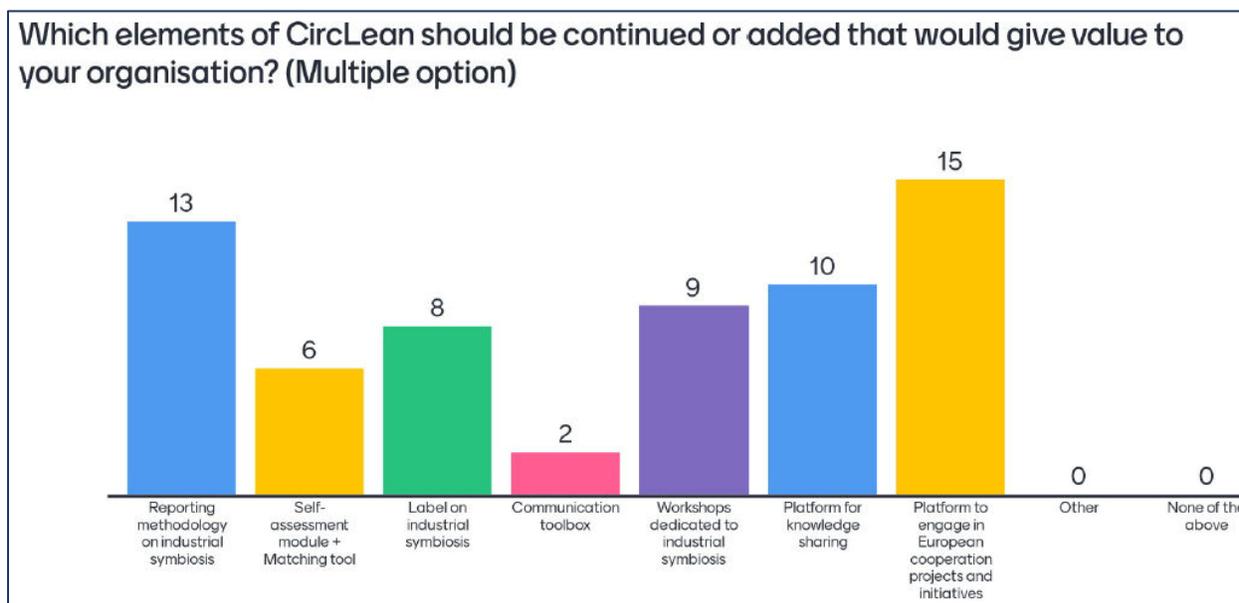
Figure 6 Results from Mentimeter question no. 2



Mr. Lo Piparo commented that as nobody expressed a lack of interest, it shows the open and inclusive view of the platform and the appreciation of allowing for the exchange of knowledge on IS within the network.

In Figure 6, the results to the **third question**, regarding **which elements of CircLean should be continued or added to give value to the participants' organisations** are presented. The question allowed multiple choice. Most participants agreed that the platform should engage in European cooperation (15 votes) and ensure the continuation of the reporting methodology on IS (13 votes). This was followed by support for the platform as a knowledge-sharing forum (10 votes) with workshops dedicated to IS (9 votes), and the CircLean Label on IS (8 votes). Participants also see the importance of the Self-assessment module and the Matching tool (6 votes) and the Communication toolbox (2 votes).

Figure 7 Results from Mentimeter question no.3



Mr. Lo Piparo stressed that the new geopolitical context creates new needs and opportunities. The potential and opportunities for IS usher even greater relevance. Particularly, the Reporting methodology is seen to provide added value to the organisations. Similarly, the Self-assessment module combined with the Matching tool is perceived as beneficial. The comparably lower number of votes for the tools can be attributed to the small proportion of industries that are active in the network.

Ms. Rachel Lombardi (International Synergies) noted that many companies are interested in the element of recognition for their increasing IS activities and therefore have a high interest in a consistent reporting methodology.

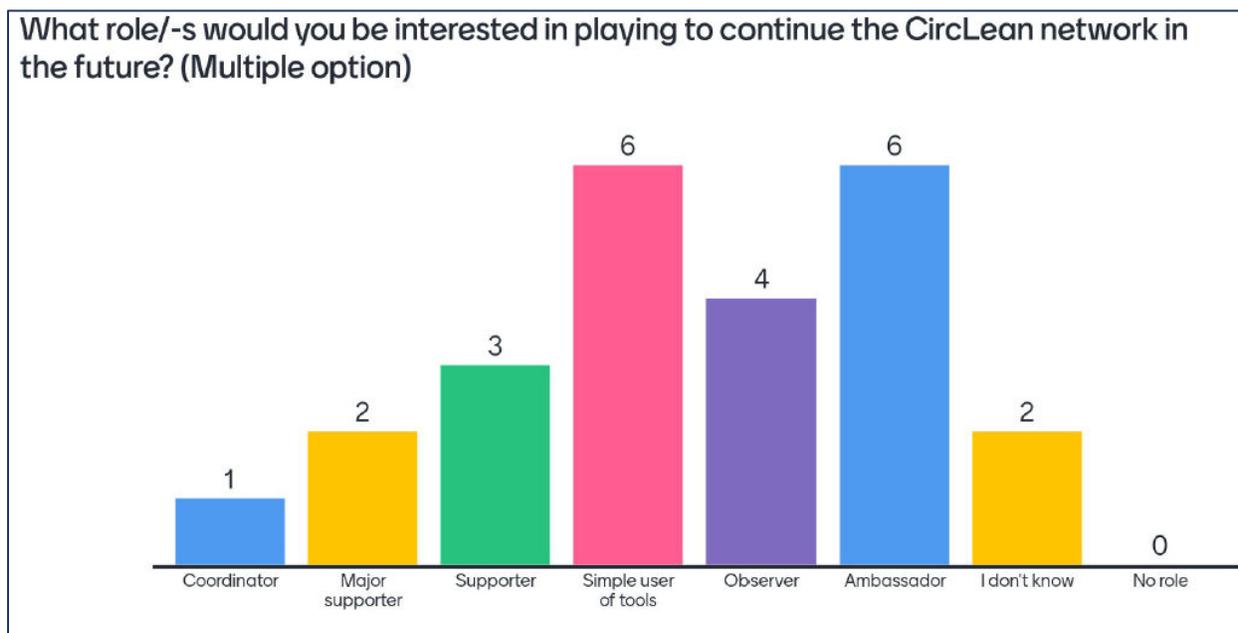
Mr. Magnus Persson from Paper Province expressed his view on the importance of the communication toolbox as it allows best practice and knowledge sharing.

Ms. Evelina Paunksnyte from A.SPIRE also added that the high representation of R&I organisations is reflected in the answers and noted that interests depend on the type of stakeholder. She expressed her organisation's continued interest in developing and strengthening the network. She noted that it is now necessary to move towards more concrete ideas on how to continue the network.

The **fourth question** asked the participants in a multiple-option format to **express their interest in the role they can play in the CircLean network in the future**. Most of the participants (12 votes in total) responded that their interest lies either as a simple user of the tools or as an ambassador of the network. This was followed by four votes for

the role of an observer and three votes as a supporter. Another two votes expressed interest as major supporters, and one vote suggested a role as a coordinator. Lastly, two respondents expressed their uncertainty, however, none of the participating stakeholders foresaw that they would have no role (0 votes). Figure 7 below illustrates these results.

Figure 8 Results from Mentimeter question no.4



Mr. Lo Piparo encouraged all respondents to follow up on their tentative interests expressed in the *Mentimeter*.

Mr. Kuyer (RedEco) added additional suggestions and commented that the ‘first level’ of the platform should always be free so to encourage registration as a member and a second lever where users pay. The first level could be used to show the possibilities of the network and the second level unlocks more functions. Additionally, he mentioned that the platform could be better connected to other EU projects and suggested that the creation of an internal working group within the network could be dedicated to this purpose.

6 Next steps and conclusions

Mr. Luigi Lo Piparo (Technopolis Group) noted that the minutes and results of the Mentimeter will be shared with the participants shortly. He invited everyone to contact the CircLean secretariat with specific requests (circlean.project@technopolis-group.com) before the end of the project (22 October 2022).

Mr. Filopoulos (European Commission - DG GROW) commented on the positive opportunities for further development of the network in the near future. He noted the crucial importance of IS to ease the EU's dependence on fossil fuels and primary materials.

Finally, Mr. Lo Piparo added that the Secretariat will be delivering the CircLean Labels to the relevant members and that members will be asked for inputs both bilaterally and multilaterally for a draft handover document.

The two remaining CircLean Open Innovation Workshops will be carried out in Frankfurt, Germany on the 11th of October and in Troyes, France on 19-20 of October.

Annex 1 Agenda of the CircLean Network and Management Board meeting

Time	Session	Additional details	Speaker
10:30-10:35	Welcome and introduction	<i>Presentation of the agenda</i>	Luigi Lo Piparo, Technopolis Group
10:35-10:50	Update on the implementation of the CircLean Network and its promotion	<i>Update on the expansion of the membership and the CircLean toolbox (self-assessment module, matching tool, communication toolbox, and label)</i>	Margrethe Steinert, Technopolis Group James Woodcock, International Synergies Anya Gregory, Arctik Laurent Zibell, Trinomics
10:50-11:00	Q&A session		
11:00-11.15	Highlights on how to unlock the potential of industrial symbiosis from the ongoing CircLean Open Innovation Workshops	<i>Lessons learnt from the Open Innovation Workshops</i>	Margrethe Steinert, Technopolis Group Rachel Lombardi, International Synergies Laurent Zibell, Trinomics
11:15-11:30	Q&A session		
11:30-12:25	Avenues for the uptake of the Network and of its tools by the CircLean Members after the end of the EU funding	<i>Interactive session regarding the medium-/long-term sustainability strategy for the network</i>	Anestis Filopoulos, European Commission, DG GROW Luigi Lo Piparo, Technopolis Group with CircLean Secretariat
12:25-12:30	Conclusions	<i>Takeaways messages</i>	Luigi Lo Piparo, Technopolis Group