



SMEs rise through EU-wide cooperation

Building cross-border value chains for the bio-economy

Date: **19/11/2018** from 18:30 – 22:00

Venue: Members' Salon, **European Parliament**, Brussels (Belgium)

Host: **Franc Bogovič**, Member of the European Parliament (MEP)

Co-host: **Lambert van Nistelrooij**, Member of the European Parliament (MEP)

Participants

24 participants were present at this dinner debate representing different EU organisations or companies, such as Members of the European Parliament, representatives of funding agents Interreg NWE and EASME, representatives of SME's and SME associations, government representatives and consultants. The dinner debate was hosted by two members of the European Parliament.

Background

The BioBase4SME (Interreg NWE) and SuperBIO (H2020) projects both **set-up and managed voucher schemes** for SMEs and start-ups active in the circular bio-economy **to access innovation support services**. During this dinner debate, the main merits of these SME-friendly vouchers schemes were discussed and demonstrated, especially the points: (i) Access for SMEs and start-ups to a unique and enormous European network of bio-economy and innovation experts, (ii) the set-up of many innovative cross-border value chains, (iii) significant TRL (Technology Readiness Level) increase of the biobased innovations the companies were working on.

Furthermore, both projects assessed the hurdles and bottlenecks SMEs and start-ups encounter when trying to get innovative products and processes to the market and distilled several **policy recommendations** out of these analyses which was also presented during the dinner debate.

Main discussion points

- **the importance of a co-financing system;**
- **the availability of cross-border services and value chains to generate a pan-European ecosystem;**
- **the need to set up a voucher system to allow companies to use services offered by actor outside their region.**

Impressions

Presentations and photo gallery are available [online](#).



Programme

18.00 Reception with drinks

Research is not Innovation

Wim Soetaert, CEO Bio Base Europe Pilot Plant

19:30 **BioBase4SME Outcomes**

BioBase4SME [video](#):

How can the network help SMEs to bring their innovation to the market?

Bio-Innovation Support for Entrepreneurs throughout NWE Regions

Tanja Meyer, BBEPP, Coordinator BB4SME

BioBase4SME Needs & challenges of SMEs in the bio economy in NW Europe

Lucie Pfaltzgraff, NNFC

Testimonial from the BioBase4SME project

Emile Redant, Agrosavfe

20.00 **SuperBIO Outcomes**

SuperBIO [video](#):

Developing new, innovative, cross-border and cross-sectorial industrial value chains in the bio-based economy

Build new industrial value chains by integrating and supporting SMEs in collaboration with other innovation actors

Stefan Ruyters, Flanders Biobased Valley, Coordinator SuperBIO

Testimonial from the SuperBIO project

Patrick Giles, Chairman and founder of AEP Polymers

SuperBIO evaluation and recommendations for the bio-economy

Els Van de Velde, IDEAConsult

20.30 **Closing with discussion**

Lambert van Nistelrooij, MEP and co-host of the dinner debate

Franco Bogovič, MEP and host of the dinner debate



Research is not Innovation

In the key note presentation **Wim Soetaert**, CEO of the Bio Base Europe Pilot Plant, made clear that it takes much more than research processes to come to innovation in industrial biotechnology. As long as research stays in the lab, there is no innovation. He explained that to be able to talk about innovation, you need to take the next step to **demonstrate the technology at a larger scale**. A lot of research fails to do so, and therefore gets stuck in the so-called valley of death between decreasing technological risk and increasing investments. A pilot facility such as the Bio Base Europe Pilot plant therefore is an essential step in innovation. The Bio Base Europe Pilot Plant is a flexible multipurpose pilot facility supporting process development, scale-up and custom manufacturing and is currently employing more than 70 people.

BioBase4SME Outcomes

Tanja Meyer, Coordinator of the BioBase4SME project, explained in a brief overview the BioBase4SME project, highlighting the achievements and impacts. This Interreg NWE project has been organising **15 transnational workshops, 11 transnational trainings, 2 innovation biocamps** (a 1-week intensive innovation and business training), **has granted 63 applications** for a coupon and **supported 54 SME's by coupons for a total value of 1.2 Mio EURO**. The easy application procedure, quick feedback to SME's and low administration all added to the success of the project.

Lucie Pfaltzgraff, Senior Consultant at NNFCC, gave an overview of the results of a survey that was performed in the framework of the BioBase4SME project. For this 50 SME's from NW-Europe were asked about 43 possible barriers in the bioeconomy. The **top 3 barriers identified in this way are 1) Demand-side policy, 2) Poor stakeholder perception and 3) Investment risk**. The major complaints with regard to demand-side policy are that 'public procurement regulation does not take into account biobased products', the 'lack of an efficient "green public procurement" legislation at regional/national level', and that 'commercial frameworks are not yet developed to promote biobased products'. Concerning stakeholder perception, especially the lack of stakeholder knowledge of biorefining activities and the poor communication on the benefits of biobased products is hampering the SME's in their business development. Also, a lack of labelling is a problem SME's are still dealing with in their market entering strategy. The large confusion about biobased and biodegradable plastics is further adding to this discussion. Finally, investors see bioeconomy technologies still as confusing and risky, because of the long time to market and the cross-sectoral character: the time for return on investment is too long, there is a lack of financial support for new production facilities (cheap loans, subsidies, etc.), the lack of visible tangible products and blockbuster products is a problem and there is a lack of investor confidence in industrial biotechnology. Overall however, since the previous survey conducted in 2013 there appears to be an **overall improvement in the barriers for SME's development**, with 12 barriers seeing a significant reduction, and only 13 individual barriers still identified as being significant, which is a reduction of over a half. More precisely, in 2013 capital requirement, investment risk and patent filling were the top 3 barriers identified.

Emile Redant, Scientist Downstream Processing at Agrosavfe, testified about the support that his company received from the BioBase4SME project. AgroSavfe produces a kind of antibodies, called



Agrobodies[®], that are targeting essential molecules of plant pests and pathogens, as such developing the next generation of biological control agents, combining a highly specific mode of action with a minimized risk of effects on wildlife, bees, growers and consumers. Agrosavfe was in the need for large quantities of the material for the further large-scale testing of Agrobodies[®] in greenhouses and fields on various crops, against different fungal pathogens. They also wanted to validate their manufacturing process at a large scale. Through BioBase4SME they obtained a voucher to receive piloting services from the Bio Base Europe Pilot Plant. This voucher appeared to be **the perfect match for them: the service was customised to their exact needs, had a low entry barrier and provided an independent but confidential perspective on their technology.** It resulted in the **successful scale up of their process to 1500L scale, representing an increase in technology readiness level (TRL) from 4 to 5.** It allowed the company to move on from research into product development. They employed 8 additional FTE's in 2018 and the results from the BioBase4SME coupon have been providing leverage for the application of a Horizon 2020 BBI-JU Demo project to continue the path to commercialisation.

SuperBIO Outcomes

Stefan Ruyters, Coordinator of the SuperBIO project, highlighted the main achievements of the SuperBIO project. This project aimed at developing new, innovative, cross-border and cross-sectoral industrial value chains in the bio-based economy, and in doing so resulted in **the creation of 42 new value chains, linking feedstock providers, technologies and end-users. The project received 60 applications from SME's for support through the project, of which 49 ideas were validated and 37 companies received services** from the SuperBIO service providers. This resulted in the development of 7 new food ingredients and 2 new feed ingredients, 7 new agrochemicals, 4 new processes to convert food waste, 8 new biobased chemicals, 5 new biobased materials and 21 processes developed, optimized or scaled up.

Patrick Giles, Chairman and founder of AEP Polymers, presented the company, being a service receiver of SuperBIO as an independent Italian SME focusing on industrial R&D activities in the field of biobased polymers and formulations from biobased building blocks. He then further elaborated on their activities within the value chain of cashew nutshell liquid (CNSL) derivatives, where they are currently developing new epoxy hardeners and polyols for the composites and polyurethanes market. These new materials have been developed in the past two years, have been successfully scaled-up, tested and validated and they have been on the market for a very short time. They relied on the SuperBIO project for a **lifecycle assessment and market analysis on CNSL based materials with the aim to improve the production process and the market penetration.** As a small company, AEP could never conceive of spending 60.000 EUR on market analysis and support, however, with the funded support provided by the SuperBIO project, this became feasible. In this way they could **obtain very valuable information for the further development of their business.**

Els Van de Velde, Senior Expert at IDEA Consult, presented the results of a monitoring survey that they performed on the SuperBIO project. Based on a survey initiated by the SuperBIO project itself, it became **clear that the beneficiaries were very satisfied about the support offered to them through the project, because of the ease of access, the right expertise and knowledge offered and the value for money.** 79% of the companies indicated that they have kept contact with at least one of the stakeholders in their value chain, and 75% of the companies believe that the value chain is viable



now or in the longer term, showing that also the value chain building was very valuable and effective. An additional survey on the economic impact of the services provided by the SuperBIO project learned that 67% of the **respondents reported a positive impact on investments in the first 2 years after the service was provided**. In addition, 50% reported a positive impact on employment for the similar time frame and 25% a positive impact on the turnover (e.g. estimated revenues, often not realized yet but expected if successful). The findings led to the formulation of several recommendations by Idea Consult on different aspects of the project. One of **the main recommendations is maintaining the co-financing system, as it guarantees the SME's motivation and a strong impact of the services offered**. Additionally, the availability of larger vouchers for more expensive services could attract more mature companies and increase the use and impact of the other services offered. It was clear that the large-scale demonstrator approach has a demonstrated EU added value as it connects national and regional ecosystems that would otherwise be disconnected, and it helps companies to access the services of organisations located in other countries, facilitating knowledge transfer and access to new markets.

The presentation was concluded by putting forward 3 main discussion points to the audience:

- **the importance of a co-financing system;**
- **the availability of cross-border services and value chains to generate a pan-European ecosystem;**
- **the need to set up a voucher system to allow companies to use services offered by actor outside their region.**

Testimonial SMEs

Both SME's that presented during the dinner confirmed again how helpful the innovation services offered through the voucher system have been to them. It has helped AEP Polymers to get insight into the market. Through the support of the SuperBIO project they were able to obtain a very extensive and detailed market report, a service which normally they would not be able to afford, but which is helping them a lot in their further business development. Also, Agrosavfe was very clear on that. Because of the upscaling that was done through the BioBase4SME project, they were able to apply for a BBI demo project. This upscaling would not have been possible without the support they obtained through the voucher system.

Discussion

The Program Director of Interreg North-West Europe remarked that the project partners of the BioBase4SME project were far too modest, as their predecessor project Bio Base NWE won the RegioStars Award in 2017 in the category Smart Specialisation for SME innovation. The project made clear that **offering vouchers to SME's to support them in their innovation can create a huge leverage effect**. Similarly, both projects demonstrate again that providing tailor-made advice to SME's via a voucher system can create a large impact. Especially the combination of investments in hardware like in a pilot facility and a voucher system is really delivering. It is helping to get SME's over this valley of death by taking away some of the burdens for SME's: it can be quick, easy, it's taking away the whole discussion on IPR, and you can start working in a very short time, whereas when you would be a partner in a project, it would take you 2 years to get started, which is impossible for an SME.



As a conclusion, the voucher scheme is an ideal way of working. When looking at the two projects they appear similar, however, the policy behind them is different. One is on the cohesion policy, the other is on excellence policy. Cohesion is about reduction of territorial disparities. This is clearly visible in the BioBase4SME project: the leaders Belgium, the Netherlands, Germany and France are working together, and they deliberately take Ireland on board, and Luxembourg, which are followers in this field of bio-based economy. During the project, investments are done in a pilot facility in Ireland. The mission of H2020 is not on cohesion, but to make excellence, increasing the competitiveness of Europe compared to the rest of the world. So, this is an important difference in both projects.

Wim Soetaert added to this that both projects were a success because they have been able to make the best out of the voucher system. The conventional way for SME's to profit from EU money is to be on board of a project as a full partner, to go through the lengthy process and all the administrative burden, which is quite hopeless for an SME. But because of the voucher system SMEs can nevertheless be part of the story and profit from it without being a full partner. SMEs can be in the project for 2 weeks without any hassle and can get things done when they want them to be done. Because it's also a matter of planning for an SME. So, **the voucher system in combination with large scale infrastructure has really proven its value.** Now the system has to change. Europe should come up with a system where there is no need for complicated solutions. They are now discussing the new Interreg: we have been advising them to make sure that this voucher system is simply normal and not just exceptionally accepted. So that also people from other regions outside NWEurope can profit from it.



Mr. van Nistelrooij comments to this that there is a European Innovation council with 20 billion EUR, and there is in **Interreg this new proposal to have exactly this scaling up for 1 billion EUR** (component 5). The thing is that we need to adapt the idea of vouchers first into a bigger reality. It is very important that in the legislation we make it possible that also other types of initiatives that go in the same direction are supported. It is clear that you need the infrastructure in order to be able to facilitate, and that this infrastructure needs to be very advanced and stable.

A consultant from PNO working initially on the BiOLinx project raised the issue of preserving the networks that have been established during a certain project. It takes a lot of effort to get SME's on board, to be noticed by them and to convince them that you offer (almost) free services. When a project, especially a CSA, is over where does the network go? Every CSA does a big effort to build a new network. How many times are they getting the network of the previous one? How much good are we at saving European Commission resources by handing over networks between CSA's? Every 6 months a new CSA is born and another one stops. Especially for Interreg (which is not Horizon or ERA-net, so outside the core mainstream of H2020 or BBI) how good are we at handing over the networks? There is the risk of duplication and in any case, there is the certainty of doing double effort to know what's going on. How much money would that save and how much more impact could that have if a formalized hand-over is there, especially between programs with different logo's. In this way a lot of money could be saved.



Wim Soetaert fully agrees with this by mentioning that one of the recommendations they have put forward to Interreg is to put the continuity of the project after the project has finished as key eligibility criterium. Today it is not needed to present data about what will be done after the project has stopped. The Program Director of Interreg North-West Europe replies that at least for Interreg this is not true. In the application you have to quantify your results at the end of the project, but also 5 and 10 years after the project ended, and there is a full work package on long-term impact.

This is a compulsory work package and it is meant to guarantee the rollout of the project. He agrees that there seems to be some difficulty within Europe to create some sort of historic knowledge. For Interreg however, all 20.000 Interreg projects are collected in a key database in which you can find all e.g. all biobased projects by keywords.



Another consideration on the voucher system is, that it seems that this system works very well, for the bio economy sector but probably also for other sectors. However, there are lots of SME's which have potentialities, and you cannot help them all with these vouchers. If that is the solution to motivate SME's, then the question remains whether it is **possible to offer similar services to all European SME's, and how that should be organised then?** How can we find a solution to obtain these results also with other SME's? Install a kind of voucher system that finances at different levels? There is certainly a limit to the system....

Franc Bogovič, host of the dinner debate shares his concerns about the challenges for this sector. We all speak about environment and sustainability, but there are still many barriers. Having co-financing and grants makes it easier. But **how can we improve this ecosystem and come to bigger scale, as this is the big challenge?** The **voucher support scheme will certainly play an important role in this.** It is a good time now to talk about this, with different debates going on inside Horizon and the agricultural committee. The question however is if this is enough or if we need other mechanisms like taxation, or other support schemes. It is not so easy to come to bigger scale. However, it is important if we want to **make sure that production is in Europe and not in other parts of the world.**

Mr. van Nistelrooij adds to this that the Biobased economy can be seen as an opportunity for less developed countries or more rural countries to create jobs in their own region. He also sees an important role for the members states. As it is not possible to bring down to every region every activity, the members states should make choices and co-finance it, and maintaining it by signing a partnership agreement with the EC. As a final remark Mr. van Nistelrooij mentions that still a lot of things need to be solved. For example, should we do the branding as biobased or rather as circular? Can you be so concrete in standardization that people still understand it? We are still in the middle of solving this branding problem and the certification issue.