

SMEs BENEFITTING FROM INDUSTRIAL SYMBIOSIS

More than 30 participants from different sectors gathered at a virtual meeting to hear about and discuss the opportunities and challenges for SMEs who are part of an industrial symbiosis or want to become part of one.

Symbiosis Center Denmark, May 2020

“SMEs in the industrial sector and the opportunities and challenges for industrial symbiosis in the Baltic Sea Region” was on the agenda at the 2nd meeting in the BSR Industrial Symbiosis Council moderated by Per Erik Sørås from Trøndelag County Council as an online event on Wednesday the 27th of May.

The report about SMEs and Industrial Symbiosis, that was presented at the Council Meeting, was commissioned by the Swedish Agency for Economic and Regional Growth - partner in the BIS project, and prepared by a team of experts from Policy in Practice, Cajalma and IVL Swedish Environmental Research Institute.

ANALYSIS AND RESULTS

The report analyses experiences of SMEs in relation to industrial symbiosis networks and their views on the advantages, challenges, and enabling factors to participate in such networks. It was carried out in two parts: a literature review and interviews with 20 selected SMEs. The focus of the study was SMEs in the industrial sector in the six countries involved in the [BIS project](#) (Sweden, Norway, Denmark, Finland, Russia and Poland).

The report presents an analysis of critical factors that are inherent to an industrial symbiosis network, that can enhance the participation of SMEs in these networks. In this context, public policy and digitalisation are key. Both can be used to further development and growth of industrial symbiosis networks, but in different ways. One key finding from this report is that public policy is described by the companies as mainly targeting

external factors, while digitalisation primarily targets internal factors. A couple of the main conclusions from the report are summarised below.

The interview study showcased that many of the companies view economic benefits as the greatest advantage of industrial symbiosis. The literature identified both economic and environmental gains as important advantages. In many cases, the economic and environmental concerns pull in the same direction. When they do not, the interviews in this study suggest that to many SMEs economic gains are the main drivers.

Synergies, other than by-product exchanges, are additional benefits of being part of an industrial symbiosis network, especially for SMEs. These include, e.g. infrastructure synergies such as sharing of operational machinery, and knowledge synergies such as sharing key personal or knowledge on how to better deal with, for example, health and safety issues.

Industrial symbiosis offers new business opportunities to SMEs in several ways. Achieving higher environmental targets enhances the company's green corporate image, leading to better credibility among the existing customer base and an opportunity to attract new customers. Development of new products and services allows extension of the customer base and a reach to new markets. The global recognition of industrial symbiosis offers the possibility to gain visibility in an international environment, thus helping the company to expand to new geographical markets.

One of the recommendations in the report is to continue collaboration between the countries in the Baltic Sea Region in order to strengthen industrial symbiosis. This is recommended because analysis in the report shows strong similarities in enabling and hindering factors across countries.

GROUP DISCUSSIONS ON HOW TO SUPPORT SMEs AND STRENGTHEN INDUSTRIAL SYMBIOSIS

At the Council Meeting, representatives from the private as well as the public sector (local, regional and national), Universities, Clusters and organisations working with symbiosis and circular economy had the opportunity to discuss the report in breakout sessions. The groups discussed the report's recommendations and presented their suggestions in plenum on how to support networking, project development, increase public procurement, and pave the way, so that more SMEs can become resource efficient and gain benefits through industrial symbiosis.

There were many interesting considerations from the participants on how to support SMEs in entering industrial symbiosis, e.g. so-called "social aspect" in the symbiosis building process. Even the fact that many digital tools, e.g. diverse data bases and communication platforms, have shown their effectiveness, the "physical contact" between the potential symbiotic partners is efficient for successful communication and relationship building which are key in a symbiosis collaboration. Though, we all recognize that digitalisation can have a role to play, the majority of the symbiotic partnerships have emerged in the absence of digitalization. Besides, many participants emphasized that the "physical meeting" with an existing symbiosis, where you can see, feel, touch, and be inspired,

could be useful for the potential symbiotic partners. The physical encounter with people working with various aspects of industrial symbiosis is thus an important shortcut to becoming involved in the construction of new industrial symbiosis.

THE NEXT COUNCIL MEETING

The BSR Industrial Symbiosis Council provides a platform for policy learning to build policy capacity in local, regional, and national authorities, agencies and other public policy-focused organizations supporting Industrial Symbiosis Development. It engages partners within the project partnership and associated partners, as well as representatives of related transnational initiatives who are invited to join the Council for purposes of project result multiplication beyond the project partnership. Trøndelag County Council provides a secretarial function for the Council during the project period - and leads efforts to ensure that the Council becomes a sustainable platform for policy dialogue, learning, and further capacity building beyond the project period.

The Council meets two times annually during the project period. [The 3rd meeting is scheduled for early October 2020](#), and here, the focus will be on how the municipalities play an important role in creating the best possible physical conditions and institutional framework for successful industrial symbiosis.



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