

The Role of Technology Development in Greenhouse Gas Emission Reductions – Case of Finland

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This contribution presents results from the Finnish CLIMTECH Technology programme. Projections from a total of 27 projects were used to investigate the prospects of GHG mitigation technologies in the Finnish conditions, including all emission sources. The estimated impacts of climate change on the energy system were also taken into account in the analysis. Systematic investments in technology development were found to yield substantial benefits in the long term, by decreasing emission reduction costs and by facilitating more ambitious reduction targets. Advanced biofuel production and utilization technologies and off-shore wind power proved to have the largest potential by the 2030's. Results also indicated a clear relationship between technological development and national emission trading patterns.

Abstract for the International Energy Workshop
jointly organized by the
Energy Modeling Forum (EMF), International Energy Agency (IEA) and IIASA.
24-26 June 2003 at IIASA Conference Center, Laxenburg, Austria