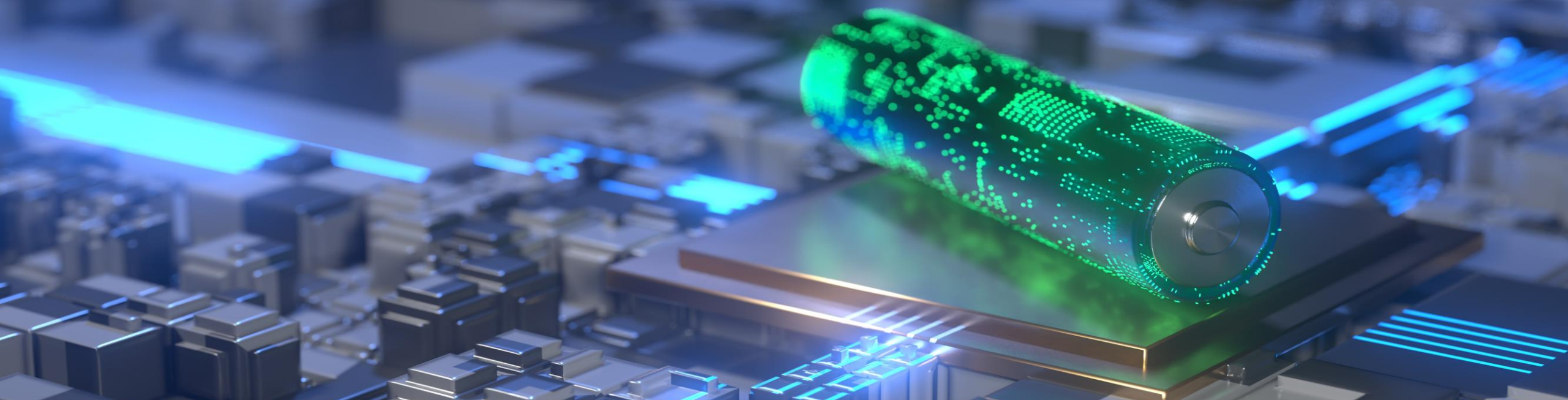


The Nordic Battery Collaboration

- Overview & value chains



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The background of the slide features a low-angle, upward-looking perspective of a large wind turbine on the left and a solar panel array on the right. The entire image is overlaid with a semi-transparent blue filter. The text is centered in the upper half of the image.

By 2026 the Nordic region has attained a leading position in Europe as a sustainable, competitive and innovative battery ecosystem.

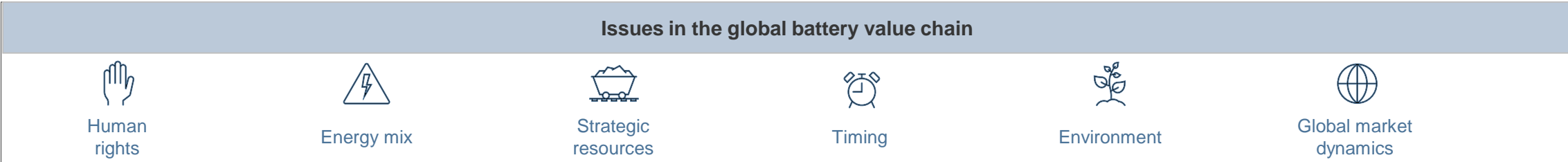
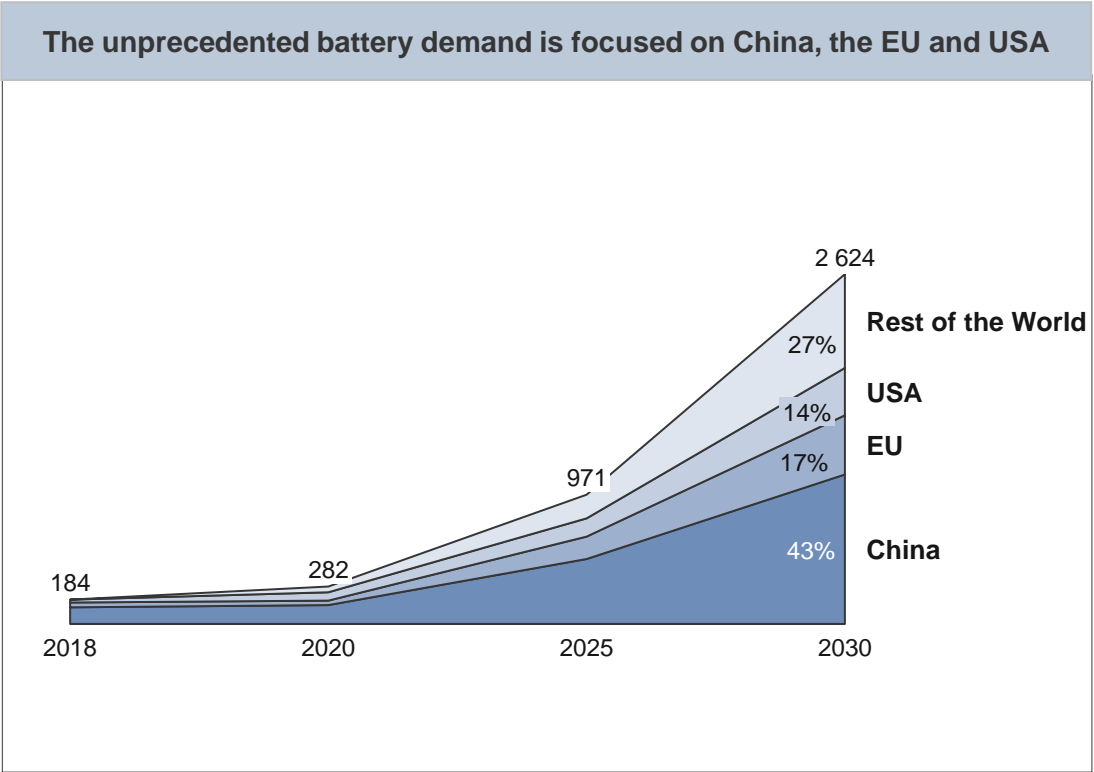
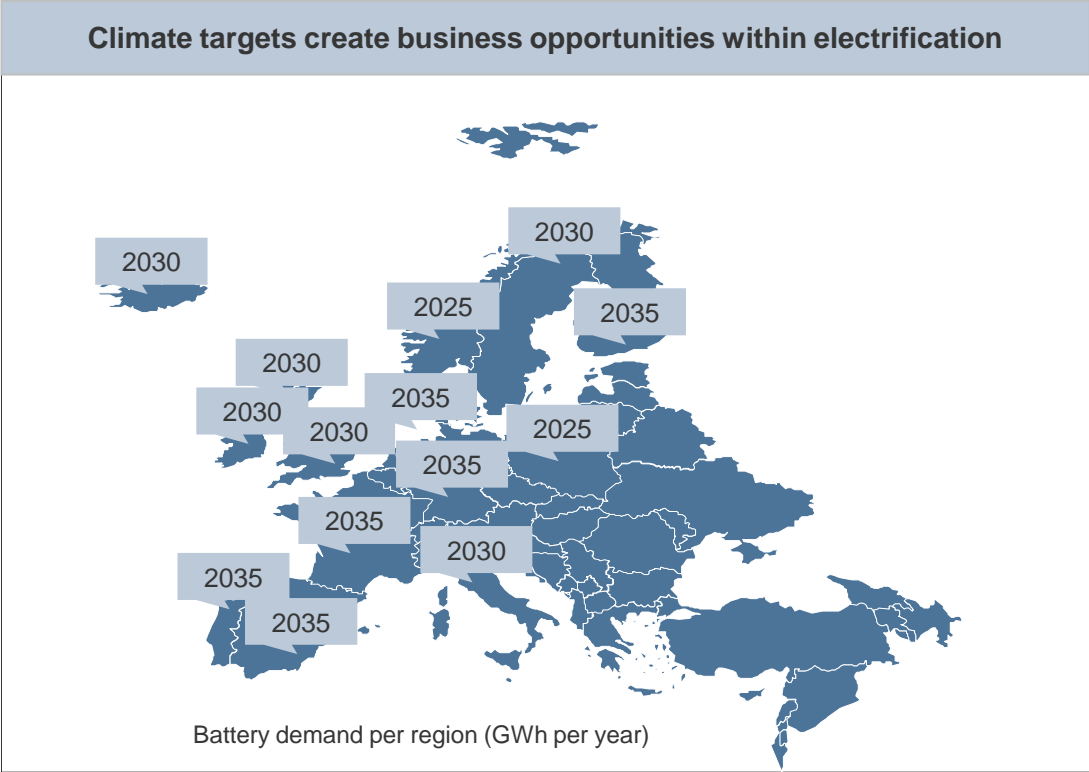
VISION OF THE NORDIC BATTERY COLLABORATION

Nordic Battery Collaboration | **We've had 134 companies, 56 organisations and 19 academic institutions involved in our activities over the two years**



Climate targets and electrification have caused an unprecedented battery demand

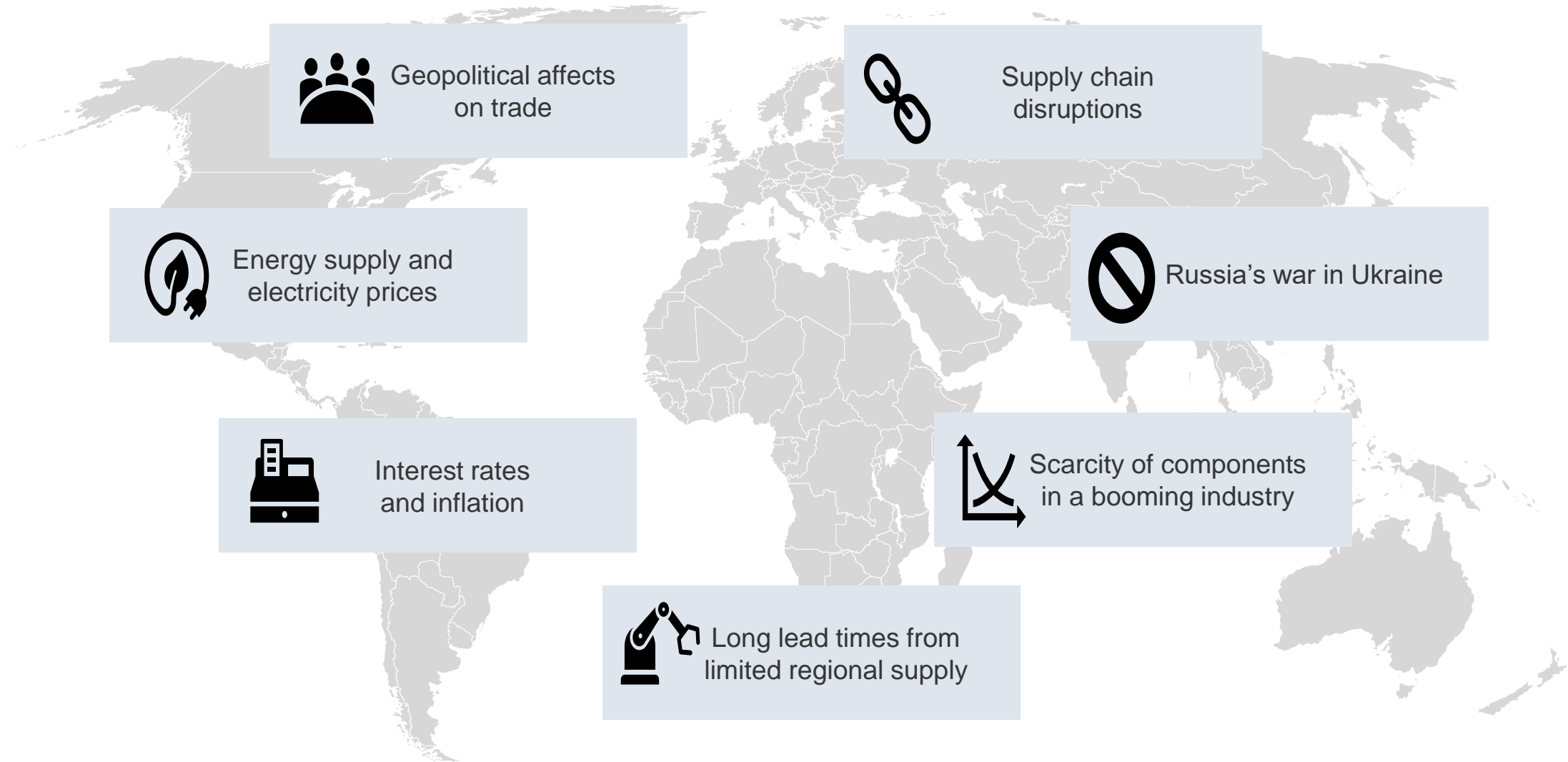
- A vast supply-gap parallel to ESG issues opens a window for sustainability impact



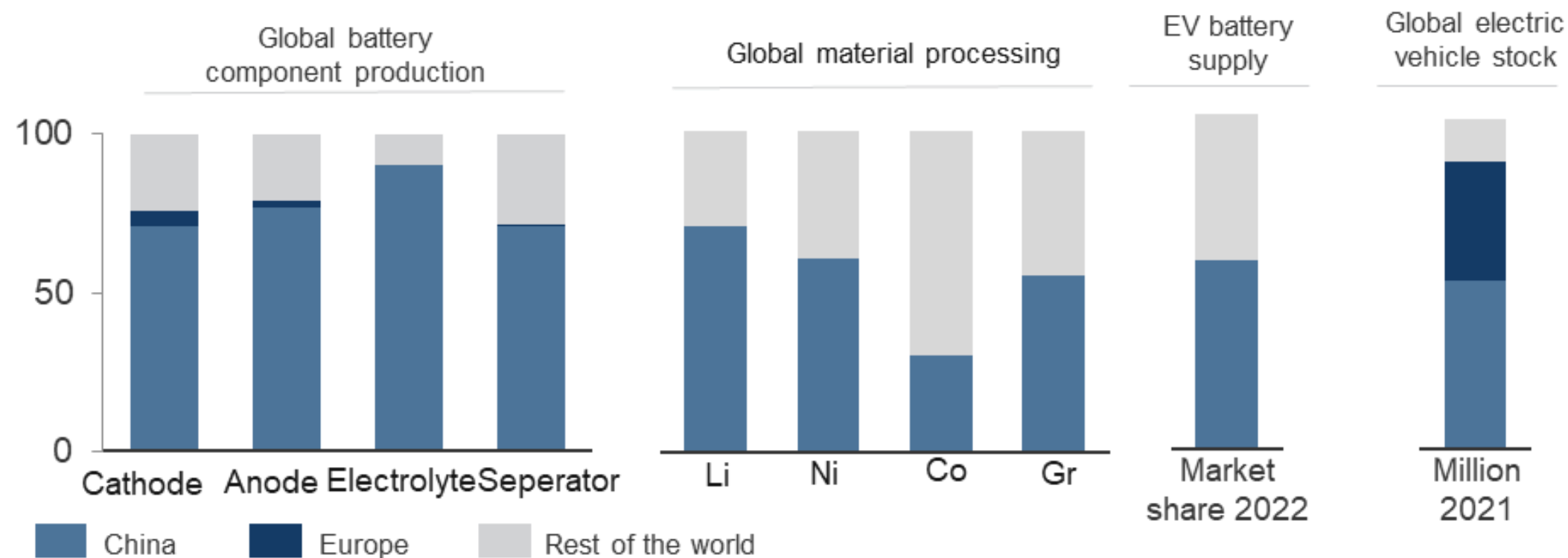
Source: World Economic Forum - A Vision for a Sustainable Battery Value Chain in 2030, BloombergNEF Electric Vehicle Outlook 2020, European Battery Alliance, Battery2030+, McKinsey Analysis, IEA Global Supply Chains of EV batteries, IEA Global EV Outlook 2022, BloombergNEF, EU; European Environment Agency, Foreign Policy, Swedish Environmental Research Institute, Benchmark Minerals, Global Battery Alliance, United States Department of State, Australia Clean Energy Council , Amnesty International

Current global markets are strongly influenced by an almost perfect storm

- At the same time Europe needs continued critical investments in its value chain

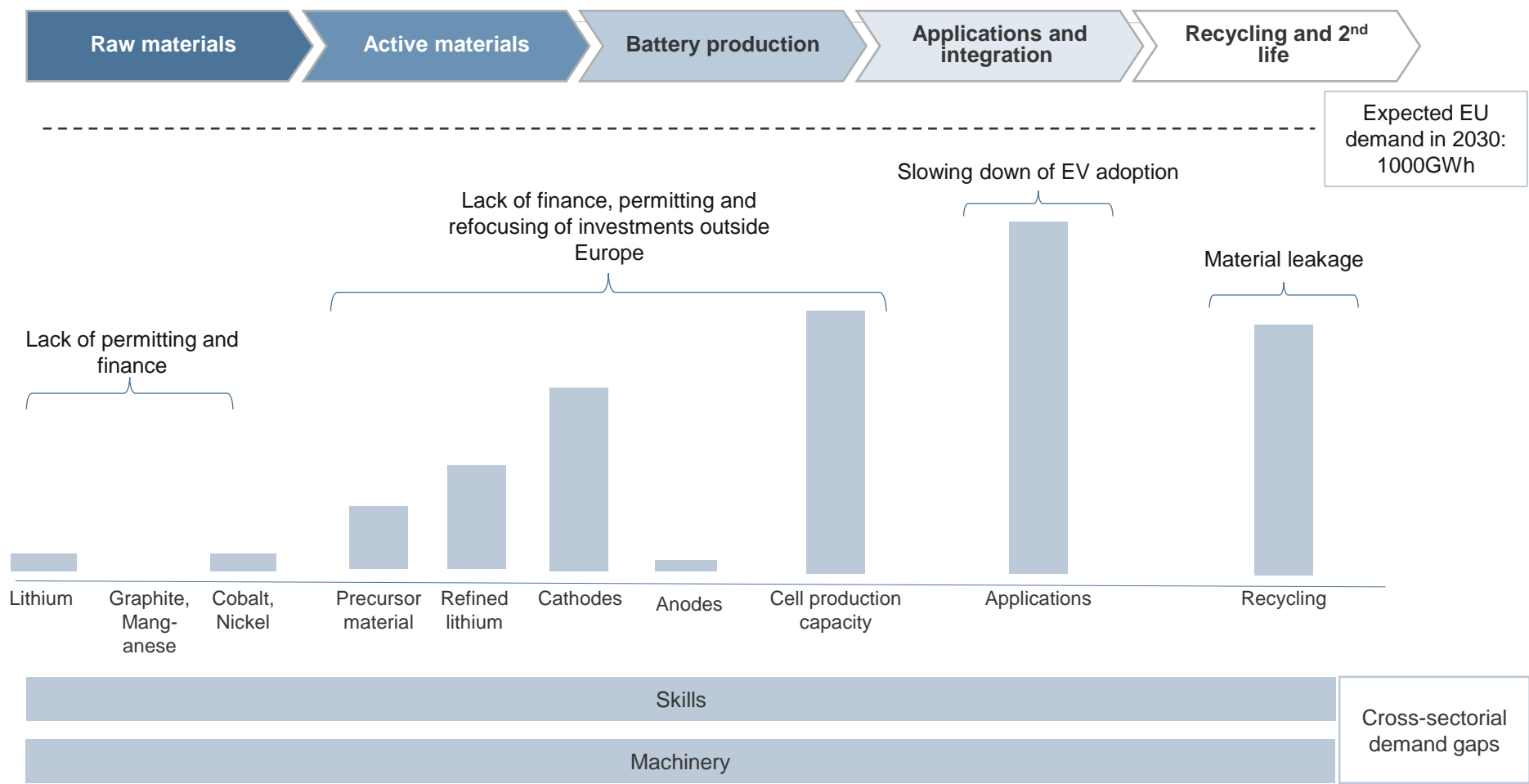


The battery industry supply chain is dominated by a few countries



Europe is developing, still with a large gap between demand & supply

European Battery Alliance
Estimated realistic share of EU + Norway production capacity compared to estimated demands* per value chain step

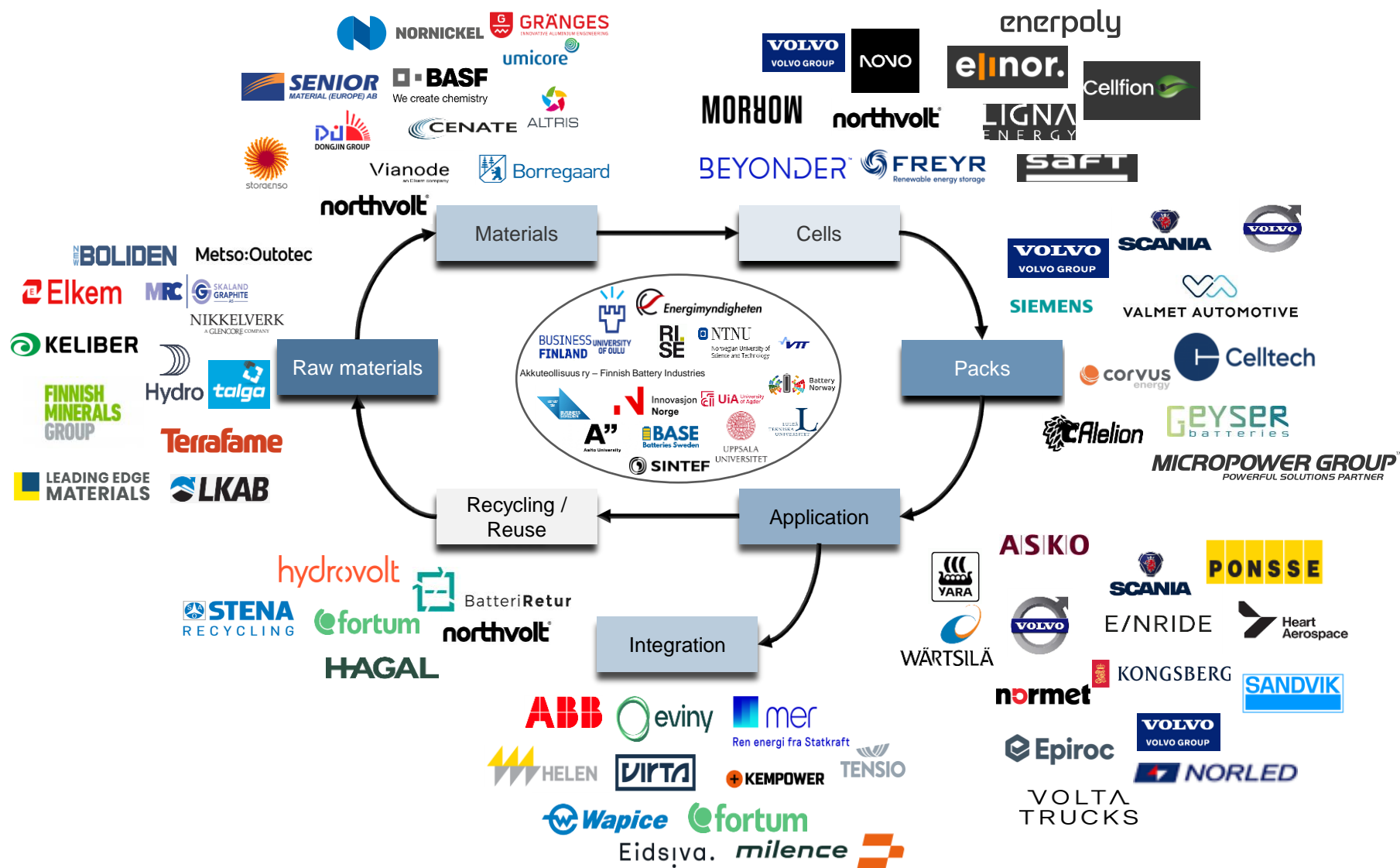


Source: European Battery Alliance, Business Sweden interviews
*Demands based on public announcements with current framework in 2030

Nordic countries in the top ten ranked battery nations globally (BNef, Nov 2022)




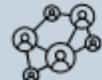


Global rank		Raw material	Battery manufacturing	Environmental, social, and governance factors (ESG)	Industry, innovation and structure	Downstream Demand*
1	China	1	1	17	9	1
2	Canada	3	8	6	4	10
3	US	6	4	16	5	2
4	Finland	9	15	2	1	11
5	Norway	18	10	1	3	7
6	Germany	21	6	4	7	2
7	South Korea	17	2	10	6	5
8	Sweden	21	9	3	2	8
9	Japan	13	3	8	12	8
10	Australia	2	15	9	13	11

The Nordic region has key actors in all parts of the value chain with continuous foreign and domestic investments in the industry



The Nordics share the preferable prerequisites for a strong battery industry and the individual countries complement each other

Prerequisites for Nordic business

-  Green energy at low costs
-  Stable energy supply and cold climate
-  Productive workforce
-  Connected logistics
-  Tangible actions for sustainability
-  Abundant deposits of raw material

Overall share of fossil fuel-free 2021

74.1%

Denmark

84.8%

Finland

99.3%

Norway

100%

Iceland

98.1%

Sweden

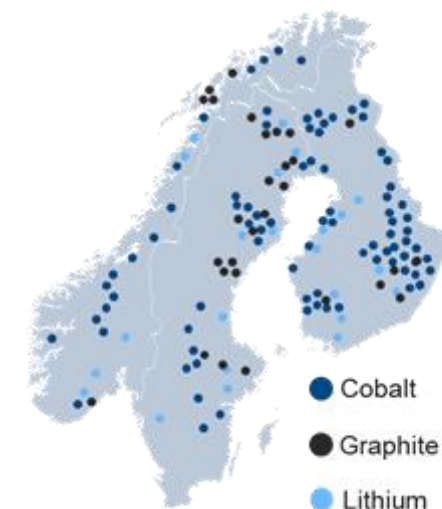
62.5%

EU

Examples of ongoing investment cases in the Nordic region 2022*

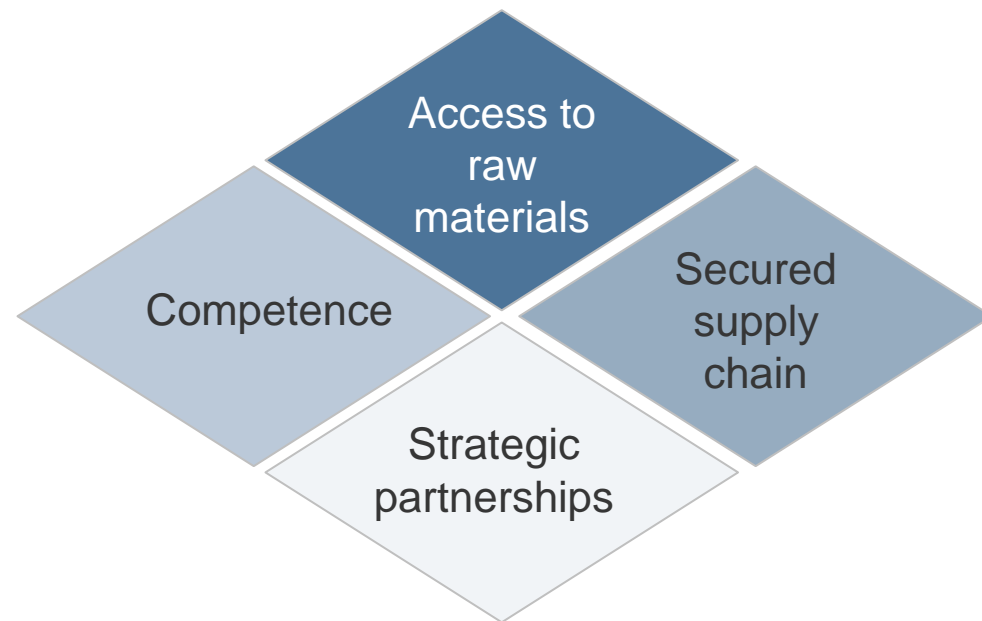


Deposits in the Nordics, 2022

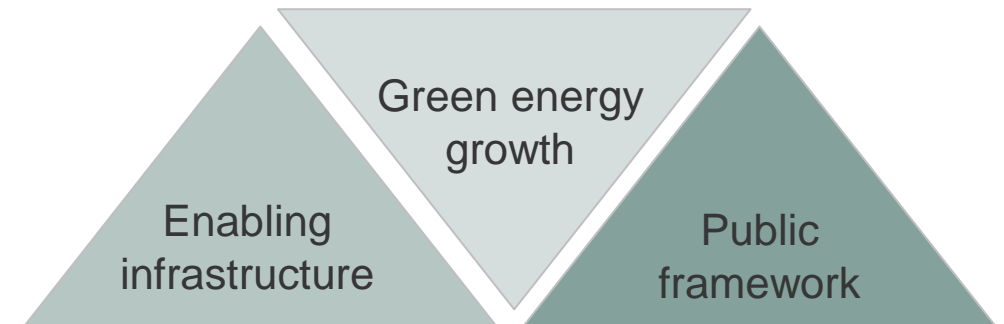


The Nordic battery ecosystem shares decisive market necessities with Europe

Within the valuer chain



Market prerequisites



Key to success working Nordic is a close collaboration with the industry, having a joint vision and work in teams – at home & on global markets

**BUSINESS
FINLAND**



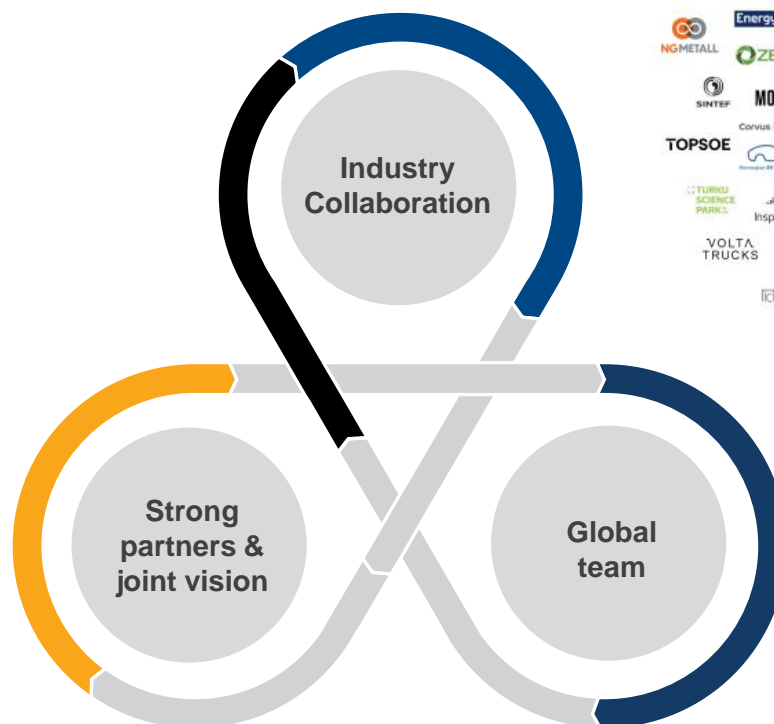
**Nordic
Innovation**



**EUROPEAN
BATTERY
ALLIANCE** | **EBA250**

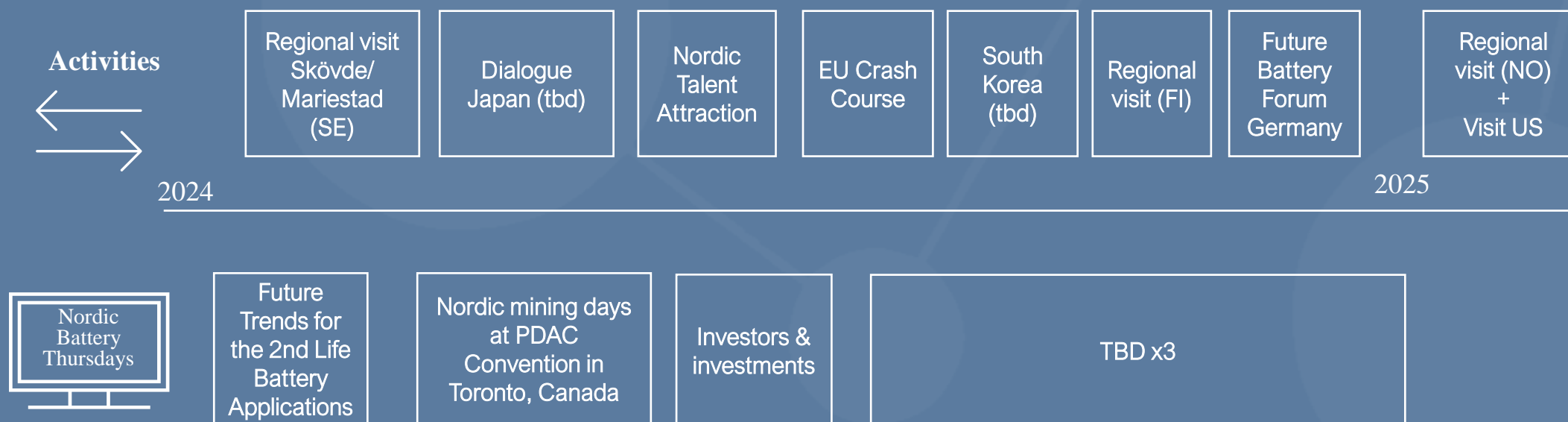
By 2026 the Nordic region has attained a leading position in Europe as a sustainable, competitive and innovative battery ecosystem.

VISION OF THE NORDIC BATTERY COLLABORATION



THE NORDIC BATTERY COLLABORATION

A vibrant and active Nordic ecosystem driving investments, global strategic partnerships, and R&D!



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