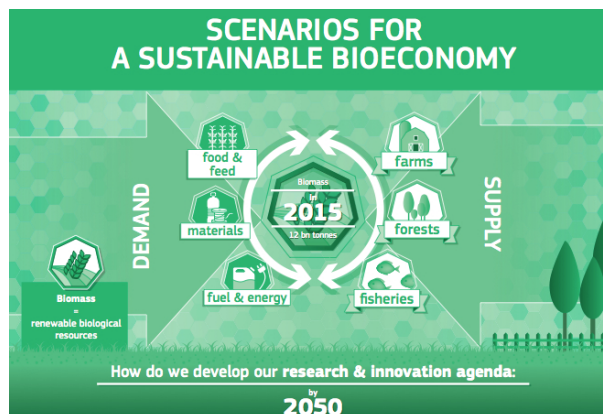




Creating Responsible Bioeconomies – Plans for a Series of Events

By Karsten Bolz¹

Synthetic biology is already being used in the processing of biomass to produce industrial goods such as biofuels, commodities for the chemical industry and ingredients for consumer goods. This is why SYNENERGENE is exploring the connection between synthetic biology as a technology and the bioeconomy as an overarching concept, which focuses precisely on such procedures.



Developing a holistic concept

The concept of a bioeconomy is a prominent notion around the globe. Strategies are outlined in national and transnational policy papers that aim at bioeconomies capable to make major socioeconomic contributions to improve health outcomes, increase the productivity of agriculture and industrial processes, and boost environmental sustainability. The success of such strategies is far from guaranteed, however. Harnessing the potential offered by a bioeconomy will require challenges to be addressed in industry, policy and society so that the concept can be shaped such that it yields benefits for a wide range of people around the globe. There is therefore a need to expand the discussion of RRI related to advanced biotechnology in order to develop a holistic concept towards the bioeconomy.

Creating Responsible Bioeconomies

Against this background, SYNENERGENE will address crucial aspects of the bioeconomy in a series of events that involve stakeholders from research, industry, civil society and policy-making. In this series we want to learn more about which notions of the bioeconomy exist and how they are perceived by different actors. Furthermore we are interested in expectations and future challenges. Exemplary questions that reflect the issues we want to address while developing the series of events under the concept of “Creating Responsible Bioeconomies” are:

- What can stakeholders do to promote the responsible creation of a bioeconomy?
- What do stakeholders expect from each other?
- Is there common ground on which a future bioeconomy could be built on?
- What does ‘responsible’ mean for the different actors?



- What are challenges one needs to be aware of?
- How can collaboration between stakeholders be fostered?
- What role do different actors play while shifting towards a bioeconomy?
- What are key issues connected to bioeconomy strategies and their implementation?
- What are potential issues arising from emerging / advanced biotechnologies (such as synthetic biology)?
- How should/could potential actions and conditions for the development towards responsible bioeconomies look like?

A first workshop in Brussels

We started the series with a workshop in Brussels at which we discussed different notions of the bioeconomy with a wide variety of stakeholders. It was organized by the Karlsruhe Institute of Technology (KIT) and the Technical University of Darmstadt, in collaboration with the Royal Flemish Academy of Belgium for Sciences and Arts. The workshop aimed to see European and US experts from the fields of economics, technology assessment (TA), science and technology studies STS, industry, private investors, civil society organizations as well as policy-making discussing their perspectives on bioeconomic notions, expectations and future challenges. A mixed format approach consisting of presentations, plenary discussion and open discussions combined with interactive elements led to a flourishing exchange of viewpoints and ideas. A report on the event will be published following its evaluation.

The workshop was the first in a series of events addressing the bioeconomy. The results of these events will contribute to the SYNENERGENE initiative's agenda-setting process that aims to involve policymakers, industry, researchers and societal actors in the responsible introduction and use of advanced biotechnology.

¹ [Karsten Bolz](#) is Doctoral student *Innovation processes and impacts of technology at the Karlsruhe Institut für Technikfolgenabschätzung und Systemanalyse (ITAS)*.