Recommendations on Electrification

from the Nordic Electricity Markets Forum to the Nordic Ministries

In January 2019, the Nordic Prime Ministers signed a Declaration on Nordic Carbon Neutrality. The Nordic Electricity Market Vision 2030 complements this declaration: it states that the electricity market should contribute to reaching the ambitious Nordic climate goals. Exploring different pathways towards carbon neutrality, there is a broad consensus, that electrification is a vital part of the Nordic countries' strategy. The electricity market stakeholders, gathered at the Nordic Electricity Market Forum, are aware of the scale of the challenge and how different the future energy sector will look like – electrification could mean a doubling of the current total regional electricity consumption by 2050, with consequences for production and grid. We are also aware of the current security of supply issues connected to the war between Russia and Ukraine: by working towards an emission free electric future based on Nordic RES production we increase our security of supply.

Based on our collective knowledge and the expertise of the electricity sector, the 2022 Forum presents these recommendations and examples for no regret actions to support the ministries and to ensure that electrification brings the Nordics closer to our common goal of carbon neutrality, as well as to enable the utilisation of inherent business opportunities arising from the European green transition, so that we as a region may profit.

Joint Nordic energy transition planning: the reality of a synchronous Nordic electricity grid and the integrated Nordic electricity market makes common planning of the energy transition a necessity. Examples to realize this recommendation could be:

- A shared Nordic holistic approach to electrification strategies, power to X and flexibility (storage/demand) for example through Nordic coordination of the EU mandated NECP processes
- Consider establishing a hydrogen working group under the Nordic Council of Ministers to address the upcoming EU legislation in a coordinated way

Promote unique Nordic strength in Europe: the Nordics have a lot of low carbon firm capacity, coupled with cost competitive weather dependent renewables to enable power to x and continued expansion of energy intensive industry. Examples for actions could be:

- Nordic insights into good practices on the electricity markets, including retail markets, should be actively lobbied for and included into legislation adopted at EU level
- Defend the Nordic strengths, ie. a clean grid electricity mix in the EU regulation of green/clean hydrogen, RFNBOs and REDII. Avoid European rules that establish obstacles for investments due to extremely complex additionality rules for green electricity/hydrogen.
- Engagement to jointly maximise access to European funding in the Nordics supporting the green transition of Europe as a whole

Politically promote joint Nordic long term grid planning: Nordic electrification strategies should give clear political signals to the TSOs how generation and demand might evolve from a Nordic perspective. Grid investment is also required to promote further market integration and use the potential that lies in the abundance of green energy in the Nordics. In total, the Nordic TSOs are

planning to invest more than EUR 25 billion in the coming decade. To invest that amount of money efficiently the grid needs to be planned on a Nordic level. Examples for actions are:

- Improve public acceptance for grid investment by politically recognizing the need for it. Explain that grid investment is required to reduce area price differences, increase security of supply and to make room for electrification.
- Present clear Nordic climate ambitions and their implications for generation and demand.
 The ambitions should give the Nordic TSOs clear signals in which direction the Nordic regional plans within the European TYNDP should be taken.

Improve the investment environment by looking at permitting processes and price signals: Customers and investors need long term price signals to hedge. To facilitate electrification the the long-term market design and the permitting processes need to be developed.

- Explore the advantages and disadvantages of a more regional approach to system
 operation. Decisions with regional impact are made through transparent close
 cooperation and coordination on a regional level. An example is the bidding zones
 revision process, where the possibilities of cross border bidding zones and bidding zone
 merges could be taken into consideration, other examples are balancing, grid operation
 etc.
- Work for a better alignment of energy policy and financial policy. The example is the regulation on bank guarantees that has a considerable negative impact on forward market liquidity.
- Streamline permitting and investment procedures for manufacturing (for example hydrogen), power production and grids. Implement "one stop shop" regulation if possible.