

## **Elinor Batteries**

DNVA Battery Day 2024



#### **Batteries**

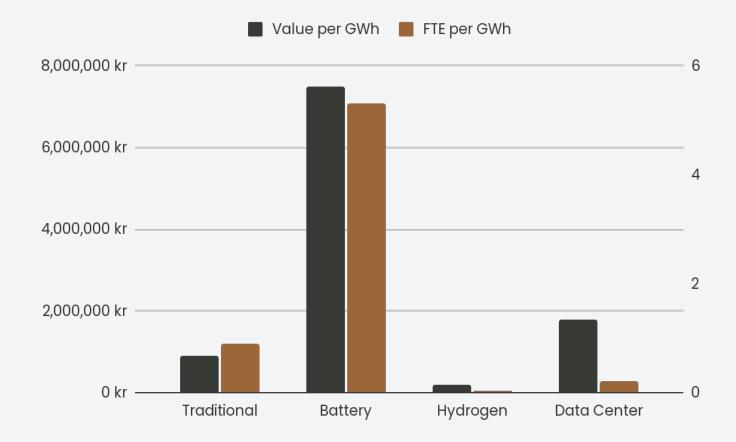
# The biggest green opportunity of this decade

*"Three years into the decade of energy storage, deployments are on track to hit 42GW/99GWh, up 34% in gigawatt hours from our previous forecast."* 

Bloomberg, 2H 2023 Energy Storage Market Outlook



#### Battery industry creates jobs



The value creation of battery factories is substantially higher than any other energy intensive traditional or new industry in Norway.

#### Source:

"Ringvirkninger av Nye Kraftintensive Industrier i Nordland", Menon Economics,, 2021

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### Norway, top 2 in Europe, top 5 globally

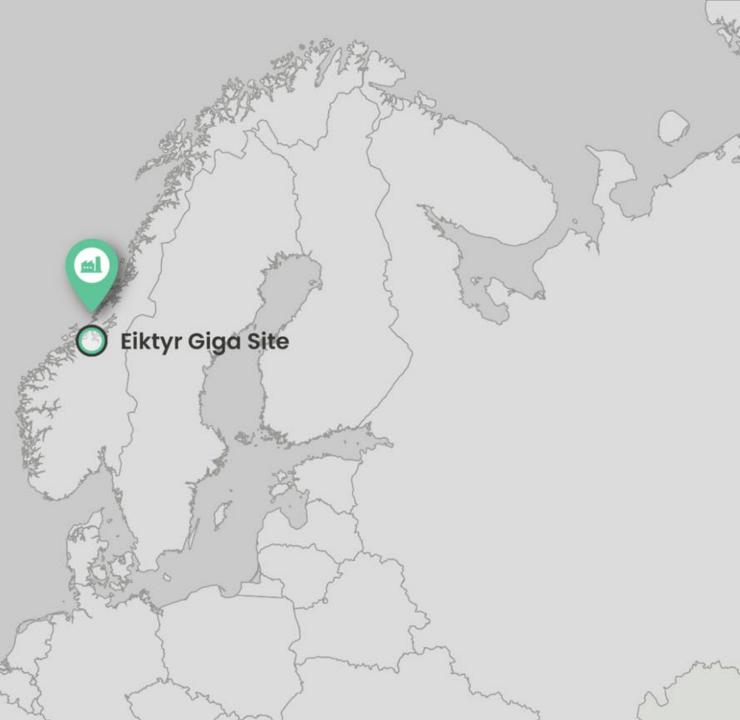
Bloomberg's ranking of potential for battery value chain

Source: Bloomberg NEF 2022

Country	Ove ra ll ra nk	Downstream demand	Industry, Innovation & Infrastructure	Battery manufacturing	Ra w Ma te ria ls	ESG
China	1	1	9	1	. 1	17
Canada	2	10	4	8	3	6
US	3	2	5	4	6	16
Fin la n d	4	11	1	15	9	2
Norway	5	7	3	10	18	1
Germany	6	2	7	6	21	4
South Korea	6	5	6	2	17	10
Sweden	8	8	2	9	21	3
Japan	9	8	12	3	13	8

### **Prime location**

Eiktyr giga site covers more than 6 square kilometers with abundant renewable energy, the site is perfect for power and manpower intensive green industries.



#### The Eiktyr giga site offers all critical resources in one place

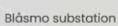
- Eiktyr is located near 2 x 420 kV substations.
- Land purchase options secured in 2021 for 6 km<sup>2</sup>.
- Environmental Impact Assessment completed 2022 - 2023.
- Zoning plan submitted for approval in february 2023.
- The municipal harbor company runs the deep sea harbor, with areas ready to serve the entire site.
- Existing industrial cluster
- Strong service industry and utilities organization.







Elkem Silicon metal plant



Trondheim

- Eiktyr is 40 m in utes from Trondheim, the main tech hub of Norway with technicaluniversity NTNU, with 40.000 students
- The surrounding region houses a regional workforce of 300 000 people within 50 km
- **SINTEF**, the leading national research institute, has a battery laboratory and more than 150 battery experts



Hydro Sunndalsøra aluminum plant (100km) 30km



### **Elinor Batteries in brief**

#### Giga scale battery initiative

- Norwegian initiative aiming to produce LFP based battery cells for stationary energy storage systems at giga scale (10 GWh) from 2027.
- (LFP is now also widely applied in EVs.)
- Funded by the most successful green investment company in Norway, Valinor.
- A highly experienced business development team within energy storage, large scale infrastructure, strategy and international management experience.
- Current assets include a giga site opportunity in the industry park Eiktyr in Central Norway that is unparalleled in Europe.
- A unique business proposal both in terms of tech and market strategies
- A strategic cooperation with SINTEF, with a battery laboratory, and their staff of more than 150 battery experts

#### **V** Valinor





### The owner - Valinor

Valinor is a leading Norwegian investment company, rooted in a history of developing large scale renewable energy projects with the lowest LCOE in Europe through Norsk Vind. Being highly experienced in working with international giants as partners and counterparts, the company has developed and financed business opportunities across the entire energy value chain. Their portfolio offers a unique opportunity to develop Elinors markets. For example, one of their greatest successes is Zaptec, a leading player in EV charging.

- 8 Person investment team
- 35 + investments
- 2 Euronext Growth listings 2020/21
- 1 listing on the main list
- Absolute commitment to environmental sustainability, reinvests 90 percent of returns in sustainable initiatives.







# Trondheim, the technology capital, enables fast progress

- Framework a greements with Sintef and NTNU.
- Battery lab at Sintefopened
- Battery design, production and testing ongoing.
- Elinor is now taking part in applications for research centres and projects.

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## First cells are ready





## Preparing for the workforce of the future





#### **Global partnerships**

- Clear strategy to facilitate fast development and mitigating risk through strong partnerships, locally, nationally, and internationally.
- Currently participating in battery clusters up to the European level.
- Engaged in serious discussions with well-known, large, established players throughout the value chain.

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## Communication and key arenas





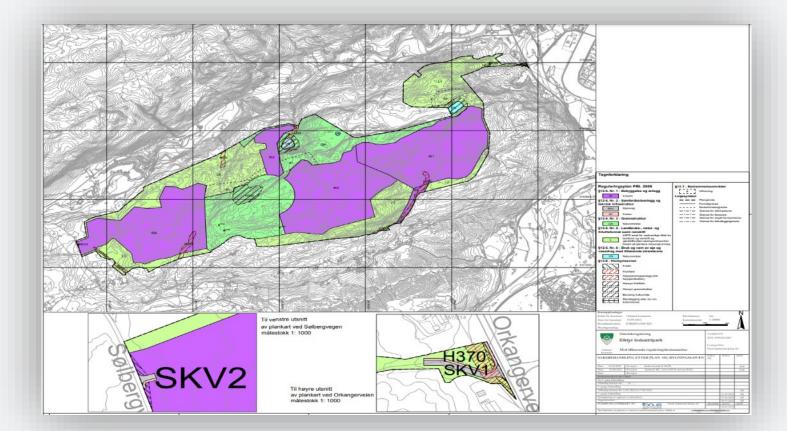




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#### Permits and technical planning



- Area zoning plan for Eiktyr Industrial Park
- Comprehensive EIA, 2 years
- Detailed zoning plan for access road
- Considered mature for grid connection
- Local political support

MN24 Nyheter Regnskapsnytt Elendemsnytt Meninger Skattetall Bil Kjøp stillingsannanse

- Regional political support
- Completed technical pre design study incl. geotechnical surveys





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# Conceptual foundations of the first Elinor giga factory at the Eiktyr site

#### Optim ized process flow



The design of the factory is guided by a unique approach that prioritizes the optimization of Elinor battery's process flow. This philosophy ensures that the factory's structure is custom-built to support Elinor's specific operational needs.

Integration and green infrastructure



The architectural strategy is deeply rooted in the integration of the site's green infrastructure. This approach underpins the design, bringing the green infrastructure as close to the building as possible and preserving vital green spaces.

Vision of a green industry park



The Eiktyr site is envisioned not just as a battery factory, but as a hub for industries contributing to the green shift. This expansive vision has been a guiding influence on the design process.



## Prismatic format



