

Infosheet

SECURE-BIO-SUPPLY

No 1: October 2024

Coal and Peat to be Phased Out!

Climate Goals Accelerates the Energy Transition

The EU has committed to reducing its greenhouse gas emissions by at least 55 percent from 1990 levels by 2030. Additionally, the EU aims to become the first climate-neutral continent by 2050. Finland's climate policy is based on international agreements and is structured within the national Climate Act (423/2022). The goal is for Finland to be carbon-neutral by 2035 and to reduce greenhouse gas emissions by 60 percent by 2030.

Finland has a climate and energy strategy from 2022, and an update is currently being prepared. Finland's greenhouse gas emissions are reported annually to the EU Commission and the UN Climate Convention.

Fossil Fuels to be Phased Out

The fossil fuels we use cause greenhouse gases. The emission factor for energy use of coal and peat is greater than for oil and natural gas, so more is gained by limiting coal and peat use first, especially in electricity

production where coal was previously used in condensing power plants to balance electricity needs. Such power production has now mostly been shut down, and from May 1, 2029, it will be prohibited in Finland to use coal as fuel for electricity or heat production. The law prohibiting energy extraction from coal (416/2019) also stipulates a penalty fee of 30 €/GJ, approximately 108 €/MWh, if coal is used in violation of the law.

There is no corresponding legislation prohibiting the use of fuel peat in Finland. The political goal has been to halve peat use by 2030, but due to increased energy taxation and higher emission fees in recent years, the phase-out has progressed much faster than planned, and the future of the peat industry has been perceived as highly uncertain.

A rule regarding excise tax exemption for smaller plants using peat has at least temporarily increased the production of sod peat, as more forest chips are directed to larger plants that must pay tax for the peat. During 2022-26, a smaller combustion plant can use up to 10,000 MWh of peat without paying excise tax, and during 2027-30, the maximum amount is gradually reduced to 5,000 MWh.



Co-funded by
the European Union



NOVIA
UNIVERSITY OF APPLIED SCIENCES



Metsäkeskus
Forest Centre

Energy Storage a New Challenge

There are other factors besides carbon dioxide emissions that must be considered during the transition to a fossil-free society. One is the domestic and often local production capacity, another challenge is building new storage capacity to store the surplus electricity from wind and solar for periods when the energy is more needed. Long-term stored fuels will therefore be needed for a long time to come.

Following Russia's attack on Ukraine in 2022, Finland stopped importing energy from there. Previously, Russia had been our most important supplier of energy such as coal, natural gas, nuclear fuels, and electricity, worth a total of 3.5 billion euros in 2020.

In the spring of 2022, the demand for domestic fuels increased, and at the same time, there was concern that peat was being phased out too quickly. The government appealed to district heating companies to secure fuel supply for the next and possibly subsequent heating seasons by entering into agreements with peat producers. It was considered that the contract periods should cover several years. It was also decided to resume the emergency stockpiling of peat, something that has been in our legislation since 2007 (321/2007 and 498/2007).

However, it turned out not to be so easy to increase the supply of peat, as energy peat had been produced only on order, and some producers had already closed operations.

The National Emergency Supply Agency has now planned to strategically store peat until 2028. Coal and peat have been easy and cheap to store long-term, and long-term storage must therefore be developed as these fuels are phased out.

Read more (in Swedish):

FBC (2022). Försörjningsberedskapscentralen inleder säkerhetsupplagring av bräntorv [webbnyhet] Publicerad 15.6.2022.

FINLEX (321/2007) Lag om skyddsupplag för bräntorv.

FINLEX (498/2007). Statsrådets förordning om skyddsupplag för bräntorv

FINLEX (416/2019). Lag om förbjudande av energiutvinning ur kol.

FINLEX (423/2022) Klimatlag.

TEM (2022). Klimatneutralt Finland 2035 – den nationella klimat- och energistrategin. Arbets- och näringsministeriet. TEM 2022:54.

VH (2023). Energibeskattningen. (VH/3237/00.01.00/2023).

Statrådet (2019) Ett inkluderande och kunnigt Finland - ett socialt, ekonomiskt och ekologiskt hållbart samhälle.

Author:

Margareta Björklund-Sänkiaho

Professor in Energy Technology and Project Leader at Åbo Akademi University

SECURE-BIO-SUPPLY- Development of Long-Term Storage of Solid Biofuels to Enable a Sustainable Energy Transition

Contact us:

abo.fi/secure-bio-supply



Project information:

Time period: 1.3.2024–28.2.2026

Project Owner: Åbo Akademi University

Project partners: Novia University of Applied Sciences, Finnish Forest Centre

Financier: EU-FRO Just Transition Fund (Ostrobothnia's FRO (JTF) call 2/2023.) The Regional Council of Ostrobothnia.

The goal of the **SECURE-BIO-SUPPLY** project is to analyse the challenges and opportunities that changes in long-term fuel storage can create in Ostrobothnia.



Co-funded by
the European Union

