A low-carbon Finland is a great challenge, but an achievable one

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VTT specialists have assessed Finland's chances of achieving the 80% greenhouse gas emission reduction targets. The EU's goal for 2050 is to reduce emissions by at least 80% from the level of 1990.

The goal is a tough one for Finland, but possible to achieve as long as all sectors that produce or consume energy take part. On top of this, all greenhouse gas emissions must be reduced. Finland requires new technological solutions for industrial activity, for the transport of people, goods and services, and for housing and working methods. If clean forms of energy and the efficiency of energy use are substantially developed and widely adopted, Finland could become a seller of emission allowances and clean energy.

Finland benefits from the availability of substantial reserves of renewable energy and a diversified energy structure.

In 2050, 85% of Finnish electricity could be produced free of carbon dioxide. This requires diverse energy production and the widespread adoption of carbon capture and storage (CCS) technologies, in connection with both fossil fuel and biomass use.

If the industry significantly improves its energy efficiency and adopts CCS, 80% of the energy consumed by industry will be carbon-neutral. Resource efficiency must be improved and the use of recycled materials increased.

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More information: VTT's Low Carbon 2050 research project's final report online: www.vtt.fi/inf/pdf/visions/2012/V2.pdf

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