

More than 35 per cent of all Finnish homes are connected to district heating networks. This figure will go up to 50 per cent by the end of century. More than 60 per cent of all district heat is produced in combined heat and power plants. The combined heat and power (CHP) potential and co-generation in industry are intensively utilised; the share of CHP of total electricity being the highest in the world. Because of this, the energy efficiency in urban areas is exceptionally high. On the other hand, the opportunities to decrease the energy demand and to decrease the CO₂ emissions by intensifying CHP or district heating are limited. Finland has already very low CO₂ emissions from electricity production.

Finland is very rich in forest and peatlands, both of which are sinks of carbon. The sustainable use of forest has been the basis of all forestry in Finland. The total amount of carbon in forest in Finland has increased during last 30-40 years. The area of forest has also increased slightly during last years. There is some evidence that it would still be possible to increase absorption of carbon in forests by means of forest management. The studies concerning the carbon balances in Finnish forests and peatlands are preliminary. More information is expected in two to three years, when the national research project on climate change (called SILMU) will produce assessment results.

Finland expects that it will experience large effects from climate change. The country is situated in the area where the temperatures are expected to rise significantly, especially in winter. The effects will most strongly be felt in the forestry sector and in the winter tourism sector. The risk of forest damage is expected to rise due to climate change and air pollution.

3. Relevant Studies

Most of the reports are available only in Finnish or Swedish.

- Government Report of Sustainable Development Activities (1990).
- Working Group Interim Report of Environmental Economic Incentives (1990).
- Interim Report of the Energy Policy Council on the Energy Policy (1990).
- Report on Energy Conservation Potential in Finland. Report of research project (1991).
- Report of the Working Group for Greenhouse Gas Emissions (1990).
- Bostrom, S. et al., Greenhouse Gas Emissions from Energy Production and Consumption in Finland. MTI Series D:186, 1990.
- Ahlholm, U. et Silvola, J. The Role of Peat exploitation in Altering the Carbon Balance in Finland and Worldwide, MTI Series D:183, 1990.

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