



Round Table „Is Germany missing opportunities of the bioeconomy?“

Representatives from politics, funding agencies, business angels, technology centers, startups, SME and industry met on the 2nd June 2015 in Dusseldorf to discuss pressing topics in the field of bioeconomy development in Germany. The main focus of this round table was on the aspects startup and business models in bioeconomy, corporate development, and funding options.

Startup and business models in bioeconomy

It was observed that currently only few new start-ups in general and especially in the area of bioeconomy and industrial biotechnology were funded in the last year. Entrepreneurship is not part of the curricula at universities. Because of this, many students are not aware of the possibilities but also the needs to start an own company. In addition, the value of spin-outs is not realized by professors, in contrary, they often fear knowledge leakage to companies. There are instruments in place to overcome these known hurdles, but in many cases they do not work properly. One major example is technology transfer offices, which are located at many universities. They should build a bridge between academia and industry, to facilitate transfer of research results into innovation. A main hurdle is that their personnel mostly is too far away from both “sides”: they often originate from university (thus having no industry experience), but also are not connected to most recent research results anymore. As a result, transfer between universities and industry is not given in many cases.

It was concluded that a change of mindset is required, as an entrepreneurial culture in Germany is not well developed. A stronger exchange between universities and companies to identify each other’s needs could help to tackle this problem. Clusters may promote such a dialog between academia and industry. Further on, dedicated courses in entrepreneurship at the universities may foster start-up culture.

Corporate development

In addition, the corporate development of SMEs is not simple. The production of reference product volumes is costly and often difficult. But these are needed to convince investors. Here, incubators can help to create a favorable environment to facilitate this development step. But it is not that easy, as on the one hand many incubators are exclusively publicly funded, which often results in a lack of industrial networks and experience. On the other hand many incubators do not include pilot plant facilities or are only dedicated to singular processes. Therefore incubators containing a mix of private and public funding with well trained personnel and with access to especially multipurpose pilot facilities, embedded in a strong industrial network are needed. Operational venturing which means access to facilities and processes within existing industrial site might be an interesting model.

Pilot plants, either within incubators or as separate facilities, can enable production of reference product volumes, leading to easier access to capital. But the lack of pilot plants hinders the proof of concept and thus business development.

It was also estimated that regulatory terms in Germany and Europe are getting worse, which makes product placing more difficult. But in many cases those regulatory hurdles can only be addressed by the European Commission.

Funding options

Still, the major problem for both startups, as well as SMEs is the financial support. The funding landscape in Germany is manifold, but is considered to be quite confusing. It is not obvious which funding fits to which development stage of a company and its business cases and/or products. Additionally, internal terms of public funding schemes are often not flexible enough for the different needs of biotech SMEs, as - for example - they do not allow business activities with industrial partners. The discussion highlighted that there are no programs for next development stages after seed funding available. The access to Venture Capital is still a pressing problem for the biotech-industry. Generally industrial biotechnology projects are of high risk for VC, as they need long development periods compared to e.g. ITC, which makes them quite unattractive for investors. Furthermore, the expected return on investment cannot be fulfilled by many business models (especially for service provision). Existing service contracts with industrial partners often cannot be published as references, because of non-disclosure agreement. The development of alternative funding options like business angels or family offices, as well as public private partnerships and mini funds (smaller volumes per investment) was recommended.

It was concluded that bioeconomy projects often need individual solutions. Mixed funding may be an approach. Advice is needed to help the SME to find the right funding model to the right time. This could be supplied by networking organizations or within national, or EU projects.

The European law on state aid that does not allow funding of industrial development is an enormous hurdle and represents a structural problem. This should be addressed by the commission with high priority, to help bridging the valley of death, which is still often encountered in bioeconomy development.