

Bodecker Partners Investment Seminarium 2023



On the 23rd-24th of March, we at Bodecker Partners once again hosted our yearly seminar and match-making event for international investors and large-scale project developers of Nordic renewable assets - also joined by some heavy industry and new PtX developers.

IN TOTAL, ABOUT 70 DELEGATES gathered on the top (54th) floor of the Turning Torso building in Malmö to discuss the latest development in the energy market and politics, upcoming wind-, solar-, and battery projects, potential on the flexibility markets, and much more in an informal and transparent setting. There were also chances to arrange individual meetings, which we were glad many took the opportunity to do.

With far above 70 billion EUR of renewable fund capital and a high share of the active Nordic project developers in the same room, we also had to take the temperature on some current topics - you will find the resulting output spread out throughout the text. As on all our events, we used the Chatham House rules and had no media presence - all to encourage open and transparent discussions.

mentioned some ongoing projects, incl. marine spatial planning for offshore wind and build-out of grid (previous assignment not yet changed/terminated), distribution of 90 TWh onshore wind, and potential adjustment of veto (no news since last year's vote).

If we believe our seminar participants, there will also be SMRs developed in the Nordics, but not before 2030. No consensus however; ~20% think they will never happen.

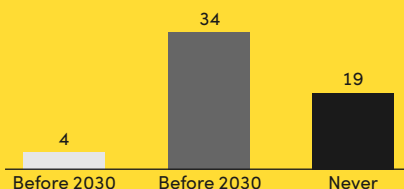
AFTER A MORNING of individual meetings and a tasty lunch with a beautiful view, Caroline Asserup, head of the Climate Department at the Swedish Energy Agency, started the seminar sessions.

An important takeaway from their new analysis is that new electricity production not only has to cover new demand but also the high volumes of current capacity being phased out. Caroline also

So, is there any interest in investing in SMRs? Who better ask than our dedicated European investors? In which technologies will our delegates be most active in 5-10 years? Output of our poll

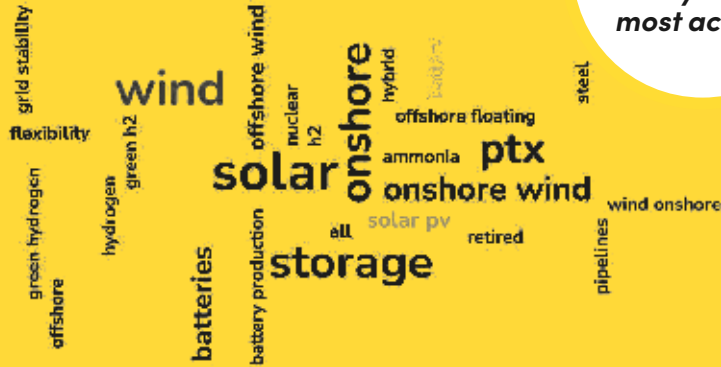
Electricity use is increasing to 228-349 TWh by 2050

All fossil-free types of electricity production are needed



When will the first SMR be commissioned in the Nordics?

**In 5–10 years:
In which areas
will you be
most active?**



Denmark when utility-scale PV is being built out at record speed? Our audience said yes to a decrease, but perhaps not as bad as for wind.

Sigbjørn Seland from StormGeo gave us all the answers on long-term prices, summarizing their new price forecasts released just two days earlier. Crucial inputs to their analysis are renewable energy and hydrogen production costs, and the northern Nordic areas are expected to remain low-price areas around LRMC for onshore wind. The southern regions are expected to end up around the LRMC for offshore wind around 46–56 EUR/MWh. He also pointed out that current demand is deficient while production grows – a slight warning for the shorter term.

We also wanted to understand the power price expectations among our participants. We focused our poll question on northern Sweden, SE1, in 2040. The result was yet proof of the immense uncertainty. About a third expects prices to remain at last year's (relatively high) level, while half of our market experts believe they will be lower. That still leaves about 20% expecting even higher prices.

is clear, SMR:s will have to find other financings... Unsurprisingly, solar, storage, and PtX are the new hot objects, but onshore wind is still strong, and offshore is not forgotten (mentioned several times with different wording).

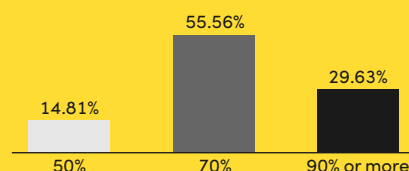
LISA HAUKAAS AT HYDROREIN gave us a quick update on the Norwegian wind power development and politics. Norway is in the process of awarding acreage in the Southern North sea and at Utsira Nord, but could have to tear parts of already constructed onshore wind in the Fosen area. Lisa also summarized the increased and new taxes on wind power – 40% resource rent tax being the most debated and harmful.

described how higher GoO activity has increased prices, making the instrument an essential part of investment calculations. Some findings from Mia's PPA session were the high capture rates deteriorating PPA value, slowly merging price expectations between buyers and sellers, and external price forecasts indicating much lower area price differences after 2040.

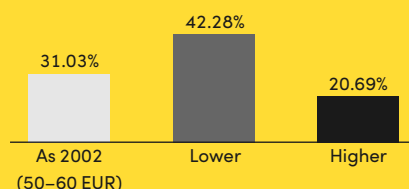
We also took the opportunity to check our participant's views on long-term capture rates. As you know, wind power cannibalization is now very high in many Nordic areas. Should we expect the same pattern from solar in southern Sweden and

In Finland, we learnt that most wind power is built on the western side of the country due to Defence issues. This, in combination with the rapid build-out, causes decreasing capture rates. Heidi from the Finnish wind energy association also mentioned the upcoming elections where the leading Finns party is the most wind power skeptical party.

THE BODECKER PARTNER SESSION was started with Gustaf updating us on the power market development since last year. He concluded that gas influence on power prices should remain for the rest of the year, volatility remain high, but flow-based model result in tighter area prices. Finally, he warned of about risk of recession and demand destruction. Sevdie



What is the capture rate for solar PV in southern Sweden and Denmark in 2026?



What will the average yearly power price in SE1 be in 2040?



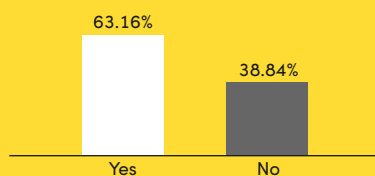
Anything that would stop/pause your willingness to invest/develop projects in the Nordics?

Before the evening mingle, we concluded the afternoon with a short introduction round of all 18 investment management companies present. We discussed topics like investment climate, main challenges, future investment focus areas, and much more. Transparent discussions in an informal setting – just the way we like it.

The panel discussions indicated a continued strong interest in the Nordic markets and a good investment climate (even though several were severely concerned about Norway's new wind taxation). So, what would scare our investors away? In our poll, many words seem to relate to the same topic; regulatory changes and new taxes. Another common area is low capture rates and/or persistently low power prices. We particularly like the comment »Bodecker Partners too busy.«

For the rest of the evening, we enjoyed food and drinks, good conversations, and many laughs – all to the sound of live acoustic music.

Friday morning, we started with presentations by four project developers. RES gave us an interesting update on their Green Hydrogen projects in Ånge in SE2, Neoen presented a 100 MWp solar project in SE3 and a battery project in SE2, Universal Kraft showed a number of upcoming solar projects across Sweden, and, last but not least, we heard Magnus from Freja Offshore describing their



Will batteries be a given, embedded part of wind and PV parks built in 2025-2027?

Swedish floating offshore projects where the first application is due this week.

We were also interested to understand our delegates' view on batteries in the Nordic. We conclude from our poll that batteries certainly will be a natural choice when building and investing in wind- and solar parks, for a majority already from 2025-2027.

From Bodecker Partners, Gustaf presented some results from our work to better be able to answer questions like »How much risk do we have with current baseload hedge ratio?«, »How would risk decrease if transferred to a Pay-as-Produced structure?« or »What is the optimal hedge ratio?«. We develop a new CTRM tool to ease our clients' visibility regarding risk scenarios.

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gustaf@bodeckerpartners.com!

Gustaf also gave the audience a snapshot of why it now makes sense for asset owners to take their own balancing responsibility or, at least, to learn how to and keep it as an optionality in negotiations.

Fredrik presented some of our learnings on revenue potential from hybrid wind parks. We see batteries easing baseload PPAs and improving performance, reducing cannibalization, and, ultimately, creating plannable production and optimization potential (like hydropower). Best sales pitch of the day »Get a hybrid park for free through frequency support (and capacity) markets«.

Last but not least, we got the latest updates from LKAB and Liquid Wind as well as an introduction from Anne Särkilähti at Hytrade – a company started only last week to support H₂ industries to optimize energy flows for higher profitability. When Liquid Wind presented the company at this event last time, it consisted of only two employees, and the first factory was in early planning stage. Now they are nearly 50 people, the first factory has been sold, and two more (double the size) have been presented. Also Stefan from LKAB has presented at our event before, and it was fascinating to see the progress since. Apart from the enormous transition to fossil-free sponge iron, the company will now also extract critical minerals from mine waste and, for example, cover 30 percent of the EU's need for rare earth elements as well as Sweden's entire need for gypsum for construction. Electricity demand will increase stepwise at a pace also based on grid connection and supply of fossil-free power production. The estimated annual demand by 2050 exceeds 70 TWh.

