The Benefits of Investing into Renewables in the Nordics

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September 2025

Setting the Stage: Who I am & What we'll cover today

Agenda

1. **Nordic Energy Market**
2. **Repowering and System optimization**
3. **Hydropower's Strategic Role in the Nordics**

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Portfolio Manager

Real Estate and Infrastructure

SEB Asset Management

M. Sc. Mechanical Engineering

20 years experience from the energy sector from Siemens, OX2 and Vattenfall

Selected roles / experiences

- Director Strategy at Vattenfall Heat
- Head of Decentralised Energy at OX2
- Head of Strategy Nordics at Siemens

SEB – a leading northern European corporate bank

- **Our heritage:** Established in 1856 by the Wallenberg family – currently our largest shareholder (21%)
- **Our offering:** Combining quality advisory and financial services
- **Our people:** Experienced and dedicated team providing solutions aligned with our clients' needs
- **Our mindset:** Entrepreneurial with 160+ years in the service of enterprise finding new roads together with clients
- **Long-term client relationships:** Supporting our clients in both good times and bad
- SEB is one of the largest asset management houses in Europe with **€246bn AuM** and has been ranked as the **Top Asset Manager** for four consecutive years (2025, 2024, 2023 & 2022) in the Nordic region*

SEB's purpose:
"We exist to positively shape the future, with responsible advice and capital.
Today and for generations to come."

Marcus Wallenberg
Chairman of the Board

Johan Torgeby
Chief Executive Officer

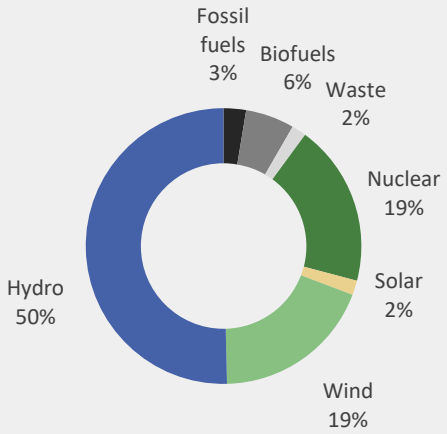
Source: SEB Fact Book unless otherwise stated. Data as of 31/03/2025. Skandinaviska Enskilda Banken AB (publ) ("SEB").
*Kantar Sifo Prospera survey 2025, 2024, 2023 and 2022. Shared top-ranking in 2023.

Nordic Energy Market

The Nordics, a stable industry region with high net zero ambitions

- Close to 100% fossil free electricity mix, Hydropower as back-bone
- Nordics is a net exporter of electricity
- Ambitious net-zero targets
- Large corporate demand – Nordics pioneered corporate PPAs
- Stable, rule-based regulation and transparent liquid markets with proven support schemes
- Nordic region on top globally for VC impact investments where energy, mobility and transportation are dominating

Nordic electricity mix 2023*

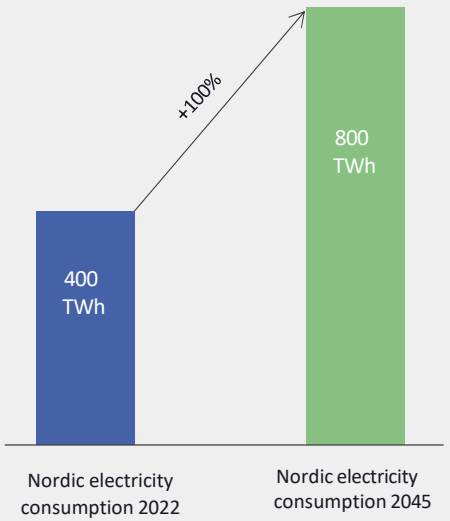


*BloombergNEF, IEA (2024)

The net zero ambitions are pushing the demand in the Nordics, however some slow down and uncertainty ahead

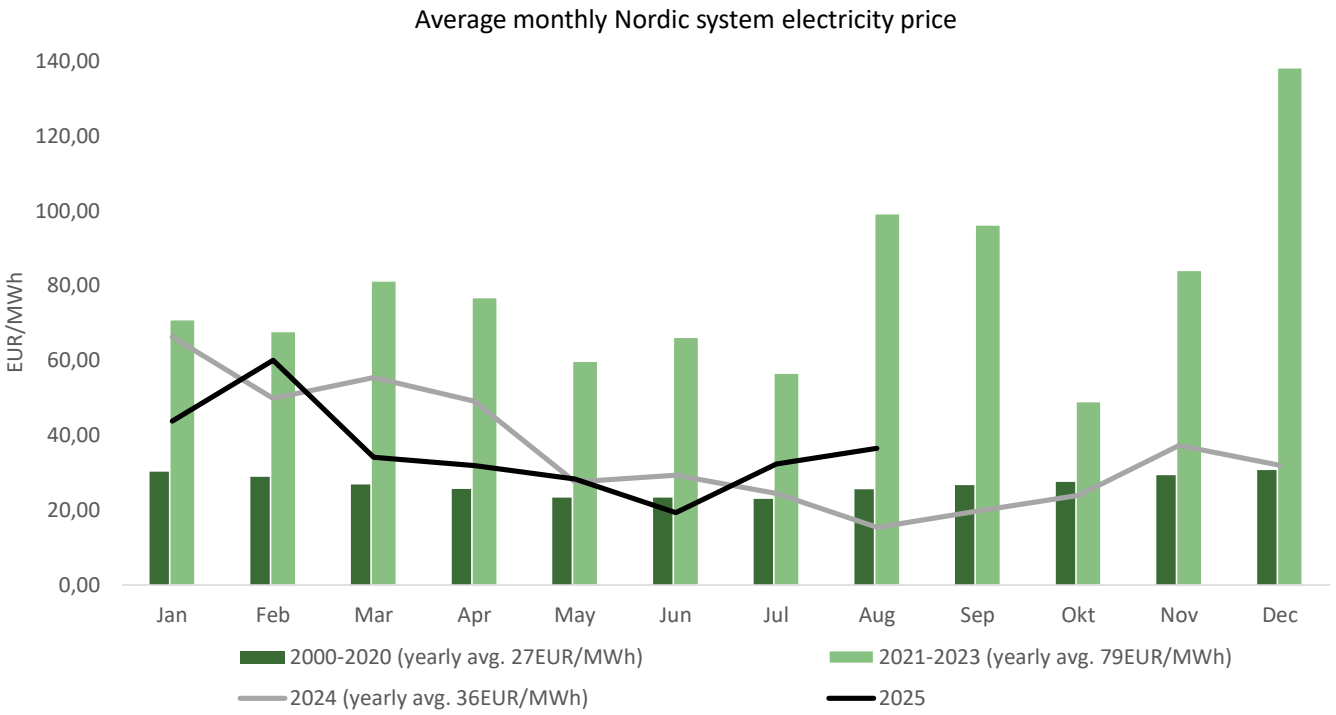
- Electrification of industry flagship projects in the Nordics
- Datacentres and potentially electrolysers could be pushing demand ahead
- Wind power development has been on the rise in the region, but several owners and construction projects are now facing challenges
- PPA market is reconstructing
- North–south grid congestion, but interconnections increasing
- Political support for new nuclear power in Sweden
- Larger deal activity in the Nordics currently slowed down however still continued global confidence in the region's long-term potential

Projected energy demand*



*Several sources (high projections); Statnet, Sitra and Svenska Kraftnät (2023)

Future electricity price one important value driver for returns



- Energy prices and supply dynamics have largely stabilised after last years shock waves
- Nordic system price heavily dependent on weather – seasonality effect
- Price areas in SE and NO: large differences between north and south
- Increased volatility and merchant capture price risk during the last years
- Flow based and 15-minutes imbalance settlement now introduced to support more intermittent production
- Dry weather currently puts an upward pressure on power prices
- Long term price development based on demand, supply dynamics and global fuel markets

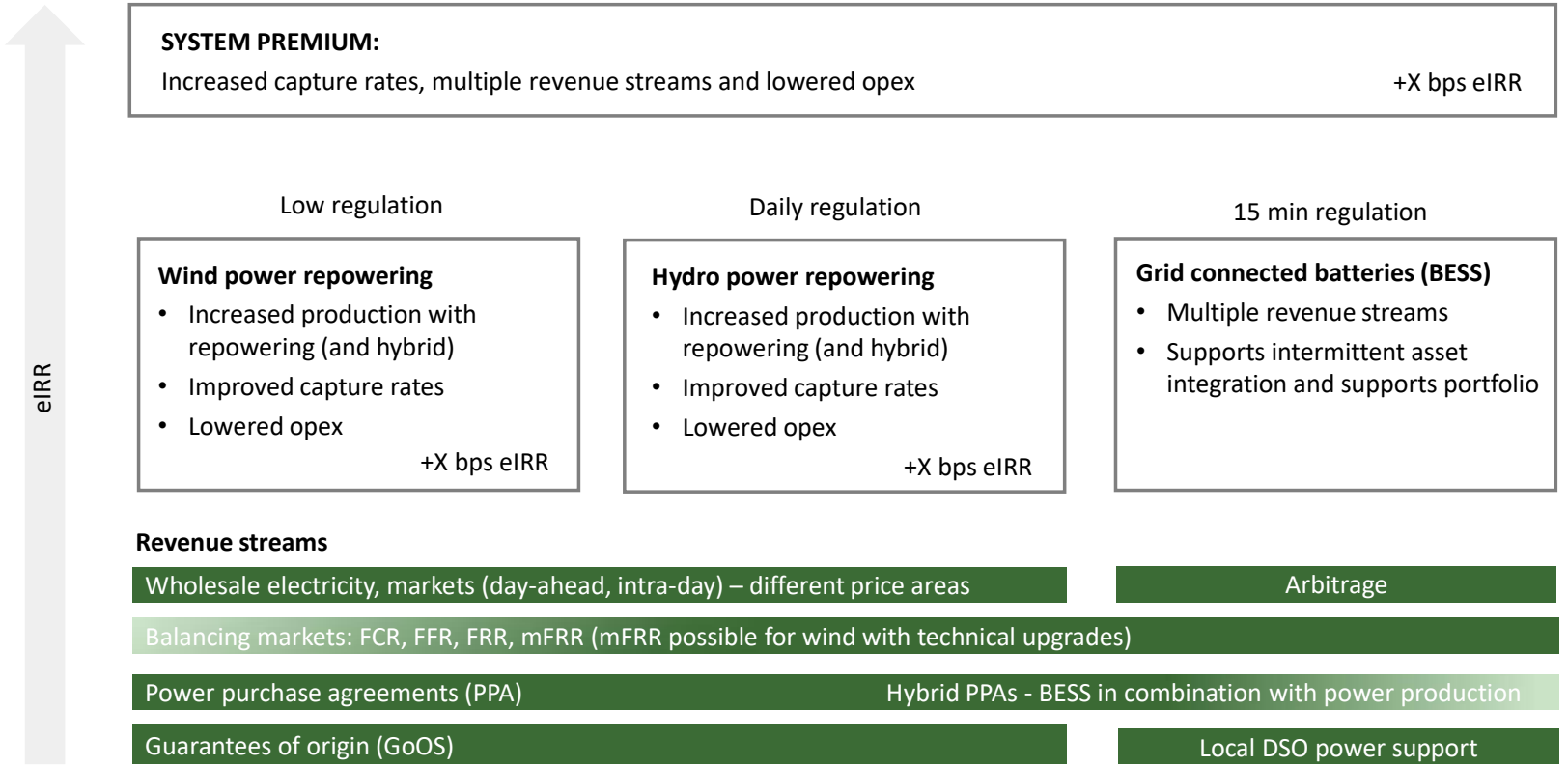
The figure display's the average Nordic system baseload electricity price per month for 2000–2020, 2021–2023 and the year, 2024. Since the electricity prices in 2021, 2022 and 2023 was extremely high and characterised by the energy crisis, it is considered an outlier and not representative of the historical electricity prices.
The Nordic system electricity price is an unconstrained market clearing reference price for the Nordic region. It is calculated by Nord Pool without considering any congestion restrictions. The price is determined after calculating area prices for all bidding areas within the Nordic region and is close to the average price. (source; Nord Pool, price calculations and picture source, 2024-03-27)

Repowering and system optimisation

Large potential in reusing existing small-scale assets and the most sustainable way forward

- No time-consuming permitting processes, permits already in place
- Minimum new land exploitation
- No NIMBY effect
- Re-using a large volume of the material keeping CO2 emission to a minimum
- New turbines and modern control systems and updated operations and maintenance strategies
- Large upgrade potential within wind and hydro

Increased return profile through diverse portfolio, active management and system optimisation



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Soft Repowering of existing small-scale wind

Sustainability through circularity, reuse in four dimensions

1. Reuse existing infrastructure

When repowering an asset there is no need for additional deforestation and infrastructure investments e.g. road and grid connections. Another benefit is that permits are in place, meaning that production can start as soon as the repowering is complete, gaining many years of production compared to a new site establishment.

2. Reuse tower and foundation

The tower of a WTG is often made of steel, and the base foundation is made of concrete. These parts of a WTG have a lifetime far succeeding the more technical parts like nacelle and blades thus making them highly suitable for reuse.

3. Refurbished turbine

The WTG is upgraded with a refurbished nacelle, hub and blades. The upgrade also comes with updated control systems allowing curtailment and increased energy output. This improves the output from the WTG and extends its lifetime, with a minimal environmental impact.

4. Repurpose original parts

The exchanged parts i.e. the nacelle, blade and hub can be repurposed, making certain that we maximize the use of the assets.

Hydropower’s Strategic Role in the Nordics

Hydropower, one of the most established form of renewable power in the Nordic countries

- Largest form of renewable energy within the EU and one of the oldest energy production technologies
- The largest “battery”, unlocks clean energy growth
- Environmental concerns in 1970’s paving the way for the EU Water act
- Environmental permits reconsideration process ongoing in SE and FI, Concessions in NO according to modern environmental standards
- **Small scale hydropower** in the Nordics one of the lowest carbon intensities and important for local grid stabilisation
- Many small-scale Nordic plants are mid-life and can be **upgraded** for more capacity and faster control to capture reserve premiums

Electricity Generation Mix 2023* Hydropower of total country production		
Norway	**89%** 138 TWh	Dominant provider of balancing products – hydro build out
Sweden	**40%** 66 TWh	Significant hydro backbone supporting nuclear/wind
Finland	**19%** 15 TWh	Smaller but critical for balancing with high wind and OL3 nuclear
Denmark	**0,1%** <0.01 TWh	Minimal hydro, benefits from Nordic hydro through market coupling

*Data source: IEA Electricity Information, Country Statistics and Data (09.09.2025)

Why invest in small-scale hydro power?

Seasonal power production with high availability

- Renewable energy production with high availability & long lifetime
- Largest water flows typically occurs during winter months when electricity demand peaks

Upgrade potential and “dispatchability” characteristics

- Existing small-scale hydro assets in the Nordics have typically great upgrading potential
- By utilising waterflows more efficiently through dispatchability - either increased water intake, short term regulation or upgrades of technical installations, output and efficiency can be improved

Possible multiple revenue streams with hybrid sites

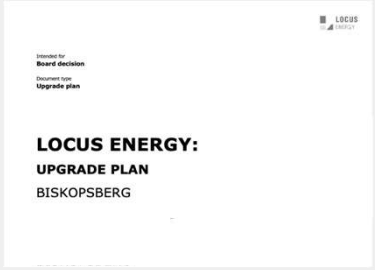
- Grid frequency control and Guarantees of Origin
- Co-location of BESS for flexibility & intra-day arbitrage, increases profitability of site
- Lowering HPPs electricity consumption by co-located solar production behind-the-meter for OPEX reductions

Sweden: Biskopsberg hydro power plant upgrade with approx. 40% yearly production increase

Acquisition
Q2 2023

- Acquisition of site and integration into hydro portfolio
- Significant production increase potential identified in DD

Analysis & procurement
Q3 2023-Q1 2024



- Together with technical advisors technical plan was developed for the asset
- Negotiations with suppliers and subcontractors

Upgrade
Q2-Q4 2024

- Exchange of turbines & generators to allow for more efficient operations & higher water flows through turbine
- Upgrade of control systems to allow for increased automation

Operations
Q1 2025-onwards

- Fine tuning period for new installation after COD
- Operations handled together with service subcontractor

Summing up

Continued long term potential in the Nordics, where flexibility and system optimisation will be key going forward

The Nordic Market

- Continued global confidence in the region's long-term potential
- Industry transition and data centre build out
- Policies and grid reforms
- PPA market reconstructing
- More complex power system -> investment shift and the rise of flexibility

Repowering

- Potential in repowering both within small-scale hydro power and wind power in the Nordics
- Reusing what is already in the system is the most sustainable way
- System optimisation - key when electricity prices is pressed downwards

Hydropower

- Unlocks clean energy growth
- Large upgrade potential
- One of the lowest carbon intensities
- Characteristics of dispatchability and seasonality

Thank you.