



Lecture Series *Transformations to Sustainability*



The role and function of bioclusters in the transition to a bioeconomy

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21 May 2019, 10:00 am. Building 4.0, room 101

Abstract. The concept of the knowledge-based bioeconomy has attracted a lot of attention as contemporary economic development encounters ‘limits to growth’ due to the scarcity of natural resources and increasing concerns about climate change. In addition to the shift away from a fossil-based economy toward renewable energy, the bioeconomy promises to contribute to the creation of new economic opportunities – for instance, through new business formation and entrepreneurship, increased resource efficiency, energy independence, and employment creation in knowledge-based sectors related to biotechnology and genomics, plant breeding, and plant-based processing.

Bioclusters, here defined as ‘a geographically proximate group of interconnected companies and associated organizations in the various fields of the bioeconomy’, are expected to play a key role in the development of the bioeconomy. As a result the promotion of bioclusters often features prominently in many national bioeconomy policies, as policy makers want to create ‘the next Silicon Valley’. Although a lot of research has already been done on the different

characteristics and development pathways of regular industrial clusters, bioclusters can be thought of as a special type of clusters in the sense that they operate with the explicit goal of contributing to sustainable development. The presentation will explore bioclusters from the perspective of transition theory and their potential role in fostering innovations and regional and agricultural development.

Dr. Frans Hermans is currently junior research group leader on the TRAFORBIT project: The Role and Functions of Bioclusters in the Transition to a Bioeconomy, at IAMO: the Leibniz Institute for Agricultural Development in Transition Economies in Halle (Saale). His research interests are the dynamics of innovation networks and innovation systems, social learning and collaboration and (innovation) policy for regional sustainable development.

The lecture series *Transformations to Sustainability*. Sustainability implies a formidable challenge for a variety of fields. Buzzwords such as bioeconomy, energy transformation, green chemistry, agricultural turnaround or digitalization illustrate the multiple facets at play. Each of these – often deeply interwoven – aspects describe complex processes on their own. Beyond technological progress, transformations to sustainability also require broad societal and institutional change. Against this background, the lecture series *Transformation to Sustainability* reflects on the topic from manifold perspectives: What are the specific targets of transformation processes? How can sustainability targets be translated into viable transformation research programs? To what degree can the transformation processes be consciously managed? What are the main drivers or barriers of transformation and how do they vary in different contexts? The lecture series was initiated by the Thematic Area ENVIRONMENT AND SOCIETY to offer a comprehensive discussion platform, welcoming colleagues from all disciplines at UFZ. For further information contact the head of RU 6 Environment and Society: bernd.hansjuergens@ufz.de. Foto: Markus Scholz.