



Sustainable Energy
Systems 2050
NORDIC ENERGY RESEARCH PROGRAMME



norden

Nordic Energy Research

Nordic Energy Road Map 2050

Strategic Choices towards Carbon Neutrality (NORSTRAT)

Kick-Off Sustainable Energy Systems 2050,
Helsinki, 11th and 12th of October 2011

Ingeborg Graabak SINTEF Energy Research,
ingeborg.graabak@sintef.no

NORSTRAT objectives

- **Objectives:** To build knowledge about possible carbon neutral futures for an integrated Nordic power system in a time perspective up to 2050 based on qualitative scenario analysis of impacts on the electricity, the transport and partly the heating system combined with the necessary governance aspects to enable the transformation.
- Two alternative paths shall be examined:
 - **Nordic Balance**
 - **European Hub**

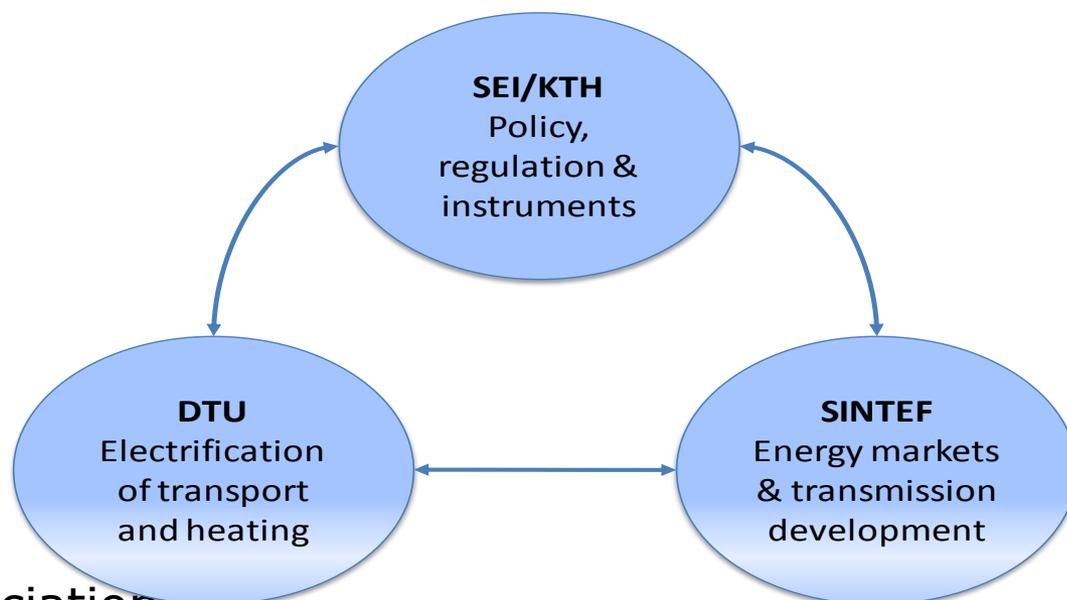


NORSTRAT partners and stakeholders

- **Partners:** SINTEF Energy Research, Stockholm Environment Institute (SEI), Technical University Denmark (DTU)

- **Reference group**

- Vattenfall
- Dong Energy
- Statnett
- Fingrid
- Energinet.dk
- Danish Energy Association
- Vestas
- Enova
- Energy Norway
-



NORSTRAT structure

