

# Linking Promotion Strategies for RES-E and CO<sub>2</sub> Reduction in a Liberalised Electricity Market: Is Harmonisation of Policy Necessary?

Claus Huber<sup>a</sup> and Poul Erik Morthorst<sup>b</sup>

<sup>a</sup>Institut für Elektrische Anlagen und Energiewirtschaft, TU-Wien, Vienna, Austria

<sup>b</sup>Systems Analysis Department, Risø National Laboratory, Roskilde, Denmark

Corresponding author: <huber@risc.iew.tuwien.ac.at>

In this paper two important issues with respect to the integration of different renewable energy sources into the liberalised European electricity market and the international condition of GHG-reduction will be investigated.

First, it will be analysed how individual promotion schemes for different technologies for electricity generation (e.g. feed-in tariffs, quota systems, investment subsidies etc.) interact with each other. The technologies considered will include different renewable energy sources for electricity generation (RES-E) technologies as well as conventional electricity production.

Second, the linkage of RES-E, conventional electricity generation and GHG-reduction with the three markets, for physical power, green certificates and emission trading will be investigated, i.e. it will be evaluated how new environmental markets, such as CO<sub>2</sub> emission permits / credits may affect or overlap with the promotion of RES-E.

A number of policy recommendations in relation to the integration of the three markets and trade-offs between technologies and promotion schemes will be made. In this paper preliminary results of the EC founded project **Green-X** are presented. The core objective of this project is the development of a dynamic simulation model **Green-X** to find a set of efficient and sustainable dynamic instruments integrating strategies for RES-E, CHP generation, DSM activities and GHG-reduction.

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