

The Environmental Economic Conference 2021

Presenter:

GreenREFORM

Authors and affiliation: Peter Stephensen, research director of The Danish Research Institute for Economic Analysis and Modelling, DREAM, Rasmus K. Berg, KU, Jonathan Leisner, KU, August T. Nielsen, KU, Jens Sand Kirk, Project Director of GreenREFORM

Abstract

Presentation of the GreenREFORM Model (Peter Stephensen)

The goal of the ongoing GreenREFORM project is to develop an analytical tool that allows for an integrated and consistent assessment of the environmental and climate effects of economic policies, as well as the socioeconomic effects of environmental, energy and climate policies. An important premise for this, and a goal in itself, is that the baseline simulation of the model should provide a comprehensive assessment of how future economic development is expected to affect the environment and climate. Further, the baseline simulation should assess whether this development is compatible with the political goals within these areas. Peter Stephensen, research director of DREAM presents the model strategy, and gives a status of what has been accomplished so far.

Overcoming The Big Mac Challenge: Integrating Technological Marginal Abatement Cost Curves in Economic Models (*Rasmus K. Berg, Jonathan Leisner & August T. Nielsen*)

The paper develops a method for integration of a class of bottom-up data related to abatement technologies in conventional top-down models. The class of bottom-up data compatible with the model framework is relatively general and covers simple end-of-pipe technologies as well as more complex versions of input-displacing technologies. We implement the framework in a partial equilibrium setting, using actual technology data.

Preliminary model results (Jens Sand Kirk)

While development of the GreenREFORM model is ongoing, Jens Sand Kirk, Project Director of GreenREFORM, will provide a sneak peek at some early (still subject to change) results of simulations of policies in GreenREFORM Model system. Kirk will discuss questions like: What happens when a uniform CO2e-tax is introduced? How does the results differ from those obtained in a standard CGE-model? What is still needed in order to improve realism of the results?