

Nordic Electricity Market Dynamics: Navigating Hedging Challenges and Opportunities

Understanding power derivatives and market transitions Montel Finnish Energy Day 2025

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Power-Deriva key figures

Power-Deriva founded in 2000

Power-Deriva consists of Power-Deriva Oy and PD Power Oy The offices are located in Helsinki and Harjavalta



Development of the underlying energy system ${f D}$ and regulation of derivatives impact to hedging possibilities





Nordic hedging changes - a lost decade?

- Nordic price areas where historically tightly price coupled, leading to high liquidity on derivatives
- Sweden divided into four areas in 2011
- Norway divided three (2009), four (2010) and then finally five (2011) price areas
- MiFID II and MiFIR applied in Europe 2014
- 2016, bank guarantees not allowed
- Major private Norwegian power trader, Einar Aas, defaulted in 2018
- Miscalculation of System price 2021
- Energy crisis in 2022
- Flow-Based market coupling in 2024 November



Nasdaq cleared Nordic power volumes



2006 Power System 4 Price areas
Tightly coupled prices
Stable price levels
=> Liquid forward market

2024 Power System 12 Price areas New RES and interconnectors to the UK/continent **Partially** linked prices => **Reduced exchange volumes**



Hedging of Nordic utilities have remained stable



- Hedging remains a key tool to manage price risk
- Some volumes declining and shifting hedging strategies
- As volume development does not correlate with exchange-based volumes
 => hedging bilaterally or/and decreased hedging volumes due to product mismatch

In 2022, Vattenfall revised its hedging strategy due to major price differences between the Nordic system price and local price areas, resulting in less effective hedging and lower realized prices



Price area	2012- 2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
DK1	0,55	0,81	0,63	0,81	0,67	0,44	0,87	0,8	0,68	0,36
DK2	0,77	0,86	0,66	0,82	0,71	0,38	0,89	0,82	0,63	0,4
FI	0,77	0,83	0,65	0,87	0,63	0,46	0,89	0,77	0,75	0,65
NO1	0,97	0,96	0,94	0,97	0,96	0,92	0,92	0,83	0,89	0,85
N02	0,96	0,95	0,92	0,97	0,96	0,93	0,92	0,79	0,89	0,69
NO3	0,97	0,94	0,92	0,97	0,97	0,92	0,62	0,59	0,86	0,87
NO4	0,97	0,9	0,69	0,93	0,96	0,86	0,66	0,48	0,8	0,75
N05	0,96	0,93	0,91	0,93	0,96	0,92	0,92	0,83	0,88	0,88
SE1	0,96	0,88	0,76	0,97	0,95	0,74	0,64	0,6	0,88	0,91
SE2	0,96	0,88	0,76	0,97	0,95	0,74	0,64	0,63	0,88	0,89
SE3	0,95	0,9	0,77	0,97	0,94	0,53	0,96	0,93	0,91	0,87
SF4	0,92	0,9	0,78	0,9	0,9	0,43	0,92	0,88	0,79	0,69

Outlook:

- Demand
- Grid investments
- New nuclear support
- Bidding Zone review
- Geographically differentiated grid connection tariffs – will they steer location of new resources?

Among other factors, increased volatility **with high prices and limited investments** in the Nordic power grid **have weakened the correlation** between system and area prices, making hedging more **challenging with existing products**



Exchange competition – friend or foe?



The **Euronext Nord Pool Power Futures Market**, is a new platform for trading power derivatives. It is set **to launch in March 2026**.

Euronext acquired Nasdaq's Nordic power derivatives, with a trading **volume of approximately 527 TWh** over the last 12 months.

Key Features:

- Membership model via **GCM**
- Offers trading in **cash-settled power futures** for the **Nordic and Baltic regions**
- **Products**: Includes **System Price Futures** and **EPADs** (Electricity Price Area Differentials)



The **EEX Nordic Power Exchange** allows trading in electricity derivatives for the Nordic region launched as of March 2024.

Its rolling 12-month trading volume is approximately 9 TWh.

Key Features:

- Membership model via **GCM**
- **System Price Futures** based on a Nordic reference price and **Zonal Futures** for all 12 Nordic bidding zones, including Finland, Sweden, Norway, and Denmark.
- Location Spread Trading for trading price differences between zones or prices.
- **Future-to-Spot Service** that converts futures into spot market positions for added flexibility.

Exchange competition can drive product development and service offering - providing alternatives for market participants



- GCM's may support clearing with one or many exchanges
- a CCP clears both physical and financial products
- Exchanges can provide different product offering
- Exchanges entering more direct competition for volumes – EEX Nordic Liquidity program the latest development

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Challenges and opportunities of the exchange membership structure



The GCM model is likely more expensive than Nasdaq's for smaller market participants and could lead to more bilateral trading.



To access the market, GCM service provider is required



Currently, the number of Nordic service providers (banks) is limited.



Could the same GCM provide access to both exchanges?



Key topics to watch going forward

Choose the product and trading venue which provides hedging products fitting your need – competition is good!

Physical underlying – Will the declining trend of System Price correlation continue for your price area?

Choose a GCM which enables trading on multiple trading venues!