

Asia: VN/19961/2023

Suomen yhdenntetyn energia- ja ilmastosuunnitelman (NECP) päivitys

Lausunnonantajan lausunto

Lausunnonantajan taho

Muu taho

Mikäli vastasit "muu taho", voit tarkentaa vastaustasi tässä

Gasgrid

LAUSUNTO

Yhdyn esitykseen, ei muuta lausuttavaa

Mikäli vastasit yhtyväsi toisen tahon lausuntoon, täsmennä mistä tahosta on kyse

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1) Kasvihuonekaasupäästöjen vähentäminen ja nielujen kasvattaminen (NECP luku 2.1.1 ja 3.1.1)

Yhdyn tämän osa-alueen linjauksiin

Avoin vastaus kasvihuonekaasupäästöjen vähentämisestä ja nielujen kasvattamisesta koskien

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2) Uusiutuvan energian edistäminen (NECP luku 2.1.2 ja 3.1.2)

Yhdyn tämän osa-alueen linjauksiin

Avoin vastaus uusiutuvan energian edistämistä koskien

Gasgrid notes that effective and predictable permitting processes are essential for large-scale infrastructure projects that require significant investments. The regulation applicable to hydrogen projects are still underway which creates unclarity regarding the regulatory environment. Despite this unclarity and lack of regulation, there is need to effectively proceed with project development together with authorities to ensure that the project development does not take longer than would otherwise be necessary.

The PCI projects (Nordic Hydrogen Route, Baltic Sea Hydrogen Collector, Nordic Baltic Hydrogen Corridor) that Gasgrid is developing with its project partners are large-scale and complex projects that come with many uncertainties. These include especially land use, planning and permitting processes which require extensive preparation. It is of utmost importance that the permitting process is clear, smooth and well-coordinated between the authorities. In projects that extend across national borders, the cooperation and coordination should cover all relevant geographical areas. Lastly, while public participation in critical infrastructure projects shall be guaranteed, the court procedures should not unreasonably lengthen the development of the projects.

3) Energiatohokkuuden edistäminen (NECP luku 2.2 ja 3.2)

Yhdyn tämän osa-alueen linjauksiin

Avoin vastaus energiatohokkuuden edistämistä koskien

Side-stream heat originating from hydrogen production may bring benefits also for energy efficiency as the heat can be used in district heating.

4) Energiaturvallisuus (NECP luku 2.3 ja 3.3)

Yhdyn tämän osa-alueen linjauksiin

Avoin vastaus energiaturvallisuutta koskien

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5) Energian sisämarkkinat (NECP luku 2.4 ja 3.4)

Yhdyn tämän osa-alueen linjauksiin

Avoin vastaus energian sisämarkkinoita koskien

Gasgrid estimates that based on investments plans that have already been announced the availability of renewable gases (biomethane and e-methane) will increase tenfold by 2030. Renewable gases (also other than hydrogen) will therefore provide important flexibility and predictability in the electricity market where the volatility of renewable electricity production needs to be managed and balanced. Therefore, the gas transmission system will play a significant role in balancing the whole energy system when the share of renewable energy production increases even more.

Gasgrid has been mandated to implement the hydrogen infrastructure and to use it to bring operators together in the hydrogen economy and to accelerate the creation of a hydrogen economy around the Baltic Sea Region. The national hydrogen infrastructure will enable the creation of a hydrogen market and a significant new sector in Finland.

Baltic Sea Hydrogen Collector would enable significant deployment of new RES (mainly offshore wind) and hydrogen production in Finland, Sweden and Denmark and connect the supply with off-

takers in Central Europe, Finland and Sweden. Nordic Hydrogen Route and Nordic-Baltic Hydrogen Corridor, on the other hand, would enable significant deployment of new RES (mainly onshore wind and solar) and hydrogen production and connect green hydrogen supply with off-takers in Finland, Sweden, Estonia, Latvia, Lithuania, Poland and Germany. More detailed description of the projects are provided below.

The Nordic Hydrogen Route is an initiative to accelerate the creation of the hydrogen economy by building up cross-border hydrogen infrastructure in Bothnian Bay region and an open hydrogen market by 2030. The aim of the Nordic Hydrogen Route is to drive decarbonization, support regional green industrialization, economic development, and European energy independence. The companies involved in the project seek to develop a network of pipelines that would effectively transport energy from producers to consumers to ensure they have access to an open, reliable, and safe hydrogen market. Currently, there is no major gas network infrastructure in Bothnian Bay. The first sections of the pipeline network are expected to be operational by 2030. A total of 1,000 km of dedicated hydrogen pipelines will serve 65 TWh of identified potential hydrogen demand in the Bothnian Bay region by 2050. The pipeline is an important early building block towards a clean, resilient and integrated European energy system. The Nordic Hydrogen Route is at the forefront of answering EU's decarbonisation and energy integration goals, with a regional estimated hydrogen demand of 1 Mt around 2030. In a wider context, the Nordic Hydrogen Route realizes a part of the European Hydrogen Backbone vision. In the long-term vision, the Nordic Hydrogen Route links to a wider European hydrogen infrastructure, enabling exports of excess hydrogen production by 2040 to Central Europe.

The goal of the Nordic-Baltic Hydrogen Corridor project is to develop hydrogen infrastructure from Finland through Estonia, Latvia, Lithuania and Poland to Germany by 2030. Gasgrid's share is particularly related to the development of the hydrogen network covering the whole of Southern Finland and the market in the Baltic Sea region. Project supports the diversification of energy supply and the accelerated introduction of renewable energy. As the hydrogen infrastructure continues to develop around the Baltic Sea, a strong hydrogen market area can also be created, which enables large-scale utilization of abundantly available and competitive renewable energy resources. The project strongly supports the EU's hydrogen strategy and the REPowerEU plan. In addition, the hydrogen corridor of the Nordic and Baltic Sea region supports several regional and EU climate goals, such as the EU's Green Deal program and the Fit for 55 package.

The Baltic Sea Hydrogen Collector (BHC) plans to build a 1,250 km pipeline system which will connect mainland Finland and Sweden with Germany, and potentially also Denmark. Between Finland, Sweden, and Germany, the pipelines can be connected to hubs for hydrogen production on Åland, Gotland, and Bornholm islands. These production points can unlock additional deployment of locally produced offshore wind power, while the hydrogen collected will be distributed throughout the Nordics and Northern Europe, supporting innovative decarbonization projects within each market and delivering on the EU's 2050 targets. BHC's interconnected infrastructure has the potential to transport a significant share of the EU's domestic hydrogen target as defined by the RePower EU plan. In addition, the hydrogen produced will play a vital role in balancing Europe's future energy system by offering storage and balancing solutions. When electricity is cheap, more

hydrogen will be produced. Conversely, when electricity prices are high, stored hydrogen can be deployed. The BHC will, therefore, contribute by balancing power in the grid, as well as establishing competitive energy prices.

6) Tutkimus, innovointi ja kilpailukyky (NECP luku 2.5 ja 3.5)

Yhdyn tämän osa-alueen linjauksiin

Avoim vastaus tutkimusta, innovointia ja kilpailukykyä koskien

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Avoim vastaus muita kansallisen energia- ja ilmastosuunnitelman osia koskien. Mikäli mahdollista, kerro vastauksessasi mitä suunnitelman lukua vastauksesi koskee

Gasgrid notes that in section 1.2.3 (Key issues of cross-border relevance, p. 20-21) only Nordic Hydrogen Route with detailed numbers is mentioned. There are, however, three large-scale infrastructure projects with a PCI-status under development by Gasgrid (please find more information about these projects under question 5).

In summary, the projects of common interest (PCI) developed in the region are:

- Hydrogen interconnector between Sweden and Finland (currently known as Nordic Hydrogen Route – Bothnian Bay)
- Hydrogen interconnector between Finland, Estonia, Latvia, Lithuania, Poland and Germany (currently known as Nordic-Baltic Hydrogen Corridor)
- Hydrogen interconnector between Sweden, Finland and Germany (currently known as the Baltic Sea Hydrogen Collector)

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