



Electricity markets through the energy crisis

- What has been and what's to come?

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The Faculty of Law

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“[W]here there is no trust, there can be no contract”

- Surveillance *protects the integrity* of markets
- Surveillance works to *build and uphold trust* in our markets
- Surveillance function to meet regulatory requirements
- Surveillance is a gatekeeper of the market

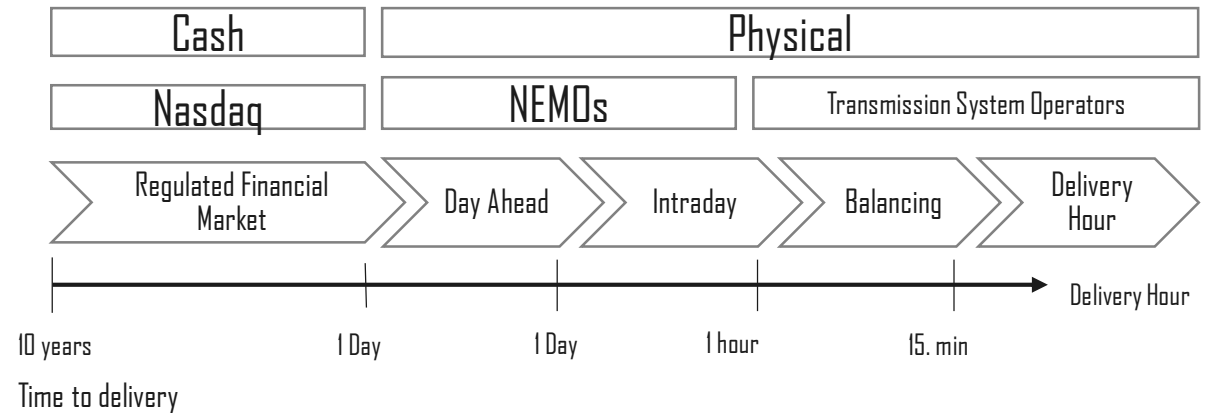
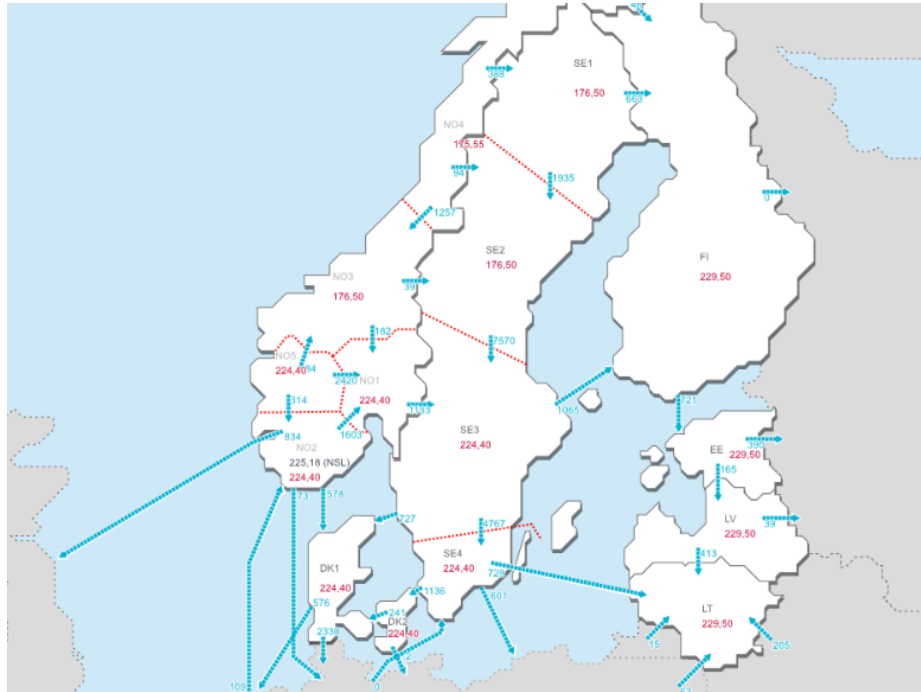


A public credible reference for future electricity prices;

- Enable market participants to effectively manage risk
- Give sound investment signals to both sides of the market and make sure new production capacity is realized at lowest capital cost

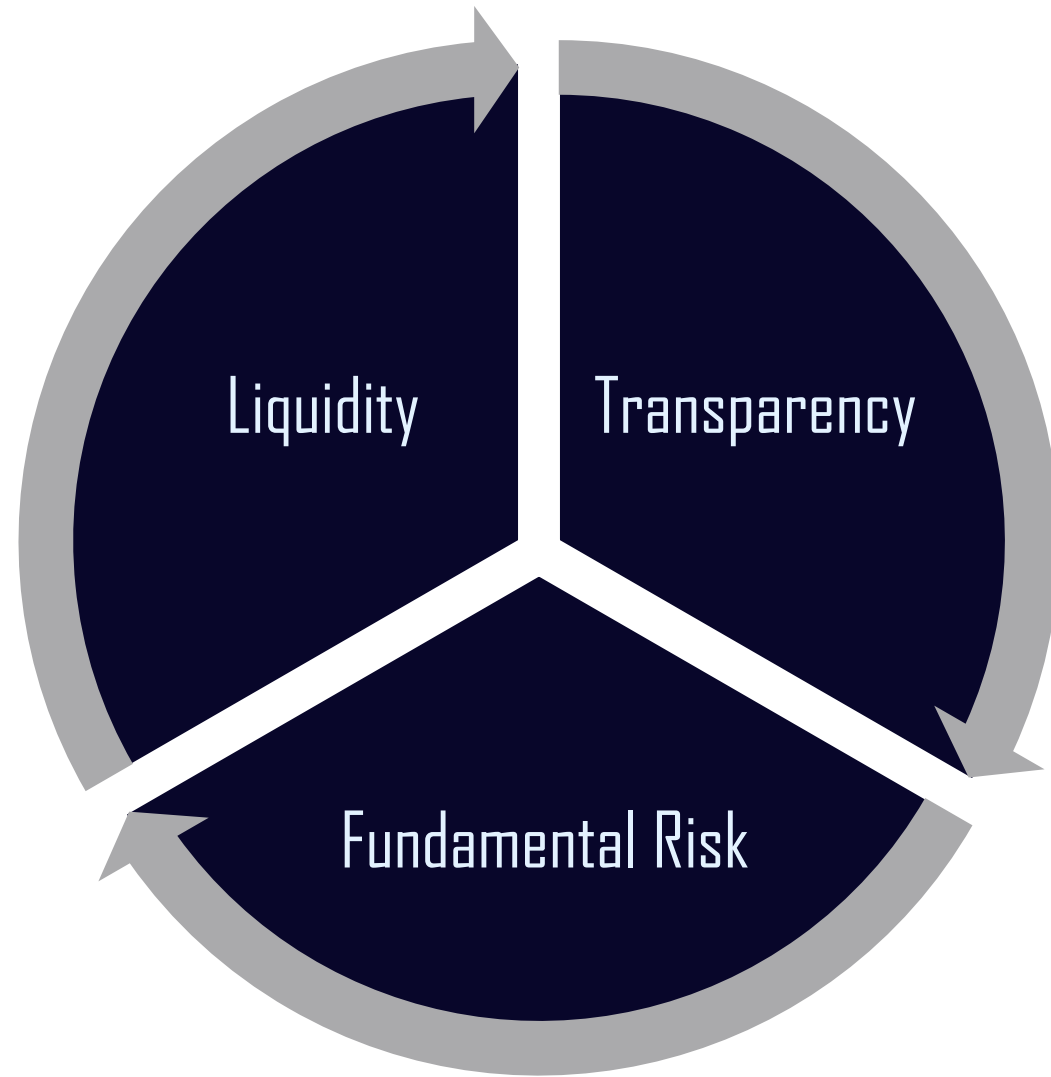
What has been?

Nordic regulated financial electricity market

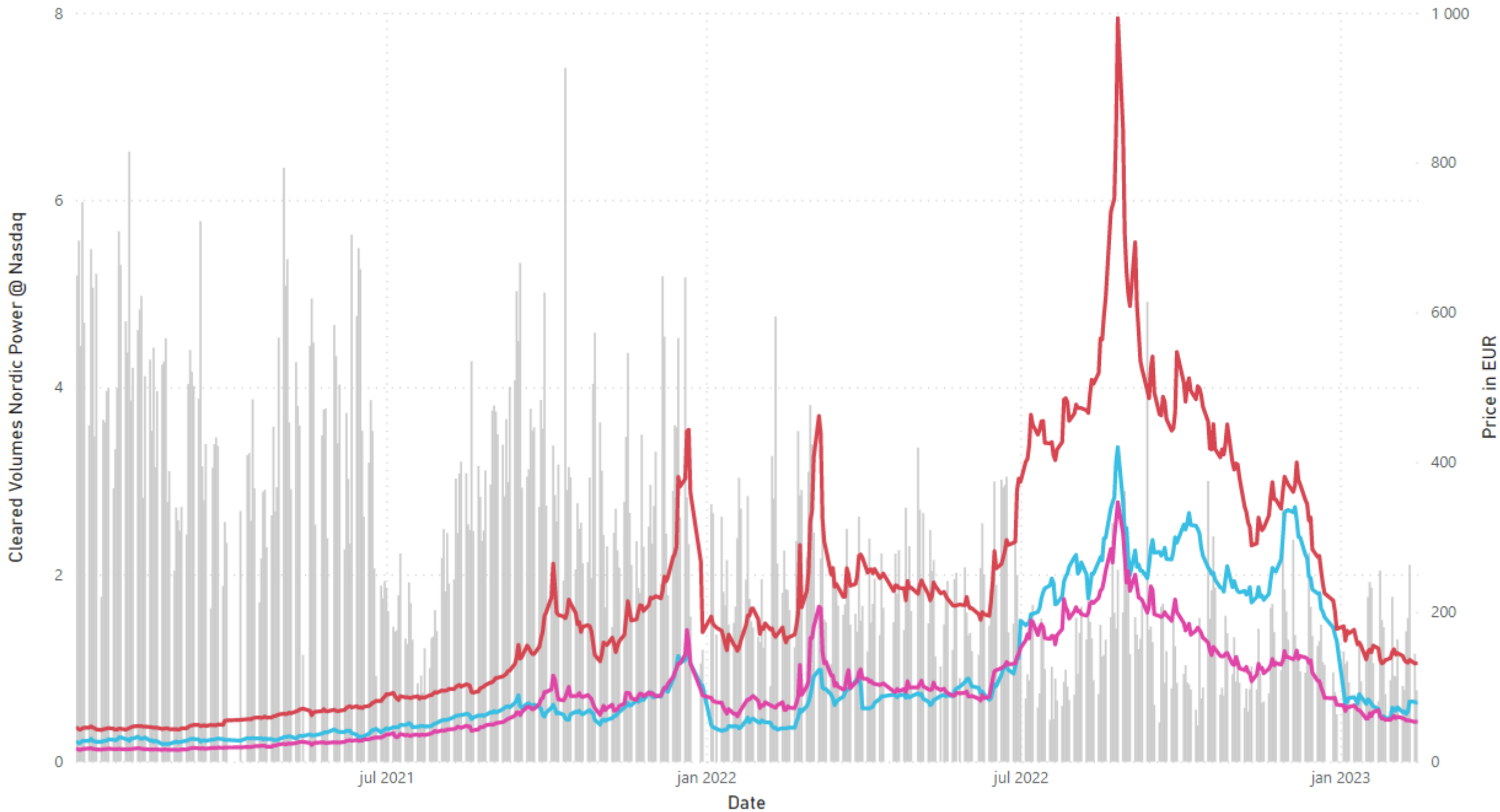


Transparency



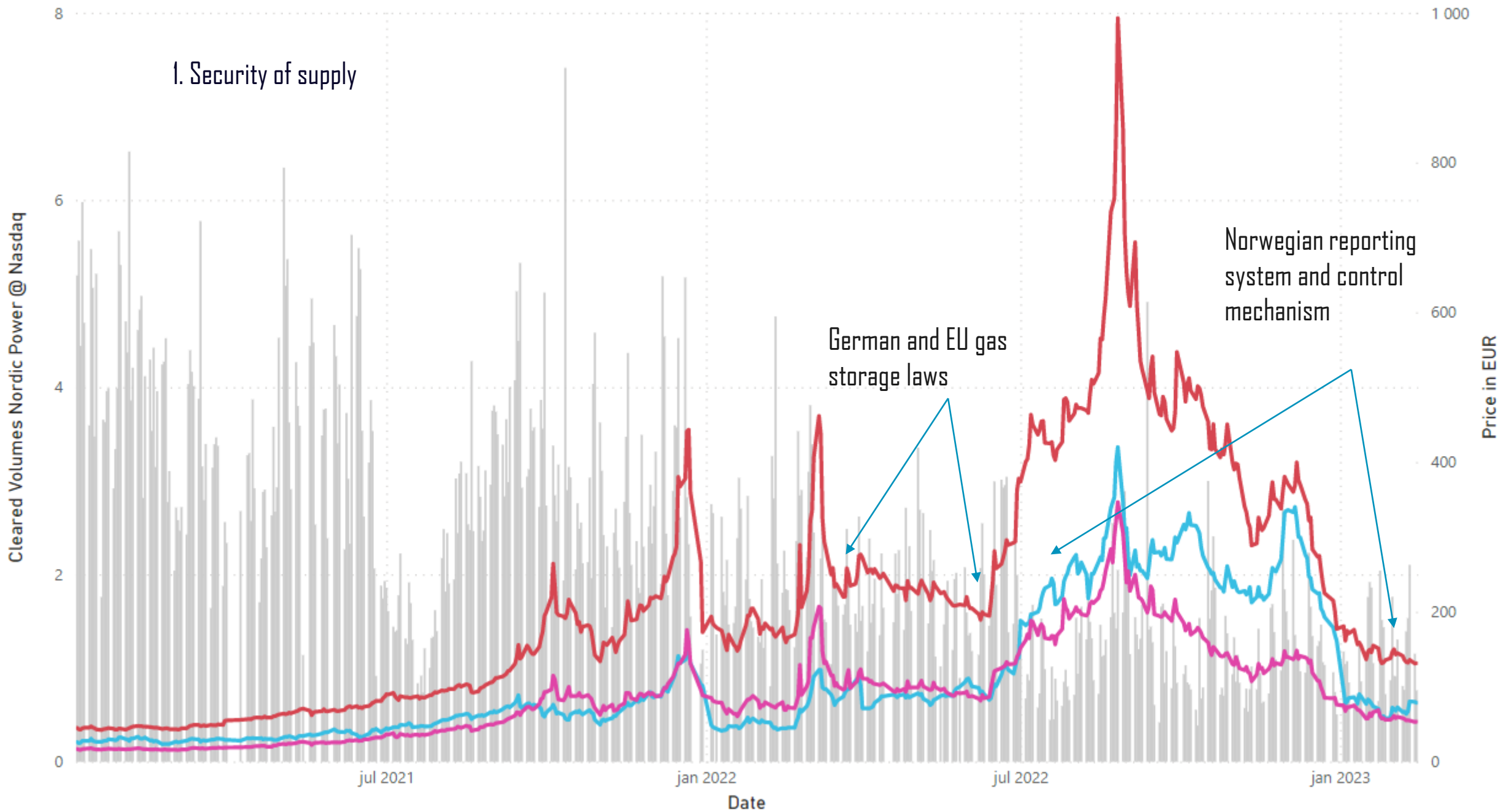


● Nasdaq Cleared Volumes TWh ● Nordic Power Qc1 ● TTF Gas Qc1 ● German Power Qc1

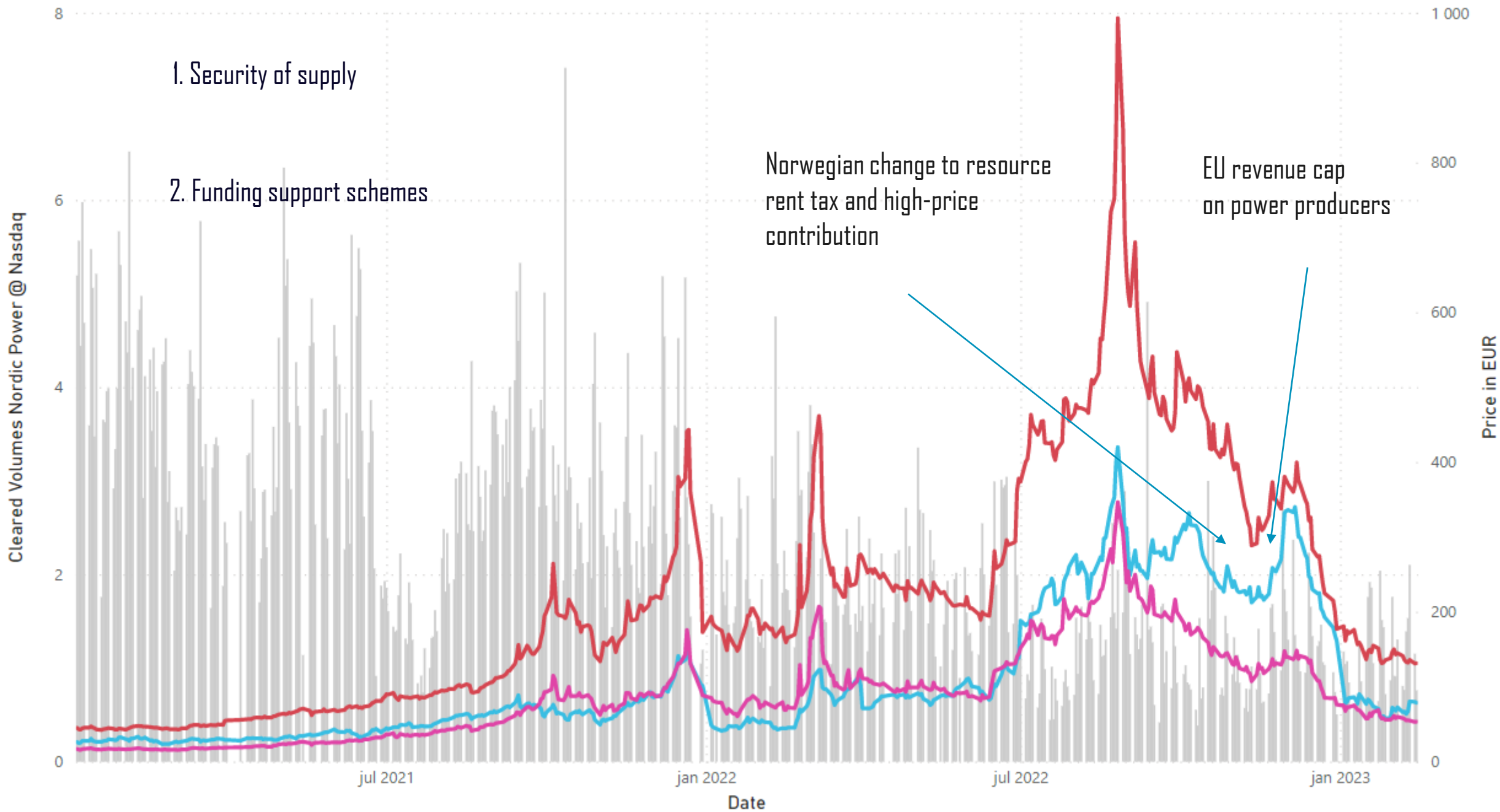


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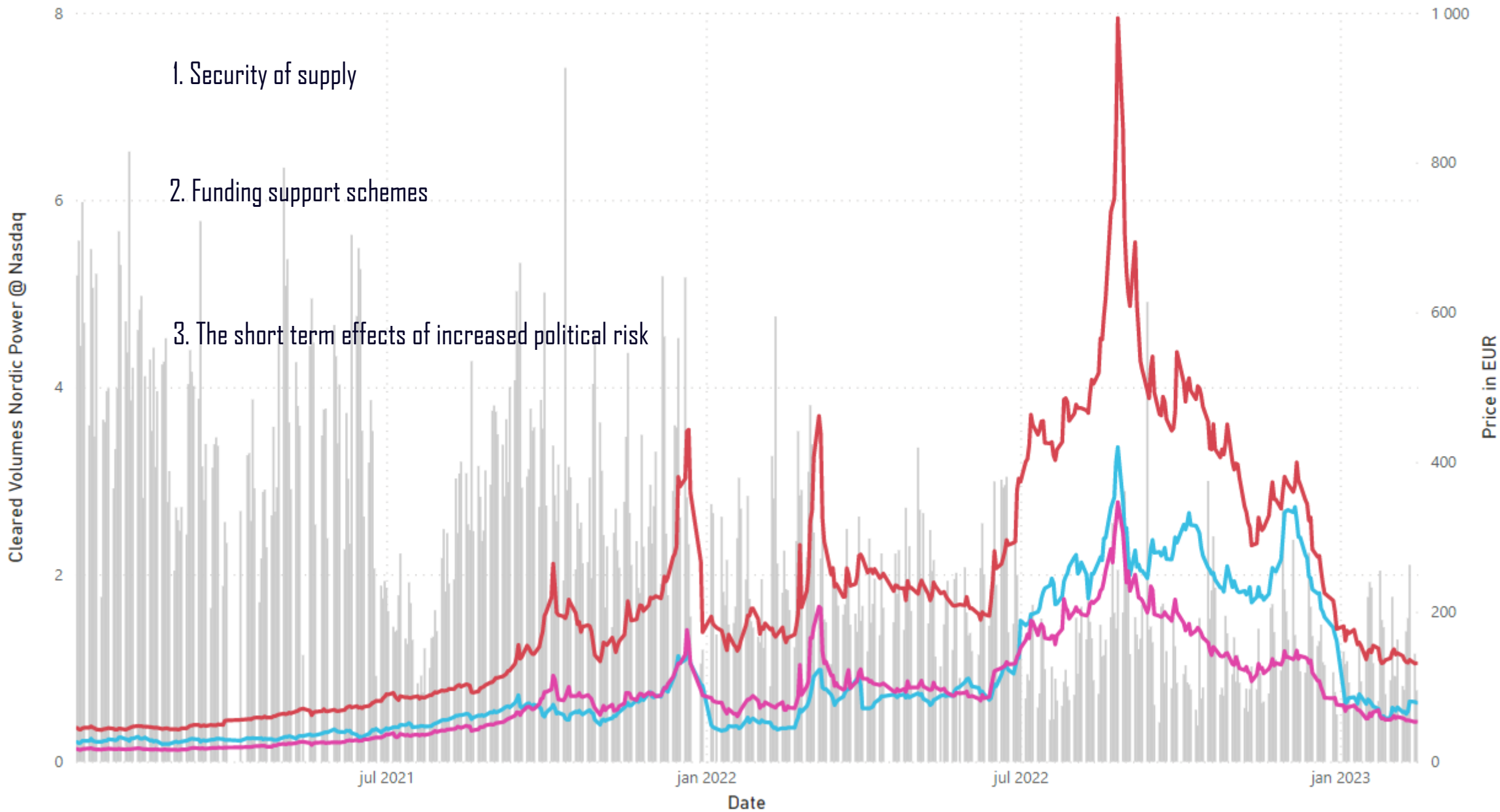
1. Security of supply



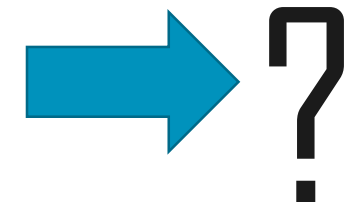
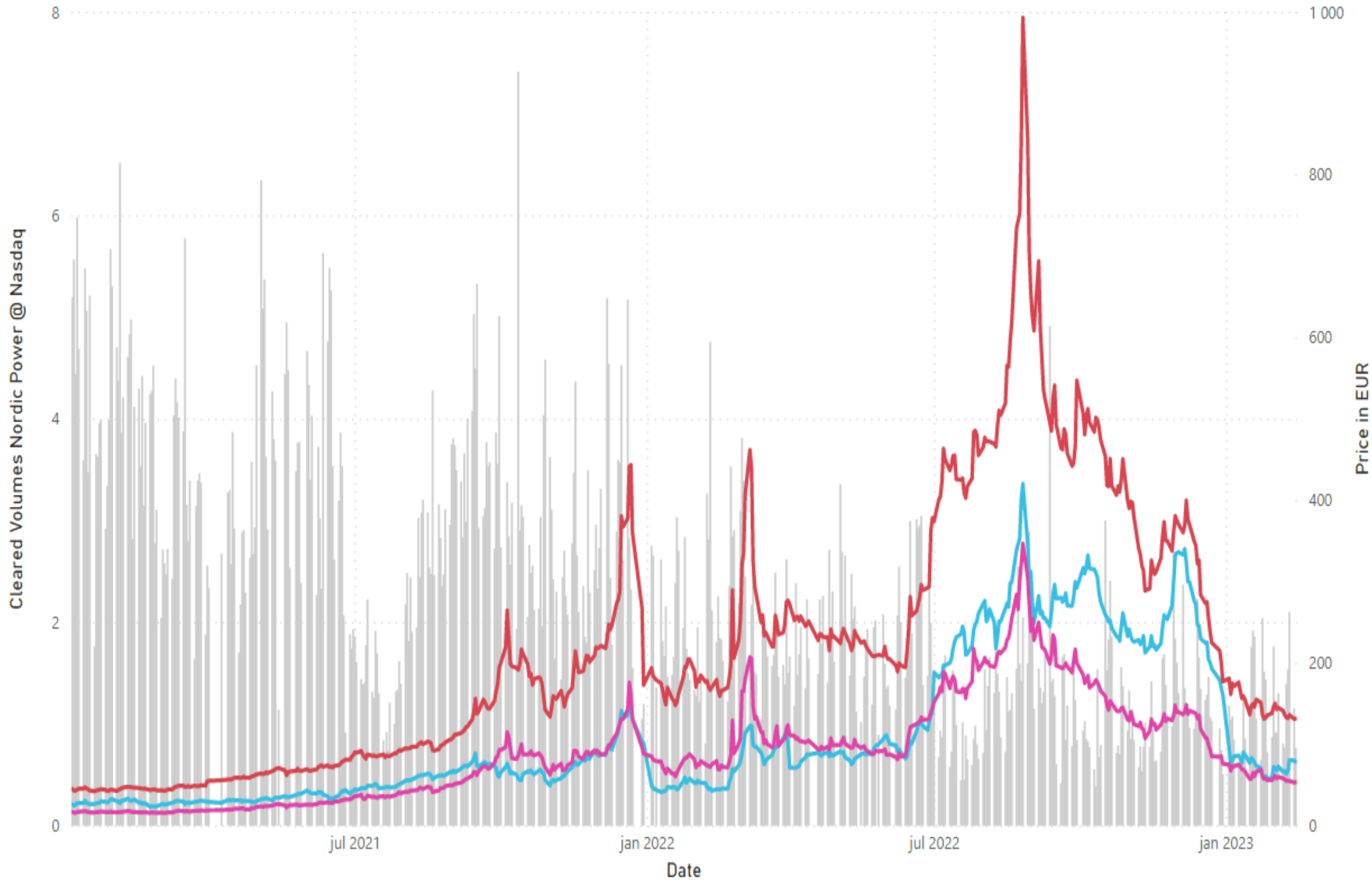
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What has been

Measures to ensure security of supply

Norwegian reporting scheme and control mechanism

- New regulation under way: «A statutory responsibility for hydropower producers to safeguard security of supply.»
- Clear signal to producers
- Did not cause prices to fall - nor too push them up

German and European gas storage laws

- EU: 90% Nov Each year (80% for 2022)
- DE: Aug 65%, 80% Oct, 90% Nov
- Creates information imbalances
- Pushed prices to extreme levels

What has been

Funding support schemes

Norwegian resource rent taxation and adaptations

- Resource rent taxation of hydropower since 1996 based on spot price
- Exemption from spot price for specific type of PPA
- New levels and technologies
- High-price contribution at 70 øre/kWh (64 EUR/MWh)
- Interim – but consequences up to 9 years ahead

EU revenue caps

- Effective since Dec 1 2022
- General cap for «low cost» production: 180 EUR/MWh, allow for national adaptations
 - NL: 130 FR:100 DE:60-130
DK: 180
- Based on market revenue regardless of contractual form
- Interim - but no one invests with current uncertainty



What has been

Funding support schemes – REMIT context

- Price caps and levys alters the optimal bidding strategy for producers
- In periods where the average price in a month gets close to the high price contribution threshold hydro power producers have the incentive to push prices down
- NVE-RME has provided guidance that adapting bids to optimize income within calculation period for levy may constitute market manipulation



What has been

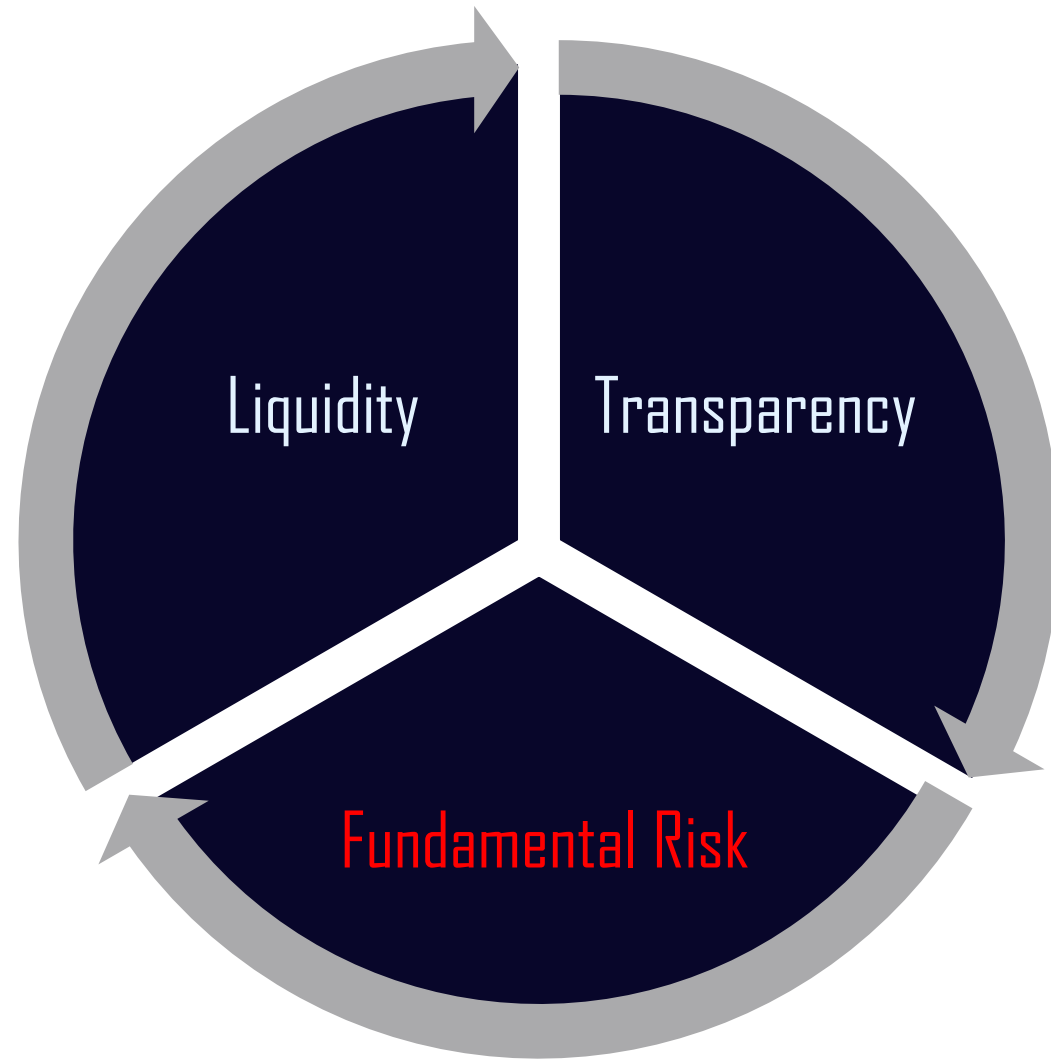
The short term effects of increased political risk

- Changed market dynamics
 - Volatility up, liquidity down
- Forward markets moving to the closest maturities
- Increased need for and cost of collateral
 - Liquidity support came when most needed



What's to come?





What's to come?

What is transparency?

Market Prices

Market: Types: Product:

| Traded

Aggregated volume (GWh): 737.72 * MW ** HOURS

Updated: 2023-02-22 14:50:38

PRODUCT SERIES	BID	ASK	LAST	+/-	%	HIGH	LOW	ON*	OFF*	VOL*	DAILY FIX	OI	SIZE**	UPD*	MORE...
ENOAFUTBLMMAR-23	98.25	100.00	99.00	3.00	3.13	99.00	98.00	7	7.0	14.00	96.00	4970	743	14:31:06	
ENOAFUTBLMAPR-23	92.00	94.50	94.75	4.25	4.70	94.75	94.75	4	6.0	10.00	90.50	723	720	14:31:06	
ENOFUTBLQ2-23	84.00	85.00	84.25	1.12	1.35	85.00	83.50	24	23.0	47.00	83.13	4469	2184	14:32:49	
ENOFUTBLQ3-23	72.15	73.00	73.00	1.50	2.10	73.00	73.00	1	8.0	9.00	71.50	4283	2208	14:41:28	
ENOFUTBLQ4-23	96.75	98.00			0.00				10.0	10.0	95.25	4221	2209	14:33:13	
ENOFUTBLQ1-24	114.00	120.40	116.00	1.00	0.87	116.00	116.00	5		5	115.00	910	2183	14:34:23	
ENOFUTBLQ2-24	65.00	75.00	70.00	1.50	2.19	70.00	70.00	2	1.0	3.00	68.50	348	2184	13:13:47	
ENOFUTBLQ1-25	96.00	100.00			0.00				8.0	8.0	95.50	164	2159	14:18:59	
ENOFUTBLQR-24	75.30	75.65	75.50	1.00	1.34	75.50	75.25	8	20.0	28.00	74.50	3966	8784	14:30:14	

<http://www.nasdaqomx.com/transactions/markets/commodities/market-prices>

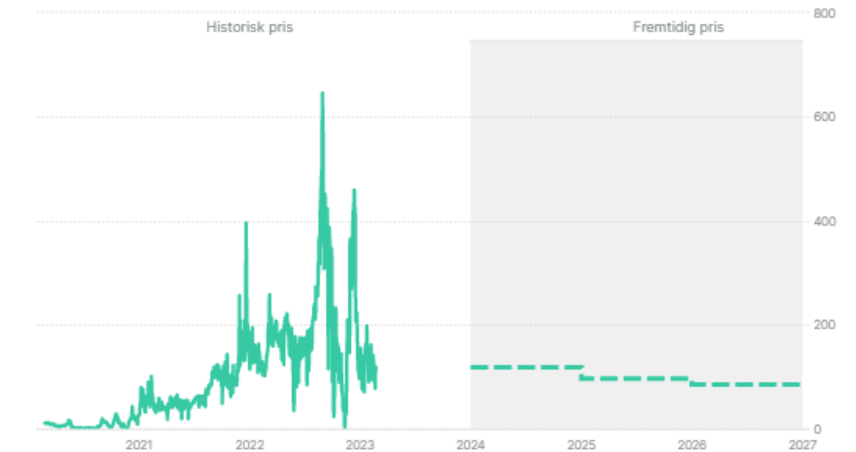


Strømprisene fremover

Hva blir spotprisen på strøm for deg som forbruker de neste månedene og årene? Det vet ingen.

Her ser du priser frem i tid fra [Nasdaq's strømbørs](#) for din strømregion. Prisene gjelder *sikringskontrakter* for profesjonelle krafthandlere, men de gir også en pekepinn på hva spotprisen kan bli for deg som forbruker. Husk at jo lengre frem i tid, jo større er usikkerheten.

Se prisen neste tre ...



Tall fra Nasdaq 21. februar. VG har regnet om fra euro til norske kroner med kursen den dagen. Prisene i denne grafen er uten nettleie, avgifter og mva.

<https://www.vg.no/stromprisen/kommune/aslo/>

What's to come?

What is transparency?

Minister of Trade and Industry Jan Christian Vestre

perceives that there is great interest in fixed-price contracts among businesses.

- I hear from several electricity suppliers that they have sold fixed price agreements both before and after Christmas and that there is great interest from business, says Vestre to NRK.



The screenshot shows the ACER TERMINAL website interface. At the top, there is a navigation bar with the ACER logo and the text 'European Union Agency for the Cooperation of Energy Regulators'. The main heading is 'Price assessment' with a sub-heading 'Daily SPOT LNG price assessments for EU LNG imports'. The page displays a table of price assessments for North-West Europe (NWE) and South Europe (SE) for the period H1 MAR. A map of Europe highlights the NWE and SE zones. Below the table, there is a section for 'LNG price assessment data statistics*' showing the number of transactions, traded volume, number of market participants, and number of LNG terminals. A comment section provides additional context on the methodology and data collection.

ACER
European Union Agency for the Cooperation of Energy Regulators

TERMINAL

HOME PRICE ASSESSMENTS

ACER
European Union Agency for the Cooperation of Energy Regulators

Publication date: 21/02/2023
Reference period: H1 MAR

Price assessment

Daily SPOT LNG price assessments for EU LNG imports

DES LNG SPOT North-West Europe (NWE)	
• NWE LNG H1 MAR	46.43
DES LNG SPOT South Europe (SE)	
• SE LNG H1 MAR	49.03
SPREAD DES LNG SPOT (SE-NWE)	
• SE minus NWE	2.60

All prices in Euros/MWh.

LNG price assessment data statistics*

Number of transactions	11	Number of market participants	16
Traded volume in MWh	9,375,276	Number of LNG terminals	14

* Only relevant DES SPOT LNG transactions considered for both zones

COMMENT

For the 5-working day rolling window considered for the LNG price assessment, ACER collected:

Eligible for price assessment:

- 11 spot Delivered Ex Ship (DES) transactions for the relevant delivery period.

According to the Methodology [1], ACER was able to calculate the price for the NWE zone, but not for the SE zone. The SE price assessment reported above is thus the same as published on the 20/02/2023. ACER's LNG price assessment relies on the LNG market data reported – the facts on transactions, bids and offers. All IT systems are up and running. 77 LNG market participants are registered and can report. LNG market participants are reminded on their reporting obligation and encouraged to report their LNG market data via TERMINAL.

High-price contribution

Resource rent taxation

European Commission:
“Electricity market – reform of
the EU’s electricity market
design”

Government PPA regime

Political risk

Power price committee

EMIR review – Collateral cost

ACER review NC Forward Capacity
Allocation: “Further development of the
EU electricity forward market”

Reduced interconnection?
(Skagerrak 1&2)

EU revenue caps



What's to come?

Reduced liquidity, reduces transparency

Event	Effect
Introduction of government standardized PPAs without tax risk («Fastprismarkedet»)	Introduces alternative hedging tool without tax risk for – reduced liquidity
Introduces high-price contribution	At 90% tax on spotprice very little volume is left possible to hedge without extreme tax risk – reduced liquidity
EU revenue caps	Heterogeneity in implementation increases political risk – reduced liquidity
Weaker systemprice and bidding zone correlation	System price less effective as a proxy hedge – reduced liquidity
EMIR change Removal of bank guarantees as approved collateral	Increased collateral cost – push to bilateral – reduced liquidity



What's to come?

Political desperation vs well designed measures

EU promises 'emergency intervention' to rein in energy prices

Governments are under growing pressure to curb soaring gas and electricity bills.



European Commission President Ursula von der Leyen | John Thys/AFP via Getty Images

BY VICTOR JACK AND BARBARA MOENS

AUGUST 29, 2022 | 8:58 PM CET | 6 MINUTES READ



Vedum vil ikke endre grunnrenteskatten for fastprisavtaler

For å utvide tilbudet av fastprisavtaler, mener finansministeren at strømsalg-selskapene kan kjøpe kraft fra vindkraft, småkraft og utenlandske aktører. Grunnrenteskatten for stor vannkraft vil han ikke endre på.

21. mars 2022 12:57 OPPDATERT 22. mars 2022 09:08

Av Haakon Barstad

Som Europower har omtalt tidligere, ønsker Energi Norge å endre på reglene for grunnrenteskatten. Kort oppsummert vil de ha endringer for å øke tilbudet av fastprisavtaler ut til forbrukerne.

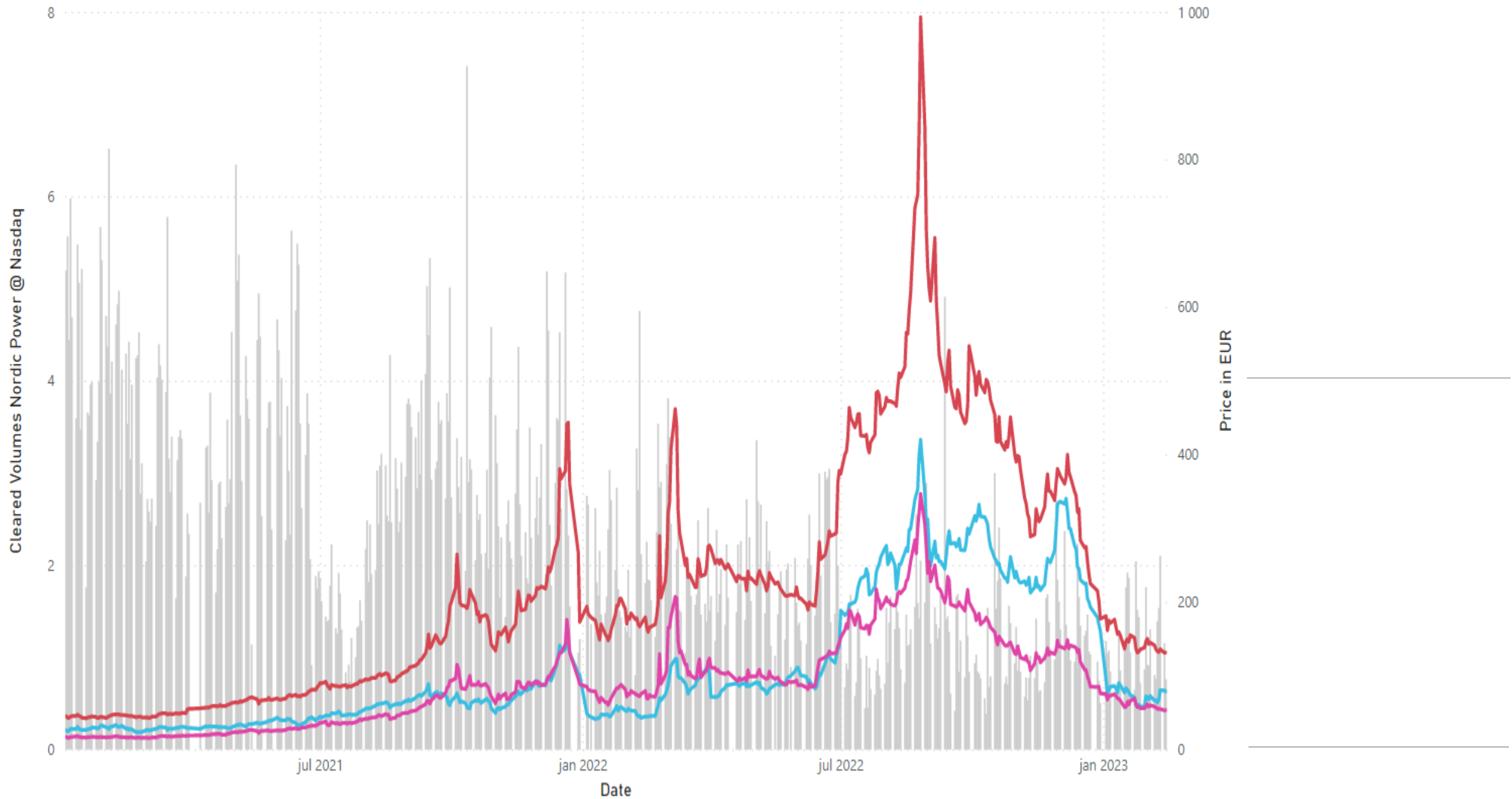
«ACER/CEER response:

Overall, PPAs are bilateral arrangements, which may be a welcome addition to the forward market, but ACER and CEER refrain from actively supporting PPAs because they may have a negative impact on overall market efficiency and transparency. Given their characteristics, they are not suitable to all market participants.

...

Standardisation of PPAs is welcomed, but financial futures and forward are already standard long-term products that serve the same purpose. CfDs seem also better suited for standardisation. If some Member States decide to facilitate higher volumes and more standard PPAs, then it might be better to put such effort in supporting financial forward markets with futures and forwards."

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Thank you!