NORD POOL

2019

Annual Report Embracing New Challenges

"The common thread I see through all Nord Pool's activities is a determination to deliver benefit to our customers, regardless of their size or where they trade from."

N OR P O O

Kari Ekelund Thørud CEO

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Foreword

Embracing New Realities

Kari Ekelund Thørud CEO

As I approach the end of my second year as Chief Executive at Nord Pool, I am once again delighted to take the opportunity to speak directly to our expanding body of customers and stakeholders wherever they are placed within Europe's thriving energy sector.

For Nord Pool the main theme of the past year has once again been that of 'change'. Our expert team is continually faced with fresh developments and newly-emerging challenges which they must work with – as they always do – to ensure our continued delivery of the simple, efficient and secure power trading for which we are rightly known and trusted.

When I travel across Europe to consult with customers and hear their concerns, I am frequently struck by the fact that Nord Pool must continue to expand and provide an innovative offering to the market. And that offering needs to be focused on our core products and services, which allow the market to function efficiently and effectively, to make our customers' trading lives easier.

After some 'quieter' years recently, in terms of external visibility, 2019 was back to being a year in which Nord Pool expanded what we could offer to Europe. And with the advent of new majority owners in the shape of Euronext, I would say we are now looking forward to an even stronger European presence. But there have been some inward-facing developments too, as we have worked to accommodate, understand and simplify the new landscape of power trading in our so-called 'home' territories, doing everything we can to aid the smooth and effective implementation of the multi-NEMO arrangements in the Nordic region. The common thread that I see through all our activities during 2019, has been a continued determination to deliver benefit to our customers, regardless of their size or where they trade from.

You can discover more about these aspects of our business as key members of our team expand on them later in this year's Annual Report.

A date with the data

I am, at heart, a 'commercial animal' and I see a highly customer-focused approach and mindset at work everywhere within Nord Pool. That is something that we can never let go of, given the fully competitive power exchange environment in which we are located today.

I find two important aspects of working life at Nord Pool continually pleasing. First among these is our people. We enjoy such diversity in terms of age, gender, expertise, culture and ethnicity among our team. But there is also the firm commercial focus that we have here, perhaps best expressed by an unspoken sense of landmark achievements in our figures barely being worth a raised eyebrow! In 2019 that certainly seemed to continue. The total volume of power traded through Nord Pool stood at 494 TWh, with Nordic and Baltic day-ahead market trading standing at 381.5 TWh, UK day-ahead achieving 94 TWh, and volume on our intraday markets setting a record of 15.8 TWh – nearly doubling the previous years' figure.

But for me perhaps our proudest achievement was in our newly launched central and western Europe day-ahead market, which finally completed our offering for the region and grew to almost 2.5 TWh of power traded by year end. The performance of our intraday markets was also remarkable, with all-time high results being recorded. This included year-on-year intraday trading growth in Germany of more than 200%.

But if 'change' was the theme for our year here at Nord Pool then this was truly reflected in July when the ever-more-prevalent automated trading made its presence felt. It was then that, for the first time, more than half (52%) of intraday volume traded through Nord Pool across all markets was by Application Programming Interface (API).

Though these important numbers may serve to illuminate our continued upward trajectory, plain figures are, I think, deceptive to some extent. They say nothing of the complicated tasks being tackled across the year by Nord Pool's expert teams in a variety of areas and in offices sited to be in close physical proximity to our customers.

Kari Ekelund Thørud CEO

That way we can be sure that we are never out of earshot of their interests and concerns. But what the numbers do show is that our business is moving forward proudly and as one, with our integrity maintained and with our goal the pursuit of excellence. With that in mind it is pleasing that our figures for 2019 continued to provide the underpinning for our robust and continued growth.

If there is one inescapable conclusion to draw from our numbers for the year, it is, I believe, that, in power exchange terms, we exist at the centre of increasingly real competition. In that atmosphere it is vital that we continue to achieve reliably strong numbers in existing markets, while maintaining positive momentum in new ones. Doing so will surely create the solid ground on which to construct expansion not just into new geographical locations, but in terms of the products and services we can offer.

Staying focused

Although a continued 'habit' of getting records under our belt might be seen very much as 'business as usual' for Nord Pool, it would be a mistake to assume that such achievements are somehow either unremarkable or unrecognised. With evidence of power market competition all around us, we must never permit complacency to establish itself within our operations. While the absolute necessity to serve our customers remains, that would be unforgiveable.

Our core customer focus, the individual and personalised attention that we are able to bring to all of our extremely valuable customer relationships, serves Nord Pool well in two ways. For a start, it ensures that our existing customers are comfortable and confident to continue to work with us. But it also creates an appealing prospect for new customers, attracting them to contact us about getting the most from Europe's Nordic-based power market. What never changes, I think, is the need to ensure that our customers – who are, after all, the most important people in our business – can continue to depend on us to create and bring to market the products, services and innovations they tell us they must have to make their trading lives simpler.

Changing with the challenges

The end of the year at Nord Pool heralded a fundamental change for us, as we announced a new ownership structure – pan-European exchange group Euronext had agreed to purchase 66% of the share capital and voting rights of Nord Pool Holding AS.

The agreement, a most welcome development from our perspective, saw Euronext enter into partnership with the previous owners of Nord Pool, the Nordic and Baltic Transmission System Operators (TSOs). There was a real sense of excitement among the team at Nord Pool to have a strong European company like Euronext as our new majority owner. But of course, there are two-way benefits stemming from this new relationship. While we see Euronext as a superb partner, playing to Nord Pool's strengths, we know that we also have a role to play in the wider success of Euronext, too. That will require us to contribute to the Euronext group's broader ambitions towards diversification of revenue mix, while also helping to reinforce its commodity presence.

With this news I am very confident to say that we are undoubtedly moulding our business into one that is entirely fit for the competitive future we face. Nord Pool has been an active power exchange for more than a quarter of a century now, and we know from our accumulated experience that a pioneering drive is an unnegotiable necessity if we are to establish new means by which to achieve the best results for our customers.

Looking ahead

2019 was, I think, a year we spent playing a central part not only in contributing to the greater good of the pan-European power market, but also helping to engineer its – and our – success, by working to accommodate the multi-NEMO landscape which wider power market competition demands.

Our world, as a power exchange, is increasingly characterised by change and new developments. Some might see that as a cause for concern. At Nord Pool we prefer to embrace the challenge it presents, adapting what we do for the benefit of our customers, while remaining true to our core values – delivering transparency and integrity to the benefit of all market participants.

On a personal note it is incumbent upon me to express my gratitude to all my colleagues at Nord Pool, to our existing owners and our new majority owners at Euronext, and – most importantly – to all of our customers, for their on-going support as well as for their forthright sharing of viewpoints and challenges.

I began with an examination of the encouraging volumes of trade which continue to be placed with us by our customers, no matter their size or geographical location. But equally important to everyone at Nord Pool are the honest views that our customers provide. I can assure you that we listen, we act and we react because that feedback is invaluable in helping to shape everything we do to deliver efficient, simple and secure power trading, where, when and how our customers tell us they need it. I would ask our customers please to remain equally frank and challenging in this new decade - at Nord Pool we depend upon that in order to remain always at our best.

New Year – New Owners

As 2019 came to a close, Nord Pool welcomed the news that Euronext, the pan-European exchange group, had entered into a binding agreement to acquire 66% of the share capital and voting rights of Nord Pool Holding AS.

Under the agreement Euronext, which operates regulated markets in Belgium, France, Ireland, The Netherlands, Norway, Portugal and the UK, committed to enter into a partnership with the former sole owners of Nord Pool, the Nordic and Baltic Transmission System Operators (TSOs), governed by a shareholders' agreement.

The transaction also contributed to the Euronext group's ambition to diversify its revenue mix and reinforce its commodity franchise, at the same time as growing its presence in the Nordic region. Euronext is headquartered in Amsterdam and primary listed on Euronext Paris. Welcoming the change of ownership Kari Ekelund Thørud, CEO of Nord Pool, said: "Everyone at Nord Pool was excited to have a strong technology-driven, European company like Euronext as our new majority owner. With a solid European footprint, ambitious Nordic expansion plans and in-depth exchange technology know-how, we see Euronext as the ideal partner, complementing Nord Pool's established strengths.

"At Nord Pool we make it our business to continuously adapt to evolving market demands and strive to deliver simple, efficient and secure power trading to our customers. This welcome development with Euronext was something that our customers and partners undoubtedly saw as a positive outcome.

"What the change of ownership did not do, however, was to change the fundamentals of the power markets where we operate. Nord Pool will continue to deliver transparency and integrity to the benefit of all market participants." Stéphane Boujnah, Chief Executive Officer and Chairman of the Managing Board of Euronext, added: "Acquiring Nord Pool represents a new milestone in developing Euronext into the leading pan-European market infrastructure, as well as in achieving our ambition to grow further in the Nordics.

"Expanding to the power market is key to Euronext's mission of financing the real economy. By joining forces with Euronext, Nord Pool will be even better positioned to support the shift to new ways of managing power supply in the face of climate change and the transition to sustainable growth.

"We have been very pleased to welcome Nord Pool's highly skilled employees, whose expertise in running power markets will reinforce Euronext's commodities franchise, into our family."

The transaction was subject to regulatory and competition approvals, completed in January 2020.



2019 Highlights

January

The year begins with Nord Pool starting delivery of services to the newly commissioned Nemo Link Interconnector between the UK and Belgium (the first new interconnector in the UK since 2011) providing shipping services to help facilitate NEMO Link's regulatory obligations under EU Capacity Allocation and Congestion Management (CACM) guidelines.

March

Nord Pool celebrates the 20th anniversary of launching the world's first multicountry intraday continuous trading market – Elbas – established in Finland and Sweden.

The split of Nord Pool into two separate entities is confirmed, in response to CACM and a sale process for the business begins.

Berza električne energije d.o.o. (BELEN), the power exchange of Montenegro, announces the selection, after an open competition, of Nord Pool as its partner to create the first competitive Montenegrin day-ahead power market. It is planned the new market will become operational in early 2020.

May

A statement from Ofgem, the government regulator for gas and electricity markets in Great Britain, concerning GB–Ireland market coupling, is welcomed by Nord Pool, as it emphasises the importance of establishing a level playing field between power exchanges.

June

Monthly trading records are achieved in Nord Pool's intraday markets in Austria, Belgium, Denmark, France, Germany and Norway.

July

Completing its market offer for central and western Europe (CWE), Nord Pool successfully launches day-ahead power trading – making it the first power exchange to offer day-ahead trading across the Nordic and Baltic region, the UK and CWE.

In an acknowledgement of the increasing role of technology in power trading, for the first time more than half (52%) of intraday volume traded through Nord Pool across all markets is done by Application Programming Interface (API).

The day-ahead markets newly launched by Nord Pool in Austria, Belgium, France, Germany/Luxembourg and The Netherlands, attract volume of 13.8 GWh in their first week of trading.

November

Nord Pool's European Market Coupling Operator (EMCO) business completes the IT implementation project to support day-ahead implicit auctions on the new 1GW ElecLink interconnector between the UK and France, providing shipping services when ElecLink goes live in 2020.

Nominated Electricity Market Operators (NEMOs) and Transmission System Operators (TSOs) confirm the successful go-live of the Single Intraday Coupling – SIDC (formerly known as XBID) second wave, with significant increases in traded volumes across the seven countries which joined the SIDC. This brings to 21 the number of countries coupled through SIDC.

December

Nord Pool extends its proven Urgent Market Message (UMM) transparency platform to include Transmission Outage Messages, Offshore Grid and other Market Information Messages available in the Nordic Transmission System Operators' system NUCS, providing all relevant unavailability information for the Nordic and Baltic region.

Intraday trading on Nord Pool sees a monthly total volume record of 1.95 TWh achieved.

Pan-European exchange group Euronext announces an agreement to acquire 66% of the share capital and voting rights of Nord Pool Holding AS (the Nord Pool group), thereby becoming the new majority owner of Nord Pool.



Key facts and figures



15.8 TWh Nord Pool intraday markets (a new record)



TWh Total volume traded





Nordic system price (average price in EUR/MWh)

The system price is an unconstrained market clearing reference price for the Nordic region. It is calculated without any congestion restrictions by setting capacities to infinity. The system price is calculated locally at Nord Pool after area prices are calculated for all bidding areas. Flows between the Nordics and The Netherlands, Germany, Poland and the Baltics from the area price calculation are taken into account in system price calculation.



Average system price (Nordic)



Day-ahead

Nordic/Baltic day-ahead volume turnover 2019

(per country in TWh)



Traded volume growth (in TWh)

A total of 494 TWh traded in 2019



Intraday

Intraday volume turnover 2019

(per country in TWh)



Percentage of trading undertaken by Application Programming Interface





Embracing Competition in the Nordic Region

In recent years, playing a central role in implementing the Multi-NEMO (Nominated Electricity Market Operator) Arrangements (MNA) for the Nordic region has been key for Nord Pool.

The introduction in the Nordic area of the same competitive environment seen in central and western Europe (CWE) is something Nord Pool embraced from the start. We see this as an important, logical step in full delivery of the Capacity Allocation and Calculation Management (CACM) guidelines.

Our belief, drawn from experience, is that competition among NEMOs is good; bringing increasing value and efficiency to customers. But realising that potential assumes competition is fully and properly implemented. We cannot take that for granted and must give it our full attention, to attain.

Looking forward to competition

Much work has gone into realising the Nordic MNA. At the time of writing we feel the finishing line almost within touching distance.

Marja Eronen, Development Manager at Nord Pool, feels customers must be at the very heart of market design: "We are very aware that, although NEMOs and Transmission Service Operators (TSOs) are responsible for implementing, for example, the CACM guidelines, it is often our customers who feel the impact. "For that reason, power markets ought best to be designed and implemented in a way that accounts for customers' opinions, challenges and needs. We are here, as we always have been in the Nordics, to provide ease of access for market participants and to facilitate efficient use of power production assets and consumption, locally and across borders, to benefit wider society."

Our ambition

Hilde Rosenblad, Senior Advisor Public and Regulatory Affairs, echoes Marja's viewpoint: "For us, Nordic MNA is about providing a simple market, available to all levels of participants in a cost-effective way.

"Nord Pool is widely seen as the Nordic champion. Our focus for some time has been developing the Nordic market to enable the resolution of real challenges, whether from customers or TSOs. We are proud to be engaging in – and solving – Nordic-specific problems for our customers. After all, that is what we are good at!"

The proof of Nord Pool's 'Nordic champion' position lies in the practical innovations delivered – and on-going – for the area. These include;

- Offering extended intraday trading in Finland
- Consulting on new directions for 'Nordic market design 2.0'

- Creating a clearing model to reduce collateral for all customers (a visible and very real benefit of Nord Pool providing a single clearing and settlement solution)
- An intraday fallback solution outside of the pan-European Single Intraday Coupling's XBID platform with local trading for the Nordics, where customers can trade local products with Nord Pool within the region
- Ensuring power market transparency by active engagement with TSOs and regulators in the region
- Enabling one single data source for transparency data – Urgent Market Messages; including core information from Nordic TSOs after launch of their NUCS

And Marja Eronen believes parity is important: "Looking at the Nordic region compared with central Europe we see differences around implementation of MNA. Regulators, TSOs and other industry bodies need to understand that competition and markets only work properly in a level playing field."

Establishing common ground

One example is the differing Nordics and CWE fallback methodology. Marja continues: "If the Nordic market is decoupled from Europe, locally agreed rules allow more time to achieve a price from the shared order book, than in central western Europe. The Nordic region decouples from the pan-European market and if it is unable to find a solution by 8pm the fallback, though perhaps not perfect, is to reference the previous day's prices and volumes. "In central Europe, the combination of shadow auctions on each border, TSO nomination deadlines and each NEMO calculating prices separately in certain fallback scenarios, is hard for market participants to manage."

Hilde adds: "A perfect solution with fallback positions in market decoupling has yet to be found – and both the situation and customer priorities in the Nordic and central European regions differ, with the CWE's high renewables market component. But the key seems to lie in granting market participants more time to handle a complex and pressurised situation, while not separating order books. This is what Nord Pool advocates."

This situation highlights some of the less desirable aspects of the CACM guidelines. Nord Pool's concerns are twofold. First there remains a risk market participants end up on the paying side if NEMO competition is not on equal terms in all regions. Second is an increased operational risk with multiple prices in varying bidding zones. There is a need to find a way forward. Nord Pool is working hard to realise it.

The Challenge of diversity

The future of physical power markets, whether in the Nordics or elsewhere, involves the participation of increasingly diverse assets, while facing greater challenges in the form of large changes in assets and production facilities.

"That makes it even more essential to ensure the Nordic market is transparent and simple to participate in," comments Marja. "Providing high liquidity, an efficient supply/demand balance and non-discriminatory access to markets and cross-border capacity.

"We strongly advocate a 'participant-centric design' to attract market participants and assets while allowing the economically and technically efficient resolution of future challenges. "The market needs to be enabled and incentivised to resolve balancing of the power system through market-based mechanisms up-to-delivery. That would allow a TSO focus on handling unexpected 'emergencies' beyond the markets' ability to manage."

True to our principles

Hilde Rosenblad sums up the situation as Nord Pool sees it: "We want to be the preferred provider of power exchange services in the Nordic region. We would not be doing our job properly if we did not believe that we can, and do, offer customers the best products and services – as we have for many years.

"With Nordic MNA live we want traders to feel that, fundamentally, nothing need change; they can continue to trade confidently and securely with Nord Pool as they always have. "They will have access to the same kind of liquid transparent market they have had since 1993 – though there have been many market developments since then, of course! And they will also continue to play a central role in – and benefit from – our on-going work on market development."

At Nord Pool we believe broader power market competition allows us to provide customers with efficient, simple and secure power trading giving the very best value.

These have been long-held principles. We would be letting customers down if we changed them now!

> Marja Eronen Development Manager at Nord Pool



Central to Our Success

In the central and western Europe (CWE) region (comprising Austria, Belgium, France, Germany, Luxembourg and The Netherlands), 2019 was truly a landmark year for Nord Pool. At long last we were able to realise our full ambitions by launching a day-ahead market in the region.

Pietro Rabassi, Nord Pool's Director Central European Markets, believes the importance of this development should not be underestimated: "Providing robust day-ahead trading was the missing link in our CWE offering. The fact that we have made good progress in the region during the year is very much down to our being able to have a full, active and appealing power trade offering."

Today, Nord Pool brings intraday and day-ahead markets, plus a broad range of related services to the CWE region. "We are experiencing steady organic growth. The only 'missing' part of the equation in the area, geographically at least, is Poland, which is coming soon," comments Pietro.

Core markets

Nord Pool has offered intraday trading in Germany since 2006, but only since the advent of the XBID (now Single Intraday Coupling – SIDC) project in 2018 have there been the all-important shared order books, a highly significant development for customers, as Pietro outlines. "2019 was the first full year of Nord Pool's intraday offering in CWE and I'm delighted to say that our intraday market increased by over three times, when compared to our 2018 volumes. For a challenger Nominated Electricity Market Operator (NEMO) that is no small achievement."

Although Nord Pool's market share, for the time being, may be relatively modest, it is continuously growing. But why? Pietro believes he has the answer, from talking – and listening – to a great many market participants and other stakeholders active in the region, over the past few years.

"It's clear that customers want to see viable trading alternatives without having to think about the 'liquidity trap'. Shared order books in intraday and day-ahead mean they can disregard liquidity concerns and focus on the rest of their operations and on what the NEMOs can offer them.

"That's where we feel we can contribute in valuable ways. Customers tell us they find Nord Pool simple and easy to use, as well as being more competitive from a total cost of trading perspective. That's great news for our future growth."

Steady success

Throughout 2019 Nord Pool has seen positive momentum, with steadily increasing trading volumes, in CWE. Pietro Rabassi believes that this is growth built on solid foundations: "Our day-ahead market in CWE is highly important, as it very much represents the backbone of power trading. To get the full benefit of trading at Nord Pool you really need to be active both in day-ahead and intraday. Today we have more than 20 customers in day-ahead and more than 50 in intraday and that number is growing."

Bringing down the barriers

Nord Pool has always prided itself on lowering barriers to entry to the power market for businesses of all sizes, no matter where they trade from. In CWE, as Pietro reveals, we are remaining true to that goal.

"Our customers in CWE are finding out for themselves that with Nord Pool they can trade simply, easily and in a cost competitive manner," he says. "We are already seeing the first cases of customers that are able to join the open market for the first time through Nord Pool. It is a pleasure to bring these new participants into the market."

Charles Lapierre, Nord Pool's Central Europe Key Account Manager, continues: "We also want to provide an attractive alternative to OTC (Over the Counter) trading, which is still quite prevalent in CWE. Bringing those volumes of trade into the open market would certainly help make it more transparent and create more robust pricing, which would be good news for all participants, we believe."

Find out more about why energy trading businesses such as <u>European Commodities</u> and <u>Sunnic</u> welcome Nord Pool's presence in the CWE region.

Future direction

A key part of Pietro and his team's brief is to understand – and cater for – new developments in the CWE power sector. They are seeing a variety of trends, as he explains.

"There are a number of key trends we see in the market which we are constantly working to accommodate. Intermittent renewables are playing an ever-greater role across Europe. We already see about 40% renewable generation in Germany. That is set to rise to 65% by 2030.

"Trading closer to delivery is being driven by the increased role of renewables in the market, as weather forecasts become more certain the closer you get to delivery and market participants seek to avoid the potential costs related to being in imbalance. To accommodate this need, we were the first NEMO to shorten gate closure in intraday trading in Germany; up until delivery in a single TSO area and down to 20 minutes Germany-wide, a big improvement on the situation a few years ago."

Charles Lapierre sees additional changes in the market: "We also have an ever more complex market environment with a related increase in API (Application Programming Interface) trading – that is, automation and/or trading by algorithms – which we must cater for in both intraday and day-ahead.

"Intermittent renewables tend to drive down prices in the wholesale power market, making customers increasingly cost conscious. We know we need to reflect that by being as cost competitive as possible."

Pietro continues: "With more renewables in the mix and consumption patterns changing thanks to new developments such as electric vehicles and batteries, decentralised flexibility markets are also becoming increasingly important. "And in a more dynamic energy environment we see that big utilities focus on new arenas such as 'smart' digital services. The traditional market participants are changing and adapting, taking advantage of new opportunities – new types of businesses are emerging. At Nord Pool we need to be on the lookout for how to best cater for the changes in our customer base, for the new types of customers and markets that we see coming through."

Taking-on challenges

In an atmosphere of change, maintaining a robust market in CWE is not without its challenges, as Pietro outlines.

"We are seeing that many, if not most, traders in intraday are API traders, with orders being placed by automated and algorithmic systems. At Nord Pool we continuously work to ensure our systems are able to facilitate for increased API trading and the greater load that it represents."

> **Pietro Rabassi** Director Central European Markets

"Nord Pool's presence in the market brings a much more cost competitive structure and more dynamic collateral management for us." Axel Baudson Director of Business Development, European Commodities Pietro also believes that, to create a better market environment for all participants, there are some wider aspects of trading in CWE that need to change.

"We are firm advocates of shared order books in all timeframes and for all products. Why? Because that is the only way to diminish the concerns traders have over liquidity and hence allow businesses freely to choose which NEMO they prefer to trade with.

"In the intraday arena we must make the SIDC available in all timeframes – for example in the increasingly important last half hour of trading in Germany, Austria and France, where there is no shared order book today. Why should this hour be traded in local order books rather than shared to benefit market participants?

"We would be delighted to see further development of the intraday market, such as cross-matching of intraday products, under the SIDC banner and not in local markets."

"We have also had frustration expressed to us by customers," comments Charles, "that certain popular products have fallen outside the boundaries of the SIDC. Our view is that having the full suite of products available in the SIDC is important to truly achieve shared liquidity. Without that, businesses can feel that they are 'tied' to the NEMO that offers these – and that inevitably limits choice."

Influencing change

And there are other areas where the experience with market coupling in CWE so far proves a need for some important changes.

"In the day-ahead market, should there ever be a difficulty in coupling the different NEMOS' orderbooks, customers and NEMOS alike need more time to be able to detect and solve problems," explains Pietro.

"In the realms of legislation and regulation, we see the need for rules to apply across countries and, where necessary, for domestic laws to be changed to allow for the equal treatment of all NEMOs. For example, the price index in a given country is frequently very important for renewables subsidies, as is the case with the EEG law in Germany – such laws or frameworks should not favour one NEMO over another. After all, the daily price does not 'belong' to one NEMO anymore.

"In some respects it is a new world in power markets and there is some catching up to do. Established habits need to change. When it comes to lobbying activities, we see increasing numbers of customers supporting us in forums and meetings organised by third parties such as TSOs and regulators. We are pleased and proud to be a voice for our customers and it's clear that they appreciate it. Many industry bodies and lobby groups welcome a fresh, alternative viewpoint to that of the incumbent. We are happy to provide that."

In the all-important area of provision of market data, it is Nord Pool's view that there also remains room for improvement. All NEMO data should be included in all relevant indexes on equal terms. If data from the incumbent is 'favoured', there is a real risk of not including an important part of the market, while trading entities will lack information for their analytics.

A challenger needs to turn every stone to achieve equal treatment. At Nord Pool we are doing just that and finding established structures, legislation and procedures that still need to change to create truly equal treatment of NEMOs. However, we are very happy to be an integral part of offering an alternative to what already exists. We are in central Europe for the long term and will continue the journey together with the many customers that welcome us.

Pushing ahead

Of course, power market competition is not universal within Europe, but Pietro Rabassi lives in hope of change here, too.

"Some European countries are still closed to competition," he points out. "We want to see them open up. That may chiefly be a matter for the European Commission, but as a NEMO the question is on our agenda too and we are pushing for change. After all, we have a taste for growth now – we want to expand into new markets."

And Pietro believes that developments at the end of 2019 may strengthen Nord Pool's position: "We are very aware that we are the challenger in CWE, but now we are a part of the wider and more influential Euronext group. That brings the prospect of a broader reach and the potential for new opportunities.

"We feel there is a very positive future for Nord Pool and our CWE customers. That's especially true as long as, as a power market, we remain true to our core principles – staying well priced, providing the very best customer service and a full, robust, marketleading and easy to use offering of products and services.

"And you can trust us to do that."

OUR CWE MARKET AT A GLANCE

Participating countries Austria, Belgium, France, Germany, Luxembourg, The Netherlands

Customers ~ 60 in 2019

Customers growth year-on-year ~ +30% **Day-ahead** Launched in 2019 2.5TWh traded

Intraday 7.7TWh traded in 2019

Intraday growth year-on-year +200%

Watching the Market – in Fairness to All

Key to the robustness of Nord Pool's markets and to the transparent and reliable trading on which trust in those markets relies, is a small group of experts in our Market Surveillance team. Just as the power sector has developed and, indeed, transformed significantly in the past decade, so too has Nord Pool's Market Surveillance function.

Perhaps the most pronounced sign of that transformation has been a move towards more automated trading, which Market Surveillance has mirrored with an increase in its own automated surveillance tools. Recently this has been a particular focus area, where the team has used its expert market knowledge to develop tailor-made solutions. This capability allows Market Surveillance to react rapidly to unpredictable developments in the market, such as changes to market design or new regulatory guidance.

Maintaining the fundamentals

Niklas Cremer, part of Nord Pool's fourstrong Market Surveillance team, believes that, although change is inevitable and necessary, the fundamentals of keeping an eye on a busy and complex market remain the same. "Our chief task has always been to monitor trading activity to maintain trust, robustness, fairness and transparency," says Niklas. "That's all well and good, but we cannot just do that, sit back and be satisfied. We understand our role today as being much more.

"Although we have an explicit regulatory obligation to find and report any and all cases of market abuse, we have taken a conscious decision to adopt a more proactive approach. We firmly believe that it is much more effective to do all we can to prevent market abuse from happening in the first place!"

A complex picture

Of course, it goes without saying that members of Nord Pool's markets operate to the highest of standards in their work around regulatory compliance. But as the power market world is complex and changing, a common cause of market abuse stems from simply misunderstanding the rules.

Niklas continues: "This problem is something which we address head-on by actively engaging in dialogue with market participants. That allows both sides of the surveillance equation to reach a common understanding of how to interpret the important regulations that apply to power trading activity." And with trained, knowledgeable and experienced experts on hand at Nord Pool, communication on rules and regulations is an open, and two-way, street: "Our members very often come to us with questions relating, for example, to compliance with the EU Regulation on Energy Market Integrity and Transparency (REMIT).

"They often want to discuss specific trading practices, updates to regulatory guidance or how best to handle insider information. The team here has plenty of experience in these areas and is always happy to help. In fact, together with a number of market participants, we have taken the initiative and produced a dedicated REMIT Best Practice Report to help with the do's and don'ts."

Customer dialogue

Customer dialogue is an important common thread running through Nord Pool's business and the Market Surveillance team is no exception.

Throughout the year the team holds regular meetings with customers in order to better understand their business, how they view the market and how they see their role within it. In addition, the Market Surveillance team takes an active role in exporting its knowledge to benefit the wider market, seeking out regular opportunities to present at conferences and industry gatherings, working towards a common understanding of the regulations.



That is a further plank of the team's wider mission to listen, learn and guide, as Niklas explains: "We try to be open in our views and encourage discussion with market participants and regulators alike, in order to align everyone's understanding. Without such a close dialogue it would be difficult to maintain the competence necessary for properly performing our tasks.

"Uncovering a divergence in views over, say, how a particular rule or regulation is viewed or interpreted is immensely valuable. We see the power market world one way, but that does not necessarily mean that we have all the answers at our fingertips. It is a true team effort and there is huge value in guidance from regulators and the Agency for the Cooperation of Energy Regulators (ACER).

"We see our role very much as that of a middleman between regulatory authorities and customers. Our aim with this active dialogue is to positively contribute to a well-functioning and fair market."

In pursuit of perfection

Another aspect of this widely consultative approach is to help identify inherent flaws in the rules and guidelines themselves – adding to the Market Surveillance team's elusive and never-ending pursuit of perfection! Market Surveillance team members (left-to-right) Jon Rokne Bolkesjø, Niklas Cremer and Christian Giswold

"It sometimes becomes apparent," explains Niklas, "that some market abuse is only made possible due to imperfections in market design. We try to identify and understand these imperfections and, alongside our colleagues across the business, to actively work towards market design that neither allows nor encourages abusive behaviour. What that means in practice is that the team has an active role to play engaging in on-going regulatory work and consultations to help shape emerging regulation for the better." At Nord Pool several dedicated market design experts are fully committed to striving for a better market. Market Surveillance supports these efforts and provides its input to relevant consultations, in some circumstances actually taking the lead. For example, during summer 2019 the team responded to a draft guidance note on price spikes in wholesale electricity markets by the German regulator and also on the European Network of Transmission System Operators consultation on co-optimisation methodology for crosszonal capacity allocation.

Following closely any consultations and regulatory updates allows the team to defend and maintain the fundamental market principles on which our business is built.

During 2019, Market Surveillance was especially pleased to see ACER's updated guidance on the publication of inside information, as Niklas explains: "The update specifies that inside information shall be published on central information platforms and sets out certain minimum requirements for those platforms.

"For us, this is an important step towards ensuring that all market participants will have equal access to significant changes in market fundamentals. Our view is that publishing inside information on individual company websites or through paid access is not in the spirit of REMIT. "In this respect we lead by example; information on our Urgent Market Message platform can be accessed, free of charge, through an API, web feed, or web interface. Market Surveillance sees this as the best solution for the market and would like it to become standard across Europe."

Making a case

Market Surveillance is also on the receiving end of contact from market participants whenever and wherever they come across behaviour they suspect to be market manipulation or insider trading. When reports and enquiries like this reach the Nord Pool team, they are always followed up closely.

Market Surveillance Analyst Jon Rokne Bolkesjø reveals more: "A case can be generated with us in three different ways. Most regularly Nord Pool's custom-made automated systems detect a suspicious trading pattern and alert us accordingly. In other circumstances we discover what we term an 'outlier' through our manual monitoring routine. Or we will be informed about a specific incident in the market by a third party. Those observations are of particular value, since they show how the market looked from a trader's perspective. Such communication is of course always treated in the strictest confidence and the incident carefully investigated."

Assessing behaviour

All unusual events and notifications are passed through a first assessment by a Market Surveillance analyst. Jon explains, "We are looking for market fundamentals or known trading behaviour by the market participant that could explain things. Our established alarms generate several hundred 'events' every week and it is important to be able to efficiently filter out 'false positives'. "For those alerts that we do not dismiss after first assessment, we start a more in-depth analysis. We may also decide to ask questions of the market participant in order to be able to decide on the case.

"Before contacting the market participant involved, we do, however, always consider whether this could, in any way, damage any subsequent investigation by a regulator. That said, in most cases we contact the market participant to obtain their explanation of the behaviour we have seen. Insight into these matters from market participants is a really valuable resource. More often than not a simple consultation will provide a legitimate explanation of the observed trading patterns.

"Based on the available information, we then have to decide whether we have a reasonable suspicion that this behaviour might represent a breach of REMIT. If that is the case, it is our legal obligation to inform the relevant regulator(s)."

A message to the market

So the overall message is clear – Nord Pool's Market Surveillance team is constantly vigilant over suspicious trading activity in order to ensure regulatory compliance, fairness and transparency for all market participants, regardless of their size or where they trade from.

The team's door is always open for questions or information on unusual trading activity in the market. Like the market itself, the Market Surveillance team never – well hardly ever – sleeps!

Directors' and Financial reports

Report of the Board of Directors

Nord Pool Group

TSO Holding AS (formerly Nord Pool Holding AS) is located in Oslo. As per 31st December 2019 TSO Holding AS embodied the Nord Pool Group which is constituted by the parent company TSO Holding AS, and subsidiaries: the European Market Coupling Operator AS (EMCO), Nord Pool AS (PX), Nord Pool Holding 2 AS, Nodes AS and Nodes Tech AS. The structure originates from the 2018-demerger of Nord Pool AS, separating the EMCO (monopolistic) and Nord Pool (competitive) operations into two separate legal entities.

European Market Coupling Operator AS has two subsidiaries, European Market Coupling Operator AB (Sweden) and European Market Coupling Operator Oy (Finland). Nord Pool AS has three subsidiaries, Nord Pool AB (Sweden), Nord Pool Finland Oy (Finland) and Nord Pool Consulting AS (Norway).

European Market Coupling Operator AS holds NEMO licenses in 15 countries. Through delegation of these to Nord Pool AS the Group organises simple, efficient and secure physical power trading – centred on day-ahead and intraday markets – for customers in the Nordic and Baltic countries, the UK and the central and western European region (Germany/Luxemburg, France, Austria, The Netherlands and Belgium). Additionally, the Group services the power markets in Croatia and Bulgaria. The Group also offers compliance services for its customers and for transmission system operators (TSOs), around European regulatory requirements such as the Regulation on Energy Market Integrity and Transparency (REMIT) and others.

The Nord Pool Group has its main office in Lysaker, and branch offices in Espoo, Stockholm, London and Berlin. As of 31st December 2019 the Nord Pool Group is owned by the Nordic and Baltic TSOs Energinet, Fingrid Oyj, Statnett SF, Svenska kraftnät, Elering AS, Augstsprieguma tikls AS and Litgrid AB.

Operational Highlights

2019 was a successful year for the Nord Pool Group as we launched day-ahead power trading for customers in the central and western Europe region (CWE), making us the first power exchange to offer day-ahead trading across the Nordic and Baltic region, the UK and CWE. Significant efforts were made in developing and upgrading Nord Pool's day-ahead trading platform ahead of the CWE launch. The launch is a result of the go-live of the Multi Nemo Arrangements (MNA) arising from the European CACM (Capacity Allocation and Congestion Management) Regulation, which allow multiple power exchanges to operate in the same markets across Europe. This is part of the EU target model towards creating a single pan-European market to improve efficient use of energy across national borders, with shared access to market liquidity.

Nord Pool Group also took part in the second wave launch for the European Single Intraday Coupling (SIDC, formerly known as XBID). The launch marked another important step towards expanding the single integrated European intraday market. Significant efforts were also made in advance of this launch to ensure technical readiness and to increase the capacity of our intraday trading platform to cater for growth in the intraday market. The SIDC solution is based on a common IT system with one shared order book, a Capacity Management Module and a Shipping Module. It allows for orders entered by market participants for continuous matching in one bidding zone to be matched by orders similarly submitted by market participants in another bidding zone, if transmission capacity is available.

Research and development (R&D) efforts in the Nord Pool Group are largely related to IT in general, and software development related to our core systems in particular. Software development during 2019 in particular related to projects such as launch of day-ahead trading in CWE and the second wave launch for the SIDC. During 2019 a total of 494 TWh of power was traded through Nord Pool, including the Nordic and Baltic day-ahead market (381.5 TWh) and the UK day-ahead market (94 TWh). Our intraday markets achieved all-time high results, with 15.8 TWh traded – nearly doubling the figure of 8.2 TWh achieved in 2018. Meanwhile Nord Pool's newly launched central and western Europe day-ahead market achieved almost 2.5 TWh of power traded by year end.

The company administration has supported a process initiated by the Board of Directors with the objective of considering strategic options for the Nord Pool Group. On 5th December 2019, the current owners and the pan-European exchange group Euronext, jointly announced that Euronext had entered into a binding agreement to acquire 66% of the share capital and voting rights of Nord Pool Holding 2 AS, including the subsidiaries Nord Pool AS and European Market Coupling Operator AS. The transaction was formally completed on 15th January 2020.

The Board wants to express its gratitude to its customers and employees for their contribution in 2019.

Annual Accounts 2019

Group revenues in 2019 were NOK 384.5m (2018: NOK 382.9m) whereas operating profit was NOK 73.6m (2018: NOK 103.2m). Net income amounted to NOK 26.2m (2018: NOK 62m) for the Group. Corresponding numbers for TSO Holding AS were revenues of NOK 0m, operating profit of NOK -15.9m and net income of NOK 41.7m. By the end of 2019, total equity and liabilities for the Group were NOK 1.833,7m (2018: NOK 2.677m). The equity and liabilities of TSO Holding AS were NOK 334.7m as at 31st December 2019 (2018: NOK 333.6m).

The two 50% owned companies Nodes AS and Nodes Tech AS are in a build-up phase and the negative result stemming from these companies is expected to yield long-term positive contributions to the Group.

The Board of Directors considers the equity to be adequate with regards to the company's exposures and collateral posted by market participants.

The annual accounts are prepared on the going concern principle, and the Board of Directors confirms the basis for this. No events of material significance (for the 2019 annual accounts) have occurred up to and including the signatory date of this report.

Liquidity

Group cash and cash equivalents changed from NOK 555m at the end of 2018 to NOK 1,137.5m at the end of 2019.

Risks

Nord Pool Group's activities have no negative impact on the environment. The group operates in an environment increasingly defined by regulatory requirements. This gives rise to new business risks – and opportunities – such as potential market entry of new competitors, regulatory or other legal amendments, technical changes or modifications of the product landscape, etc.

Market Risk

The Nord Pool Group is exposed to currency risk, as physical power trades are settled in multiple currencies. This exposure is hedged using contracts where settlement and VAT is hedged daily, while revenues are locked-in once a week.

In the UK market, the Nord Pool Group also faces imbalance risk due to being a nomination agent and thus requires members to post collateral reflecting replacement cost in case of non-delivery or rejection of notified volumes.

As we enter a more competitive environment among power exchanges due to the advent of a single European power market, Nord Pool anticipates greater competition in its established markets, mirroring our own growth in the CWE region. The Board regards Nord Pool to be very well positioned for competition.

Nord Pool is campaigning to ensure robust cost recovery associated with work undertaken in relation to European market coupling. At the time of writing, this is not assured.

Credit Risk

All Nord Pool trades are settled on the day of trading or on the following business day, with invoices and credit notes being dispatched in the afternoon. Financial settlement is due one banking day after trading for net buyers and two banking days after trading for net sellers. The credit risk related to financial settlement is mitigated by holding collateral as a payment guarantee for unpaid invoices. Collateral requirements are regulated by the Clearing Rules. Collateral can be posted either in the form of cash on a pledged account, or as an on-demand-guarantee or letter of credit. Year-end accounts receivable amounted to NOK 582.8m (2018: NOK 1.752m) of which NOK 568.7m referred to trading.

Variations in settlement cycle following variations in banking days over the new year period combined with variations in physical power prices traded on our markets give rise to significant fluctuations in accounts receivables from year-to-year.

Liquidity Risk

Nord Pool has a solid liquidity position, as invoices from physical power sold as a main rule are due one banking day prior to selfbilling invoices for purchased volumes.

Counterparty Risk

Counterparty risk for Nord Pool is regarded as low and is mitigated through members and financial counterparties being subject to an internal risk assessment prior to trading and financial exposure, as well as monthly monitoring and reporting using both internal and external sources. Members must comply with and fulfil daily security requirements, while the solidity of financial intermediates is monitored using external credit ratings. There was no debtor loss registered for Nord Pool in 2019. In the case of a member default, Nord Pool expects to recover all outstanding claims by calling on the member's collateral.

Risk capital

The concessions granted to the companies in the Nord Pool Group from the Norwegian Water and Energy Directorate (NVE) require that the company holds sufficient risk capital and that the size of this is reviewed regularly. Nord Pool AS holds a sales concession from NVE and has conservatively calculated that the minimum risk capital is NOK 154m. EMCO AS holds a marketplace concession from NVE and has conservatively calculated that the minimum risk capital is NOK 35m. The required risk capital for both companies is derived from assessments of counterparty risk and operational risk, based on the same methodologies as for banks and securities firms

The Group companies comply with the concessions and continuously monitor the situation.

Organisation and working environment

The talent base of the Group is significant. As per 31st December 2019 the Nord Pool Group had 149 employees based in Norway, Sweden, Finland, Denmark, the UK, Estonia, Germany and Lithuania. Of these 40 were in European Market Coupling Operators AS and 109 were employed in Nord Pool AS. Nord Pool Group had 51 female employees and 98 male.

As per 23rd March 2020 the TSO Holding AS Board of Directors consists of two men and two women. The Chairman of the Board in TSO Holding AS is male, while the CEO is female. The Nord Pool Group corporate management team consists of five women and four men.

Health-related absence during the year was 1.4%. No lost-time accidents or personal injuries were suffered in 2019. Nord Pool human resources policy is based on equality, meaning that there shall be no differences between male and female salary when expertise and experience are comparable.

The Group has an equal opportunity approach and encourages all employees to establish solutions which make it easier to combine work and family life. There were six employees on maternity/paternity leave as per 31st December 2019, and the company had one employee working part time at the end of the year.

Lysaker, 25 March 2020

Chris Topple Chairman

Camille Beudin Member of the Board

Geir Heggem Member of the Board

Nicholas Kennedy Member of the Board

Torger Lien Member of the Board

Camilla Vedeler Member of the Board

Marja Eronen Member of the Board

Kari Ekelund Thørud CEO

Allocation of profit

The Board proposes to distribute NOK 49,536,088 as dividend for 2019, and to allocate NOK 0 to other equity.

Outlook for 2020

The Nord Pool Group has 25 years of power market experience built on offering flexibility, transparency, innovation and greater choice to our customers. These themes will be essential for our continued success in the years ahead.

The Board welcomes future competition between power exchanges following the implementation of Multi-NEMO arrangements in the Nordic and Baltic markets. The opening of the Nordic and Baltic markets is expected to take place in 2020, following the opening of CWE markets for competition in 2019. Nord Pool is prepared to extend its market offerings for day-ahead and intraday trading across the Nordic and Baltic region, the UK and CWE.

Positive developments from last year are expected to continue into 2020 and the Group expects strong results for the year overall. Nord Pool remains committed to pioneering European power markets, and to driving innovation for the benefit of all customers and stakeholders.

Further, a project to divest the majority share of the Nord Pool Group (EMCO and power exchange) was closed on 15th January 2020. From this date TSO Holding AS holds 34% of the newly created Nord Pool Holding 2 AS (org. no.: 823 268 572), while Euronext Nordics Holding AS (reg. no.: 923 861 564) holds the remaining 66% of the shares. From this date Nord Pool Holding 2 AS embodies the two subsidiaries European Market Coupling Operator AS (EMCO) and Nord Pool AS (power exchange). This new structure will be reflected in reporting going forward as Nord Pool Holding 2 AS, accounts will be reported instead to represent the entirety of Nord Pool Group activities. The 50% ownership in each of the companies Nodes AS (reg. no.: 920 321 844) and Nodes-Tech AS (reg. no.: 920 824 404) will be retained in TSO Holding AS.

The COVID-19 pandemic has created some uncertainty with regards to the outlook for 2020. The short-term impact on the Group's main business, electricity supply and demand, has been minor so far as the power sector is considered part of critical infrastructure. Although there may be some variation in electricity demand due to temporarily reduced activity and thus a lowered need for power in certain sectors, it is expected that overall electricity consumption will stay reasonably stable and any decline should be short-lived. The Group also has clear processes in place to ensure operational robustness and to mitigate risk. Through its licenses the Group is required to keep subordinated capital to ensure its financial soundness. Subsequently, the impact on the Group's future profitability from the COVID-19 pandemic is expected to be low; it should have no impact on the annual dividend for 2019. Further consequences of the COVID-19 pandemic need to be assessed as the situation continues to develop.

The Board of Directors

Chris Topple Chairman CEO at Euronext, London Global Head of Sales for Euronext

Geir Heggem Member of the Board CFO of Oslo Børs VPS

Torger Lien Member of the Board Representing the TSOs **Camille Beudin** Member of the Board Head of Strategic Development and M&A at Euronext

Nicholas Kennedy Member of the Board Head of Commodities at Euronext

Camilla Vedeler Member of the Board Employee Representative at Nord Pool Trading Adviser

Marja Leena Eronen Member of the Board Employee Representative at Nord Pool Senior Project Manager

Profit and loss account

Nord Pool Group			
Amounts in NOK 1000	2019	2018	
Fixed fee revenues	36 032	34 966	
Volume dependent fees	230 888	223 584	
Other operating income	117 623	124 441	
Total operating income	384 543	382 991	
Depreciation	8 395	6 773	
Payroll expenses	155 169	141 111	
Other operating expenses	147 361	131 899	
Total operating expenses	310 925	279 783	
Operating profit	73 618	103 208	
Net financial items	-30 402	-20 733	
Profit before taxes	43 216	82 475	
Taxes	17 035	20 441	
Net income	26 181	62 034	



Balance sheet Assets

Nord Pool Group		
Amounts in NOK 1000	31.12.2019	31.12.2018
ASSETS FIXED ASSETS Intangibles		
Intangibles assets	19 370	14 971
Deferred tax benefit	1 930	1 191
Total intangible	21 300	16 162
Tangible fixed assets	5 467	1264
Financial assets		
Investment in subsidiaries		
Investment in associated companies	34 062	32 578
Total financial assets	34 062	32 578
TOTAL FIXED ASSETS	60 829	50 004
CURRENT ASSETS Receivables		
Accounts receivables	582 768	1 752 416
Other receivables	52 565	319 193
Total receivables	635 333	2 071 609
Bank deposits	1 137 495	555 127
TOTAL CURRENT ASSETS	1 772 828	2 626 736
TOTAL ASSETS	1 833 657	2 676 740

Balance sheet Equity and liabilities

Nord Pool Group		
Amounts in NOK 1000	31.12.2019	31.12.2018
EQUITY AND LIABILITIES EQUITY Paid-in-equity		
Share capital	53 720	53 720
Share premium	51 300	51 300
TOTAL PAID-IN-EQUITY	105 020	105 020
Retained earnings		
Other equity	207 411	182 054
TOTAL RETAINED EARNINGS	207 411	182 054
TOTAL EQUITY	312 431	287 074
LIABILITIES Provisions for liabilities		
Pension liabilities	3 286	3 517
TOTAL PROVISIONS FOR LIABILITIES	3 286	3 517
Current liabilities		
Derivatives	189	767
Accounts payable	1 352 919	2 234 793
Taxes payable	15 988	18 557
Public duties	55 447	5 920
Dividend	-	45 889
Other current liabilities	93 397	80 223
TOTAL CURRENT LIABILITIES	1 517 940	2 386 149
TOTAL LIABILITIES	1 521 226	2 389 666
TOTAL EQUITY AND LIABILITIES	1 833 657	2 676 740

Lysaker, 25 March 2020

Chris Topple Chairman

Camille Beudin Member of the Board

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Geir Heggem Member of the Board

Nicholas Kennedy Member of the Board

Torger Lien Member of the Board

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Camilla Vedeler Member of the Board

Marja Eronen Member of the Board

Kari Ekelund Thørud CEO

Cash flow analysis

Nord Pool Group			
Amounts in NOK 1000	2019	2018	
Cash flow from operating activities			
Net income	26 181	62 034	
Ordinary depreciation	8 395	6 773	
Change in accounts receivable	1 169 648	-757 969	
Change in accounts payable	-881 874	766 669	
Change in pension liabilities	-231	-441	
Change in other current receivables and liabilities	323 338	28 026	
NET CASH FLOW FROM OPERATING ACTIVITIES	645 457	105 092	
Cash flow from investment activities			
Income from sale of fixed assets	130	0	
Income liquidiation from subsidiary	0	6 000	
Purchase of tangible fixed assets	-5 470	-1 181	
Purchase of intangible fixed assets	-11 830	-10 560	
Purchase of associated companies	0	-37 528	
Investment in subsidiaries	-30	-73	
NET CASH FLOW FROM INVESTMENT ACTIVITIES	-17 200	-43 342	
Cash flow from financing activities			
Payment of dividend	-45 889	-33 179	
NET CASH FLOW FROM FINANCING ACTIVITIES	-45 889	-33 179	
Net change in liquid assets	582 368	28 571	
Liquid assets as of 1 January	555 127	526 556	
LIQUID ASSETS AS OF 31 DECEMBER	1 137 495	555 127	

Accounting principles

The annual accounts have been prepared in accordance with the Norwegian Accounting Act of 1998 and generally accepted accounting principles.

Consolidation principles

The Group accounts include the parent company, TSO Holding AS, and the subsidiaries Nord Pool Holding 2 AS, European Market Coupling Operator AS, European Market Coupling Operator Oy, Nord Pool AS, Nord Pool Finland Oy, Nord Pool AB and Nord Pool Consulting AS.

The Group accounts have been prepared as if the Group was a single financial entity. Intercompany transactions and balances have been eliminated. The Group accounts have been prepared based on similar principles, the subsidiary applying the same accounting principles as the parent company.

A purchased subsidiary is recorded in the Group accounts based on the parent company's acquisition cost. The acquisition cost is based on identifiable assets and liabilities of the subsidiary, which are recorded in the Group accounts at market value at the time of purchase. If the acquisition price exceeds (or is less than) amounts attributable to identifiable assets and liabilities, the excess is recorded in the balance sheet as goodwill (or negative goodwill) and amortised on a straight-line basis over the expected useful lives of the purchased assets. Associated companies are valued in the Group accounts in accordance with the equity method. The allocated proportion of the profit of the associated company is based on the after tax results of the associated company, after deducting any internal gains and any depreciation on any excess value caused by a higher acquisition price of the shares than the acquired part of equity recorded in the balance sheet. The allocated proportion of the profits is recorded in the profit and loss accounts as "Income from associated companies".

Subsidiary

The company's subsidiary is valued according to the cost method in the company accounts. Investments are valued at acquisition cost for the shares unless a write-down has been necessary. Investments are written down to market value if the decline in value is viewed as non-transitory in nature and it is deemed necessary according to generally accepted accounting principles. Write-downs are reversed if the conditions for the write-down are no longer present.

Power turnover

Purchases and sales of electrical power and gas are settled at the same price. Consequently, the monetary value of trading has no effect on the profit level of the Nord Pool Group.

Income from fees

The income base of the TSO Holding Group consists of:

- annual fees
- volume-dependent fees
- FX fees

Volume fees in the physical market relate to power traded (MWh) and are invoiced together with the power following delivery. FX fees apply for customers buying or selling electricity in currencies other than EUR. This is calculated as a % of invoice value.

Other operating revenues

The Group follows generally accepted accounting principles for accounting of revenues. According to these principles, revenues related to subcontractor reinvoicing as agent and without mark-up added should be netted with related costs. This principle has been adopted from 2019, comparable numbers are not changed in 2018.

Classification and valuation of balance sheet items

Current assets and short-term liabilities include items that fall due within one year of acquisition date. Other items are classified as fixed assets/long-term liabilities.

Current assets are valued at the lower of acquisition cost and market value. Shortterm liabilities are recorded in the balance sheet at face value at the time of recording. Fixed assets are recorded at acquisition cost but are written down to market value in the event of a decline in value which cannot be expected to be transitory in nature. Long-term liabilities are recorded in the balance sheet at face value at the time of assuming such liabilities.

Receivables

Accounts receivable and other receivables are recorded in the balance sheet at face value after provision for bad debts. Provisions for bad debts are based on an assessment of individual accounts. In addition, a general provision for bad debts is made covering assumed losses for other accounts receivable.

Foreign currency

Accounts receivable and accounts payable in foreign currencies are valued at the yearend exchange rate on 31st December 2019.

Financial instruments

The Group uses financial instruments to manage foreign exchange exposure. Spot exchange contracts are used solely to hedge currency exposures incurred in connection with the settlement of physical trading. Gains and losses on spot exchange contracts are reported and evaluated in tandem with the hedged item. Gains and losses on hedging instruments rolled over prior to their expiry are recognised in the balance sheet and income statement over time along with the hedged item. Financial derivatives are booked at market value.

Tangible fixed assets

Tangible fixed assets are recorded in the balance sheet and linearly depreciated over the expected useful lives of the assets. Direct maintenance costs related to tangible fixed assets are currently expensed as operating expenses, whereas upgrades and improvements are added to the cost base of the operating assets and depreciated at the same rate as the assets to which they refer.

Intangible assets

The Group has Intangible assets relating to development of software, IT systems, R&D and intellectual property (IP) related to our own clearing and trading system.

Expenditure on own development of intangible assets, including costs for own research and development, is recognised in the balance sheet when it is probable that the future economic benefits associated with the assets will flow to the company and the acquisition cost can be measured reliably.

Intangible assets that are purchased individually are capitalised at cost.

Intangible assets with a limited economic life are depreciated according to plan. Intangible assets are written down to the recoverable amount if the expected economic benefits do not cover the carrying amount and any remaining manufacturing costs.

Pension costs and liabilities

The Group has a contribution-based pension plan for all employees, where the current year's pension costs correspond to the current year's premium payment.

Net pension costs for the year are included as a salary expense in the profit and loss account. Premiums paid are treated as investments in pension funds.

Nord Pool AS has in addition a defined benefit pension plan which provides employees with the right to defined future pension benefits (defined benefit plans). Benefits are based on the number of years of employment and salary at retirement age. This plan covers two former employees. Contributions to the pension fund are made in accordance with the actuarial method of calculation. Pension assets in the pension fund are primarily invested in securities. Pension liabilities are calculated in accordance with the Norwegian accounting standard (NRS) for pension costs.

Pension obligations are valued at the present value of future pension liabilities earned as at the balance sheet date, which are to be paid through the company's own pension fund or financed by operations.

Taxes

Tax expenses in the profit and loss account consist of tax payable for the period and changes in deferred tax. Deferred tax is calculated on the basis of the temporary differences between accounting and tax values, as well as the tax deficit at the end of the year to be carried forward. Tax-increasing and tax-decreasing temporary differences, which are reversed or reversible in the same period, have been eliminated. Any net deferred tax benefits are recorded in the balance sheet to the extent they are expected to be utilised.

As of 31st December 2019, net negative temporary differences between accounting and tax values have been recorded by the Group. The associated deferred tax benefit is recorded in the balance sheet under assets.

Cash flow

The cash flow analysis has been prepared using the indirect method. The model is based on an adjustment of the after-tax net income resulting in the net cash flow from operating activities. Cash flows from investment and financing activities are presented as gross figures.



NORD POOL

Norway P.O.Box 121 1325 Lysaker Tel: +47 67 10 91 00

Sweden Västra Järnvägsgatan 3 11164 Stockholm

Finland Keilasatama 5 02150 Espoo **Estonia** Tornimäe 5 Regus Business Center 10145 Tallinn

UK 27 Clements Lane London EC4N 7AE

Germany Kurfürstendamm 194 10707 Berlin

twitter.com/nordpool_energyin linkedin.com/company/nord-pool

www.nordpoolgroup.com