

# Annual report 2019



**ABO  
WIND**





#### Legal notice

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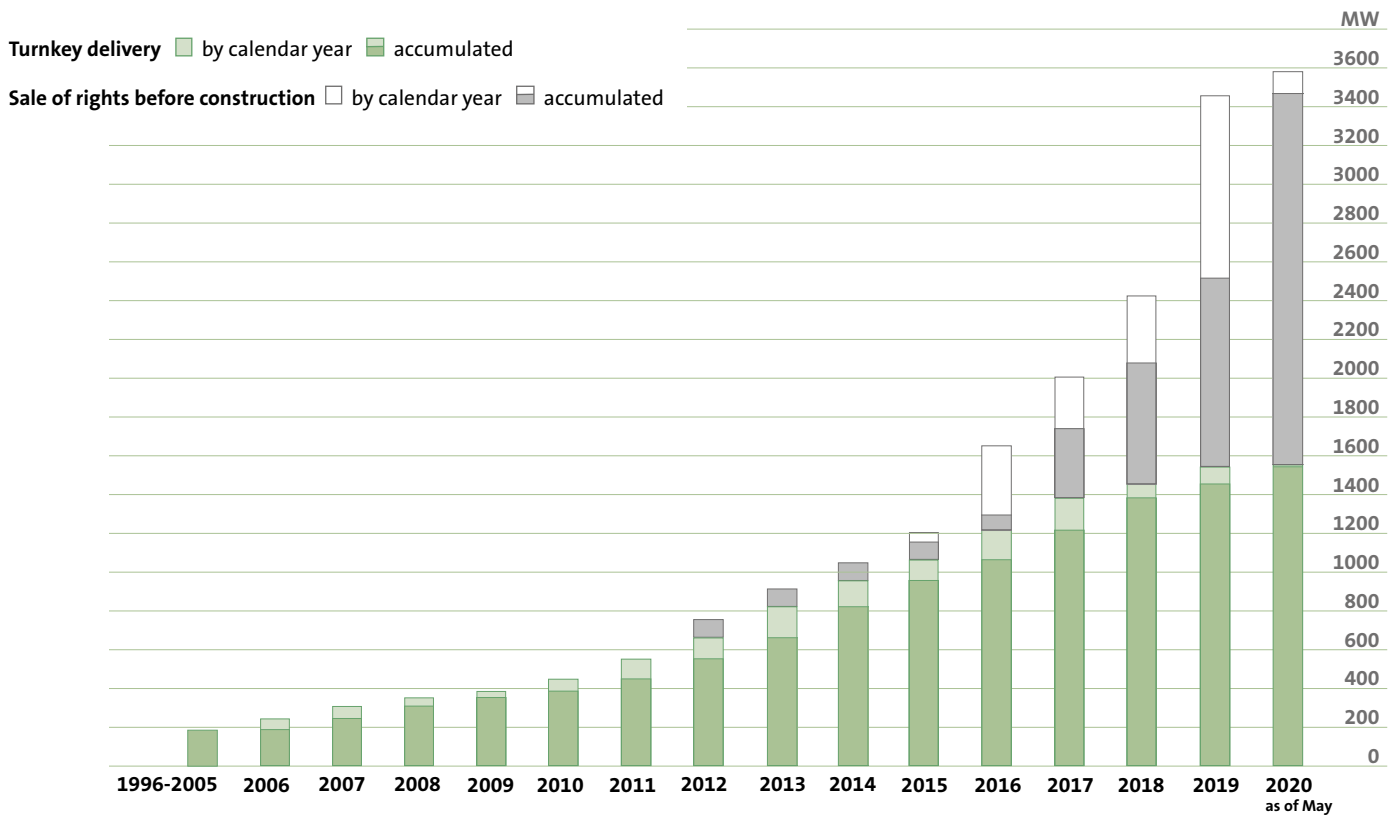
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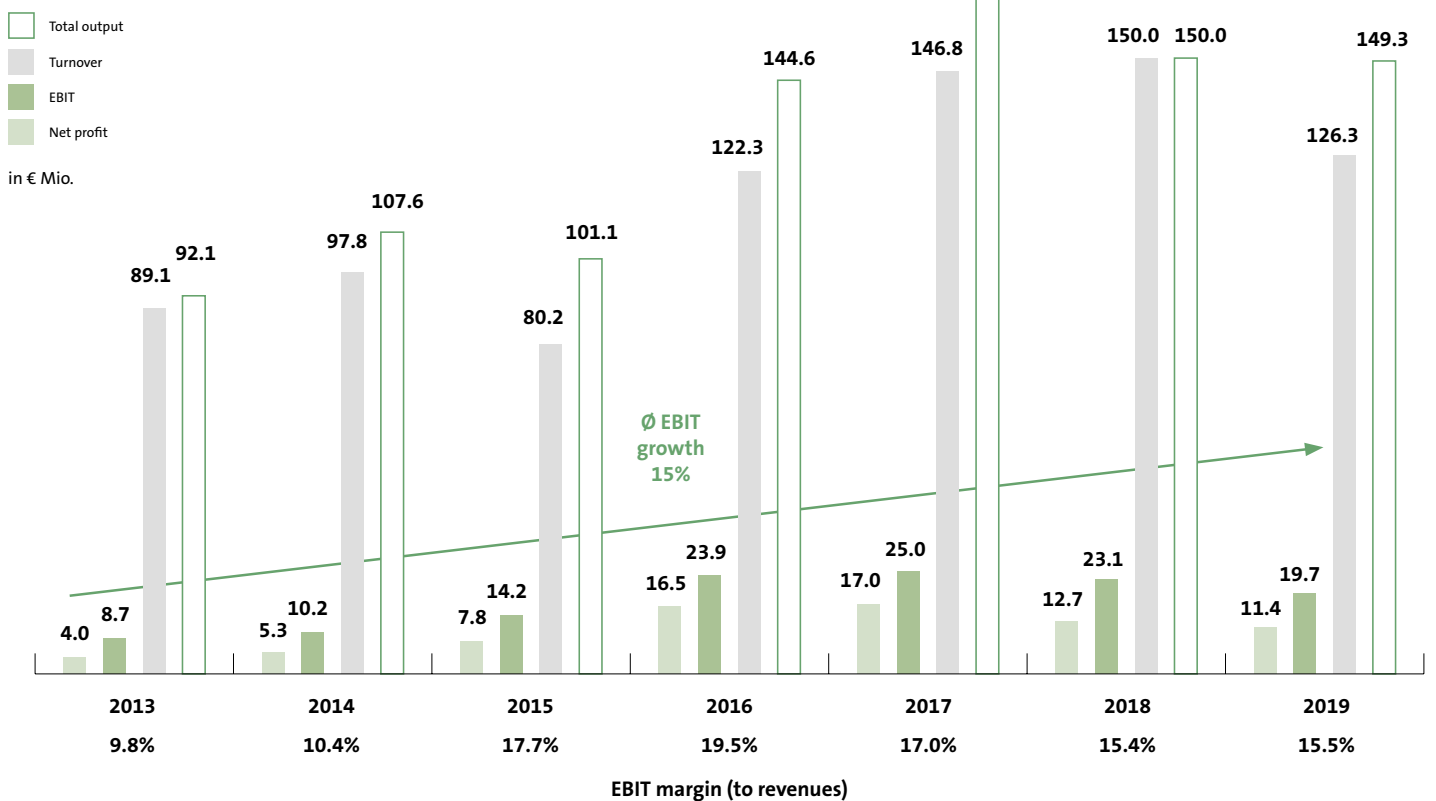
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Rödl & Partner completed its audit of the 2019 consolidated financial statements of ABO Wind AG on 11 May 2020 with the issue of an unqualified audit opinion. The complete audit opinion can be found on page 48ff. of the [German version of the Annual Report](#).

# Sale of wind and solar energy projects



# Earnings over time



# Financial figures per share

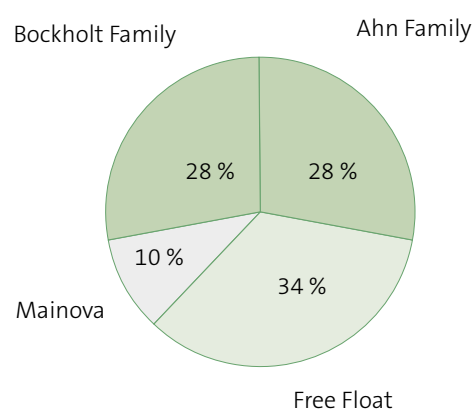
(in EUR)	2015	2016	2017	2018	2019
EBITDA	2.63	4.50	4.94	4.24	3.58
Net profit	1.02	2.16	2.22	1.67	1.48
Dividend	0.25	0.30 0.20*	0.40	0.42	n.a.
Dividend yield	3.6%	6.8%	3.3%	3.0%	n.a.
Book value (as of 31.12.)	6.8	8.7	10.4	11.64	12.83
Share price (as of 31.12.)	6.9	7.4	12.0	13.80	17.30
Price-earnings ratio	6.8	3.4	5.4	8.31	12.27

\*Additional anniversary dividend

## Key statistics

Class of shares	no-par bearer shares
Capital stock	8,470,893 €
Shares outstanding	8,470,893
WKN / ISIN	576002 / DE0005760029
Stock exchange	Xetra, free trade Munich (m:access) and other German stock exchanges
Industry	Renewable Energy
Accounting regime	German Commercial Code (HGB)
Fiscal year-end	December 31st
Bloomberg-code	AB9:GR
Reuters-code	AB9.D

### Shareholder structure



# Internationalisation and continuity

Project development is a risky business that is constantly subject to cycles and fluctuations. Developers work on wind farms for years. Sometimes, right before a project is ready for construction, a country may elect a new government, change its policies, or implement new laws. Such changes can affect the feasibility and value of the projects – both positively and negatively.

Power plants for electricity generation – whether from fossil or renewable resources – are location-bound and dependent on political and economic factors. Over the past decade, the conditions for the development of renewable energy projects have changed considerably in most countries. In Germany, for example, approvals for new wind farms have virtually collapsed in 2018 and 2019 to around a third of the levels of previous years. Prior to this, solar and wind energy installation in Spain came to a substantial standstill from 2013 onwards due to an economic crisis. But from 2018 on, a significant recovery set in.

The examples of Spain and Germany, the two countries with the largest renewable energy capacities in Europe, are a case in point: the ups and downs do not necessarily run parallel in each country. The ABO Wind business model benefits from this. The increased internationalisation of the company has significantly reduced the dependence on individual country markets. This makes it possible to smooth out fluctuations time and again and to guarantee continued entrepreneurial success that is quite atypical for the project development business.

The group net profit for the year 2019 reflects this: it exceeded the ten million euro mark for the fourth time in a row.



**Canada:** ABO Wind opened a subsidiary in Calgary in autumn of 2017. The Calgary team develops wind and solar energy projects primarily in Alberta and Saskatchewan and works on hybrid energy systems.

**Colombia:** 70 percent of Colombia's electricity needs are covered by hydropower. As electricity demand is rising, the country is now increasingly turning to wind and solar energy, which do not yet play a significant role. ABO Wind is working on the development of several solar farms.

**United Kingdom:** The United Kingdom is the world leader in offshore wind energy. Conditions for onshore wind energy have deteriorated in recent years. ABO Wind focuses on Northern Ireland, where conditions are more favourable.

**Republic of Ireland:** ABO Wind has already installed five wind farms with a capacity of 95 megawatts. The team in Dublin is working on further projects, some of which have already obtained construction permits and are to be built in the next few years.

**France:** In France, ABO Wind has installed a total of more than 150 turbines with a total of 300 megawatts. The around 100 employees are working on new wind and solar farms with a capacity of around 1,000 megawatts. Four French wind farms are in construction in mid-2020.

**Spain:** In 2019, more wind and solar farms were installed in Spain than in any other country in Europe. ABO Wind has already benefited from the continuing boom in renewables by selling project rights for more than 800 megawatts.

**Argentina:** Since 2006, the ABO Wind subsidiary in Buenos Aires has sold ready-to-build projects with a total of 350 megawatts. A high electricity demand and great conditions for renewable energies indicate the country's still great potential – despite its economic problems.

**Netherlands:** The Netherlands have a large coastline and great wind conditions. Nevertheless, renewables currently only contribute around seven percent to the energy mix. ABO Wind has stepped up commitment in 2020 to help increase this percentage.

**Finland:** With 29 installed wind turbines (nearly 100 megawatts) and four sold ready-to-build projects (210 MW), ABO Wind is one of the leading project developers. The team is working on numerous other projects – several of which have already obtained construction permits.

**Germany:** For the past two and a half years, the company's home market has been suffering from a blatant lack of permits for new wind farms. Nevertheless, ABO Wind was still able to install several projects in 2019 and participated successfully in tariff tenders in 2020.

**Poland:** Climate-damaging coal-fired electricity generation currently covers 85 percent of the demand. Renewable energies do not play a major role yet. ABO Wind wants to help change this in cooperation with partners

**Hungary:** Wind energy is not politically desired, but Hungary is becoming increasingly important as a solar market. In 2019, 653 megawatts were installed. ABO Wind contributed 6.2 megawatts to this, and installed another 6.5 megawatts in 2020. Further projects are in progress.

**Greece:** ABO Wind installed a first photovoltaic plant with a capacity of seven megawatts in 2019. 38 megawatts of solar energy will follow in the summer 2020. The team is working on further wind and solar projects with a total capacity of several hundred megawatts.

**Tunisia:** ABO Wind started working with a small team in Tunis in 2018. In spring 2020, ABO Wind installed a first small photovoltaic rooftop system. Currently, the financing of larger wind and solar farms is in progress.

**Tanzania:** ABO Wind develops photovoltaic and wind projects with local partners. The team is also working on hybrid energy systems that use batteries to supply consumers that are not connected to the grid.

**South Africa:** Coal still dominates the electricity market, but renewables are on the rise. By 2030, wind and sun energy are expected to cover around 30 percent of the demand. ABO Wind is working on several large projects with a capacity of more than 100 megawatts each.



# Managing Board



## **Andreas Höllinger**

The business expert (born in 1966) has been working for ABO Wind since 2001. He was appointed to the Managing Board in 2010 and has been its Chairman since October 2018. He already worked in the renewable energy sector before 2001. He was responsible for ecological products at an investment fund company and managed project financing at an international developer of renewable energy projects. At ABO Wind, his work focuses on financing and sales, power purchase agreements (PPA), and the supervision of activities in several countries.

## **Dr. Jochen Ahn**

The physical chemist (born in 1960) founded today's ABO Wind AG together with Matthias Bockholt in 1996. The families of the two founders are majority shareholders (with an equity share of around 28 percent each). Before 1996, Jochen Ahn worked as a wind energy expert for the Hessian Ministry of Environment. He is deeply involved in wind energy and solar planning in Germany, storage technologies and bioenergy projects.

## **Matthias Bockholt**

The electrical engineer (born in 1966) already wrote his diploma thesis on photovoltaic plants, a seemingly exotic topic at the time. He was later in charge of the assessment of solar energy projects at the Hessian Ministry of Environment. There he met Jochen Ahn, with whom he founded ABO Wind. They both still manage the company today. Matthias Bockholt works closely with ABO Wind's Power Plant Management, which supports wind and solar farms in the operational phase as a service provider, and develops and sells service products.

## **Dr. Karsten Schlageter**

The industrial engineer (born in 1973) has been working for ABO Wind since 2013. As General Manager, he initially played a key role in establishing the company's international business. He has been a member of the Managing Board since October 2018. Before joining ABO Wind, Karsten Schlageter developed the renewable energy business in Peru for the German energy corporation EnBW and worked in business consultancies. As a board member, he is responsible for activities in foreign markets such as Spain, Canada, South Africa, Colombia, and for solar technology.



# Supervisory Board



## **Norbert Breidenbach**

The electrical engineer (born 1955) was Managing Director of the municipal utility Stadtwerke Langen GmbH from 1991 until 2001. From 2001 until 2013, he was CEO of the Bavarian utility Regensburger Energie und Wasserversorgung AG & Co KG (Rewag). He has been part of the Managing Board of the Frankfurt-based utility Mainova AG since 2013. Mainova AG holds ten percent of the shares of ABO Wind. Norbert Breidenbach has been a member of the Supervisory Board of ABO Wind AG since 2015.

## **Eveline Lemke**

The economist (born in 1964) is the founder of „Thinking Circular“, a think tank focusing on circular economy. From 2011-2016, she was the Green Party's first Deputy Prime Minister and Minister of Economics in the federal state of Rhineland-Palatinate. She has been a member of the ABO Wind Supervisory Board since June 2017.

## **Jörg Lukowsky** (Chairman)

The lawyer (born in 1959) has been a tax and employment specialist at the lawfirm Fuhrmann Wallenfels in Wiesbaden since 1992. He has been Chairman of the Supervisory Board of ABO Wind AG since 2000. He is also active for ABO Kraft & Wärme AG in the same function. He was Chairman of the Supervisory Board of ABO Invest AG between 2010 and May 2020.

## **Maike Schmidt**

The scientist (born in 1979) has been working in the department of Systems Analysis at the Centre for Solar Energy and Hydrogen Research Baden-Württemberg (ZSW) since 2006. Since 2014, she has been the head of the department. Her work focuses on scenario, potential and market analyses for renewable energies and storage technologies as well as the development and evaluation of market introduction instruments. She has been a member of the Supervisory Board of ABO Wind AG since 2019.

## **Dr. Uwe Leprich**

The economist (born in 1959) has been teaching at the Saarland University of Applied Sciences since 1995. His main areas of expertise are economic policy and energy economics. From 2016 to 2018, he was seconded to the German Federal Environment Agency, where he headed the Climate Protection and Energy Department. With a short interruption, Uwe Leprich has been a member of the Supervisory Board from the very beginning.

# Managing Board's letter to the shareholders

In our still important home market, Germany, the wind industry suffered another severe setback in 2019. Approvals for new wind farms, which had already declined in the previous year, slumped to 20 percent of the level of 2017. Layoffs at all major wind turbine manufacturers and the Senvion insolvency reflect the plight.

Nevertheless, ABO Wind has reported a consolidated net profit of more than ten million euros for the fourth time in a row. At EUR 11.4 million, the result is solid.

On the one hand, we have been fortunate enough to achieve a few permits against the overall trend in Germany. These projects received adequate remuneration in the undersubscribed tariff tenders. So despite the crisis, the German wind energy market has made a contribution to our business success. In addition, our international strategy is paying off: by stepping up commitment in other countries, we have become less susceptible to fluctuations in Germany. Other countries have already overcome the low point the German wind market is currently facing. In the first decade of the 21st century, Spain was one of the pioneers of renewable energies. Then the economy fell into a severe crisis. As a result, the construction of new wind and solar farms nearly came to a complete standstill. Since 2017, the conditions for renewable energies have been improving. The industry is experiencing an upswing that can keep up with the speed of the previous decline. In 2019, Spain was a twofold European champion: the country was number one in the construction of both wind farms and photovoltaic plants. ABO Wind is currently also profiting from this boom. During the crisis, we continued to work on our projects and secured grid access, which is now in short supply in Spain. In a favourable market environment, we sold Spanish wind and solar projects under development with a capacity of 700 megawatts in 2019. ABO Wind has contractually agreed to continue developing the projects and in some cases to also be involved in their construction. ABO Wind will be compensated for achieving defined milestones. We therefore expect to continue participating in the positive development of the Spanish market in the coming years, whether by selling further projects or by continuing our work on sold projects. We have already received a small portion of the milestone payments in the first half of 2020.

In the medium term, we hope and expect that more wind farms will obtain construction permits in Germany again. Otherwise, the energy policy goals of a short-term phase-out of nuclear power, a gradual phase-out of coal-based power generation and a progressive electrification of the transport sector will be impossible to achieve. However, Germany does not seem to follow Spain's example in the short term. Some two and a half years after signing their coalition agreement, the CDU/CSU and SPD have failed to implement many of the agreed plans. This is even true for initiatives on which there is consensus. So the wind energy market is still waiting for a long-needed push to get back on track. A regulation, for example, to involve local authorities more strongly in the added value of wind power and thus improve acceptance, is still idling.

Spanish boom  
benefits the  
company

Needed reforms  
in Germany still  
pending

Will those in power in Germany learn from the COVID-19 pandemic, which has caused comparatively little damage to our company so far? If politicians were to ignore the scientific expertise, the devastation caused by the dangerous virus would be far greater. The same applies to global warming. Politicians should also listen more to scientists and less to lobbyists when it comes to climate policy and the closely linked energy policy. Especially since the means to avert a catastrophic global warming has long been available – while a vaccine against it is still being searched for. Perhaps the pandemic will finally give the impetus to consistently reduce CO2 emissions.

In the past fiscal years, we have worked to further improve our financial base, i.e. the equity base. This is an important prerequisite for successfully working on a growing number of projects in now 16 countries. After all, it takes three to five years to implement an average wind farm from securing the site to commissioning. A photovoltaic plant takes about half that time. In addition, we are working on new services such as the replacement of large components of wind farms, or hybrid energy systems combining renewable energy production and batteries.

Good annual results, which for the most part went into revenue reserves, as well as two capital increases have increased our equity to now more than EUR 100 million. In order to place a convertible bond and new shares, we have turned more strongly to the capital market. ABO Wind is now included in the m:access segment for small and medium-sized companies on the Munich Stock Exchange and in the Xetra electronic trading system on the Frankfurt Stock Exchange. This has increased the attractiveness of our share for institutional investors and contributed to a positive price development. This has created favourable conditions for implementing further capital increases if necessary to support the growth of the company.

However, the completed reorientation on the capital market does not change our character as an owner-managed medium-sized company. You can rest assured that we will continue to focus on the sustainable success of our company and our contribution to global climate protection. With ABO Wind, there will be no orientation towards quick success at the expense of long-term perspectives. This is our promise to you, dear shareholders, as well as to our employees, to whom we owe the past successful business years.


We look forward to further good years together.

Kind regards,

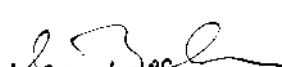
The Managing Board of ABO Wind AG



Dr. Jochen Ahn



Andreas Höllinger



Matthias Bockholt



Dr. Karsten Schlageter

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Learning from the pandemic to boost climate protection

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Strong equity supports future growth



# Cooperation and reliability – our core values for project development

It is the year 1996: Dr. Jochen Ahn and Matthias Bockholt found the „Planungsgesellschaft zur Nutzung der Windkraft & andere regenerative Energien mbH“. Renewable energies are still in their fledgling stages. However, the two entrepreneurs recognize the potential. Four years later, the young company changes its unwieldy name to ABO Wind and becomes a stock corporation. Its first wind farms go online in Hesse and Rhineland-Palatinate. In 2001, ABO Wind establishes its first foreign subsidiary in Valencia, Spain. The second international branch follows one year later in Toulouse, France. France soon becomes the second most important market after Germany. After a long dry spell, the Spanish branch turns into one of the cornerstones of the company.

ABO Wind preserves many of the characteristics of a medium-sized company, but at the same time changes during its almost 25 years of existence. ABO Wind gradually establishes itself in 16 countries and opens up new business areas. Business in some countries such as Bulgaria or Belgium is abandoned due to a lack of success. However, in most cases ABO Wind proves to have a good

## Energy supply

ABO Wind has developed renewable power plants with a capacity of 3,000 megawatts to construction readiness. Their electricity production corresponds to the household consumption of a good five million people.

## Investments

The value of the wind and solar farms developed so far exceeds four billion euros.

## Climate protection

The plants avoid the emission of five million tons of carbon dioxide every year.



instinct for business opportunities. Finland is one example: ABO Wind has been active in Finland since 2013 and has already sold wind energy projects with a capacity of 300 megawatts – including 29 turbines (92 megawatts) after turnkey construction. The far north of Finland is blessed with a lot of wind but less so with sunshine. In most of the 16 countries, however, solar energy now has the same importance as wind energy for ABO Wind. In some cases, like Hungary, the company exclusively develops and constructs photovoltaic projects.

For the second major pillar and our numerous office locations, we need personnel. Five years ago, we had around 300 employees. By today, that number has more than doubled, making us one of the major European project developers for renewable energies. A vast range of experience meets new ideas: the mix of long-standing employees and new colleagues from other sectors and companies helps us overcome the most demanding challenges.

ABO Wind has many specialised in-house departments, which other project developers often outsource, for example departments for grid connection, site assessment, and environmental conservation. These do not replace external experts required for obtaining a permit. However, our experts are able to assess in advance how promising a project is, and professionally communicate with external experts or grid operators.





# Wind energy

## Sales in 2019

### Andella

Spain, Castilla y León, 50 MW, sale of rights before construction

### Campillo

Spain, Andalusien, 250 MW, sale of rights before construction

### Cuevas de Velasco

Spain, Castilla La Mancha, 100 MW, sale of rights before construction

### Adorf

Germany, Hesse, 6.6 MW, turnkey delivery

### Arzfeld Ost

Germany, Rhineland-Palatinate, 21.6 MW, turnkey delivery

### Bad Arolsen

Germany, Hesse, 6.9 MW, turnkey delivery

### Imsweiler

Germany, Rhineland-Palatinate, 9 MW, turnkey delivery

### Pithipudas

Finland, Nordösterbotten, 28 MW, sale of rights before construction

### Sievi

Finland, Nordösterbotten, 35 MW, sale of rights before construction

### Välikangas

Finland, Nordösterbotten, 100 MW, sale of rights before construction

### Champs des Moulins

France, Nouvelle-Aquitaine, 18 MW, turnkey delivery

### Clogheravaddy

Ireland, Donegal, 10.8 MW, turnkey delivery

Developing a wind farm from site acquisition to commissioning is like running a marathon: it often takes up to five years, sometimes even more. Planners need a large portion of expertise, stamina, creativity and humour. An example from the German Hunsrück region shows how complex the approval procedures have become.

„In 2002, when we built Berglicht wind farm, the permit comprised only eleven pages“; recalls project manager Jörg Nithammer. „In 2016, we installed Horath wind farm in the neighbouring village, after five years of planning and with a permit comprising almost 100 pages.“

Various factors make project development such a slow and complex undertaking. In France, for example, lawsuits against wind farm permits have long been commonplace. In recent years, they have also become more frequent in Germany. In turn, the large number of lawsuits is unsettling the authorities, which are trying to hedge potential risks by imposing increasingly high requirements on the project developers.

It is even more pleasing that ABO Wind was still able to install four wind farms in Germany in 2019. By commissioning two wind farms in Rhineland-Palatinate, the company passed the threshold of 1,000 megawatts of installed turnkey wind energy capacity in Germany. In Hesse, for example, just six new wind turbines were installed in 2019 – four of these by ABO Wind. Adorf wind farm was the company's fourth repowering project: we dismantled the four old turbines dating from 2002 and replaced them with two new ones with thrice the capacity.

Repowering refers to the reuse of proven wind energy sites with more powerful, modern wind turbines. This business segment will grow in importance in the coming years, especially in Germany, which has an astonishing 30,000 wind turbines – the largest number in Europe. There is also great repowering potential in France, Spain and other ABO Wind markets.







# Solar energy

## Sales in 2019

### Braza

Spain, Castilla La Mancha, 82 MWp, sale of rights before construction

### Minglanilla

Spain, Castilla La Mancha, 100 MWp, sale of rights before construction

## Additional Spanish Projects

125 MWp, sale of rights before construction

### Bodenwerder

Germany, Lower Saxony, 0.75 MWp, turnkey delivery

### Dülmen

Germany, North Rhine-Westphalia, 0.75 MWp, turnkey delivery

### Lemgo

Germany, North Rhine-Westphalia, 0.75 MWp, turnkey delivery

### Kossos

Greece, Eastern Macedonia and Thrace, 7 MWp, turnkey delivery

### Létavértes

Hungary, Eastern Hungary, 6 MWp, turnkey delivery

The name of our company is not quite adequate anymore: solar energy has now become the second, almost equally important core business of the company. (In the past, other business areas had always played a minor, secondary role besides wind energy development.) Nevertheless, since the name ABO Wind is now an established brand within the renewable energy sector, we do not want to change it at this point.

The company's solar division is growing: many of our new colleagues have worked for other solar companies before joining us. In addition, parts of the staff have switched from wind to solar energy development or are now working with both technologies. ABO Wind develops photovoltaic plants in almost all of the company's markets. It is possible and makes (energy-) economic sense to generate electricity from solar energy in almost all climate zones. Therefore, we develop solar projects not only in sunny countries such as Greece, South Africa, Tanzania or Tunisia, but also in the Netherlands, Hungary, Poland, and even Canada.

As with wind energy, ABO Wind also gained its first experience with solar energy in Germany. We started in 2017/18 with three small one-megawatt solar farms in Rhineland-Palatinate, and last year we installed additional ones in North Rhine-Westphalia and Lower Saxony. Solar planning in Germany is not as complex as wind planning because the plants do not have to be approved on the basis of the German Federal Immission Control Act. This means that fewer expert studies and impact assessments are required.





However, a potential site for a photovoltaic plant must be within the scope of a land-use plan. Often this is not yet available. In such cases, ABO Wind assumes the costs and applies for the building permit.

Worldwide, ABO Wind is working on solar projects with a nominal output of around 4,000 megawatts. In 2019, the company installed the first somewhat larger solar farms on international terrain: seven megawatts in Greece and 6.2 megawatts in Hungary. ABO Wind sold a Spanish 200 megawatt solar portfolio still in the development phase. The largest self-constructed photovoltaic project to date, a 38 megawatt plant in Megala Kalyvia, Greece, is due to be commissioned in mid-2020.

Knowledge of the energy sector, legal system, language, location, and culture are indispensable for the successful development of projects. The strategy of establishing subsidiaries in promising markets and recruiting new employees locally is proving successful. The internationally experienced specialists in the German offices assume central tasks, such as technical planning, financing, plant purchasing or the park layout. It is true that cooperation across continents, time zones, languages and cultures is not always easy. However, the common goal of working on a sustainable energy supply all over the world creates a strong bond.



## Under development

ABO Wind is working on new photovoltaic plants with a total capacity of around 4,000 megawatts. This corresponds to one third of the development pipeline.



## Worldwide engineering

ABO wind engineers have installed wind or solar farms in ten countries on three continents.

## Repowering

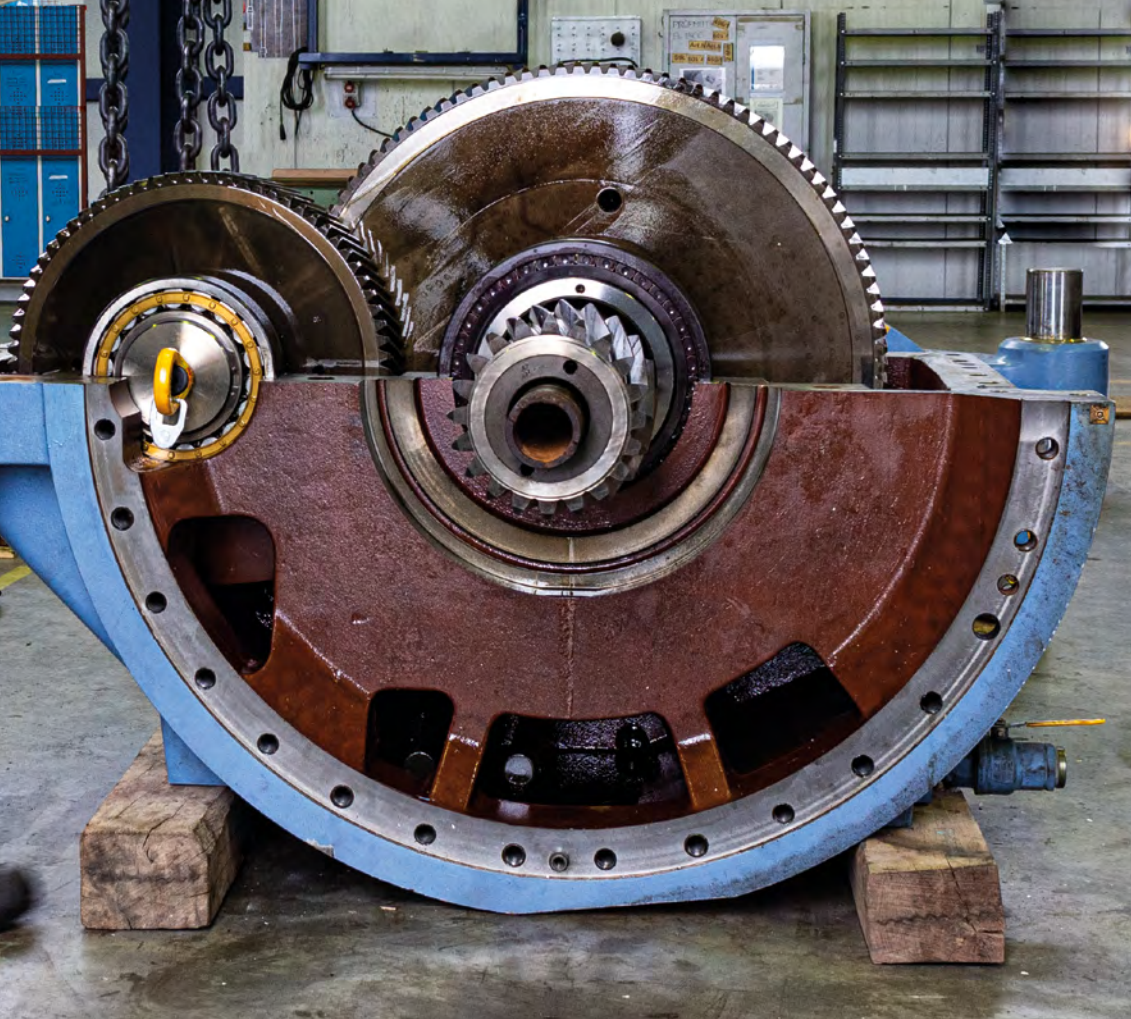
Replacing old wind turbines with powerful new ones is now gaining importance, especially in Germany.



## Know-how from a single source

The planning of wind farms and solar plants is a lengthy undertaking that proceeds in small steps. The biggest part of the work remains invisible to the public. The construction of the plants is different: gigantic rotor blades and tower segments are rolling through the surrounding villages to the construction site; huge cranes assemble the components. Even then, the work begins far in advance. The construction department is involved right from the start of the planning process. After all, it needs to be clear at an early stage how the plants will be transported, which routes need to be extended and whether the ground will support the plants. Around 40 colleagues work in the construction department in Germany. They draw construction plans for projects all over the world, plan access routes and cable routes, assign subcontractors and supervise the actual construction.

What happens to the wind and solar farms once they are finally installed and produce environmentally friendly electricity? Usually ABO Wind does not operate the wind farms after commissioning. Instead, we sell them to investors such as energy cooperatives, utility companies, pension and investment funds, or insurance companies. As a service provider, we take care of the plants in the long term. ABO Wind currently monitors and manages wind and solar farms with a capacity of more than 1,700 megawatts in nine countries. The technical operational management ensures that the plants run smoothly, while the commercial operational management is responsible for accounting, contracts and commercial management of the plants.



## Power Plant Management

ABO Wind's technicians look after 680 turbines in the operating phase.

## Gearboxes in stock

When replacing defective large components, downtimes must be minimised. ABO Wind has common parts in stock.

ABO Wind's Power Plant Management offers services, maintenance, repairs, replacement of large components, and products such as the self-developed locking system ABO Lock. With this digital access control, operators control and record via app who has access to their wind turbine and what areas they can access.

Our Power Plant Management is in charge of different generations of renewable energy plants, from modern large-scale projects to the smaller wind farm of the nineties. Many of these early wind turbines are now approaching the end of their life cycle. The first Renewable Energy Act came into force in 2000 and was valid for the subsequent 20 years. As a result, thousands of wind turbines will no longer receive subsidies from 2021 on.

There are three possibilities of what happens to an old wind farm that no longer is remunerated under the Renewable Energy Sources Act. The operator can decide to dismantle the wind farm and no longer use the site to generate electricity. It is also becoming increasingly common to conclude private power purchase agreements to extend the operating life of plants which are often still in good technical conditions. A third possible option is the repowering of a site, meaning the replacement of old turbines by more powerful, new ones.





## Energy storage systems

Making electricity from wind and sun available at any time.

## Pilot projects

A small ABO Wind division is paving the way for future business fields.



# Future Energies and Hybrid Energy Systems

The clean energy transition is not only the transition from fossil to renewable energies. It is a transformation of our entire energy supply and encompasses several sectors. Mobility has to shift away from fossil fuel and diesel towards electric and hydrogen-powered engines. In addition, the generated electricity must be stored until needed. In countries without a nationwide, stable grid, the requirements are completely different. This is where island solutions and hybrid energy systems are in demand. They combine renewable electricity from wind or solar plants with a battery, for example.

ABO Wind employs experts who work on storage projects, sustainable mobility and hybrid energy systems. In Germany, most of these are pilot projects that we drive forward in cooperation with research institutes and universities. Our focus is on hydrogen-powered mobility: we want to combine the use of wind energy with hydrogen production. As an experienced planner, we use software-supported analyses to find sites for wind farms close to transport hubs. The wind farm can be connected to a conventional service station, which will then be equipped with an electrolyser that produces green hydrogen on site and a hydrogen filling station.

We are also working on so-called hybrid projects in Tanzania. We are integrating wind and solar plants as well as battery storage systems into an Energy Management System to supply remote communities, mines, hotels, commerce and industry. Another approach of the Hybrid Energy Systems department is to stabilise grids. Our combination of photovoltaic and storage systems compensates voltage fluctuations and minimises power losses.

Storage systems in combination with volatile electricity generation from wind and sun are gaining in importance even in highly industrialised countries. In Ireland, for example, ABO Wind is participating in tenders for batteries neighbouring wind turbines to stabilise the electricity feed-in and adapt it to demand.

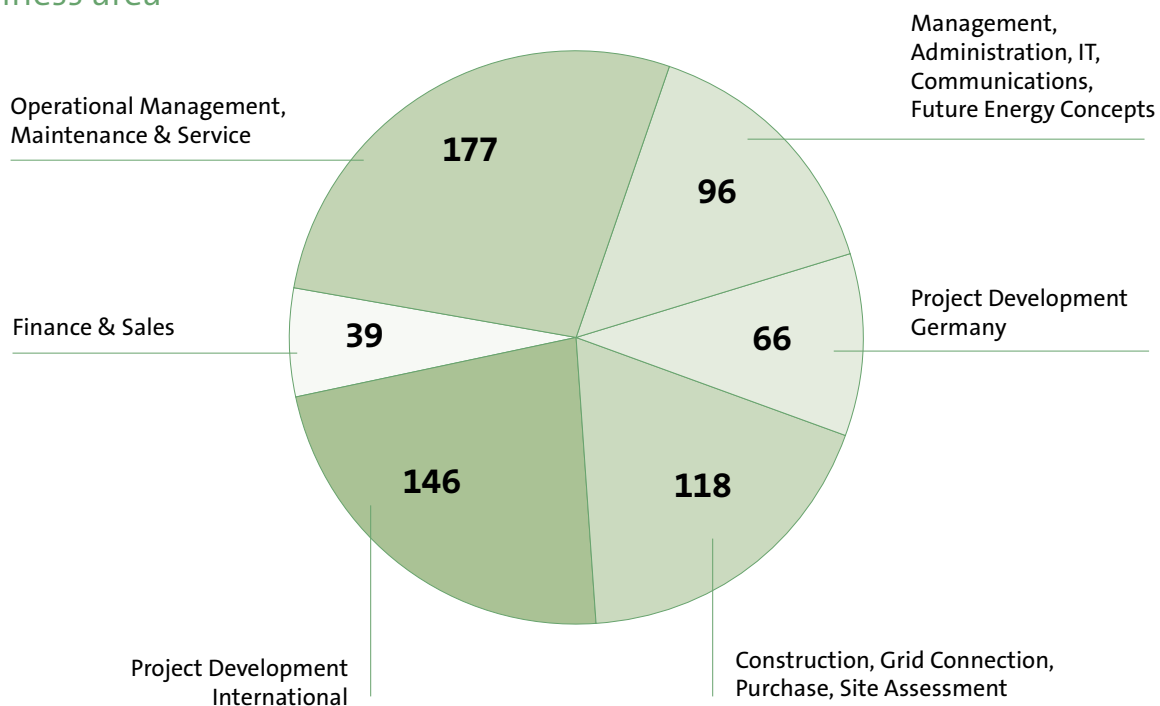


# 642 employees

Germany*	446
France	100
Finland	19
Spain	17
Argentina	11
Ireland	8
Northern Ireland	7
Colombia	7
Greece	5
Canada	5
South Africa	5
Hungary	5
Poland	3
Tunisia	3
Netherlands	1

\*Central tasks such as financing, grid connection, technical planning, yield assessments, engineering, financing and power plant management are mainly provided centrally from Germany. The development of wind and solar projects is mainly carried out by local staff in the individual countries. So a large proportion of the German colleagues work, exclusively or partially, on international projects.

## By business area



# ABO Wind AG Group Management Report 2019

## Introduction

This management report contains forward-looking statements. Please note that the actual results may differ from these expectations of the anticipated developments.

## 1. 2019 Overview

The ABO Wind group ("ABO Wind") closed the 2019 financial year with a net profit of EUR 11.4 million after tax (previous year: EUR 12.7 million). The total turnover and operating revenue (sales revenue plus change in stock and capitalised assets) amounted to EUR 149.3 million (previous year: EUR 149.9 million).

The consolidated figures contain the business activities of the Greek and Hungarian subsidiaries for the first time. A total of 16 companies are consolidated within the group.

The group continued to strengthen its international business and in 2019, with 58 percent, this contributed over half of the group's turnover. In particular, sales of project rights in Finland, France and Spain formed the basis of this success. In a successful end to the year, the long-awaited authorisations for wind farms in Germany contributed to the excellent 2019 year-end result.

The net profit forecast, amended to 'around EUR 10 million' mid-year, was exceeded slightly.

## 2. Basic facts about the group

ABO Wind plans and builds wind farms and solar power systems in Germany, France, Spain, Ireland, Argentina, Finland, Greece, Hungary and the United Kingdom of Great Britain and Northern Ireland. In Germany only, the company also works on individual biogas projects, based in particular on the fermentation of waste. ABO Wind has also acquired new wind and solar projects in Canada, Colombia, South Africa, Tanzania and Tunisia. These newly entered markets will only be considered briefly in this report since they have so far played an economically minor role for the group individually.

ABO Wind initiates projects, acquires sites, makes all the necessary technical and commercial arrangements, arranges international bank funding, and turnkey renewable energy plants on its own account and in cooperation with energy suppliers. So far, ABO Wind has installed wind power and solar facilities with a nominal output of well over 1500 megawatts on the grid. In addition to the turnkey plants and systems built, project rights have also been sold for wind farms and solar power systems with around 1400 megawatts. ABO Wind is developing additional repowering concepts in order to exploit proven sites more effectively.

After commissioning, ABO Wind's Technical and Commercial Operational Management is responsible for the operational phase of the wind power, biogas and solar facilities. Using modern monitoring systems and forward-looking services, it has so far optimised the energy yield from facilities in Germany, Finland, France, Greece and Hungary.

ABO Wind service technicians provide maintenance, repairs, inspections, a fault clearance service, and replacement parts throughout the entire operating phase.

ABO Wind also works on products to optimise renewable energy systems. Among other things, the ABO Lock access control system and ABO Bat Link – a data interface for bat monitoring – are currently being marketed.

## 3. Economic report

### 3.1. Global developments in renewable energies

Over 26 percent of the electricity generated worldwide comes from renewable sources. This was the determination of the "Renewables 2019 Global Status Report" (GSR). More than one third of the world's power plant capacity now uses renewable technologies. In new installations, renewable energy power plants have again taken the lead over fossil-fired and nuclear power plants, as was the case in the previous three years. Among the renewable energies, in 2018 photovoltaics experienced the biggest boom with newly installed capacities of 100 gigawatts. This represented 55 percent of the total increase in renewable energies. Wind power had a 28 percent share and water power had an eleven percent share. In mobility and the heating and cooling of buildings, the share involving renewable energies did not grow as quickly as in electricity however.

The growth in renewable energies is set to gain momentum in the next few years and decades. The International Energy Agency (IEA) is convinced about that. In various scenarios, it predicts this future development in the "World Energy Outlook 2019". The Stated Policies Scenario, which reflects the political objectives and plans declared by governments, predicts an increase in power capacity by almost 8500 gigawatts worldwide by 2040, two thirds of which will involve renewable energies. In the next 20 years, investments to the tune of some ten billion dollars will also be necessary. The IEA does not believe that this Stated Policies Scenario will be sufficient to limit global warming to less than two degrees however. For this reason, the IEA drafted a Sustainable Development Scenario which requires a significantly greater expansion of renewable energies.

In 2019, 60.4 gigawatts of wind power was fed into the grid. The total installed capacity rose to 651 gigawatts. 2019 was therefore

the wind sector's second-best year. Only in 2015 was the increase even higher with 63.8 gigawatts. Low prices for electricity from wind power and market-driven mechanisms such as tariff tenders and private-law power purchase agreements will spur on the further expansion of wind power according to the Global Wind Energy Council (GWEC). The industry association expects the worldwide installed wind power capacity to increase by 250 to over 900 gigawatts between 2020 and 2023.

In spite of difficulties in individual countries such as Germany and India with declining expansion figures, the GWEC increased its forecast for global expansion. The growth in other markets has more than compensated for the downturn in the aforementioned countries. In addition to the strong momentum in the key markets of China and the USA, the improved prospects were noticeable in growth markets such as Latin America, South East Asia, Africa, and the Middle East. Offshore wind energy is also playing an increasingly important role. Its share in 2019 was ten percent. By the end of 2023, it is set to rise to 18 percent according to the GWEC's prediction.

The as yet uncertain effects of the coronavirus pandemic should not be to the detriment of the global dominance of renewable technologies in power generation. Either way, the asset management company Aream reports a "huge increase in demand" from institutional investors as a consequence of the corona crisis. Renewables in particular benefited from the fact that they did not correlate with other asset categories. A more active decline in electricity demand is expected at least in the medium term however which could have the effect of curbing the demand for new renewable power plant capacities. The US American market in particular harbours risks for the global wind industry due to the specific features of the support scheme there which grants tax incentives to certain investors for limited periods of time.

### 3.1.1 Europe

The proportion of renewable energy in electricity generation grew in the European Union in 2019 to 34.6 percent and was thus 1.8 percent points higher than in 2018. Wind power alone covered 15 percent of the demand.

Coal-fired power generation decreased significantly due to the rising cost of carbon dioxide certificates. Overall, wind turbines across Europe supplied 14 percent more electricity than in the previous year, due to the increase and a good wind year. Solar power systems supplied seven percent more electricity. The proportion of solar and wind power in the energy mix therefore rose in all EU countries with the exception of the Czech Republic. Electricity generation from hydropower decreased by six percent due to persistent drought conditions. Nuclear power plants generated one percent less power than in 2018. Gas-fired plants were the only electricity producers driven by fossil fuels to grow. They produced twelve percent more power.

Across Europe, 2019 has so far been one of the best years for solar energy. Within the EU, 16.7 gigawatts of photovoltaic solar energy was supplied into the grid. More than twice as much as in 2018. With an estimated growth of 4.7 gigawatts, Spain resumed top

place in the continent as the largest solar market in the EU. Spain previously relinquished this place eleven years ago. Germany (4 GW), the Netherlands (2.5 GW), France (1.1 GW) and Poland (784 MW) complete the top group in the European solar markets.

15.4 gigawatts of wind power were supplied into the grid in 2019. This reflects the decommissioning of 0.2 gigawatts. In its annual report, industry association Wind Europe notes a rise in expansion by 27 percent compared with 2018. The increase remained ten percent below that of record year 2017 however. Spain and Sweden saw a clear upturn and the French market remained stable. In Germany, the expansion of onshore wind power was considerably smaller than in previous years.

76 percent of the new European wind power capacities (11.7 gigawatts) were installed onshore and almost one quarter offshore. At 3.6 gigawatts, the increase there reached a new record. Around half of the new offshore plants supplied power into the grid in the United Kingdom and 1.1 gigawatts in German waters.

On average, a newly installed onshore wind turbine in Europe in 2019 had a capacity of 3.1 megawatts. The highest output plants supplied the grid in Finland (4.3 megawatts on average) and the lowest in Greece (2.3 megawatts on average). In 2019, wind power projects in eleven European countries were awarded contracts in invitations to tender. 15.4 gigawatts in total were awarded funding. Of those, 8.6 gigawatts was onshore wind power and 6.8 gigawatts was offshore wind power. In Europe's biggest onshore auction, tariffs were awarded to Poland for 2.2 gigawatts of wind power. In the United Kingdom, tariffs were awarded for 5.7 gigawatts, of which 5.5 gigawatts was offshore.

#### 3.1.1.1 Germany

Wind power and photovoltaic systems in Germany will need to produce six times as much power as today by 2050. This was stated by scientists in a study by the Jülich Research Centre. In the study, they demonstrated how the energy transition could succeed whilst also being climate-friendly and economical. The study also showed the huge need to expand renewable energies in Germany, especially since the sectors of transport and heat for buildings will increasingly rely on electricity. The researchers therefore expect almost double the demand for electricity in Germany from the current 520 terawatt hours to over 1000 terawatt hours in 2050.

In 2019, renewable energies covered a total of almost 43 percent of the German demand for electricity. Thanks to good wind conditions, wind power contributed 26 percent. In spite of these record values, bad news from the wind industry dominated 2019. Only 325 wind turbines with a total capacity of almost 1100 megawatts were built onshore in 2019. In addition, offshore wind power saw a similar amount of expansion. The onshore expansion therefore fell to its lowest level since the German Renewable Energy Act (EEG) was introduced in 2000. The slow expansion is not compatible with the targets set in the federal government's coalition agreement. According to that, renewables should cover 65 percent of the German electricity demand by 2030. Since electricity is also needed for climate-friendly mobility (electric cars) and for heating buildings (heat pumps), an annual increase in onshore wind power facilities of around 5000 megawatts is

needed to achieve this target. In 2017, Germany managed to supply more than 5000 megawatts of onshore wind power into the grid. Since then however, the expansion has plummeted dramatically.

The reason for this is the lack of authorisations throughout Germany. Hundreds of projects are on hold, among other things due to the increasingly stringent species protection requirements within authorisation procedures. The plight of the German wind power market is also reflected in the Federal Network Agency's tariff tenders. Five of the six invitations to tender for onshore wind power in 2019 have been signed. Of the 3.7 gigawatts available, only 1.8 gigawatts were awarded funding. In response to the problems, the Federal Ministry of Economics published a "Task list to create acceptance and legal certainty for onshore wind energy" on 7 October 2019. With this work plan, the Federal Ministry of Economics wants to help create greater acceptance and legal certainty for existing and future wind energy projects. For this to happen, a collaborative effort is needed between the federal government, the states, the municipalities, and the local authorities. Nothing of any significance had happened as a result of this task list by April 2020 however.

In 2019, biomass produced over 44 terawatt hours of electricity and thus contributed 8.6 percent to the national net electricity generation. Biomass therefore claimed third place among the renewable power plant technologies after wind energy and photovoltaics. While wind energy and photovoltaics grew, power production from biomass declined. The Federal Environment Agency still reported a production of more than 50 terawatt hours for 2018.

### 3.1.1.2 France

In France in 2019, wind power covered approximately seven percent of the electricity demand. 1336 megawatts of wind power were supplied into the grid within the calendar year. In terms of onshore wind power capacity, France therefore ranks third within the European Union. Only Spain and Sweden achieved greater growth in 2019. In the previous two years however, installations in France were higher by 230 and 360 megawatts respectively.

In January 2019, the government published a detailed draft reformulating the multiannual program planning for energy. Targets for 2028 were proposed for the further expansion of onshore wind energy and a tender schedule was defined with appropriate volumes for the next few years. According to that plan, the onshore wind capacity of 16,644 megawatts (as at the end of 2019) should rise to 24,600 megawatts by 2023. To achieve this, an average annual increase of 2000 megawatts would be needed. The same applies to the subsequent years, since by 2028, the installed wind power capacity should be between 34,100 and 35,600 megawatts according to the plan. Given the expansion in previous years, France would therefore need to increase significantly and, in particular, speed up the authorisation procedure.

France currently still produces three quarters of its electricity using nuclear power, more than any other country. Doubts about the long-term sustainability of this technology are growing. Fessenheim, home to France's oldest nuclear power plant to date, was disconnected from the grid in early 2020. In fact, a new type

reactor was supposed to have been connected to the grid in Flamanville back in 2012. Since the commissioning has already been postponed by ten years to 2022, the decision about new nuclear power plants has also been deferred until then. In the meantime, the current French Environment Minister is also envisaging a complete supply from renewable energies.

In addition to wind power, photovoltaic solar power should also make a growing contribution to this. The French multiannual program planning for energy makes provision for a range of expansion of between 18.2 GWp and 20.2 GWp for photovoltaic systems by 2023. After the first half of 2019, the power generation from PV systems is 6 TWh. This is a rise of 23 percent compared with the previous year. In France, PV systems cover 2.4 percent of the net power consumption (+0.5 points compared with the same period in the previous year). In the first half of 2019, 12,951 new PV systems were commissioned with a total capacity of 397 MWp. This was 19 percent less than in the same period in the previous year. In early July 2019, projects with a total capacity of 5.4 GW were on hold. In the first half of 2019, the average size of the newly installed PV systems in France was 28.3 kWp (compared with 20.7 kWp in the previous year).

### 3.1.1.3 United Kingdom

The use of onshore wind power has only played a minor role in the United Kingdom for years. The expansion is forging ahead in offshore wind power however. Almost 2400 megawatts of offshore wind power were connected to the grid in 2019. By contrast, the figure was just over 600 megawatts for onshore wind power. The total of almost 3000 megawatts of newly installed wind power capacity earned the home of coal-fired power generation the top spot in Europe in previous years. With five percent of energy production, coal now only plays a minor role in power generation within the United Kingdom. The last coal-fired power plants are due to be decommissioned by 2025. In offshore wind power, with 7000 megawatts of installed capacity, the United Kingdom is a world leader. The government's plans include additional offshore wind power tariff tenders. The conditions for onshore wind power are currently less favourable. These projects are usually reliant on private-law power purchase agreements for refinancing.

### 3.1.1.4 Spain

In 2019, wind turbines with a capacity of more than 2300 megawatts were connected to the grid on the Spanish mainland. This elevated Spain to the top position in Europe in 2019, ousting Germany as the EU forerunner. Spain also set standards in Europe in 2019 in its solar expansion with 4700 megawatts.

Spain is following on from the periods up to 2012 when the country was already a pioneer in the use of wind and sun for climate-friendly power production. In response to the economic crisis, in 2012 the government at the time suddenly halted the expansion of renewable energies however. Years of stagnation followed. A new government has been working on revitalising the industry since 2017. In the previous two years, Spain has been awarded tariffs for new wind and solar projects with several thousands of megawatts in numerous invitations to tender. In 2019, this transition to greater expansion of renewable energies



was reflected for the first time of this significance in the amount of newly installed wind power capacity. In 2016, just 49 megawatts of wind power was connected to the grid, in 2017, it was 96 megawatts, and in 2018, it reached 392 megawatts. In total, Spain now has 25,800 megawatts of wind power capacity connected to the grid.

Expansion of the country's solar capacities is also in full swing and really exploded in 2019. While a manageable 288 megawatts was connected to the grid in 2018, the country increased the expansion in 2019 by an impressive factor of 15 to almost 4700 megawatts. Large-scale projects in particular dominate the market. By 2030, the government wants to continue to increase solar capacity by a minimum of three gigawatts a year.

A climate protection law (*Ley de Cambio Climático*), which requires energy-intensive companies to cover ten percent of their power consumption via green power purchase agreements (PPA), is designed to help with this. The PPAs must run for a minimum term of five years and are protected against payment defaults by a Spanish government guarantee fund. The aim is to accelerate the PPA market and reduce the price of electricity to enable the country to keep up with prices in France and Germany where the price, when compared, is 10 and 17 euros per megawatt hour cheaper respectively. This would therefore constitute another interesting opportunity for the marketing of solar power in particular.

#### 3.1.1.5 Republic of Ireland

In 2019, wind power covered one third of the Republic of Ireland's electricity requirements. Coverage was only higher in Denmark, at 48 percent. The increase in the past year was also significant with 463 megawatts. Compared with the previous year, twice the capacity was newly connected to the grid. The Irish thus once again reached the expansion level of previous years.

Ireland achieved the target of covering 32 percent of the power requirements throughout the country with wind power by 2020 early. But that was nowhere near the end of developments. The responsible authority, SEAI (Sustainable Energy Authority of Ireland), estimated the potential total capacity for wind power usage in the Republic of Ireland at 46 gigawatts in 2050. Onshore facilities account for 16 gigawatts of this and offshore wind farms for 30 gigawatts. Wind power could have huge potential in the long term as a leading export.

At the end of 2019, almost 4.13 gigawatts of onshore wind power were connected to the grid in Ireland. A fourfold increase would therefore be almost possible. Unlike the neighbouring United Kingdom, which now relies much more heavily on offshore and has largely stifled onshore expansion, offshore wind power still only plays a minor role in the Republic of Ireland in spite of the potential. So far, only 25 megawatts are installed.

#### 3.1.1.6 Finland

In Finland in 2019, wind power covered around seven percent of the country's power requirements. After wind power expansion was put on hold in 2018, in 2019 a further 243 megawatts were connected to the grid. This increased the total installed wind power capacity to 2284 megawatts by the end of the year. Of this,

71 megawatts were offshore. The majority of the Finnish wind farms currently connected to the grid were built between 2015 and 2017. During this period, ABO Wind also installed a good 90 megawatts of wind power in Finland. The initial government feed-in rate applied to 2000 megawatts. Further expansion is now taking place through invitations to tender that are open to different technologies and through private-law power purchase agreements (PPAs). The "National Energy and Climate Strategy for 2030" stipulates that the proportion of renewable energies in final energy consumption will increase to more than 50 percent by 2030.

By 2035, the country wants to be carbon neutral. "As the world's first welfare state" as social democrat Prime Minister Sanna Marin said when presenting her government's climate plan. The five coalition parties have as yet not reached a consensus however on how the 35 million tonnes of CO<sub>2</sub>, with emissions into the atmosphere to be reduced each year, are to be distributed across the individual sectors of society. An essential component of the strategy is a comprehensive electrification of industrial production and transport. In addition to an expansion of renewable energies, the power is also set to come from two new nuclear power plants: the Olkiluoto 3 reactor, already delayed for twelve years now, which is due to be connected to the grid next year, and the Hanhikivi reactor, originally intended to start production for 2020 but which is still awaiting planning permission. The supplier, the Russian state-owned company Rosatom, is now aiming for completion in 2028. The handling of peat may harbour potential for conflict. In Finland up to now, peat has largely been burned for electricity and heat production. Almost one fifth of Finns live or work in buildings heated with district heating obtained from peat. Greenhouse gases from the burning of peat account for more than ten percent of the Finnish CO<sub>2</sub> emissions. That is more than all of the cars in the country contribute. Moreover, 4000 jobs are attached to the peat industry, mostly in less prosperous regions. Viewed relatively, its share of the labour market is twice as high as the remaining jobs in the coal industry in Germany.

#### 3.1.1.7 Greece

Along with Spain, Portugal and Italy, Greece is one of the European countries with the highest levels of solar radiation. Almost North African solar radiation levels are reached in some parts of the country. Compared with Germany, the average solar radiation levels in Greece are up to 40 percent higher in some areas. State subsidies in the form of investment grants and higher feed-in rates of up to 55 cents/kWh led to a rapid expansion of the photovoltaic capacity in Greece, from around 200 to around 2600 megawatts, between 2010 and 2013. A temporary prohibition on new plants and retrospective cuts to the feed-in rates then brought the boom to a sudden end. The Greek government has been trying to revive the expansion of renewable energies at economically sustainable prices since 2017. Tariff tenders are now steering the construction of new wind and solar plants. To take part in an invitation to tender, projects need a grid connection agreement or planning permission.

The invitation to tender system has proven successful. The cost of power from renewable sources has dropped and installations are increasing. Thus, in 2019, for the first time since 2013, large

numbers of solar projects were once again connected to the grid. 160 megawatts were newly installed. Some 2800 megawatts of solar capacity were connected to the grid by the end of 2019. The government's plan published in December 2019 stipulates that solar power should be increased to 5000 megawatts by 2030. The last coal-fired power plant is due to be disconnected by 2028.

Greece is also growing heavily in wind power and achieved a record in 2019: With 727 megawatts, more wind power capacity was being supplied to the grid than ever before. 207 megawatts of wind power was supplied to the grid in 2018. The increase achieved in 2019 puts Greece in seventh place in Europe. At the end of 2019 almost 3600 megawatts of wind power capacity was connected to the grid in total.

#### 3.1.1.8 Hungary

Hungary is becoming increasingly significant as a solar market. The country occupies sixth place within the European Union for its 2019 photovoltaic expansion. 653 megawatts were newly connected to the grid (2018: 410 megawatts). At the end of 2019, Hungary therefore had an installed solar capacity of 1450 megawatts in total. The Solar Europe association anticipates a further expansion to more than 3700 megawatts by 2023.

As promising as the prospects for the Hungarian solar industry are, those for the wind industry are equally sobering. A mere 329 megawatts of wind power are currently connected to the grid. As in the previous year, 2019 did not see a single new plant.

#### 3.1.2 Argentina

Argentina's wind power capacity more than doubled in 2019. 931 megawatts were newly connected to the grid (2018: 445 megawatts). The country now has over 1604 megawatts of wind power capacity in total. Argentina is rich in as yet largely unexploited potential in terms of renewable primary energy sources such as solar and wind energy. Thus far, the primary energy generation has been based predominantly on crude oil and natural gas. Renewable energies only cover approximately two percent of the power requirements. The government's aim is to increase this proportion, in particular by expanding the solar and wind power capacities to 20 percent by 2025.

In fact, in Argentina the renewable energies sector has been one of the fastest growing sectors in the country over the last four years. Further development of this capital-intensive industry is uncertain however in view of the political and economic instability.

From 2016 to 2019 the Argentinian government awarded tariffs in invitations to tender for 6.5 gigawatts of renewable energy capacity and, in doing so, helped make wind and solar energy one of the cheapest, non-subsidised energy sources in the country. When these projects are fully operational, renewable energies will cover 18 percent of Argentina's total power supply.

In the country attractiveness index for renewable energy compiled by Ernst & Young, Argentina rose to ninth place in the world in 2019 and first place in Latin America. The country was also the third largest global market for wind turbine manufacturer Vestas in 2018.

## 3.2 Business performance

ABO Wind covers the entire value chain for the development of wind farms and solar energy systems – from acquisition of the site to turnkey construction. Its own specialist staff perform the majority of the planning, monitoring and organizational work.

In addition to the financial performance indicators of turnover and annual results, ABO Wind also uses major milestones to be achieved for the project work and portfolios of projects and service agreements as non-financial performance indicators for measuring commercial success.

Relevant non-financial performance indicators include in particular the number of new projects, the portfolio of projects under development and constructions – the so-called project pipeline – and the project developments and constructions successfully completed within the financial year.

The volume of agreed project funding and project sales, the extent of any service activities, and changes in employee figures also provide additional information about the business performance. In the 2019 financial year these indicators changed as follows:

### 3.2.1 New projects

In the previous year's annual report, annual new business to the tune of one to two gigawatts was anticipated across the group and across the various technologies for the years 2019 to 2021. In 2019, ABO Wind actually acquired new projects with over two gigawatts in Europe. Outside Europe, projects were secured for over five gigawatts. Wind projects make up 70 percent of the new business for 2019 and solar projects the other 30 percent.

### 3.2.2 Project pipeline

As of 31 December 2019, the project pipeline, weighted based on the likelihood of implementation, includes around 10 gigawatts of wind and solar power projects in development, of which around 1 gigawatt each in Germany, France, Spain and Greece, 1.5 gigawatts or more each in Argentina, Finland and South Africa and around another 1.5 gigawatts in the other countries put together.

### 3.2.3 Project implementation

The periods assigned to project implementations are based on the transfer of risk for the services provided in each instance in accordance with the commercial law realisation principle. Planning or technical milestones, such as the feeding in of the first kilowatt hour (technical commissioning) for example, may occur in a different period.

#### 3.2.3.1 Sale of portfolios and individual project rights

In the 2019 financial year, rights were sold for 27 projects at various stages of development. A proportion of the projects were

pooled together in various portfolios and each portfolio was sold to an investor. With this, the prediction from the 2018 annual report that sales of project rights and portfolios would grow significantly has been impressively proven.

Typically, the agreements with the buyers provide for further collaboration with ABO Wind to get the projects ready for construction and then to build and operate them.

Considered by country, the 27 projects include twelve Spanish projects with 707 megawatts, three Finnish projects with 156 megawatts, eight French projects with 117 megawatts and four smaller German solar projects totalling 3 megawatts. As expected, new country markets did not contribute directly to the commercial success of 2019.

### 3.2.3.2 Completed project developments

In the 2018 annual report, completed project developments with 150 to 250 megawatts were anticipated across the group and across the various technologies for the years 2019 to 2021.

With completed project developments with a total of 168 megawatts, these predictions were fulfilled in 2019. The German market made the largest contribution with four wind and three solar projects at a total of 61 megawatts. Two Greek solar projects with 45 megawatts, four French wind projects with 35 megawatts, and one 22-megawatt wind project in Northern Ireland and a six-megawatt solar project in Hungary complete the successful outcome for completed project developments.

### 3.2.3.3 Completed project builds

In the 2018 annual report, completed project builds with up to 160 megawatts annually were anticipated across the group and across the various technologies for the years 2019 to 2021.

Actually, projects totalling 46 megawatts were built and billed for in the financial year 2019. The farms built were distributed across four countries: 19 megawatts in Germany, 14 megawatts in France, seven megawatts in Greece and six megawatts in Hungary.

### 3.2.4 Project funding and turnkey plant sales

In 2019, long-term loan agreements for a total of EUR 48 million were concluded for 36 megawatts. This includes 23 megawatts in German projects with a loan volume of EUR 40 million. At the same time as obtaining the project funding, in 2019, turnkey projects with 25 megawatts were sold to investors.

## 3.2.5 Service activities

### 3.2.5.1 Wind Operational Management

As at 31 December 2019, ABO Wind was managing 117 projects with 495 wind turbines and a total of 1236 megawatts distributed across Germany (879 megawatts), France (177 megawatts), Finland (97 megawatts), and Ireland (83 megawatts).

### 3.2.5.2 Wind division

Around 100 wind turbines are managed within the division, from simple maintenance through to full service contracts.

### 3.2.5.3 Solar division and Operational Management

Six plants are managed in the solar business segment, three in Germany and one each in Greece, Hungary and Iran.

## 3.2.6 Personnel changes

The number of employees increased in the financial year from 573 on average to 676. The two subsidiaries in Greece and Hungary, consolidated for the first time, contributed to this increase.

## 3.3 Turnover and earnings situation

The previously mentioned total turnover and operating revenue of EUR 149.3 million for the 2019 financial year is the result of EUR 126.3 million in sales revenue, a EUR 22.8 million increase in inventory of finished products and work in progress, and EUR 0.2 million from "Other capitalised assets". The sales revenue comprises EUR 86.0 million from planning services and sales of rights (previous year: EUR 34.3 million) and EUR 29.6 million from the building of projects (previous year: EUR 105.7 million). ABO Wind earned EUR 10.7 million in turnover from service activities (previous year: EUR 10.4 million).

The share of turnover from planning services and the sale of rights to construction services has almost reversed when compared with the previous year. Although shifts in turnover shares between these service areas do in fact happen regularly within the project business which spans multiple periods, such a significant manifestation is remarkable, if also coincidental. The materials quota, which has dropped again compared with the previous year, of around 45 percent (2018 financial year: 47 percent) is a direct result of this. Planning services and sales of rights are, of course, less material-intensive than building services. The personnel costs of EUR 41.4 million (previous year: EUR 36.3 million) include a special bonus for the employees.

The depreciation of EUR 8.0 million (previous year: EUR 10.2 million) is broken down into EUR 1.5 million of scheduled depreciation on fixed assets and EUR 6.4 million in individual value adjustments on projects under development for which there is no longer any realistic likelihood of implementation or for which the economic situation has changed drastically. Broken down by country, EUR 2.2 million of this represents French projects, EUR 1.9 million represents German projects, EUR 1.8 million represents projects from the United Kingdom, and EUR 0.5 million represents Finnish projects.

On the whole, the insolvency of wind turbine manufacturer Senvion had only a mild impact on ABO Wind. Material depreciation had to be accepted in one project only. The balance



sheet valuations for the German project in question were adjusted in the 2019 financial year by EUR 1.3 million in total.

The value adjustments for country risks increased in comparison with the previous year by EUR 1.7 million. The main reason for this is the growing project business in Argentina. In absolute terms, the increased volume of projects results in higher risk premiums. In total, value adjustments for country risks amount to EUR 3.7 million.

The interest income after adjustments, at EUR 1.6 million, remains unchanged compared with the previous year.

The result from ordinary business activities for 2019 is EUR 18.1 million (previous year: EUR 21.3 million). The 2019 net profit amounts to EUR 11.4 million (previous year: EUR 12.7 million).

In summary, in 2019 the ABO Wind AG group managed to increase its gross profit with a steady overall performance compared with the previous year. The expected increased personnel costs and ongoing wind power crisis in Germany however meant that the result from ordinary business activities and the net profit were both down. It was still possible to exceed the forecast for the 2019 net profit, since adjusted to around EUR 10 million, however thanks to successful international activities and obtaining long-sought-after authorisations for German projects.

### 3.4 Financial and asset situation

Fixed assets totalled EUR 10.1 million. Property, plant and equipment formed a significant part of this. The share of fixed assets attributable to intangible assets (EUR 1.3 million) increased slightly as in the previous year due to greater investment in IT systems.

Of the EUR 98.3 million in work in progress recorded on the balance sheet, on the balance sheet date of 31 December 2019, around EUR 24.6 million related to projects under construction.

The down payments received and openly deducted from the inventories of EUR 23.2 million do not include any advance payments. These are payments on account only that are offset against service provided or deliveries supplied, and for which no repayment obligation exists or is likely.

The receivables from affiliated companies of EUR 87.1 million (previous year: EUR 58.4 million) consist of EUR 59.6 million for German and French projects which had either already been commissioned, were under construction, or on which construction was about to begin, on the balance sheet date. One Greek project under construction with EUR 6.7 million and two Hungarian projects, now complete, with a combined EUR 4.9 million, are other significant items included in the receivables from affiliated companies. EUR 15.9 million relates to projects in other countries and to non-consolidated foreign subsidiaries of ABO Wind AG who have obtained interim financing for project costs with these funds.

The increase in shares in affiliated companies in the current assets from EUR 14.1 million in the previous year to EUR 14.8 million as of 31 December 2019, is primarily due to contributions to a Spanish project.

The securities item in current assets includes shares in ABO Invest AG amounting to EUR 1.3 million and in ABO Kraft und Wärme AG amounting to EUR 1.4 million.

At 43 percent, the equity ratio excluding mezzanine funds is slightly below the previous year's level (46 percent). The equity ratio including mezzanine funds therefore also fell from 53 percent to 49 percent. The background is once again the strong balance sheet growth from EUR 194.0 million in the previous year to EUR 242.6 million as at 31 December 2019.

In concrete figures, it was possible to strengthen the equity capital to a proud level of over EUR 100 million currently. The increase from EUR 89.0 million in the previous year to EUR 103.6 million on the balance sheet date is due to an equity increase as well as the excellent net profit for the year. The ABO Wind AG subscribed capital was increased in 2019 in connection with the securities prospectus approved in 2018 by the Federal Financial Supervisory Authority (BaFin). A total of 425,193 new shares were issued in the course of converting previously subscribed bonds. The subscribed capital now stands at 8,070,893 no-par-value shares. The capital increase was recorded in the commercial register in January 2020 and the premium of EUR 6.0 million resulting from the increase was allocated to the capital reserve.

On the debt side, redeemable loans with a five-year term were taken out totalling EUR 29.5 million. Redeemable loans were agreed for a further EUR 8.0 million. These were all taken out in the first quarter of 2020 and also have a five-year term. The total amount of credit and guarantee facilities within the group was extended in 2019 by EUR 99.3 million.

On the balance sheet date, bank loans and overdrafts consisted of EUR 53.7 million in low-interest redeemable loans and EUR 16.0 million from the use of credit lines. ABO Wind AG's unused credit and guarantee facilities as at 31 December 2019 amounted to EUR 94.5 million.

The cash and cash equivalents, defined as cash on hand and bank balances was around EUR 5.1 million higher than in the previous year with EUR 9.6 million on 31 December 2019.

The funds were primarily used for operational activities. The cash flow statement shows a negative cash flow from operating activities of EUR 21.8 million in 2019. The two main factors here are the further expansion of the project pipeline, as evidenced by the increase in inventories, and receivables from completed projects for which payment will be received in 2020.

Other funds were used for investments in fixed assets. After adjustments, the cash flow from investment activities shows outflows of EUR 2.3 million.

The cash flow from financing activities for 2019 is the result of taking out new loans and the convertible bond issued minus debt servicing for borrowed capital and minus dividend distribution. In total, this results in an inflow from financing activities of EUR 29.2 million.

The limits agreed with the credit institutions which relate to selected financial key figures – so-called covenants – were all included in the reporting period.

## 4. Remuneration report

The remuneration report contains a summary of the principles that apply when setting the total remuneration for members of the ABO Wind AG Managing Board. It describes the deeper structure and the amount of the remuneration of the board members. The principles and amount of remuneration for members of the Supervisory Board is also explained.

### 4.1 Main features of the Managing Board remuneration system

The Managing Board's total remuneration consists of a fixed basic salary, a management bonus and fringe benefits, and takes into account the respective responsibility incumbent upon the board members. The structure of the remuneration system for the Managing Board is discussed and reviewed regularly by the Supervisory Board. The fixed amount is paid monthly as a basic salary component of the remuneration regardless of performance. The management bonus is essentially dependent on results and is paid annually after approval of the consolidated financial statements of ABO Wind AG. Entitlement to the management bonus is governed by the contracts with members of the Management Board. The annual bonus entitlement is capped at a maximum amount in each case. A negative business performance will result in complete loss of the bonus entitlement. The annual minimum remuneration from the management bonus is therefore 0 euros. In addition to the fixed basic salary and the management bonus, members of the Managing Board also receive fringe benefits in the form of benefits in kind.

Specifically, members of the Managing Board received the amounts listed below in 2019:

Andreas Höllinger, Managing Board since 2010				
Benefits granted (benefits received, if different) in EUR thousand	FY 2018	FY 2019	FY 2019 (Min.)	FY 2019 (Max.)
Fixed remuneration	167	220	220	220
Fringe benefits	6	8	8	8
Total	173	228	228	228
Management bonus	70	71	0	71
Total remuneration	243	299	228	299

Dr. Karsten Schlageter, Managing Board since 2018				
Benefits granted (benefits received, if different) in EUR thousand	FY 2018	FY 2019	FY 2019 (Min.)	FY 2019 (Max.)
Fixed remuneration	40	160	160	160
Fringe benefits	2	6	6	6
Total	42	166	166	166
Management bonus	0	43	0	43
Total remuneration	42	209	166	209

Dr. Jochen Ahn, Managing Board since 2000				
Benefits granted (benefits received, if different) in EUR thousand	FY 2018	FY 2019	FY 2019 (Min.)	FY 2019 (Max.)
Fixed remuneration	135	135	135	135
Fringe benefits	10	11	11	11
Total	145	146	146	146
Management bonus	70	70	0	70
Total remuneration	215	216	146	216

Matthias Bockholt, Managing Board since 2000				
Benefits granted (benefits received, if different) in EUR thousand	FY 2018	FY 2019	FY 2019 (Min.)	FY 2019 (Max.)
Fixed remuneration	170	170	170	170
Fringe benefits	6	6	6	6
Total	176	176	176	176
Management bonus	70	70	0	70
Total remuneration	246	246	176	246

There were no other remuneration components having a long-term incentive effect, promised pension benefits or entitlements, or promised benefits from third parties.

### 4.2 Remuneration of the Supervisory Board

The Supervisory Board's remuneration is set by the general meeting and is governed by the company's Articles of Association. The remuneration is based on the duties and responsibility of the Supervisory Board members. Members who have only been members of the Supervisory Board for part of the financial year receive remuneration in proportion to their period of service. Specifically, members of the Supervisory Board received the remuneration listed below:

Benefits granted (in EUR thousand)	Fixed remuneration	
	FY 2018	FY 2019
Jörg Lukowsky (Chair)	30	39
Dr. Ing. Joachim Nitsch (retired from office on 09.08.2018)	5	0
Norbert Breidenbach	10	13
Josef Werum (retired from office on 22.08.2019)	10	8,4
Eveline Lemke	10	13
Prof. Dr. Uwe Leprich (since 09.08.2018)	5	13
Maike Schmidt (since 22.08.2019)	0	4,6
Total	70	91

There were no other remuneration components for committee activities or attendance fees.



## 5. Opportunities and risks

### 5.1 Liquidity risks

Project development in renewable energies is characterised by high upfront costs for small quantities. Inflows from project funding and sales therefore need to be carefully matched against the outflows for planning and construction. The short to medium-term liquidity is continually planned and controlled across the group. The consolidation of incoming payments and approval of outgoing payments is done across the group by means of manual cash pooling within ABO Wind AG. Long-term needs are regularly reviewed based on a multi-year business plan. Appropriate capital measures may be initiated and monitored centrally by ABO Wind AG.

### 5.2 Currency risks

ABO Wind AG faces currency risks within the framework of its international business expansion due to its operational activities in South America, the United Kingdom and other countries. In particular in countries where the power tariff is in a local currency not linked to a strong currency, appropriate hedging transactions should be ensured. In purchasing, currency risks can arise from supply contracts based on a foreign currency. In the solar business in particular, components are often obtained from Asia. The resulting currency risks can be countered with appropriate hedging transactions. On the whole, currency risks currently play a minor role at ABO Wind AG. The main activities are handled within the eurozone.

### 5.3 Interest rate risk

Rising interest rates always present a risk for the profitability of projects. Interest rate hedges can counteract these in the short to medium term. In the medium to long term, rising interest rates may need to be counterbalanced with lower investment and operating costs and adjusted remuneration rates. No interest rate hedges are currently agreed upon to any significant extent.

### 5.4 Regulatory risks

Naturally, during operation, wind energy and solar plants cannot earn revenue on demand. On the other hand, the main running costs are determined on a firm basis from the initial investment costs and any long-term loan and lease agreements. Given the weather-dependent, and hence volatile, electricity yields, and long-term fixed costs, the economic viability of projects largely depends on stable framework conditions for sale of the energy generated. Clarity and reliability regarding the remuneration regulations are crucial. This is true in terms of protecting confidence for the investment period and in terms of protecting existing works for their economic useful life. In addition to the formerly customary, statutory feed-in tariffs, conditions have now

been created in some markets for new forms of remuneration. There, wind and solar farms can be created and operated economically on the basis of private-law power purchase agreements as well, or with electricity marketed directly.

Other regulatory risks for renewable energy projects lie in the authorisation procedures and the grid connection and power feed-in conditions. Delays and the conditions for obtaining authorisation to operate the plants and connect them to the grid can have significant effects on economic viability.

Generally speaking, the greatest potential risk for the planning of facilities to use renewable energies lies in the political and administrative organisation and implementation of the framework conditions.

### 5.5 Other risks

The current spread of coronavirus and the measures associated with it may result in delays to sales of project rights and project implementations within the business operations. In addition to postponements within a financial year, postponements to the subsequent year are also possible between 2020 and 2023. Short-term liquidity scenarios are taken into consideration when timing the annual round of financing. Based on current forecasts, extraordinary measures are not necessary. At present we expect medium-term earnings risks to be limited to the assignment in time to the above-mentioned periods. There are no signs of any long-term strategic risk as a result of the corona crisis.

### 5.6 Opportunities and strategy

In general, political decision-makers in almost all countries agree on the fact that expanding renewable energies further is desirable and necessary. It is also beyond dispute that onshore wind power and solar are by far the most economical methods of generating power in a manner that protects the environment. Any reform of the energy policy resulting in a cost-effective expansion of the electricity-generating capacities should build on these technologies.

Project developers have a key role to play in implementing the energy transition. Projects can only be implemented to the intended extent with their expertise and their planning and construction capacities.

As in any industry, hard work is the key. Dealing with our partners fairly and openly – from landowners and suppliers to banks and investors – is our guiding principle for long-term business success.

Consistent diversification cushions the risks typical of the industry. Collaboration with different manufacturers for wind power and solar facilities and a regional distribution of the projects reduces the significance of the individual risk factors.

With this in mind, ABO Wind will continue to expand the wind power and solar facility service and maintenance division and offer additional services. In the medium-term, these business areas, which are independent from the core business field of project development, should make a solid contribution to the total earnings.

## 6. Forecast

The 2018 management report predicted that the overall performance for 2019 would be on a par with the previous year's level. At EUR 149.3 million in 2019 compared with EUR 149.9 million in 2018, this prediction has been fulfilled. The gross profit at five percent rose slightly as predicted. Increases in personnel in 2019 resulted, as predicted in the 2018 management report, in greater personnel costs in relation to the overall performance. At 28 percent, compared with 24 percent in the previous year, this rate was still somewhat greater than that predicted in March 2019. The total from depreciation and other operating expenses, up by six percent in the 2019 financial year, does not show any major changes taking into account overall growth, and thus largely corresponds to the expectations from the 2018 management report.

In March 2019, senior management concluded that it would be possible to increase the net profit for 2019 in comparison to 2018. Mid-year, the forecast was lowered to "around EUR 10 million" due to the ongoing wind power crisis in Germany. Thanks to successes abroad during the course of the year and obtaining some long-awaited authorisations for German projects in a successful end to the year, the adjusted prognosis was exceeded slightly with the EUR 11.4 million achieved.

In the period from 2020 to 2022, ABO Wind is anticipating annual new business to the tune of one to two gigawatts on average across the group and across the various technologies. The extent of the new business is related to the further development of new business in markets outside Europe and the impact from individual large-scale projects on the information.

Regarding the completed project developments from the existing pipeline, ABO Wind is expected to achieve an average volume of 150 to 250 megawatts per year in 2020 to 2022 across the group and across the various technologies. The sale of project rights and project portfolios will play an important role and will also enable the first commercial successes in new country markets as well. The magnitude in megawatts is likely to be around the same as for the completed project developments or more. As far as the completed construction services are concerned, for 2020 to 2022 we are expecting up to 160 megawatts per year across the group and across the various technology, for the most part distributed across projects within Europe.

In spite of the prevailing corona crisis, the 2020 financial year is mostly going to plan. The corona crisis is expected to have an impact on the assignment of project implementations to periods, and thus also on the respective earnings for those periods, this financial year and over the next two years however. We do not predict any major effects beyond the period up to 2022.

In this situation, a current prediction of the overall performance for 2020 can only be issued cautiously. Considering the numerous projects under construction, the overall performance will, at a minimum, most likely reach the same level as in the previous two periods however. If authorities, banks and business life in general soon return to a mode that prevents further delays in authorisations, registrations, inspections and similar proceedings, 2020 may even see a considerable increase in the overall

performance compared with the previous year. On the other hand, in the worst-case scenario, a decrease in gross profit is to be expected, but in the best-case scenario, significant increases in gross profit could also be expected.

Aside from the corona crisis, German climate legislation and, above all, the regulations on onshore wind power will have an impact on overall performance and gross profit. It is to be hoped that the decision-making process, now at a halt once again, will come to a promising end in the second quarter of 2020.

Under these circumstances, the senior management currently expects the net profit for 2020 to reach at least the same level as in the previous year.

Wiesbaden, 5 May 2020

ABO Wind AG

The Managing Board



# Consolidated balance sheet

## Assets

	As at 31.12. / in EUR thousand	2019	Previous year
<b>A.</b>	<b>Fixed assets</b>	<b>10,131</b>	<b>9952</b>
I.	Intangible assets	1298	894
II.	Tangible fixed assets	5208	4553
1.	Land and buildings	322	321
2.	Plant and machinery	395	200
3.	Fixtures, fittings, tools and equipment	4372	4032
III.	Financial assets	3626	4505
1.	Shares in affiliated companies	353	347
2.	Loans to affiliated companies	2000	2828
3.	Investments	585	585
4.	Loans to companies in which the company has a participating interest	688	745
<b>B.</b>	<b>Current assets</b>	<b>230,564</b>	<b>182,545</b>
I.	Inventories	80,171	71,451
1.	Work in progress	98,310	81,941
2.	Finished goods and goods for resale	1186	915
3.	Payments on account	3834	2703
4.	Down payments received	-23,158	-14,108
II.	Receivables and other assets	123,079	87,830
1.	Trade accounts receivable	20,678	20,231
2.	Receivables from affiliated companies	87,114	58,369
3.	Receivables from companies in which the company has a participating interest	106	164
4.	Other assets	15,181	9066
III.	Securities	17,666	18,747
1.	Shares in affiliated companies	14,774	14,067
2.	Other investments	2891	4680
IV.	Cash on hand and bank balances	9648	4517
<b>C.</b>	<b>Deferred income</b>	<b>348</b>	<b>128</b>
<b>D.</b>	<b>Deferred tax assets</b>	<b>1516</b>	<b>1417</b>
	<b>Balance sheet total</b>	<b>242,559</b>	<b>194,042</b>

## Liabilities

	As at 31.12. / in EUR thousand	2019	Previous year
A.	Equity capital	103,576	88,976
I.	Subscribed capital	8071	7646
II.	Consolidated capital reserve	19,495	13,542
III.	Consolidated retained earnings	64,811	55,271
1.	Legal reserve	490	490
2.	Other revenue reserves	64,322	54,781
IV.	Difference in equity due to currency translation	-241	-266
V.	Net earnings	11,402	12,745
VI.	Non-controlling interests	37	39
B.	Mezzanine capital	14,350	14,379
C.	Provisions	24,572	21,014
1.	Tax provisions	1133	3568
2.	Other provisions	23,439	17,446
D.	Liabilities	100,060	69,672
1.	Debenture loans	5138	8757
2.	Bank loans and overdrafts	69,711	38,924
3.	Trade accounts payable	10,380	10,983
4.	Liabilities to affiliated companies	2076	1563
5.	Liabilities to companies in which the company has a participating interest	0	0
6.	Other liabilities	12,755	9444
E.	Accrued expenses and deferred income	1	1
	<b>Balance sheet total</b>	<b>242,559</b>	<b>194,042</b>

# Consolidated profit and loss statement

	From 1.1. To 31.12. / in EUR thousand	2019	Previous year
1.	Sales revenues	126,273	150,264
2.	Increase in inventory of products and services	22,752	-619
3.	Other capitalised assets	233	256
4.	Total turnover and operating revenue	149,259	149,901
5.	Other operating income	3451	2973
6.	Cost of materials	-66,582	-70,684
a)	Cost of auxiliary and operating materials and goods purchased	-3215	-2351
b)	Cost of purchased services	-63,367	-68,333
7.	Personnel expenses	-41,361	-36,305
a)	Salaries and wages	-34,475	-29,905
b)	Social security and other pension costs	-6886	-6400
8.	Depreciation	-7979	-10,204
a)	Of intangible fixed assets and tangible assets	-1542	-1438
b)	Of fixed current assets	-6437	-8766
9.	Other operating expenses	-17,143	-13,465
10.	Income from equity interests	77	685
11.	Other interest and similar income	211	215
12.	Depreciation of financial assets and securities held as current assets	0	-15
13.	Interest and similar expenses	-1858	-1802
14.	Earnings from ordinary business activities	18,074	21,298
15.	Taxes on income and profit	-6,248	-8,140
16.	Other taxes	-420	-397
17.	Net profit	11,406	12,761
18.	Non-controlling interests	-4	-17
19.	<b>Consolidated net profit</b>	<b>11,402</b>	<b>12,745</b>



# Consolidated statement of changes in equity

In EUR thousand	Parent company equity capital							Non-controlling interests			Consolidated equity
	Subscribed capital	Capital reserve	Legal reserve	Other revenue reserves	Difference in equity due to currency translation	Net profit	Total	Difference in equity due to currency translation	Net profit	Total	Total
Position at 31.12.2017	7646	13,542	490	41,053	-228	17,010	79,512	0	42	42	79,554
Allocation to the revenue reserve	-	-	-	17,010	-	-17,010	0	-	-	0	0
Dividends paid	-	-	-	-3058	-	-	-3058	-	-	0	-3058
Changes to the consolidated companies	-	-	-	-	-	-	0	-	-	0	0
Exchange rate effects	-	-	-	-	-38	-	-38	-19	-	-19	-57
Other changes	-	-	-	-224	-	-	-224	-	-	0	-224
Consolidated net profit	-	-	-	-	-	12,745	12,745	-	17	17	12,761
Change in the year	-	-	-	13,727	-38	-4265	9424	-19	17	-3	9422
Position at 31.12.2018	7646	13,542	490	54,781	-266	12,745	88,937	-19	59	39	88,976
Allocation to the revenue reserve	-	-	-	9534	-	-9534	0	-	-	0	0
Dividends paid	-	-	-	-	-	-3211	-3211	-	-	0	-3211
Changes to the consolidated companies	-	-	-	7	-	-	7	-	-	0	8
Exchange rate effects	-	-	-	-	26	-	26	-6	-	-6	19
Other changes	-	-	-	-	-	-	-	-	-	0	0
Consolidated net profit	-	-	-	-	-	11,402	11,402	-	4	4	11,406
Change in the year	425	5953	-	9541	26	-1343	14,602	-6	4	-2	14,600
Position at 31.12.2019	8071	19,495	490	65,321	-241	11,402	103,538	-25	63	37	103,576

# Consolidated cash flow statement

	in EUR thousand	2019
<b>Operating activities</b>		
	Result for the period	11,406
+/-	Depreciation/reversals of fixed assets	1542
+/-	Increase/decrease in reserves	5993
-/+	Other non-cash expenses/income	829
-/+	Increase/decrease in inventories	-8720
-/+	Increase/decrease in trade accounts receivable and other assets which are not classified as investment or financing activities	-31,679
+/-	Increase/decrease in trade accounts payable and other liabilities which are not classified as investment or financing activities	2504
-/+	Profit/loss from disposal of fixed assets	3
+	Interest expense	1858
-	Interest income	-211
-	Other income from investments	-77
+/-	Income tax expenditures/receipts	6248
-/+	Income tax payments	-11,491
=	Cash flow from operating activities	-21,795
<b>Investment activities</b>		
+	Proceeds from the disposal of property, plant and equipment items	34
-	Expenditure for investments in property, plant and equipment	-1965
-	Expenditure for investments in intangible assets	-661
+	Proceeds from the disposal of financial assets	57
-	Expenditure for investments in financial assets	-6
+	Interest received	211
+	Dividends received	77
=	Cash flow from investment activities	-2253
<b>Financing activities</b>		
-	Payments to company owners and minority shareholders (dividends, acquisition of treasury shares, equity repayments, other distributions)	-3211
+	Proceeds from the issue of bonds and (financing) loans raised	47,468
-	Proceeds from the repayment of bonds and (financing) loans	-13,145
-	Interest paid	-1948
=	<b>Cash flow from financing activities</b>	<b>29,164</b>
=	<b>Net change in cash and cash equivalents</b>	<b>5116</b>
<b>Currency, consolidated companies, and valuation-related changes in cash and cash equivalents</b>		<b>15</b>
<b>Cash and cash equivalents</b>		
	at start of the period	4517
	at end of the period	9648

# Notes to the consolidated financial statements

## I. General information

The consolidated financial statements for ABO Wind AG, Wiesbaden (registered at Wiesbaden District Court, HRB 12024), are prepared in accordance with the accounting regulations for corporations set out in the German Commercial Code (HGB) taking into account the German Stock Corporation Act (AktG).

The profit and loss statement is prepared in accordance with the total cost method pursuant to Section 275(2) HGB.

The group's financial year corresponds to the calendar year.

ABO Wind AG, as the parent company, is obliged to prepare consolidated financial statements under the provisions of Sections 290 et seq. HGB.

The accounting follows the principle of consistency in accordance with Section 246(3) HGB and Section 252(1)(6) HGB.

In the interest of better clarity and meaning, the notes to be attached to the items in the balance sheet and profit and loss statement in accordance with the statutory provisions, and the notes that are to be attached either in the balance sheet or profit and loss statement, or in the notes to the financial statements, are included in the notes to the financial statements wherever possible.

## II. Consolidated companies

In addition to the parent company ABO Wind AG, the consolidated financial statements include 15 subsidiaries (previous year: 13) over which ABO Wind AG can exercise a controlling influence, directly or indirectly, as defined by Section 290 HGB.

**The following** companies were fully included in the consolidated financial statements in the reporting year:

Company	Share in capital
ABO Wind Betriebs GmbH, Wiesbaden, Germany	100%
ABO Wind Biogas GmbH, Heidesheim, Germany	100%
ABO Wind Biogas-Mezzanine GmbH & Co. KG, Wiesbaden, Germany	100%
ABO Wind Energias Renovables S.A., Buenos Aires, Argentina	94%
ABO Wind España S.A.U., Valencia, Spain	100%
ABO Wind Ireland Ltd., Dublin, Ireland	100%
ABO Wind Mezzanine GmbH & Co. KG, Wiesbaden, Germany	100%

ABO Wind Mezzanine II GmbH & Co. KG, Wiesbaden, Germany	100%
ABO Wind N.I. Limited, Belfast, Great Britain	100%
ABO Wind Oy, Helsinki, Finland	100%
ABO Wind SARL, Toulouse, France	100%
ABO Wind Service GmbH, Heidesheim, Germany	100%
ABO Wind UK Ltd., Bellshill, Great Britain	100%
ABO Wind Hellas Energy S.A., Athens, Greece	99%
ABO Wind Hungary Kft, Budapest, Hungary	100%

The companies ABO Wind Hungary Kft and ABO Wind Hellas Energy SA were **included in the consolidated financial statements for the first time**.

Shares of subsidiaries that are held solely for the purpose of their resale (Section 296(1)(3) HGB), and those subsidiaries of minor significance, even as a whole, for the presentation of a true and fair view of the asset, financial and earnings position (Section 296(2) HGB) have **not been included in the consolidated companies**.

## III. Consolidation principles

### General information

The financial statements included in the consolidation are prepared using uniform accounting and valuation methods. Financial statements in foreign currencies are converted using the modified closing rate method.

### Capital consolidation

Capital consolidation for the companies already fully consolidated in previous years continues to be carried out in accordance with Art. 66(3) sentence 4 of the Introductory Act to the German Commercial Code (EGHGB) using the book value method by offsetting the acquisition costs of the participation against the (proportional) equity of the subsidiary. The revaluation method applies to companies newly included in the consolidated companies. In the process, the acquisition costs of the shares in subsidiaries are offset against the equity attributable to them, valued at the current market value at the time of the initial consolidation. Active differences resulting from capital consolidation are generally capitalized as goodwill after taking into account hidden reserves and charges and deferred taxes thereon. There are no such netting differences for the ABO Wind group.



### Debt consolidation

Within the framework of debt consolidation, all receivables and liabilities that exist between the companies included in the consolidated financial statements have been offset in accordance with Section 303(1) HGB.

### Expense and revenue consolidation

For expense and revenue consolidation pursuant to Section 305(1) HGB, income from supplies and services, and other income between consolidated companies, has been included in the consolidated financial statements along with the corresponding expenses. The same applies to other interest and similar income that has been offset against corresponding expenses.

### Elimination of interim results

In accordance with section 304(1) HGB, interim results from the intra-group acquisition of assets have been eliminated.

## IV. Accounting and valuation methods

### 1. Accounting and valuation of asset items

Intangible assets acquired **from third parties** are capitalised at cost and are amortized on a straight-line basis over their expected useful life pro rata temporis in the year of purchase. Computer programs acquired for valuable consideration are amortized over an average useful life of three years. Computer programs with a purchase price of less than EUR 800 are an exception. These are fully recorded as expenditure straight away. Where the fair values of individual intangible assets are below their carrying amount, unscheduled depreciation is effected if the reduction in value is likely to be permanent.

**Tangible fixed assets** are valued at the acquisition or production costs less scheduled straight-line depreciation. Depreciation on additions to property, plant and equipment is always pro rata temporis. The straight-line depreciation period is 3 to 15 years. Where the fair values of individual assets are below their carrying amount, unscheduled depreciation is effected if the reduction in value is likely to be permanent.

With regard to recording **low-value assets** in the balance sheet, the tax provision in Section 6(2) of the German Income Tax Act (EStG) is applied in commercial law. Acquisition or production costs of movable, depreciable fixed assets which can be used independently are recorded in full as operating expenses in the accounting year of their acquisition, production or contribution if the acquisition or production costs, less an input tax amount included therein, do not exceed EUR 800 for the individual asset.

In **financial assets**, shares in affiliated companies and equity interests are valued at acquisition cost. Where the fair values of individual financial assets fall below their book value, unscheduled **depreciation** is also effected if the reduction in value is likely to be permanent.

Loans are always recorded in the balance sheet at nominal value.

**Work in progress** is valued at production cost. The production costs include the components that must be capitalised in accordance with Section 255(2) HGB. In addition, a reasonable proportion of the administrative costs and a reasonable expenditure for the company's social facilities and for voluntary social security contributions are included in the production costs if incurred during the production period. Interest on borrowed capital has also been capitalized in accordance with Section 255(3) HGB where it relates to the production of assets and the production period. All valuations have been assessed without loss, in other words where the estimated selling price, less any necessary selling costs, results in a lower fair value, corresponding write-downs have been applied.

**Payments on account** are stated at nominal value.

**Down payments received** are stated at nominal value and are openly deducted from the inventories in accordance with Section 268(5) HGB and shown net of any value added tax included therein (so-called net method).

**Receivables and other assets** are stated at nominal value or at the lower fair value applicable on the balance sheet date. Appropriate write-downs are made for receivables where collection of the same involves recognisable risks. Bad debts are written off.

The **securities** held as current assets are stated at acquisition cost or at the lower fair value.

The **liquid assets** are stated at the nominal value at the balance sheet date.

Payments **before the balance sheet date** are stated as prepaid expenses where they represent expenditure for a specific period after that date.

### 2. Accounting and valuation of liability items

The **subscribed capital** is recorded in the balance sheet at nominal value.

The legal reserve has been formed in accordance with Section 150 AktG.

The group shows profit **participation rights** granted by exercising the option set out in Section 265(5) HGB as separate items between equity and debt. They are presented at nominal value.

The **provisions** have been stated at the settlement amount required in accordance with a prudent commercial assessment. Provisions with a remaining term of over one year are discounted using the average market interest rate of the past seven financial years for the remaining term.

**Liabilities** are stated at their settlement amount.

### Foreign currency translation

Transactions in foreign currencies are always recorded using the exchange rate at the time of the transaction. Receivables or liabilities from such transactions which are outstanding on the balance sheet date are valued as follows:

**Short-term foreign currency receivables** (remaining term of one year or less) and liquid assets or other short-term foreign currency assets are translated at the average spot exchange rate on the balance sheet date. **Short-term foreign currency liabilities** (remaining term of one year or less) are translated at the average spot exchange rate on the balance sheet date.

The following applies to subsidiaries included in the consolidated financial statements that use a different currency to the group:

**Assets and liabilities** are translated using the average spot exchange rate on the balance sheet date, **expenses and income** at the average exchange rate, and equity capital at the historic exchange rate. Any resulting currency difference from the translation is recorded in equity under the "Difference in equity due to currency translation" item.

### Deferred taxes

**Deferred taxes** are included in differences in the balance sheet items from the commercial balance sheet and the tax balance sheet, where these are expected to be offset in subsequent financial years. Deferred taxes are also shown under losses carried forward and consolidation measures.

The expense and income from the change in the deferred taxes recorded on the balance sheet is shown in the profit and loss statement under the "Taxes on income and profit" item and explained separately in the notes.

The valuation of deferred taxes is based on the individual tax rate expected to apply at the time the differences are reduced for the group company in which the differences are likely to be reduced.

## V. Information about the balance sheet

Unless otherwise stated, the previous year's figures on the balance sheet relate to 31 December 2018.

### Fixed assets

Changes to individual fixed asset items are shown in the schedule of fixed assets along with the depreciation for the year. The schedule of fixed assets is appended to the notes.

The shares in affiliated companies and equity interests (shareholdings), in other words business in which the company holds at least 20% of the shares, directly or indirectly, shown under financial assets are listed in the list of shareholdings which is appended to the notes.

### Receivables and other assets

Information about receivables and other assets can be found in the following analysis of receivables:

As at 31.12.2019 in EUR thousand (previous year)	Remaining term		
	< 1 year	1-5 years	
Trade accounts receivable	20,678 (20,231)	20,678 (20,231)	0 (100)
Receivables from affiliated companies	87,114 (58,369)	87,114 (58,369)	0 0
Receivables from companies in which the company has a participating interest	106 (164)	106 (164)	0 (0)
Other assets	15,181 (9066)	15,014 (9033)	167 (33)
Total	123,079 (87,830)	122,912 (87,697)	167 (133)

The **receivables from affiliated companies** are primarily the result of trade accounts payable.

### Deferred tax assets

The "Deferred tax assets" items shown separately in the balance sheet are the result of interim profits and tax losses carried forward.

The deferred tax assets and liabilities are valued using the following company-specific tax rates:

- Argentina 35%
- Germany 30%
- Spain 25%
- Ireland 12.5%
- UK 20%
- France 33%
- Finland 20%
- Greece 10%
- Hungary 9%

### Equity capital

The ABO Wind AG subscribed capital was increased through the issue of subscription shares from the convertible bond in October 2019 by 425,193 to 8,070,893 no-par-value shares (previous year:

7,645,700 no-par-value shares) with a par value of EUR 1/share. The capital increase was recorded in the commercial register in January 2020. The premium of EUR 5953 thousand resulting from the capital increase was allocated to the capital reserve.

The company's share capital increased by up to EUR 574,807 through the issue of up to 574,807 new bearer shares (2017 conditional capital). The conditional capital increase is to grant shares to the owners of convertible bonds or bonds with warrants issued on the basis of the authorisation from the general meeting of 20 December 2017 by the company up to 19 December 2022.

The Managing Board is authorised to increase the share capital one or more times before 21.08.2024 with the consent of the Supervisory Board by up to EUR 3500 thousand in return for cash contributions or contributions in kind. In so doing, shareholders' subscription rights may be excluded (authorised capital 2019/1).

## Mezzanine capital

At the balance sheet date, participation certificates totalling EUR 14,350 thousand had been issued (previous year EUR 14,379 thousand). Each of the participation certificates issued represents a par value of EUR 1. Of the total sum, EUR 7441 thousand (previous year EUR 7666 thousand) is attributable to ABO Wind Mezzanine GmbH & Co. KG, EUR 5213 thousand (previous year EUR 5213 thousand) to ABO Wind Mezzanine II GmbH & Co. KG, and EUR 1697 thousand (previous year EUR 1501 thousand) to ABO Wind Biogas-Mezzanine GmbH & Co. KG.

The participation certificate bearers are entitled to annual interest.

## Provisions

The tax provisions are structured as follows:

Tax provisions	31.12.19 in EUR thousand	31.12.18 in EUR thousand
Provision for corporation tax	1080	3153
Provision for trade tax	53	415
<b>Total</b>	<b>1133</b>	<b>3568</b>

The other provisions are subdivided as follows:

Other provisions	31.12.19 in EUR thousand	31.12.18 in EUR thousand
Provision for outstanding invoices	12,498	8055
Provision for misc. project risks	590	1538

Provision for audit and other review costs	149	145
Provision for warranties	220	56
Provision for archiving costs	25	25
Other provisions	9957	7627
<b>Total</b>	<b>23,439</b>	<b>17,446</b>

## Liabilities

ABO Wind AG offered convertible bonds on the open market on the basis of a securities prospectus approved by the Federal Financial Supervisory Authority (BaFin). The subscribers to the convertible bond issue secured for themselves the ability to acquire shares in ABO Wind AG in October 2019 at the price of EUR 15 through conversion of the bonds.

The convertible bonds were subject to the following conditions:

- Term: 1 May 2018 to 30 April 2020
- Interest: 3 percent per annum
- Issue price: EUR 15
- Conversion periods: October 2018 and October 2019
- Conversion ratio 1:1
- Issue volume: one million bonds, EUR 15 million

On the reporting date, 342,557 convertible bonds with a total nominal value of EUR 5138 thousand are shown on the balance sheet as liabilities due at the end of the term.

The statement of liabilities below shows the liabilities and their remaining terms:

Liabilities	31.12.19	Remaining term	
	Total in EUR thousand	up to 1 year	1 to 5 years
Debenture loans (Previous year)	5138 (8757)	5138 -	0 (8757)
Bank loans and overdrafts (Previous year)	69,711 (38,924)	14,224 (844)	55,487 (38,080)
Trade accounts payable (Previous year)	10,380 (10,983)	10,380 (10,983)	0 (0)
Liabilities to affiliated companies (Previous year)	2076 (1563)	2076 (1560)	0 (3)
Other liabilities (Previous year)	12,755 (9444)	12,755 (9444)	0 (0)
- of which taxes (Previous year)	9739 (7591)	9739 (7591)	0 (0)



- of which relating to social security	328	328	0
(Previous year)	(399)	(399)	(0)
	<b>100,060</b>	<b>44,573</b>	<b>55,487</b>
(Previous year)	(69,672)	(22,831)	(46,841)

The liabilities to affiliated companies primarily include those from trade accounts payable.

## VI. Information about the profit and loss statement

### Sales revenues

The following breakdown shows sales revenues by area of activity:

	2019		2018	
	EUR thousand	%	EUR thousand	%
Planning and sale of rights	86,051	68.2	34,258	22.8
Construction	29,569	23.4	105,654	70.3
Services	10,653	8.4	10,352	6.9
	<b>126,273</b>	<b>100.0</b>	<b>150,264</b>	<b>100.0</b>

The image below shows the breakdown by geographical market:

	2019		2018	
	EUR thousand	%	EUR thousand	%
Germany	52,960	41.9	71,450	47.5
France	36,242	28.7	18,726	12.5
Spain	14,234	11.3	1158	0.8
Finland	9632	7.6	34,351	22.9
Hungary	5201	4.1	0	0.0
Greece	4246	3.4	0	0.0
UK	3108	2.5	220	0.1
Tunisia	587	0.5	0	0.0
Ireland	44	0.0	23,508	15.6
Argentina	19	0.0	851	0.6
	<b>126,273</b>	<b>100.0</b>	<b>150,264</b>	<b>100.0</b>

### Other operating income

Other operating income includes income not relating to the current period of EUR 1207 thousand which is predominantly the result of releasing provisions. Income of EUR 212 thousand was also accrued from foreign currency translation.

### Depreciation

The depreciation includes unscheduled depreciation on unfeasible projects of EUR 6437 thousand (previous year EUR 8766 thousand).

### Other operating expenses

The other operating expenses include expenses not relating to the current period of EUR 2196 thousand which is predominantly the result of bad debts. Expenses from currency translation of EUR 200 thousand are also recorded.

### Taxes on income and profit

The taxes on income and profit include income from deferred taxes of EUR 341 thousand (previous year EUR 159 thousand) and expenses from deferred taxes of EUR 242 thousand (previous year EUR 467 thousand).

## VII. Additional information

### Contingent liabilities

ABO Wind AG issued a maximum payment guarantee in respect of Eurowind AG participation certificate holders for interest and repayment claims of up to EUR 125.00 in each instance. This guarantee for a total of EUR 1300 thousand forms the basis of a direct claim by the participation certificate holder against the guarantor which can be asserted if Eurowind AG is in arrears with its payments by at least 60 days. The interest on participation certificates for 2019 has already been distributed.

In connection with the project rights acquired by the French subsidiary ABO Wind SARL, ABO Wind AG is liable for the French subsidiary in relation to agreed profit participations upon completion of the acquired projects up to a maximum of EUR 640 thousand until 31.12.2020.

Moreover, ABO Wind AG has issued a guarantee in connection with the acquisition of project rights by an Irish project company to the tune of EUR 7200 thousand until 31.12.2020.

By way of security for payment claims under the contracts to supply, install and commission wind turbines for various projects, ABO Wind AG has also issued suretyship guarantees to suppliers for EUR 99,276 thousand.

ABO Wind AG has also issued a statement of commitment in favour of a Canadian cooperative company in connection with the funding of a joint solar farm. The payment guarantee is limited to

a maximum sum of EUR 3416 thousand.

In addition, ABO Wind AG has provided another guarantee in connection with the acquisition of project rights and the development of solar farms by the South African subsidiary for the equivalent of the sum of EUR 423 thousand.

No reserves have been formed for the specified contingent liabilities, estimated at nominal values, because their use and any negative impact on the group is not expected.

## Other financial liabilities and off-balance sheet transactions

The group also has liabilities from fixed-term rental and lease agreements of EUR 9151 thousand (previous year: EUR 6988 thousand). These liabilities are predominantly incurred as a result of premises rental and vehicle leasing.

## Hedge accounting

To hedge currency risks for purchase contracts concluded in Chinese renminbi (RMB), forward exchange transactions are concluded in the amount of the actual purchase volume for purchases already contracted. The currency hedges are micro-hedges since an underlying transaction is instantly hedged in each instance with an individual hedging instrument.

For the hedged risk, the respective reverse value adjustments for the underlying transaction and hedging transaction largely cancel each other out over the term of the hedge since they are exposed to the same risk which is affected by identical factors in the same way. The effectiveness of the hedge accounting is determined prospectively by comparing the key data for the items included (Critical Terms Match).

The intention is always to hold the hedging transactions to maturity. The net hedge presentation method is used.

The hedge accounting position as at 31 December 2019 is as follows:

Underlying transaction	Amount in TEUR	Hedged risk	Amount in TEUR	Hedging instrument	Type of valuation unit	Effectiveness	
						Scope	Period
RMB Order backlog	8.432	Value change risk (exchange rate changes)	151	RMB Forward sale contracts	Micro hedge	Nearly 100%	<1 year

The forward currency purchases completed were concluded to hedge against the EUR/RMB exchange rate risk from pending purchase transactions. On 31 December 2019, the hedged risk amounted to EUR 151 thousand.

## Cash flow statement

The cash flow statement shows changes in cash and cash equivalents in detail. The cash and cash equivalents as at the balance sheet date corresponds to the "Cash on hand and bank balances" balance sheet item.

In 2019, shares in operating companies in the form of securities held as assets were sold for EUR 1899 thousand. The cash inflows resulting from this process have been attributed to cash flow from operating activities due to these companies being from similar industries.

## Total auditor's fees

The parent company's single-entity and consolidated financial statements as at 31 December 2019 have been audited by Rödl & Partner GmbH, Cologne, Germany. The total fee for audit services is EUR 77 thousand (previous year EUR 71 thousand), EUR 59 thousand (previous year EUR 4 thousand) for tax advisory services, and EUR 61 thousand (previous year EUR 0 thousand) for other services.

## Employees

In 2019, an average of 676 salaried employees (previous year 573) were employed. This figure is broken down by group as follows:

Employees	31.12.2019	31.12.2018
Employee groups		
Executive salaried employees	17	14
Full-time employees	463	385
Part-time employees	196	174
<b>Total</b>	<b>676</b>	<b>573</b>

## Managing Board

The following people were on the Managing Board in the year under review:

- Dr. Jochen Ahn, chemistry graduate, Wiesbaden, responsible for project acquisition and management
- Dipl. Ing. Matthias Bockholt, graduate electrical engineer, Heidesheim, responsible for technology and operational management
- Andreas Höllinger, business graduate from Lyon ESC, Frankfurt am Main, Chair of the Managing Board, responsible for financing and sales
- Dr. Karsten Schlageter, industrial engineering graduate,

Taunusstein, responsible for international business development  
For further information on the Managing Board's remuneration, see the remuneration report in the management report.

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## Supervisory Board

Members of the Supervisory Board in 2019 were:

### Chair

Lawyer Jörg Lukowsky, tax law and employment law specialist, employed at law partnership FUHRMANN WALLENFELS in Wiesbaden

### Other members

- Prof. Dr. Uwe Leprich, Professor of Energy Economics at Saarland Business Technical College of Higher Education in Saarbrücken
- Josef Werum, Managing Director of In.Power GmbH, Mainz (until 22.08.2019)
- Norbert Breidenbach, managing board member of Mainova AG, Frankfurt
- Eveline Lemke, Managing Director of Eveline Lemke Consulting, Volksfeld
- Maike Schmidt, scientist, Head of Systems Analysis at the Centre for Solar Energy and Hydrogen Research, Stuttgart (from 22.08.2019)

The remuneration for members of the Supervisory Board was EUR 91 thousand (EUR 70 thousand in the previous year).

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## Managing Board's proposal for the appropriation of net profit

The Managing Board recommends transferring the parent company's net profit for the financial year, amounting to EUR 15,763 thousand, to retained earnings.

## VIII. Supplementary report

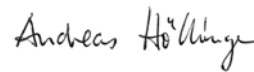
Redeemable loans amounting to EUR 8000 thousand in total, with a term of 5 years, were paid out in the first quarter of 2020. Parallel to this, a new credit line of EUR 15,000 thousand was agreed with an insurance company in January 2020.

Based on the authorisation granted by resolution of the general meeting on 22.08.2019, the share capital increase by 400,000 shares to 8,470,893 shares took place in February 2020. The premium of EUR 6440 thousand resulting from the capital increase was allocated to the capital reserve.

Please also see the statements in the management report regarding the effects of the corona crisis.

No other incidents of major significance for ABO Wind AG to its business operations or its asset and financial and earnings position have occurred after 31 December 2019 and could result in a different assessment of the company's position.

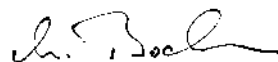
Wiesbaden, 5 May 2020



Andreas Höllinger  
Chair of the Managing Board



Dr. Jochen Ahn  
Managing Director



Matthias Bockholt  
Managing Director



Dr. Karsten Schlageter  
Managing Director



## Statement of changes in fixed assets

Statement of changes in fixed assets for the 2019 financial year					
Values in EUR thousand		Acquisition costs			
		01.01.2019	Currency effect	Incoming	Outgoing
I.	Intangible assets				
1.	Intangible assets as concessions, patents, licences, trade marks and similar rights and assets acquired from third parties	1883	0	214	
2.	Payments on account	553	-	469	
	<b>Intangible assets total</b>	<b>2436</b>	<b>0</b>	<b>661</b>	
II.	Tangible fixed assets				
1.	Land and leasehold rights and buildings, incl. buildings on third-party land	328	-	2	
2.	Plant and machinery	235	-	236	
3.	Fixtures, fittings, tools and equipment	11,184	3	1610	
4.	Payments on account and assets in process of construction	-	-	118	
	<b>Tangible fixed assets total</b>	<b>11,748</b>	<b>3</b>	<b>1965</b>	
III.	Financial assets				
1.	Shares in affiliated companies	362	-	6	
2.	Loans to affiliated companies	2828	-	-	
3.	Investments	1092	-	-	
4.	Loans to companies in which the company has a participating interest	745	-	-	
	<b>Financial assets total</b>	<b>5026</b>	<b>0</b>	<b>6</b>	
	<b>Fixed assets total</b>	<b>19,210</b>	<b>3</b>	<b>2654</b>	

			Depreciation						Book values	
Opening	Reallocations	Position at 31.12.2019	01.01.2019	Currency effect	Incoming	Outgoing	Reallocations	Position at 31.12.2019	31.12.2019	31.12.2018
-22	334	2408	1542	-15	272	-	-	1799	609	340
-	-334	689	-	-	-	-	-	-	689	553
<b>1</b>	<b>0</b>	<b>3097</b>	<b>1542</b>	<b>-15</b>	<b>272</b>	<b>0</b>	<b>0</b>	<b>1799</b>	<b>1298</b>	<b>894</b>
-	-	330	7	-	-	-	-	7	322	321
-	-	471	35	-	41	-	-	76	395	200
-137	-	12,660	7152	6	1230	-100	-	8288	4372	4032
-	-	118	-	-	-	-	-	-	118	0
<b>-137</b>	<b>-</b>	<b>13,579</b>	<b>7194</b>	<b>6</b>	<b>1271</b>	<b>-100</b>	<b>0</b>	<b>8371</b>	<b>5208</b>	<b>4553</b>
-	-	367	15	-	-	-	-	15	353	347
-	-	2828	-	-	828	-	-	828	2000	2828
-	-	1092	506	-	-	-	-	506	585	585
-57	-	688	-	-	-	-	-	-	688	745
<b>-57</b>	<b>-</b>	<b>4975</b>	<b>521</b>	<b>0</b>	<b>828</b>	<b>0</b>	<b>0</b>	<b>1349</b>	<b>3626</b>	<b>4505</b>
<b>-216</b>	<b>-</b>	<b>21,651</b>	<b>9258</b>	<b>-9</b>	<b>2371</b>	<b>-100</b>	<b>0</b>	<b>11,520</b>	<b>10,131</b>	<b>9952</b>

# Material shareholdings

As at 31.12.2019	Share in %	
<b>Germany</b>		
ABO Wind Verwaltungs GmbH, Wiesbaden	100	
ABO Wind Betriebs GmbH, Wiesbaden	100	
ABO Wind Biogas GmbH, Wiesbaden	100	
ABO Wind Service GmbH, Heidesheim	100	
ABO Wind Sachverständigen GmbH, Heidesheim	100	
ABO Wind Solutions GmbH, Wiesbaden	100	
ABO Pionier AG, Wiesbaden	100	
ABO Invest AG, Wiesbaden	2	
ABO Kraft & Wärme AG, Wiesbaden	13	
ABO Wind Biogas- Mezzanine GmbH & Co. KG, Wiesbaden	100	
ABO Wind Mezzanine GmbH & Co. KG, Wiesbaden	100	
ABO Wind Mezzanine II GmbH & Co. KG, Wiesbaden	100	
BEG Windpark-Verwaltungs GmbH, Heidesheim	100	
United Battery Management GmbH, Berlin	70	
ABO Wind Speicher GmbH, Wiesbaden	100	
<b>France</b>		
ABO Wind SARL, Toulouse	100	
<b>Spain</b>		
ABO Wind Espana S.A.U., Valencia	100	
<b>Finland</b>		
ABO Wind OY, Helsinki	100	
ABO Wind Service Oy, Helsinki	100	
<b>Ireland</b>		
ABO OMS Ltd., Dublin	100	
ABO Wind Ireland Ltd., Dublin	100	
<b>Canada</b>		
ABO Wind Canada Ltd., Calgary	99	
<b>United Kingdom</b>		
ABO Wind N.I. Ltd., Belfast	100	
ABO Wind UK Ltd., Livingston	100	
<b>Argentina</b>		
ABO Wind Energias Renovables S.A, Buenos Aires	94	
<b>Greece</b>		
ABO Wind Hellas Energy S.A., Athens	99	
<b>Colombia</b>		
ABO Wind Colombia S.A.S., Bogota	100	
<b>South Africa</b>		
ABO Wind Renewable Energies Ltd., Cape Town	100	
<b>Tunisia</b>		
ABO Wind Tunisie SARL, Ariana	99	
ABO Wind Carthage SARL, Ariana	99	
<b>Hungary</b>		
ABO Wind Hungary Kft., Budapest	100	
*Financial year 2018 **Financial year 2017		



Equity in EUR thousand		Net profit for the year in EUR thousand	
EUR	175*	EUR	3*
EUR	838	EUR	98
EUR	108	EUR	40
EUR	179	EUR	67
EUR	102*	EUR	27*
EUR	-20*	EUR	-41*
EUR	66*	EUR	-32*
EUR	64,186*	EUR	1677*
EUR	11,213*	EUR	154*
EUR	46	EUR	3
EUR	111	EUR	8
EUR	38	EUR	14
EUR	12*	EUR	0*
EUR	28*	EUR	3*
EUR	24*	EUR	-1*
EUR	4564	EUR	4373
EUR	1697	EUR	919
EUR	585	EUR	505
EUR	1*	EUR	1*
EUR	-30*	EUR	-35*
EUR	3105	EUR	2125
CAD	-2	CAD	11
GBP	821	GBP	746
GBP	-281	GBP	20
ARS	33,902	ARS	2021
EUR	200	EUR	168
COP	42,710	COP	44,832
ZAR	1430	ZAR	878
TND	156	TND	155
TND	-876	TND	-907
EUR	669	EUR	659

# ABO Wind AG balance sheet

## Assets

	As at 31.12. / in EUR thousand	2019	Previous year
<b>A.</b>	<b>Fixed assets</b>	<b>8083</b>	<b>8681</b>
I.	Intangible assets	1175	752
1.	Intangible assets as concessions, patents, licences, trade marks and similar rights and assets acquired from third parties	487	199
2.	Payments on account	689	553
II.	Tangible fixed assets	2773	2950
1.	Land and leasehold rights and buildings, including buildings on third-party land	322	321
2.	Fixtures, fittings, tools and equipment	2450	2629
III.	Financial assets	4135	4979
1.	Shares in affiliated companies	861	821
2.	Loans to affiliated companies	2000	2828
3.	Investments	585	585
4.	Loans to companies in which the company has a participating interest	688	745
<b>B.</b>	<b>Current assets</b>	<b>209,261</b>	<b>177,924</b>
I.	Inventories	73,712	70,247
1.	Work in progress	80,404	75,509
2.	Finished goods and goods for resale	0	0
3.	Payments on account	3497	2219
4.	Down payments received	-10,188	-7480
II.	Receivables and other assets	117,009	87,445
1.	Trade accounts receivable	13,897	13,701
2.	Receivables from affiliated companies	91,718	65,444
3.	Receivables from companies in which the company has a participating interest	106	164
4.	Other assets - of which with a remaining term of over one year 134 (previous year: 129)	11,288	8135
III.	Securities	14,759	17,360
1.	Shares in affiliated companies	10,812	11,428
2.	Other investments	3947	5932
IV.	Cash on hand, Bundesbank balance, cash at bank and cheques	3780	2873
<b>C.</b>	<b>Deferred income</b>	<b>169</b>	<b>66</b>
	<b>Balance sheet total</b>	<b>217,512</b>	<b>186,671</b>

## Liabilities

	As at 31.12. / in EUR thousand	2019	Previous year
A.	Equity capital	95,792	76,862
I.	Subscribed capital	8071	7646
II.	Capital reserve	19,495	13,542
III.	Revenue reserves	52,463	50,398
1.	Legal reserve	490	490
2.	Other revenue reserves	51,973	49,908
IV.	Net earnings	15,763	5277
B.	Provisions	18,282	10,605
1.	Tax provisions	66	466
2.	Other provisions	18,216	10,139
C.	Liabilities	103,437	99,203
1.	Debenture loans	5138	8757
2.	Bank loans and overdrafts - of which with a remaining term of up to one year 844 (previous year: 1125)	67,683	38,924
3.	Trade accounts payable - of which with a remaining term of up to one year 7426 (previous year: 3038)	2470	7426
4.	Liabilities to affiliated companies - of which with a remaining term of up to one year 38,649 (previous year: 20,966)	22,373	38,649
5.	Liabilities to companies in which the company has a participating interest - of which with a remaining term of up to one year 0 (previous year: 3)	0	0
6.	Other liabilities - of which to shareholders 21 (previous year: 19) - of which tax 4790 (previous year 3300) - of which with a remaining term of up to one year 5447 (previous year: 3714)	5773	5447
D.	Deferred income	1	1
	<b>Balance sheet total</b>	<b>217,512</b>	<b>186,671</b>

# ABO Wind AG profit and loss statement

From 1.1. To 31.12. / in EUR thousand		2019	Previous year
1.	Sales revenues	102,968	81,755
2.	Increase in inventory of finished products and work in progress	11,332	15,958
3.	Other capitalised assets	233	256
4.	Total turnover and operating revenue	114,533	97,969
5.	Other operating income	2001	2748
6.	Cost of materials	-59,922	-57,556
a)	Cost of auxiliary and operating materials and goods purchased	-111	-80
b)	Cost of purchased services	-59,811	-57,476
7.	Personnel expenses	-31,937	-27,910
a)	Salaries and wages	-27,483	-23,603
b)	Social security and other pension costs	-4454	-4307
8.	Depreciation	-7311	-9502
a)	of intangible fixed assets and tangible assets	-874	-736
b)	of fixed current assets, where these exceed the usual depreciation in the company	-6437	-8766
9.	Other operating expenses	-10,051	-7455
10.	Income from equity interests in affiliated companies - of which from affiliated companies: 10,527 (previous year: 500)	12,577	10,527
11.	Other interest and similar income - of which from affiliated companies: 322 (previous year: 430)	385	349
12.	Depreciation of financial assets and securities held as current assets	0	-15
13.	Interest and similar expenses - of which to affiliated companies: 479 (previous year: 444)	-1429	-1355
14.	Taxes on income and profit	-3051	-2492
15.	Earnings after tax	15,795	5308
16.	Other taxes	-31	-31
17.	Net profit	15,763	5277
18.	Allocation to revenue reserves	0	0
19.	<b>Net earnings</b>	<b>15,763</b>	<b>5277</b>

Any discrepancies are due to rounding differences.



