



UiO : **Centre for Technology, Innovation and Culture**
University of Oslo

RENTTRANS:

**Renewable Energy and Growth: Transition
Strategies for Norway**



Norway as a site for renewables

- Norway has significant activity in renewables
 - wind, tidal/wave, solar
- But it is almost unique in having two major incumbent technologies:
 1. It is a major oil and gas producer
 2. It has virtually all domestic electricity produced from renewable sources (namely hydropower).

Renewables and the energy transition

The RENTRANS question:

Can Norway remain a major energy producer via renewables and if so how?

The approach of RENTRANS:

Technologies exist as systems, and the central problems for renewables/low carbon are those of system creation and system transition.

Systems entail knowledge bases, market actors, infrastructures, regulation, engineering practices, risk management etc.

System creation and transition, especially where there are dominant incumbents, involve protection and coordination of developing systems.

The elements of RENTRANS

1. Building renewable systems in Norway

Mapping the sector

Mapping the knowledge system

Market creation and niches

Exports and infrastructure investment

2. The politics of renewable energy transitions

Dynamics of policy evolution in system functioning and transitions

3. Local and regional issues

Drivers and diffusion of small-scale renewables at regional level

4. Policy arena for transition strategy discussions

Integrating research, policy debate and development for national and multilateral strategy