

## **P3.2-2 100 % Renewable Energy Scenarios for Denmark**

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The Danish Government has requested the so called Climate Commission to develop scenarios for how Denmark can be free of fossil fuels, and the Commission has just issued a report showing that this can be done before 2050 with very low macroeconomic and energy system costs.

The paper present two sets of scenarios, one with a high share of wind energy, and another with more biomass contribution. The work includes a detailed assessment of the potential and costs of energy efficiency improvements in industry, services, buildings, and the transportation sector, and a study of

how a high share of fluctuating energy such as wind can be integrated in the Danish, Scandinavian, and European electricity markets. Large electricity trade and investments in new transmission lines will be needed.

The study also includes an assessment of policy instruments that can be needed in order to implement the targets. The Danish Government has welcomed the plan, and has promised to bring forward their own plan for how all fossil fuels can be dropped in the Danish energy system before 2050.