

MEASURES OF BIODIVERSITY – AND LINKS TO ECONOMIC MODELLING

ADDRESS COWI A/S
Parallelvej 2
2800 Kongens Lyngby
Denmark

TEL +45 56 40 00 00

FAX +45 56 40 99 99

WWW cowi.com

Keywords

Biodiversity, economic modelling, green national accounting, applied environmental economics, eco-system services

Status

The project was commissioned by the Nordic Council of Ministers (NCM) and two of its working groups, the Environment and Economy Group (MEG) and Terrestrial Ecosystem Group (TEG). It is being carried out by COWI A/S. It will be completed in June 2017 with the finalization of a report to be published in Autumn 2017.

Input to the Conference

By way of introduction, a representative of the MEG may outline the background for the project and its envisaged outcomes. Consequently, the chief economist on the project will make a presentation addressing the approach chosen, key findings and recommendations for further work in this field in the Nordic countries.

The representative of the MEG may be Signe Krarup, Ministry of Environment and Food of Denmark. Michael Munk Sørensen, COWI A/S, will make the presentation.

Abstract

Economic activities impact on biodiversity – and changes in biodiversity impact on economy. However, our understanding of these links is still fairly limited. In the words of the report “Making the environment count” published by the NCM in 2016 (TemaNord 2016:507, p. 102): “Biodiversity has proved among the more challenging environmental issues to link to macroeconomic models.”

Against this background the the Environment and Economy Group (MEG) and Terrestrial Ecosystem Group (TEG) of the NCM launched a project aimed at addressing the extent to which it is possible to establish links between measures of biodiversity and economic models.

The objective of the project is to investigate to what extent linking biodiversity and economic models is feasible, and what it would take in terms of data and model changes to establish such linking where appropriate. This is done by identifying key drivers (e.g. changes in land use, urbanisation and climate change) that affect biodiversity and assessing whether these drivers can be described by economic

models. The project also considers if there are any economic sectors or activities, which are especially sensitive to changes in biodiversity.

The project focuses on biodiversity data, indicators and indices of relevance in the Nordic countries and macro-economic models applied in these. It builds upon existing data and economic models and takes into consideration ongoing work in this field in international organizations, such as the OECD.