# Cleantech for Nordics

Q2 2024: QUARTERLY BRIEFING



With the support of Breakthrough Energy

# INTRODUCTION

As we conclude Q2 of 2024 and prepare for a summer break, we're pleased to share the latest updates on cleantech investments in the Nordics. Following a strong Q1 that nearly doubled investments compared to 2023, it was hard to imagine that prospects would look bleak as we summarize the first half of 2024. While this quarter didn't yield the same revolutionizing spike, we observed a reassuring input of capital for this quarter as well, totaling 852 M EUR.

At Cleantech for Nordics, we're particularly fascinated by the role of pension funds in shaping cleantech financing. In this edition, we are pleased to share an interview with Anders Strömblad from AP2, one of Sweden's largest pension funds, to gain insights into their perspective. We are hoping to pursue this topic further as we continue our work in the fall. Let us know if you have any feedback to us in relation to this as we explore this topic in our upcoming work.

In this brief we have also looked back on the EU elections and reflected on the surprisingly strong results from Left and Green Parties in the Nordics, compared to the rest of Europe. Read our reflections, and as always, take a look at the latest policy updates from the Nordics, dealflow numbers, and showcase of companies securing the top investments of the quarter.

We wish you all a restfull summer and hope you enjoy the read. We encourage your feedback and don't hesitate to get in touch with us at eva@cleantechscandinavia.com.

# STAYING STEADY

As we close out Q2, we can see that the Nordic cleantech market experienced a steady flow of capital during the quarter, amounting to 852 M EUR, including grants, equity, and debt. This quarter was the first in a while that was not defined by the usual headlines of companies like H2 Green Steel and Northvolt. Although, we did track additional funding for H2 Green Steel, but the exact amount remains undisclosed. Nonetheless, there's a reassuring consistency in the steady stream of capital continuing to flow to Nordic cleantech companies.

#### Private Investment Evolution (2007-2024) Investments (M €) 316 <sup>344 385</sup> 117 116 143 138 118 292 <sup>414</sup> Debt (M€) Number of Deals Equity (M€) Grants (M€)

# CONSISTENT DEALFLOW IN Q2: DEBT CONTINUES TO PLAY CRUCIAL ROLE

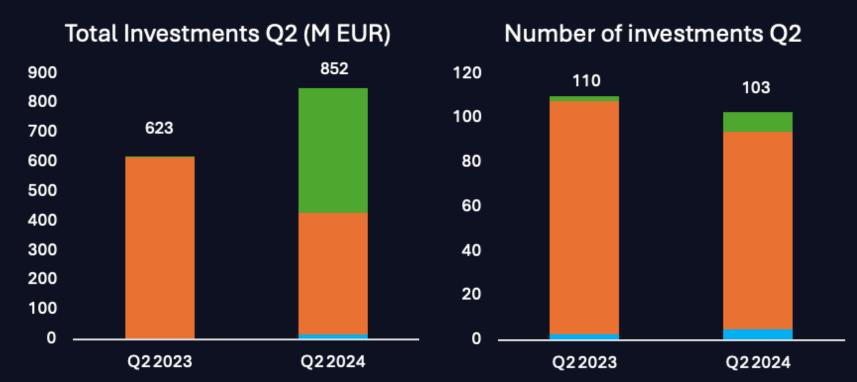
The second quarter of 2024 saw a total of 852 M EUR in investments, quite evenly split between equity and debt. As highlighted in our previous brief, debt is playing an increasingly significant role in financing cleantech. As we examine the most recent quarters, debt is clearly taking on a larger share of investments.

When comparing Q2 2024 to the same period last year, we see a slight increase in total investment amounts. The 852 M EUR invested this quarter is comparable to both Q2 and Q1 of last year, exceeding the levels seen in those first two quarters, which amounted to 738 M EUR and 623 M EUR, respectively. However, this figure falls markedly short of the third and fourth quarters of last year, which were notably inflated by mega-rounds from Northvolt and H2 Green Steel, totaling 2999 M EUR and 1760 M EUR, respectively.

In terms of deal activity, Q2 saw 103 deals, which is consistent with trends observed in previous quarters.

#### Distribution of investments (Q1 2023 - Q2 2024)

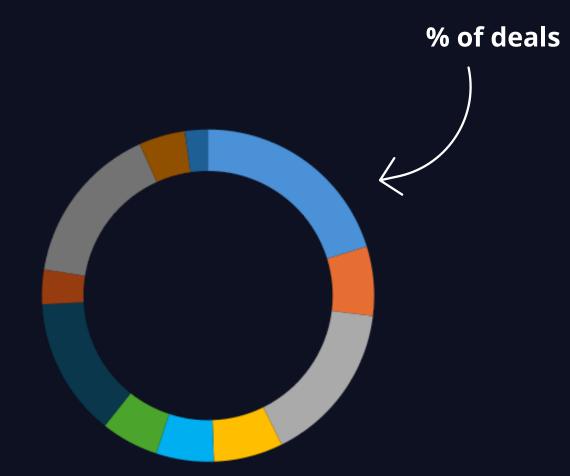


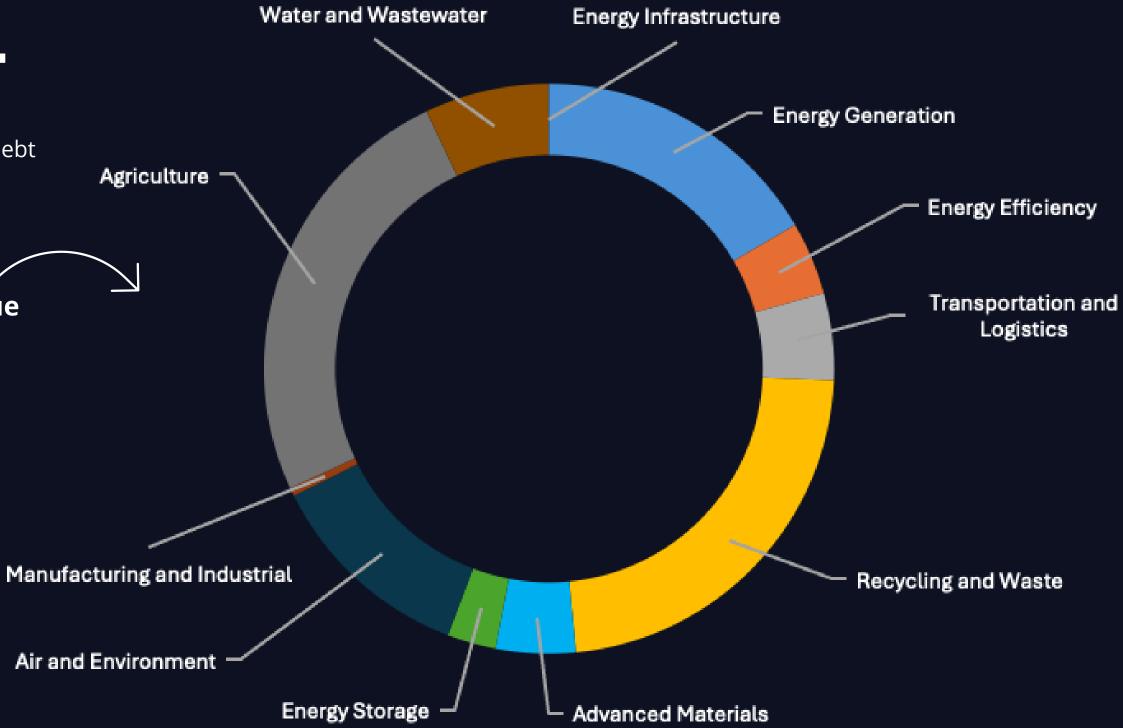


# Q2 INVESTMENTS BY INDUSTRY SEGMENT

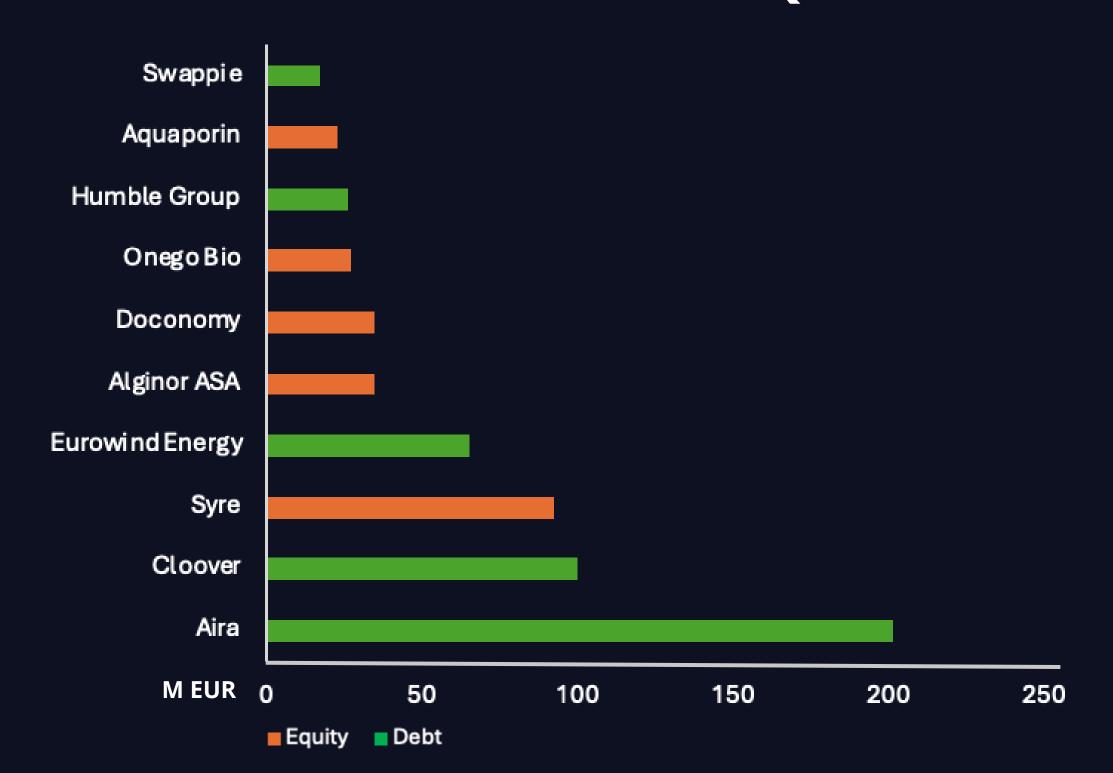
Distribution of equity investments by industry, excluding grants and debt

% of value





# **TOP NORDIC INVESTMENTS Q2 2024**



In Q2 2024, the top 10 companies securing investments are predominantly focused on solutions in energy generation and agriculture. But they all take on very different roles within each of these ecosystems. On the energy side, we see heat pumps, renewable energy, and embedded financial solutions, while on the agricultural side the companies cover aquaculture, animal-free protein, and consumer products. Two prominent names in recycling and waste, Syre and Swappie, also secure spots in the top 10.

# **TOP NORDIC COMPANIES Q2 2024**

**AIRA** 

**CLOOVER** 

**SYRE** 

EUROWIND ENERGY

**ALGINOR ASA** 

Aira provides intelligent heat pumps, offering innovative and affordable technology to advance electrification of residential heating.

Cloover provides embedded financial services, software, and energy solutions to facilitate a successful energy transition. Syre offers a textile-to-textile recycling solution, reducing CO2 emissions by up to 85% compared to conventional methods, and promoting a circular value chain.

Eurowind Energy want to reshape the energy system and develop, construct, and operate renewable energy parks. Alginor ASA specializes in sustainable harvesting and biorefining of seaweed, focusing on large brown kelp for application in areas such as food, feed, pharma, agriculture, chemicals, and materials.

#### **DOCONOMY**

Doconomy provides banks with financial tools to educate and promote impact technology and positive global climate action.

#### **ONEGO BIO**

Onego Bio produces an animalfree egg white while having a positive effect on the environment and animal welfare.

#### **HUMBLE GROUP**

Humble Group is a family of companies with a focus on healthy snacks and sustainable beauty and health products.

### **AQUAPORIN**

Aquaporin is a pioneering water tech company using bioengineering to tackle global water challenges. Their innovative technology is applied across various sectors—from industrial wastewater treatment to improving drinking water quality.

#### **SWAPPIE**

Swappie is an online marketplace for buying and selling refurbished smartphones.

# THE ROLE OF PENSION FUNDS IN FINANCING THE FUTURE OF CLEANTECH

Pension funds play a crucial role in securing financial stability for future generations. The question we ask ourselves here at Cleantech for Nordics is which role pension funds can play in securing financial stability for future technologies. With a significant investment gap hindering the scaling of essential climate transition technologies, can pension funds help bridge this gap?

To explore this topic, we spoke with Anders Strömblad, Senior Strategist and Adviser Private Investments at AP2.

The main strategy of pension funds, including AP2, is to maintain a diversified portfolio to fulfill their investment objectives. While there is no comprehensive analysis of how Nordic pension funds invest in climate-related initiatives, it is quite common that pension funds have established climate strategies. AP2, which has a long-term investment horizon, has a broad and deep approach to sustainable investments where climate is one of the major focus areas. As an investment area, cleantech distinguishes itself from others by often being very capital intensive and consisting of long-time horizons. These conditions can be challenging for many investors but work well for others—particularly for those with longer investment horizons.

Within private investments, which is Anders' area of focus, AP2's scope spans from large-scale companies and projects to start-ups, which can include infrastructure-like projects and new, unproven technologies. The private investments are almost exclusively channeled through funds or similar structures which, in turn, invest in companies. Most investments on the private side, which is what Anders works with, are focused on equity, spanning from mature technologies such as wind farms to emerging technologies which may become important within the next 10-15 years. Beyond equity, AP2 also engages in investments on the credit side. As credit plays a very important role in financing the buildup of climate solutions, it should not be overlooked.



Anders Strömblad, AP2

Climate-focus investments are integrated across all of AP2's private investments portfolios. These portfolios are sustainable infrastructure, agriculture and forestry, real estate, private equity funds, and unlisted credits. Overall, these investments emphasize long-term returns over short-term performance. As an example, AP2's portfolio on sustainable infrastructure has invested in funds like Copenhagen Infrastructure Partners, Generate Capital, Pattern Energy, Sandbrook, and Climate Finance Partnership. Since 2020, the investments within sustainable infrastructure have averaged a 13% return, though returns have varied year to year.

Similarly, their private equity portfolio includes funds with a climate focus, with familiar names such as Breakthrough Energy Ventures, Khosla Ventures, TPG Rise Climate, Generation Just Climate and DCVC. Examples of well-known climate tech companies found within these funds include Form Energy, Syre, Fervo Energy, Meva Energy, Pivot Bio, Commonwealth Fusion Systems, and H2 Green Steel. This private equity portfolio has consistently generated high returns over time, outperforming the listed stock market.

While the potential for pension funds to bridge the investment gap in cleantech is promising, the reality is more complex. Despite strong performance in AP2's climate investments, maintaining a diverse portfolio remains essential. As investors, they cannot compromise on expected returns and have a global mandate to invest in the most attractive investment opportunities. Geography, for instance, significantly influences investment decisions, with most investments being U.S.-centric due to the larger availability of venture capital and the relative ease of scaling companies in the U.S. compared to Europe, where legal and market conditions vary widely between countries. Therefore, improving the European investment landscape is crucial for

attracting pension funds and other institutional investors to Nordic cleantech companies. Despite these challenges, many U.S.-based and international funds continue to invest in Nordic companies, highlighting the region's potential. However, relying solely on pension funds may not fully address the need for increased scale-up capital in the Nordics.

Pension funds like AP2 can indeed play a crucial role in financing the cleantech sector. Yet, in the Nordic and European context, their impact on funding and accelerating the sector largely depends on navigating market conditions. To fully unlock the potential of pension funds in driving cleantech innovation, it is imperative to strengthen the European investment landscape through streamlined regulations and greater market cohesion. These efforts will be essential to fostering an environment where pension funds can effectively contribute to the growth and innovation of the cleantech sector.

## NORDIC GREEN AND LEFT PARTIES GAIN GROUND IN EU ELECTIONS

Following the recent EU election results in the Nordics, a new political landscape has emerged, painting a starkly different picture compared to the rest of Europe. What stands out is the surprising rise of Left and Green parties, coupled with a noticeable decline in support for far-right parties across Denmark, Finland, and Sweden.

In Denmark, the Green Left party (Greens/EFA) soared to become the largest party, securing three parliamentary seats—one additional, compared to previous elections. Similarly, Finland's Left Party Alliance saw a remarkable increase from one seat to three. Meanwhile in Sweden, the political scene tilted slightly leftward, as one mandate shifted from the Christan Democrats (EPP) to the Left Party (GUE/NGL). Surprisingly, Sweden's Green Party also outperformed the far-right Sweden Democrats (ECR). Across the Nordic region, there was a clear decline in support for far-right parties, with the Finnish Finns Party (ECR) losing one seat and far-right groups losing ground in all three countries.

The Nordic election results reflect a strong voter focus on climate change. In Sweden, climate action was the primary concern for voters leading up to the elections, according to the European Parliament's Eurobarometer survey. Similarly, climate action ranked among the top three concerns in Denmark and Finland as well, with all three countries prioritizing climate change more than the EU average. Sweden and Denmark also see climate action and emission cuts as critical focus areas for the EU to strengthen its global position—an opinion which is mirrored in the strong performance of the Green parties in both countries.

Another dimension to take into consideration when reflecting on the EU results are current compositions of national governments. In both Finland and Sweden, far-right parties have either been part of or supported current governments, which may have contributed to reduced support. Furthermore, climate change action has not been a priority for either of these governments, despite strong public support. A study by the Swedish EPA demonstrates that three quarters of Sweden's population support the national climate targets and want policies that contribute to their realization. This public support for climate policies has not necessarily been reflected in current government policies, however. The EU elections have further underscored this priority among Nordic citizens, highlighting the gap between public opinion and governmental action.

Amid widespread climate concerns across Europe, the EU election outcomes in the Nordics offer a different narrative—a narrative that we, at Cleantech for Nordics, believe can inspire hope for advancing European green policies, a strengthened cleantech landscape, and achieving the emission reductions we need.

# **POLICY NEWS**

- Danish tax on agriculture. Denmark becomes the first country to introduce a carbon tax on agriculture. The tax will start in 2030, at 300 DKK per ton CO2 emitted, and will in 2035 increase to 750 DKK. During the first two years farmers will get a basic deduction of 60%. Alongside the agricultural tax, Denmark has also established a new land fund, which will support planting forests on agricultural land, rewilding, and land conversions, focusing on nitrogen reduction.
- **Denmark increases diesel taxes.** Denmark raises diesel taxes to help fund the green transition, aimed at financing its agricultural green transition among other environmental initiatives. The government's plan includes increasing the fuel tax, starting with an additional 0.5 DKK per liter from 2025, while simultaneously reducing an equalization tax for diesel cars. This adjustment means that drivers who drive less than 22,000 kilometers per year will see benefits, while people who exceed this distance will face the impact of the higher diesel prices.
- Denmark's Parliament adopts CO2 industry tax. A new CO2 tax on industry will take effect in Denmark from January 1, 2025. The legislation, passed in June, includes higher taxes on industries both within and outside of the EU ETS. The tax is set at up to 750 DKK per ton of CO2 for

- companies outside of the EU ETS, and up to 375 DKK per ton for companies within it. Certain sectors will have lower rates, and companies will be able to get deductions for the CO2 they capture and store.
- Finland falls short on climate targets. The Finnish Government's latest climate report reveals that Finland is not meeting its climate targets on both national and EU levels. Despite a continued decrease in emissions, the reduction remains insufficient. The most pressing challenge lies in the Land Use, Land-Use Change, and Forestry (LULUCF) sector, where carbon sinks have weakened. Forests are not absorbing enough carbon to meet targets, suggesting a need for significant changes in forestry practices to achieve these climate goals.
- Criticism Over Finland's Old-Growth Forest Protection. Finnish old-growth forests The Finnish Government has announced strict criteria for the protection of old-growth forests. In practice, this decision means that almost no forests in southern Finland qualify for conservation under the new definition. The decision has faced significant criticism from the opposition, who argue that the government is backtracking on its promises to protect old-growth forests.

# **POLICY NEWS**

- Finland excludes support for wind and solar. The Finnish Government has decided not to include wind and solar power in its clean transition support. Instead, the green tax relief is targeted at industrial projects, such as hydrogen production, fossil-free steel, and batteries. Projects must be at least 50 M EUR in size, and the government can grant a tax credit of up to 150 M EUR. The distribution of the tax credit still needs to be approved by the EU Commission, however.
- Iceland's government has announced a new climate action plan. The updated plan is expected to reduce carbon emissions by 35-45% by 2030, through 150 actions and projects. This is a considerable increase from the previous plan's 50 actions. However, this alone will not meet Iceland's goal of a 55% reduction by 2030 and carbon neutrality by 2040. Many of the new plan's actions rely on emerging technologies, however. The plan is still open for consultation.
- Icelandic Climate and Emergy Fund. Iceland has combined two environmental funds into a single Climate and Energy Fund to simplify processes and use funds more effectively. This new fund will support projects on climate issues, energy efficiency, and the circular economy. This merger is expected to streamline the grant distribution process.

- Iceland accelerates policies for green vehicle adoption. Iceland has announced grants for trucks that do not emit greenhouse gases, aiming to support the government's climate and energy goals. The grants can cover up to 33% of the truck's total price, excluding VAT. Priority will be given to trucks that can prevent the highest amount of emissions. Additionally, starting in July, new rules will encourage further adoption of electric, hydrogen, and methane vehicles over fossil fuel cars. Under the updated tax regulations, benefits for company-provided vehicles will be calculated differently based on the type of fuel used.
- **Norwegian solar power action plan.** The Norwegian government has announced an action plan aimed at accelerating the development of solar power across the country. Key initiatives include streamlining licensing processes to boost profitability for solar systems in commercial areas, empowering municipalities to approve smaller solar projects, and facilitating the sharing of renewable electricity in commercial zones.
- Local support for areas with wind farms in Norway. The Norwegian Environment Agency has allocated 18.3 million NOK for nature and outdoor recreational projects in areas affected by wind farms, emphasizing the importance of communities affected by wind farms to

# **POLICY NEWS**

- also benefit from the developments by reinvesting in local nature. The initiative, part of the revised national budget, supports 26 projects in 2024 and aims to strengthen local support for renewable energy production.
- Norway's sovereign wealth fund criticized for not fulfilling climate ambitions. A recent report by a Norwegian NGO criticizes Norway's sovereign wealth fund, the world's largest at \$1.6 trillion, for not meeting its climate ambitions. Despite aiming for net zero emissions from its investments by 2050, the fund reportedly backed only seven out of 16 climate resolutions at major oil companies' annual general meetings in 2023. This inconsistency raises concerns about the fund's commitment to its climate goals.
- Sweden fails on EU targets. Sweden's government will not meet EU climate and energy requirements before 2030. As Sweden updated their National Energy and Climate Plan (NECP) to the EU commission, it was evident that there is a clear emission gap. Sweden is failing on both ESR (Effort Sharing Regulation) and LULUCF (Land use, land-use change, and forestry). Additionally, energy policy objectives concerning energy efficiency and renewable energy have not been met either.

- Sweden plans to include all transport fuels in ETS2. The Swedish Government has presented a draft proposal on how it plans to implement the EU's new emission trading system, ETS2. The new EU legislation, effective in 2027, mandates that fuels used in road traffic, heating, and industrial activities not already included in ETS1 are included in the ETS2 system. However, Sweden's government plans to already include all transport fuels, including those from agriculture, forestry, and fishing.
- **Swedish Green Acceleration Office.** The Swedish government is setting up a new "Green Acceleration Office" to help industries in the green transition and attract investments. The office will improve coordination between public and private sectors to speed up Sweden's move to green industries, aiming to avoid lengthy permit processes and other bottlenecks.
- Swedish Fiscal Council Criticizes Climate Strategy. The Swedish Fiscal Policy Council criticized the government's climate policy in their annual report. The report states that the government does not have a coherent or understandable climate strategy. Furthermore, they highlighted that not dealing with the costs now may entail not meeting climate targets, as well as increased costs of the climate transition.

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