

AARHUS UNIVERSITY
EXTERNAL SEMINAR
DEPARTMENT OF ENVIRONMENTAL SCIENCE

Frederiksborgvej 399, 4000 Roskilde

16 November 2018. 10.00 – 10.45

Venue: Aarhus University, Roskilde, K1.36, East



Title: Transition to a Nordic Green Energy System: Barriers and Opportunities

Speaker: Klaus Skytte, Head of Energy Economics and Regulation at DTU Management Engineering in Denmark. He has more than 16 years of experience in energy planning and system analysis. He holds a PhD in economics and has coordinated several national and international research projects e.g. the Nordic flagship project Flex4RES.

His research activities are within energy and environmental economics, regulation, micro-economic modelling, integration of energy-economic and environmental models, economic policy instruments, energy market structure and subsidy instruments for renewable electricity.

Abstract: The current transitions in Nordic countries' energy sectors form part of the green revolution towards a future with a decarbonized energy system that focuses on system integration costs, reliability and sustainability. Ambitious climate and decarbonization targets have been set that involve the massive deployment of variable renewable energy such as wind and solar power. The Nordic region has profiled itself as a frontrunner in the green revolution and in reducing CO₂ emissions. However, energy policies in most Nordic and Baltic countries are still dominated by a traditional policy framework concerned not only with environmental issues but also with security and the cost of supply, while lacking policy awareness of energy-system flexibility, a prerequisite for a successful transition to a clean energy system drawing on a variety of sources.

This presentation discusses climate and renewable-energy targets and the challenges involved in creating a future energy system dominated by variable renewable energy. Four possible scenarios for how the market might develop are surveyed and discussed with respect to future Nordic energy cooperation, and the advantages and disadvantages of a flexible energy system are highlighted.

The talk takes further a recent high-level report issued by the Nordic Council (Ollila, J., 2017: Nordic Energy Co-operation: Strong Today – Stronger Tomorrow) on the need for greater flexibility by coming up with possible scenarios for targeting Nordic energy co-operation.

Host: Marianne Zandersen on behalf of SGA Sustainable Energy and Environment, AU

External Guests interested in attending the presentation should e-mail

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