Was newsletter

No 1





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INHALT

Energy from wind dominates the energy turnaround

3,731 megawatts onshore – the second-best year in the history of wind energy in Germany. A whopping 2,282 megawatts offshore – three times the level of installed capacity in one year. And the kilowatt hours generated by wind have gone up by as much as 50 percent compared to the previous year! Three reasons indeed to celebrate.

Now is not the time for celebration however. The format for tenders will be decided on this year. Prices for electricity generated from wind are due to be fixed in tendering rounds from 2017. We had been discussing this for more than two years and were well on the way to a satisfactory outcome. Envisaged were a net annual volume of 2,500 megawatts onshore (around 4,000 megawatts gross) and two offshore wind farms per year producing 800 megawatts. With tendering definitely going ahead, outstanding issues tended to centre on details and tonality.

Following on from intense but constructive dialogue, the proverbial jack-in-the-box appeared once again. By 2025 the share of renewable energies in the electricity mix was not to exceed a target of 40 to 45 percent. With a share in the electricity mix of around 36 percent expected by the end of 2016, this virtually amounts to an abrupt halt that will first primarily hit the onshore sector. In return, a complex mathematical formula has been worked out that allows onshore to develop capacity left available by others. This should amount to at least 2,000 megawatts gross of onshore capacity. In this way, at least half of the agreed volume for new construction should be realised.

This is a declaration of war that lacks substance.
Instead, it affects the apportionment costs of the Renewable Energies Act.
These have turned out to be lower in



Dr Klaus Meier, Chairman of WAB e.V.

2015 anyway than in previous years, even though electricity from wind has increased by 50 percent. Instead, the liquidity of the apportionment account has grown by 20 percent to EUR 3.3 billion.

The agreement made in Paris calls above all for greater cutbacks in CO² emissions. If Sigmar Gabriel, the German Minister for Economic Affairs and Energy, with a tailwind of CDU party leaders (including Joachim Pfeiffer, Michael Fuchs and Thomas Bareiß who are pursuing a revanchist energy policy), is serious, then CO² emissions will even rise. A large part of CO²-free nuclear energy would then have to be replaced by coal and gas instead of by renewable energies.

Time to drop the celebration then. We must roll up our sleeves and fight – for the end of the senseless burning of fossil energies, for decentralised and indigenous energies, for Germany's leading role in technology, for our industry.

Best wishes,

Dr Klaus Meier

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DATES 6 April 2016 WAB social get-together, Bremen 6/7 April 2016 WAB introductory seminar, Bremen 13/14 April 2016 Future Conference: Wind & Maritime, Rostock (www.wind-maritim.de) 21 April 2016 bav - customs seminar, Bremen 7-9 June 2016 WINDFORCE Conference, BLG Forum, Bremen 14/15 June 2016 8th NRW Industry Day for Wind Energy, Düsseldorf 10 August 2016 WAB social get-together, Bremen 27-30 September Joint stand at WindEnergy trade fair, Hamburg









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Earlier than expected

Interview with Andreas Wellbrock

Andreas Wellbrock was actually scheduled to become WAB's CEO on 1 June. Now he'll be getting down to business two months earlier. Wellbrock has ambitious plans and wants to approach members directly.



Andreas Wellbrock. Photo: Torsten Thomas/WAB

WAB: For 16 years you worked for the BLG Logistics Group where you were also a member of the board. From April 1st you will be WAB's new CEO. Why did you decide it was time for a change?

Wellbrock: Coincidence played a part. The WAB board told me about the vacancy and at the time I was looking for new challenges anyway. I'm committed to offshore wind and it's something I also helped to develop for BLG in terms of logistics. This common denominator brought us together. And it proved to be the right route for me to take. If you've been on the board of a large company for too long, at some point it becomes difficult to break away. That's why I'm looking forward to working for WAB and its members.

WAB: So you intended to change the direction your career was heading anyway?

Wellbrock: Quite right. I had held various positions and taken on several roles at BLG.

But the time was ripe because after a while things become routine and the opportunities to change anything in a large group are limited. I'm a creative person with plenty of ideas about how we can build on what WAB has already achieved. The network grew rapidly in the boom years. Now, we're tending to stagnate and the industry is in a trough. We therefore need to make sure that momentum is regained. This applies especially when you look at the debates on acceptance in the south and west of Germany.

WAB: What will your starting point be?

Wellbrock: One focus will lie on the members. We have a very varied structure that ranges from big companies to medium to small-sized companies and one-man bands. As a result, expectations vary a great deal as to what WAB could do for its members. But then again, we need a stronger presence that reaches out beyond the northwest. If our goal is to achieve more acceptance for the offshore wind industry, we need to integrate our members in the west and south of Germany more strongly and attract new companies there.

WAB: In the heyday, the network grew at a pace, because many companies wanted to try their chances offshore, while other companies are only active in onshore wind. How can we deal appropriately with this mixed structure?

Wellbrock: First of all, we need and want to find out what our members' interests are and to what extent these interests differ. This is something I want to look at in as much detail as possible to start with. The results will engender new focal points and priorities.

WAB: It will all hinge on politics.

Wellbrock: Exactly. Big companies want us as a network to be involved in legislation and political processes in Berlin. And that's something that's important to all members of course.

Moreover, we are committed to the small, ownermanaged companies and we need to highlight the added value that membership brings.

WAB: So you first want to listen to what is being said in the network?

Wellbrock: We will evaluate the situation and conduct a membership survey. Moreover, I have resolved to visit a representative cross-section of members and discuss the situation with them. This also applies to the geographical situation, because the expectations of a local company may differ from those of a member in the south of Germany.

WAB: You are approaching the matter in a very open way.

Wellbrock: I first want to see for myself what the situation is like and listen to a large number of attitudes and opinions. This may result in a concept and clarity on where we need to make changes and what our future focal points should be. I'm hoping for a great deal of replies.

WAB: How do you rate the current situation within the industry?

Wellbrock: We need conditions that will be stable for a number of years and are geared towards the future, because the lead times for projects at sea are longer than for those on land. At the end of the day, this means that the basis for the profitability calculation still has to apply in four or five years' time. We must make this clear not only to the federal government but also to the prime ministers of the federal states.

WAB: We are entering the crucial phase concerning the amendment to the Renewable Energies Act (EEG). Is the wind industry as a whole still able to make itself heard?

Wellbrock: We are currently working on this very intensively, as the Weimar Appeal with the five northern German federal states has recently demonstrated. However, it will be essential for other federal states to follow our reasoning as well. This is hard work, because the energy transition has slipped down the agenda during the course of the refugee debate.





WAB: As a matter of fact, the politicians have already cut back a number of megawatts by capping the expansion targets. The reduced volume does not exactly fire the imagination.

Wellbrock: I consider the cap to be the wrong signal. The refugee crisis shows how fragile the world is. There are many wars, countries that are being destabilized by disputes, the conflict with Russia and distortions caused by global warming. I feel that what is lacking in the energy transition is the geopolitical interest to produce as much energy as possible ourselves. Wind energy and especially offshore wind are vital in this context. Judging from the learning curve, wind energy will indeed be able to make its contribution at reasonable prices.

WAB: At the moment, the low oil price is leading us to believe that energy supply is less of a problem.

Wellbrock: This situation, of course, is not here to stay and the low price is also a result of the fact that demand is decreasing thanks to the move away from fossil fuels. What I am missing in Germany in terms of policy is a clear commitment in favour of and a plan for the energy transition. This is not just a matter of expansion and speed, but also of how we cope with the consequences resulting from the decision.

WAB: So the basic objective first of all is expansion to meet demand?

Wellbrock: (laughing) Whatever that may mean, there must be something wrong with the plan

for environmental protection, if modern gas power plants, the costs of which still feature in the books, are not profitable, whereas money is flowing in from coal-fired power plants that have been written off.

WAB: This raises the topic of system integration.

Wellbrock: Of course, we must promote this approach more forcefully and take a much closer look at storage technologies or the conversion of electrical energy. I regard this as important simply in terms of industrial progress with all its innovations. We also need a clear framework for technological innovation from the legislator so that products which have reached market maturity, such as power-to-gas or battery storage systems, will in fact become economically feasible.

WAB: Germany is not the only country that has put the cost brakes on. A similar discussion is ongoing in the UK while in other countries costs again are an issue where tendering is concerned. At the same time, the volume of renewables is not growing.

Wellbrock: Low-cost coal-fired power stations do not help us to combat climate change and the severe consequences for many countries. Starting with coastal protection, the full costs would have to be offset against the expansion of renewable energy and I would argue that society would find this cheaper in the long term. However, without volume the wind industry will not be able to achieve economies of scale. On

the contrary, if there are insufficient capacities, the opposite effect will occur.

WAB: One consequence of the volume shortage and the cost reductions demanded is that the European market is shrinking to fewer and fewer players.

Wellbrock: Many companies have now disappeared from the market or have been incorporated into larger group structures. Concentration leads to falling costs for the initial projects, but when the market is split into oligopolistic structures, the trend will reverse. At the same time, a market in short supply and the lack of prospects will present a barrier for new entrants, because entry into the market costs a lot of money.

WAB: High costs have given rise to differing opinions on the Offshore Terminal at Bremerhaven (OTB). Early in February, your old employer signed the contract for the operation of the terminal. What is your opinion on this?

Wellbrock: About 270 hectares of developed land is available by the river Weser. Without an OTB these spaces will not be attractive or it will be a lot more difficult to market them successfully. Corporate decision makers always go where the offshore infrastructure is located.

The interview was conducted by Torsten Thomas.

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Wismar Appeal

Plans by the German Ministry for Economic Affairs and Energy to reform the Renewable Energies Act still under fire

The heads of government of the five German coastal states, employers and unions, businesses and associations met for a wind energy summit in Wismar on 25 January 2016. Similarly to 2013, an amendment to the Renewable Energy Sources Act (EEG) is looming. Once again it threatens to disrupt the offshore industry. The coastal states, and the employers and unions are standing firmly by the industry.

At the end of the event, the Wismar Appeal was signed. Its purpose is to add momentum to the debate on the future conditions of both the offshore and onshore wind industries, just like the Cuxhaven Appeal did at the time. The appeal's signatories speak out in favour of wind power expansion at sea and on land and request the German government to make amendments to the planned reform of the Renewable Energies Act (EEG 2016).

For offshore wind, the fundamental change towards tendering is generally accepted throughout the industry, but its proposed form is highly controversial. One reason is that the premature commitment to a central tendering model and two one-off auctions within one year at an early stage reduce the value of investments already made by a lot of developers and entail the risk of claims for damages. The other reason is that the urgently needed offshore grid access systems, which are intended to make connection possible in 2021 and 2022 respectively, have also been intended by the government, but not yet commissioned. Considering a timespan of six years for the tendering procedure and installation, there is a real risk that connecting offshore wind turbines to the grid on time will prove impossible.

As a way of controlling quantities, the German government is planning to apply what is known as a "world formula". The purpose of the formula is to limit the proportion of renewable energy in terms of total electricity consumption to 40 to 45 per cent for the year 2025. Expansion is to be capped at this limit and distributed among the individual renewable energy technologies – at the expense of onshore wind energy. Because in the case of the "world formula", one group's loss is another's gain. If offshore wind and PV are more successful than envisaged by the government, the opportunities for onshore wind will decrease in direct proportion. If this became law, it would have a catastrophic impact on all the various players, on jobs,



Photo: State Chancellery of Mecklenburg-Western Pomerania. Prime ministers of the five North German states: (from left) Carsten Sieling, Mayor of the Free and Hanseatic City of Bremen; Stephan Weil, Prime Minister of Lower Saxony; Olaf Scholz, Mayor of the Free and Hanseatic City of Hamburg; Erwin Sellering, Prime Minister of Mecklenburg-Western Pomerania; and Torsten Albig, Prime Minister of Schleswig-Holstein

cost reduction and technology leadership of the domestic wind industry. Last but not least, it would reduce the use of the currently most cost-effective electricity from renewables for the energy transition.

Therefore, the originally projected addition of onshore wind turbines, generating an annual capacity of 2.5 GW net, needs to be adhered to. In the coming decade, two to three new offshore wind farms, with a minimum total capacity of 900 MW, need to be connected to the grid each year.

All participants criticize that the debate falls short of the overarching goal. And the ink on the Paris climate treaty has not even dried yet. Now is the time to choose the right policy options to meet the agreed obligations. Apart from a bold and ambitious expansion of renewable energy, we still lag way behind expectations in terms of heating and transportation. Coupling the sectors (i.e. increasing the utilization of electricity from renewable resources in both these sluggish areas) guarantees increasing demand for renewable energy. For this reason, the 45 per cent should not be construed as an immovable cap, but needs to be viewed as a target that reflects potentials in other sectors as well.

Download Wismar Appeal (german)

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Joint Declaration of the German Wind Industry

Berlin, 1 March 2016

2016 Amendment to the Renewable Energy Act: Taking into Account the Consequences for Germany as an Industrial Location if Tender Volume Is Narrowly Limited

Further to the so-called "Wismar Appeal", the authors of this joint declaration view with great concern the consequences for Germany as a wind industry location if proposals based on a piecemeal formula in the key points of the 2016 Renewable Energies Act are adopted to narrow the volume of tendering for wind turbines. We fear these proposals will create structural distortions in Germany's wind industry, an internationally successful model. Changing to a tendering design that determines remuneration rates by means of a competitive scheme already poses a challenge in itself and this will be compounded by further uncertainties.

A restrictive quantity control that is barely calculable would be at the expense of Germany as an industrial location

- Without being able to draw on any relevant experience with tendering, the expansion of wind energy in future is supposed to be controlled in a fragmented way. We anticipate that the proposed formula for the quantity control of wind energy would lead to heavily fluctuating volumes for tendering at a low level. In real terms, this would hinder investment decisions to a significant extent. Only an adequate and continuous expansion volume will secure investment in innovative technologies and manufacturing processes and thereby bring about sustainable cost reductions.
- Restrictions in the domestic market cannot be compensated for in other regions in the short term. As a result of declining expansion, supply chains downstream would see lasting changes so that value creation would no longer take place in Germany in certain areas.

A stable, annual net tendering volume of 2,500 MW for onshore wind energy

 To ensure that the industrial basis built up over the past 25 years is safeguarded throughout the upcoming transition to competitive tendering, it is essential to implement a guaranteed annual net quantity of around 2,500 MW of onshore wind energy capacity, which was set out as an expansion corridor in the 2014 Renewable Energy Act following lengthy debate. A reduction in onshore wind energy compared to the 2014 Renewable Energy Act would strike an enormous blow to a growing industry that now employs more than 130,000 workers and has a turnover volume of around EUR 12 billion in the onshore wind sector alone.

Tendering of at least 900 MW annually for offshore wind farms

- For offshore wind energy, stable value-creation components can firmly establish themselves in Germany by means of additional production locations in Cuxhaven, Bremerhaven and Rostock, for instance, alongside the supply industry in North Rhine-Westphalia, Bavaria and Baden-Wurttemberg.
 In particular, this would advance the rapid industrialisation of processes.
- The prerequisite for this growth is the continuous expansion of offshore wind energy even after 2020. To achieve this, offshore wind energy projects with an annual capacity of at least 900 MW need to be realised. Offshore projects have a long implementation period. Vague future prospects are already endangering medium-sized businesses and are drivers of short-time employment and job cuts as a

result of fluctuating and declining industrial expansion.

Accelerated grid expansion is essential

Planning for the future and making appropriate investments in grid infrastructure years ago might have prevented the bottlenecks we are experiencing now. That is why it is more important than ever to force the pace of system optimisation and grid expansion at sea and on land and make this the most important project of the energy turnaround. Improved networking with neighbouring countries and measures to accelerate grid expansion with innovative grid technologies will eliminate bottlenecks.

We cannot estimate today how the expansion corridors planned now can be realised by means of tendering. That is why it makes sense to undertake an analysis of the situation until 2020 and take into consideration the 2050 Climate Protection Plan and initial experiences with sector interlinking to gain a sound understanding of electricity demand in all three energy areas of electricity, heating and mobility. Until then, the danger must clearly be avoided of seriously weakening the onshore and offshore wind industry, which currently employs some 150,000 people altogether and is a significant and entrenched part of Germany's mechanical and plant engineering industrial sector.



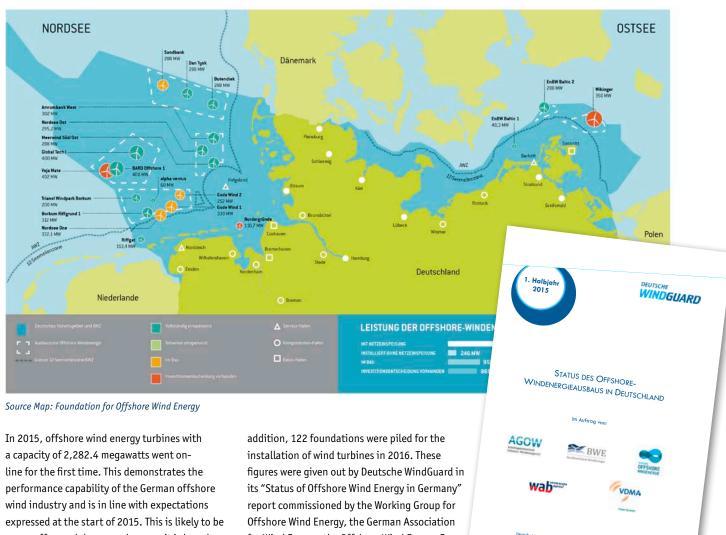
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Wind energy at sea in Germany: expansion figures in 2015

As expected, catch-up effects bring about record in offshore wind



a one-off record, however, because it is based on catch-up effects arising from delayed grid connections. But more important for the industry in the long term than one-off records is the reliable and continuous expansion of offshore wind as a basis for more climate protection and value creation. In order for this continuity to come about, the 2016 Renewable Energies Act and the Offshore Grid Development Plan (O-NEP) 2025 need to be attuned to one another.

In 2015, some 546 offshore wind energy turbines with a capacity of 2,282.4 megawatts fed power into the grid in Germany for the first time. This meant that a total of 792 turbines with a total capacity of 3,294.9 megawatts were online by 31 December 2015. Another 41 turbines with a capacity of 246 megawatts were fully installed last year but not yet connected to the grid. In

for Wind Energy, the Offshore Wind Energy Foundation, VDMA Power Systems and WAB.

According to the working group's energy figures, in 2015 over 8 terawatt-hours of electricity were generated at sea. This meets the electricity needs of more than two million households, and is equivalent to 1.4 percent of Germany's gross electricity supply.

Continuous expansion volume: the basis for technological leadership and export

The offshore wind energy industry sees this unusually high rise last year as an exceptional occurrence. It traces it back to the completion of offshore grid connections since 2013, when problems and delays occurred that were only able to be resolved last year. For 2016,

the industry predicts an increase of around 700 megawatts. The foundation stone for a sustainable domestic market is set out in the Renewable Energies Act. "The cornerstones for the German Ministry for Economic Affairs and Energy for the Renewable Energies Act give an expansion target of 11,000 megawatts for the year 2025. This would mean an annual increase of some 700 megawatts. However, only a continuous annual expansion volume of at least 900 megawatts from 2021 would provide the foundation for lowering the costs of offshore wind energy, ensuring value creation and industrial production, and in the long term making an effective contribution to achieving security of supply", was the unanimous view of the industry.





Ensure suitable tendering processes and accelerate grid expansion

A crucial aspect of the future tendering system's design will be what the transition and start phase looks like until the mid-2020s. Tact and sensitivity with regard to volume, frequency and duration will need to be applied. To achieve this, a transition period of at least four years will need to be set and more than one tendering process undertaken during this time.

A problem for the design of the tendering model for wind energy at sea is also the threat that construction approvals will be withdrawn without appropriate compensation. This would call into question the legal certainty of projects that have been developed and it would also significantly compromise the planning security of future investments.

In order to avoid major fluctuations in the expansion of offshore wind energy, as demonstrated by stoppages and record years such as 2015, the O-NEP 2025 must pay sufficient attention to offshore wind energy expansion at an early stage. The first transmission grid operators' draft for the O-NEP 2025 should at least be in line with the cornerstones of the 2016 Renewable Energies Act and, regarding grid capacity, take into consideration expansion goals having an adequate safety buffer.

Reliable expansion goals for all renewable energies

The offshore wind energy industry stands shoulder to shoulder with the onshore wind industry. Both reject the formula set out by the German Ministry for Economic Affairs and Energy, whereby expansion quantities of wind energy on land would become a volatile correction factor in the expansion of renewable energies. Onshore wind energy would be capped if other technologies, such as offshore wind energy, were to exceed their targets. This causes great uncertainty amongst the players. "All technologies are dependent on long-term planning fundamentals and reliable targets", the five industry organisations emphasise.

Implementing international agreements

The outcomes of the climate conference in Paris (COP 21), representing as they do a logical continuation of the agreements on climate protection made at the G20 summit in Elmau, have to be incorporated into future national objectives. The mandatory setting of the two-degree target (and the ambitious possible reduction to just 1.5 degrees) demand the further consistent and ambitious expansion of renewable energies in Germany. The offshore industry can make an important contribution, but it is up to the German government to lay the groundwork for it in the upcoming amendment of the Renewable Energies Act.

Download fact sheet with expansion figures

Overview of 2015 figures

| | Increase in 2015 | Offshore wind turbines with grid feed-in | 2,282.4 MW (2014: 492.2 MW) | 546 turbines |
|--|---------------------------------------|---|----------------------------------|-----------------|
| | Accumulated total on 31 December 2015 | Offshore wind turbines with grid feed-in | 3,294.9 MW (2014: 1,012.5 MW) | 792 turbines |
| | | Installed offshore wind turbines without grid feed-in | 246 MW (2014: 1,345.2 MW) | 41 turbines |
| | | Foundations without offshore wind turbines | | 122 foundations |











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New market opportunities in the USA

Virginia Offshore Wind Coalition (VOW) and NovaVis sign agreement with WAB

The American market for offshore wind is still young with just a few projects on the way today. But looking a little closer is very much worth it already, because the US could be a market opportunity for WAB members. In December 2015 we met with Charles Decuir and J. J. Keever for talks about options for cooperation such as experts.wab or a b2b trip to America in the foreseeable future. We signed a Memorandum of Understanding (MoU) to further strengthen the ties between Germany and the US.

"NovaVis recognizes this business agreement with WAB as the path forward to bringing the European experience to the emerging US offshore wind supply chain industry to play a key role in offshore wind projects along the coast; collectively with the Europeans, the supply chain now has much to offer," said NovaVis Executive Director, J. J. Keever.

"The concept of building the transatlantic bridge was based upon the creation of a consolidation hub, sharing of lessons learned, technology, education, health and safety, risk, policy, manufac-



turing, fabrication, installation, and operations and maintenance associated with the life cycles of offshore wind energy and its supply chain. This agreement is a ground-breaking event for the United States offshore wind industry," said Virginia Offshore Wind Coalition Chairman, Mr. Charles Decuir

The situation in the US is very much like it was here more than a decade ago. The offshore wind industry consists of various branches that are cooperating for the first time. Companies and research institutes from the fields of mechanical engineering, maritime industry and wind industry work together with traditional utilities, banks and insurance companies. The offshore business is new, versatile but complex and there are tools needed to turn these companies into partners.

Our platform experts.wab.net and NovaVis are excellent examples of coordinating technology to accomplish this unique and powerful collaboration.



Urs Wahl (left) and Charles Decuir in front of the Christiansborg, Copenhagen

The new collaboration was also recognized by the Governor of Virginia, Terry McAuliffe (Dem), who personally wrote a letter to show his support.

- Further information about the Virginia Offshore Wind Coalition (VOW)
- Further information about NovaVis

WINDFORCE Baltic Sea: a successful conference on Bornholm

Conference calls for more influence from the European Union

With its impressive programme, the fourth WINDFORCE Baltic Sea conference was once again a highly satisfactory event. The two-day event provided the approximately 100 conference participants with a comprehensive overview of issues relating to renewable energy supply. Seven theme sessions as well as 27 international speakers dealt with virtually every aspect within the value-creation chain of the offshore wind industry. Themes ranged from research, installation and logistics to financing, grid connection and political framework conditions.

As a Member of the European Parliament, Jeppe Kofod called for Europe to exert greater influence over national energy policy in order to promote renewable energies. This involves offshore wind energy assuming a central role because its potential is far from being exhausted, particularly in the Baltic Sea. The European Union's investment plan should also be made available for investments in grid expansion.

Denmark came under the spotlight as the host country. The conference was organised in



Photo: Offshore Wind Messe und Veranstaltungs GmbH

conjunction with the network Offshoreenergy. dk. Six representatives from the national wind energy associations of Germany, Poland, Estonia, Lithuania, Denmark and Sweden presented current developments in their countries. Jens Eckhoff, managing director of WINDFORCE, put it all in a nutshell: "Offshore wind energy is





developing along very different lines in these six countries. More influence from the European Union would also give the offshore market greater stability". Urs Wahl, manager of public affairs for OWIA, speaking for the networks WAB and WEN that organised the event, added: WINDFORCE Baltic Sea has an important role to play in the development of an integrated "Baltic Sea power plant" of the future in view of the differences between the states bordering the Baltic Sea.

The programme gave speakers time to engage participants at a personal level. The festive dinner held on the first day of the conference was once again a highlight – everyone was able to enjoy becoming acquainted with the culinary delights of the Baltic Sea island of Bornholm,

as well discover the advantages offered by the Bornholm Offshore Centre, which is aiming to establish itself as the hub of offshore development in the Baltic Sea.

The event organisers were once again pleased that the conference had proven so successful and will be issuing invitations for the next event in 2017.



Photos: Offshore Wind Messe und Veranstaltungs GmbH



Former offshore ship rescues refugees in the Mediterranean

SOS Mediterranee is looking for further support

The association SOS Mediterranee has chartered the Aquarius, a former offshore ship, and from the end of February will be carrying out rescue operations in the waters between Sicily, Libya and Lampedusa. The ship is able to hold 200 to 500 people and can operate throughout the year. Head of operations is Gerd Knoop, managing director of SOS Mediterranee Operations. He previously worked for Bard, the offshore pioneer. The association has initially chartered the Aquarius until the end of April. It has the option of extending the charter for a further six months or of buying the ship. The owners' consortium and the Hempel Shipping company support plans to develop a lasting civil emergency sea rescue operation in the Mediterranean. The "Doctors of the World" partners have taken on the costs of medical equipment and staff for the initial deployment period. The internationally active workers' welfare association is already sponsoring the rescue operation with a significant sum.



Photo: Patrick Bar

The continued success of the mission depends on joint efforts to attract additional partners, sponsors and supporters in order to develop a civil emergency sea rescue organisation in the Mediterranean. Those interested in getting involved should contact SOS Mediterranee.

Contact:

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Telefon +49 (0)30 2639 2348 Mobil +49 (0)176 3107 6650

Further information

SOS Mediterranee on Facebook

To donate directly

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Photo: Jens Weyers

WINDFORCE in the historic BLG Forum building

Uwe Beckmeyer to open the conference

WINDFORCE, the international conference of the offshore wind industry, will be held from 7 to 9 June 2016 in Bremen as planned. However, the trade fair has been cancelled, which means that WAB is now focusing solely on the conference and its topics.

This year again, the conference programme will explore exciting topics for the industry. Twelve sessions will cover the most important aspects of the offshore wind industry. Theme sessions will look into cost reduction, insurance, financing and current international developments, and will provide an overview of the German market.

In 2015, participants especially enjoyed the breakfast sessions. This year we will again feature four breakfast sessions that begin at 8 a.m. on both days of the conference. On Wednes-

day, 8 June, one of the topics will be offshore turbines, and sessions on the following day will deal with installation and foundations. You can see an overview of the conference's themes online soon.

The new event venue for the conference is the BLG Forum building. We see this surprise as a great success. The historic BLG Forum in Bremen's Überseestadt district makes it clear that industry and maritime commerce are a tradition in Bremen. Come and see for yourself and be sure to secure your ticket for WAB's twelfth offshore wind conference, WINDFORCE. Registration begins in mid-March.

LAST CALL TO BECOME A SPONSOR!

Take advantage of this opportunity to present your business to interested offshore wind industry specialists. The last sponsorship packages will be allocated shortly.

More information and sponsorship ideas

Our WINDFORCE team is happy to answer any questions:



Mr Philipp Wolff +49 421 841 377 15 wolff@windforce.info



Ms Mahsa Rashid +49 421 877 341 10 rashid@windforce.info

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Germany's most important **Offshore Wind Energy Conference**

○ 7 – 9 June 2016, Bremen, Germany

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Major presence for WAB members at international wind energy trade fair



WAB is present with a joint stand at the WindEnergy in Hamburg

WAB will be represented by more than 100 members at the international wind energy fair in Hamburg from 27 to 30 September. The WAB network will also be occupying a joint stand with more than ten fellow exhibitors over an area of

330 square metres. WAB, the industrial network currently comprising more than 350 members, will be presenting its activities and diverse competences at Stand 301 in Hall B7. Our members are warmly invited to use the joint stand as a

meeting place, for talks with business partners or simply as somewhere to visit. Fresh coffee and refreshments will be available throughout.



Fellow exhibitors:

























Pooling in the offshore wind industry

News from the Operational Plans and Maintenance specialist working group

A part of WAB's Service & Operations working group, the specialist group for Operational Plans and Maintenance, looked closely into the concept of pooling during the past few months. Headed by Johannes Kratz und Jörg Asmussen,

the group released its final report with the results of its research. The report is exclusively available to all WAB members and can be downloaded at experts.wab. The specialist group is now looking into the condition monitoring

systems and will release a final report with options for action in this area when it has concluded this round of work.

WAB's Working Groups

| Offshore | | Offshore and Onshore | | | Onshore |
|---|---|---|--|--|---|
| Foundation Structures & Steel Construction | Service & Operations | Market & Logistics | Law | Investment & Financing | Onshore |
| Speaker: Thorsten Rönner Deputy Speaker: Dr. Sigurd Weise Coordination: Daniela Schimrigk | Speaker: Irina Lucke Deputy Speaker: Dr. Knud Rehfeldt Coordination: Daniela Schimrigk | Speaker: Dirk Briese Deputy Speaker: Dr. Kerstin Lange Coordination: Daniela Schimrigk | Speaker: Dr. Klaus Meier Deputy Speaker: Dr. M. Stoevesandt Coordination: Daniela Schimrigk | Speakers: Thomas Haukje and Heiko Stohlmeyer Coordination: Daniela Schimrigk | Speaker: Norbert Giese Coordination: Daniela Schimrigk |
| Specialist Groups | | | | | |
| Corrosion Protection Speakers: Holger Bartels and Hendrik Müller | Customs Procedures Speakers: Anneke Lippek and Nils Göttner | | | | Acceptance Speaker: to be confirmed |
| | Operational Plans and Maintenance Speakers: Johannes Kratz and Jörg Asmussen | | | | Technology Speaker: to be confirmed |

WAB's working groups (March 2016)

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WAB members receive a discount

Job ads posted on eejobs are 50 percent cheaper

Our cooperation partner, Jobbörse für erneuerbare Energien/Energieeffizienz [job exchange for renewables and energy efficiency], had its fifth birthday on 1 March 2016. To celebrate, the job exchange is offering a discount on job ads to

all WAB members, with a reduction of 50 percent on ads posted by 31 March 2016. Adding in the association's 10 percent discount, which always applies to WAB members, means that an ad posting now costs EUR 45 (if self-posted). To take



advantage of this offer, enter the code "Geburtstagsrabatt WAB" in the "hier können Sie einen Aktioncode eingeben" box in the input form.

More information

Free guest tickets for WAB members

2016 Hannover Messe trade show

WAB members can register for the 2016 Hannover Messe trade fair free of charge. The guest ticket for the fair is a full ticket and valid on all days of the event. "Integrated Industry – Discover Solutions" is the theme of the show, which will run from 25 to 29 April 2016 on the Hannover fairgrounds. Experience the age of industrial networking and get a global market overview of all key technologies in one place. Exchange ideas with international experts on the latest Industry 4.0 technologies and build valuable cross-industry business relationships.



Register for the 2016 Hannover Messe trade fair

Upcoming Events

Bremen's wind-to-gas strategy

Opening event for WAB project on 14 March

The "Bremen Wind-to-Gas Strategy" project launched by WAB late last year was introduced to an interested specialist audience at an inaugural event on 14 March. The event targeted representatives from industry, research and administration who wished to find out about and discuss the ongoing project as well as the current status of power-to-gas technology.

The event included a presentation of the ongoing project as well as talks on the role and potential of power-to-gas. Results from current studies and experiences gained from pilot projects have also been presented. The following speakers supported the event:

- Christine Brandstätt, Fraunhofer Institute for Manufacturing Technology and Applied Materials Research IFAM – Energy System Analyses (formerly Bremer Energy Institute)
- Phil Doran, ITM Power
- Prof Stefan Gößling-Reisemann, University of Bremen, Research Centre for Sustainability
- Renate Klingenberg, ChemCoast e.V.
- Klaus Stolzenburg, PLANET GbR

Moderators: Irina Lucke, Deputy Chair of WAB's Executive Board, and EWE Offshore Service & Solutions

Welcome: Ronny Meyer, State Counsellor to the Senator for the Environment, Construction and Transportation

The aim of the "Bremen Wind-to-Gas Strategy" project is to investigate the technical and economic potential of power-to-gas applications in exploiting excess electricity from wind energy turbines, and to identify recommendations for action by the State of Bremen. Within the framework of the study, all relevant business models of wind-to-gas and related structural conditions will be examined, and an assessment of the size of the market for Bremen will be made. The one-year project is being funded by the State of Bremen.



 ${\it The project receives funding from the State of Bremen.}$

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Entertaining, consolidated, competent

Next "Fit in Wind Energy" introductory seminar in April

The introductory seminar is consolidated, entertaining and peppered with examples taken from practice. According to one participant, the introductory seminar "[...] was so exciting, there was no time to use the phone!"

It is particularly suited to industry newcomers, suppliers and all those who want to get an overall picture of wind energy from A to Z, such as personnel working on the administrative side. While the main topic on the first day of the seminar will be onshore wind, the second day will deal with the offshore industry. The WAB

social get-together will be held in the evening after the first day of the seminar and of course all participants at the introductory seminar are warmly invited to attend. WAB will organise the transfer of participants to the event venue.

Event dates

Date 6 and 7 April 2016

Time 10 a.m. to 5 p.m. (first day) and

9 a.m. to 4.30 p.m. (second day)

Venue Courtyard Marriott Hotel Bremen,

Theodor-Heuss-Allee 2, 28215 Bremen

"It was so exciting, there was no time to use the phone!"

(quote from a participant)

As a WAB member you can take advantage of a reduced participation fee.

For further information and to register



Special seminar on customs clearance in Bremen on 21 April

Advanced course on the finer points of export processing

In cooperation with WAB, the organisation Bremen Foreign Trade and Transport Seminars (bav) is offering wind power and offshore businesses another special seminar on customs clearance. Held in Bremen, this seminar for specialist participants aims to explain the more complex issues of export processing and clarify what is involved when working with the electronic customs tariff, including tips on export control.

A lot of time at the seminar will be devoted to dealing with and clarifying (typical) questions that have already been submitted earlier regarding exports, (re-)imports, turbine supply and the utilisation of tools offshore. For this, bav is seeking additional input from participants. You are invited to submit your questions no later than two weeks prior to the seminar.

Bremer Außenwirtschaftsund Verkehrsseminare

WAB members can again take advantage of the reduced price of EUR 250 for the event instead of the regular EUR 300.

Event date

Date 21 April 2016 **Time** 9 a.m. to 2.30 p.m.

Venue bav-Seminare, Hillmannstr. 2a,

28195 Bremen

Further information and to register

8th NRW Industry Day for Wind Energy

Benefits for WAB members

WAB is a partner of the 8th Industry Day Wind Energy NRW event. North Rhine-Westphalia (NRW) is the German offshore industry's most important supplier state – right in the heart of Europe – and participants arrive not only from Germany but Belgium and the Netherlands as well. WAB members receive advantageous special rates. The Industry Day will be held in the Hotel Nikko in Düsseldorf on 14 and 15 June in colla-

boration with WAB. Once again the organisers have put together a comprehensive programme with top-class speakers. This year the event will cover topics ranging from turbine development to repowering, from the designation of priority areas to commissioning. Relevant aspects for wind energy – grids, storage, financing, logistics and research – will be discussed in workshops with participants. There is also an opportunity to

BRANCHENTAG WINDENERGIE NRV

make use of attractive exhibition space by booking a stand. WAB members benefit from special conditions for space in the exhibition area and pay a reduced fee for the conference. More information on these special conditions is accessible at the following links to registration forms.

- To register as a participant
- To register as an exhibitor
- More information

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Upcoming Events

Wind study course kicks off again in September

Applications can be submitted now

The wind study course is being offered for the eleventh time and has established itself as the leading in-service training course for specialist and management staff engaged in the wind energy industry. In the wind study course, well-known speakers from industry and research share professional know-how and experiences that take account of the diversity and complexity of wind energy projects today.

This year the wind study course will obviously be highly influenced by the new Renewable Energies Act and the tendering model. Integrated project work, practical talks and interesting excursions will provide in-depth insights and access to a lively network of experts.

The quality and academic level of the wind study course were appraised last year and we are pleased about the very good results of this assessment. The internationally respected wind energy expert, Dr. -Ing. Dr.h.c. Jos Beurskens, gave the wind study course a thoroughly positive evaluation: "The level of continuing education is graded as being at the Master's level. The course is therefore unreservedly suited for degree credits in a Bachelor's or Master's course of study, with the assignment of a maximum of 30 credit points."

You will find the complete grading recommendation together with further information, dates and application forms at www.windstudium.de.



The closing date for applications is 30 June 2016. Applications received by 31 May receive a discount of EUR 200.

For further information and to register

5th Future Conference: Wind & Maritime

Wind and maritime industries meet in Rostock

The 5th Future Conference: Wind & Maritime will focus on market and technological trends in wind energy (onshore and offshore), the maritime industry as well as marine technology in the field of underwater technologies. The event will be on 13 and 14 April 2016 in cooperation with the Offshore Wind Industry Alliance (OWIA).

For further information and to register









Sharing information in the lobby's stylish atmosphere

The WAB social get-together - meeting place for the wind energy industry

Next WAB social get-together in Bremen on 6 April 2016

The next WAB social get-together will be in the Hotel Radisson Blu in Bremen on 6 April 2016. The evening's sponsors and WAB cordially invite you to join this regular information-sharing evening in a relaxed atmosphere. We will enjoy taking this opportunity to introduce Andreas Wellbrock, our new managing director.

Event date

Date 6 April 2016 Time 6 p.m.

Venue Hotel Radisson Blu,

Böttcherstraße 2, 28195 Bremen

You can activate the online registration form until 4 April 2016.

To register

The social get-together is sponsored this time by bremenports and convent energy. We would like to express our warm thanks to them. By sponsoring a social get-together in 2016, you have the opportunity to introduce your company to an interested group of experts in the industry.

Further information on the social get-together

Download



Sponsors benefit from an attentive specialist audience

Those interested should simply send an email to: lisa.flissikowski@wab.net

Sponsorenporträts

bremenports Bremerhaven GmbH & Co. KG

A consultancy and engineering company with its own port bremenports can justifiably lay claim to this title. We operate the infrastructure of the Bremen/Bremerhaven group of ports on behalf of the Free Hanseatic City of Bremen. Our experts at bremenports maintain close contact with shipping and logistics to ensure that port development is in line with demand. They plan and implement construction projects such as Container Terminal 4 (completed in 2008), the Kaiserschleuse lock (2011) as well as the current Offshore Terminal Bremerhaven (OTB) to prepare this world port on the Weser River for the future. We operate, maintain and repair the complex facilities of maritime infrastructure. We also increasingly market our nautical-technological and ecological expertise at home and abroad. Our port management company therefore makes an interesting partner for projects throughout the world. Bremenports is also responsible for the location marketing of Bremen's ports.

www.bremenports.de

convent

■ ENERGY

As a service provider for wind energy, convent energy concentrates on the placement of skilled workers from the metalworking and electrical trades in the manufacture and installation of wind turbines as well as the service and maintenance of all components and entire systems. It is equally prepared for the challenges presented both onshore and offshore. With a staff generally totalling around 100 persons, it offers manufacturers, operators and service providers perfect solutions for their volatile staffing requirements. A fully developed recruiting plan and unique market position enables the company to draw on a network of over 1,500 experienced manufacturing workers, assemblers, climbers and service technicians. The training of newcomers to the industry, as well as the retraining of specialists in the company's own convent college, is a considerable step forward for the industry in supporting clients in implementing projects in line with demand. Experienced staff, active in highly specialized areas of activity involving fibre composites or system technology, for instance, works quickly, safely and efficiently. Compliance with the highest international safety standards in a rapid manner, is guaranteed by means of the appropriate management of equipment and storage, forward-looking certification and an experienced implementation team. In this way, convent energy provides an efficient, extremely flexible service to its clients engaged in personnel deployment.

www.convent-energy.com

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GÖRG is one of Germany's leading independent corporate law firms. With more than 250 lawyers at its six locations in Berlin, Essen, Frankfurt/ Main, Hamburg, Cologne and Munich the law firm advises on all aspects of commercial law. For many years now GÖRG has been advising national and international market players in the energy industry in all areas of the valuecreation chain. The planning, implementation and procurement of energy generation plants (especially onshore and offshore wind farms and photovoltaic facilities) is a particular focus of consultancy work. In addition, GÖRG advises on all areas of national and European law governing the energy industry, in the area of the electricity and gas trades, and in the market integration of production and storage facilities.

www.goerg.de



Hamburg-based G + H Marine Service also has a subsidiary in Bremen and offers extensive expertise and experience in the maritime sector, providing competent service for onshore and offshore facilities. Its range of services covers inspection, maintenance and repair as well as the provision of skilled workers within the framework of the commercial supply of manpower.

www.guh-marine.com



Founded in 1974 as a liner agency, the **COLI Group** has developed into a leading business group for project and heavy-load transport.
Operating globally and represented in twelve countries, the company is a broker and carrier and is ISO 9001 certified, with an extensive network of agents and partners at its disposal.
The COLI Group is specialised in the organisation of turbine transport for wind energy. The team in Bremen has many years' experience in the preparation of door-to-door plans for prominent manufacturers in the industry.

www.coli-shipping.com



Fred. Olsen Windcarrier provides innovative and tailored services for the transport, installation and maintenance of offshore wind parks. The company offers holistic solutions including vessel operation, crew and turbine technician supply and complete project management. The company currently owns and operates classleading jack-up vessels and a fleet of crew/service vessels. Together with other Fred. Olsenrelated companies we offer our clients the most flexible, proactive and solution-oriented approach in the market.



Based in Bremerhaven, **mh² offshore** is a young service provider with a focus on steel construction and welding technology for offshore wind energy. Our services include inspection and test procedures as well as the preparation of maintenance and repair plans. The emphasis of our range of services is on assembly work, welding and steel construction repairs, including the preparation of related documentation.

www.mhquadrat.de



www.psa-zentrale.de

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March 2016

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