



Bioenergy Hub Small Grant Report

Title of Project

Transferability of a simulation model from the German biomethane market to the UK market.

Name of researchers: Mirjam Roeder

Organisation: The University of Manchester

Period of Project: Oct/Nov 2015

Funded by a SGH small grant Thomas Horschig (Deutsches Biomasseforschungszentrum, Leipzig) visited The University of Manchester to work with Mirjam Roeder for 2 months in October/November 2015. During his stay Thomas started transferring his German biomethane market simulation model to the British biomethane market. For this, he collaborated with SGH partners in Manchester (Mirjam Roeder and Patricia Thornley) and Bath (Paul Adams) and engaged with industrial stakeholders in the UK.

The model based country comparison can contribute to a better effect-estimation of biomethane capacity development supporting policies. Furthermore, it will allow estimating the amount of GHG emissions that can be saved depending on the supporting scheme. To the mutual benefit, we worked on the differences and similarities policy support of biomethane in Germany and the UK and looked at associated greenhouse gas emission savings. Furthermore, a detailed market analysis was conducted and transferred into a modeling environment. Final results of the country comparison shall be presented in summer 2016.

A part of the results are currently written up in a joint scholarly paper. The paper describes the concept of the reasonable potential for biomethane and its application to the UK and Germany. With the derived potential possible greenhouse gas emission savings are calculated and compared to the status quo. The paper will be submitted to Applied Energy by the end of February 2016.

Latest results of the SUPERGEN funded research were presented at the annual SUPERGEN Hub assembly at Rothamsted Research with an oral presentation and a poster presentation. Besides sharing the latest results of the research to other academic and industrial partners of the SGH the assembly and joining the SHARE network day offered Thomas Horschig a great opportunity for networking, in particular with other early career researchers through the SHARE network.

Furthermore, stakeholder engagement activities took place during a short-term stay at the University of Bath and meetings with industrial stakeholders at Future Biogas (Guildford) and an ADBA (Anaerobic Digestion & Bioresources Association) meeting (London). These meetings were of high significance for Thomas Horschig and the industrial stakeholders as this supported tremendously the model development process. That way it is possible to create a sound model that considers market structures and developments.

Summarising, the SGH funded research visit enabled us to start a model building process supported by interviews with industrial stakeholders and academics to simulate possible futures of the British biomethane market (anaerobic and thermochemical produced). Furthermore we started to write a joint journal paper that will be submitted to a special issue of Applied Energy by the end of February.

Small grant project to support the exchange of early career researchers to exchange knowledge and skills and building capacity as well as extending the SHARE network.