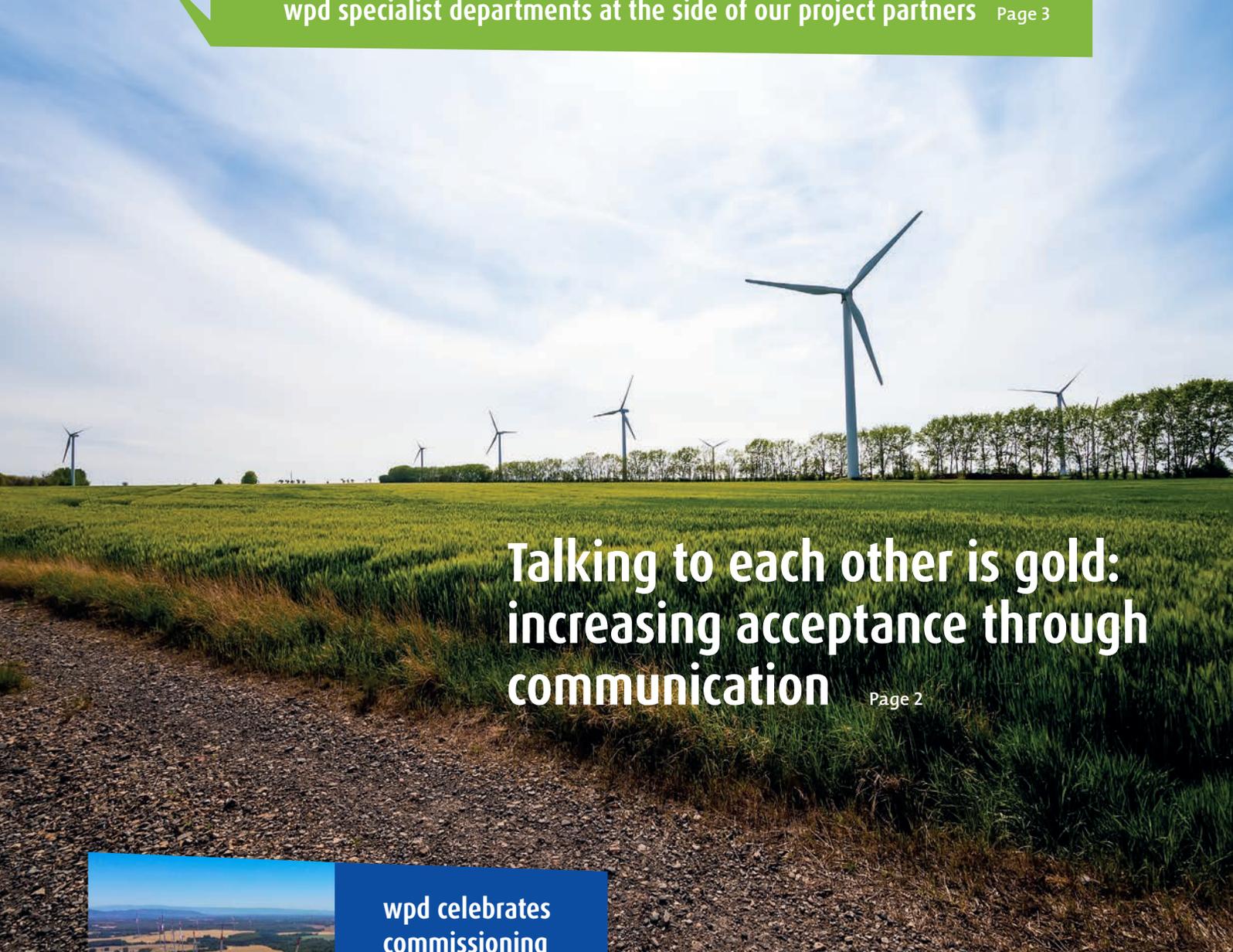




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Communication as the key to acceptance and the success of projects

For the last ten years, the German Renewable Energy Agency (AEE) has been publishing the results of its representative, Germany-wide survey of the level of acceptance greeting the expansion of renewable energy. The approval ratings are consistently high; in 2020, 86% of respondents were in favour of faster expansion of regenerative energy. In addition, the economic stimuli and opportunities for rural regions were rated positively by 57%. But that should not give rise to any assumption that project work on site is an easy business. Communication work is subject to many requirements and is sometimes challenging.

After taking over a project from the sales department, technical project management gets down to business. And initially, that means entering into a dialogue with representatives of the local community that is as intensive as it is open. Serious, explicit commitment to a project can best be demonstrated face to face with the people on site.

And that consists of more than just exploring the opportunities for local authorities and residents to participate in the project. On the one hand, a municipality can profit as the landowner from leases in connection with road and cable contracts. However, the amendment to the Renewable Energies Act (EEG) in 2021 opens up completely new opportunities.

municipality from a project”, notes Ekkehard Darge, technical Project Manager at wpd onshore. For example, thanks to the new Section 36k, municipalities can now share in every kilowatt hour generated to the tune of 0.2 cents. According to the Federal Ministry of Economic Affairs, this can add up to roughly 20,000 euros per year per turbine, depending on the location and electricity yield. This additional income from a wind farm for municipal coffers and therefore for local residents represents important momentum for greater acceptance. Transparent and above all personal dialogue is also an important door opener to such acceptance. Many of the concerns expressed are well documented: from infrasound via the shadows cast to the protection of birds. Reliable, objective information is a valuable asset here. However, during on-site planning for the wind farm, Ekkehard Darge has frequently experienced appreciation for the openness displayed and for the strenuous endeavours to achieve a balance of interests that takes account of residents’ concerns.

The positive effects can be seen by the example of the Oldendorf-Kuhla project. Besides technical information, an approach in which concerns and fears are taken seriously can move mountains. Commitment, fairness and transparency can overcome many hurdles. “An open, honest dialogue, especially with the local citizens’ initiative, and acknowledging local concerns, played a pivotal role in obtaining approval for the project in Oldendorf-Kuhla”, Ekkehard Darge explains. Starting in 2022, four turbines will produce green electricity here for 20,000 households per year. Residents can participate in the wind farm with a fixed-interest loan.

A success story facilitated in no small measure by the opportunities afforded by open communication.

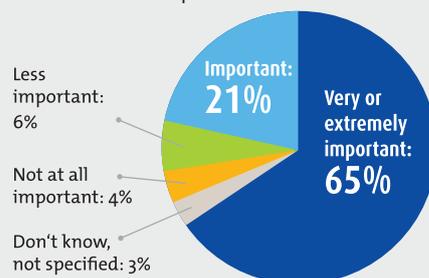
Wind farm Langwedel in Lower Saxony



“For the first time, we have the chance to generate direct value added for the

86 % of Germans support the expansion of renewables

Greater use and expansion of renewables are ...



Source: Survey by YouGov on behalf of the Renewable Energy Agency, n=1.051; Status 12/2020, © 2020 Agentur für Erneuerbare Energien e.V.

One contact for every phase of the project

„One face“ of wpd

The concept of “one face to the customer” describes the principle that as a customer of a company, you should be able to rely on having a single point of contact. This also applies to project collaborations at wpd. “Basically, the principle should rather be seen as “one team for the customer”, explains Lars Planitz, deputy Head of Project Procurement at wpd onshore GmbH & Co. KG. After all, besides complete in-house project development, collaborations with partners represent the second vital pillar of wpd’s business in the German market. One permanent contact person works closely with the project partner as well as with wpd’s various networked technical departments. As part of the project collaboration, the entire process of project development is thus supported through every phase, from the initial idea to its realisation and commissioning of the turbines. This guarantees that the specific tasks in each phase of the project are expertly supported, coordinated and implemented.

All the expertise that wpd has established in over 20 years of project development is thus available. In the German market, the company currently works with 50 collaboration partners in approx. 160 projects, offering all the services required for the successful implementation of a project.

This is of particular significance in challenging phases of the development work. Whether it’s expert reports as part of species protection investigations, approvals such as applications in compliance with the specifications of the Federal Immissions Control Act (BImSchG) or grid connection planning: the relevant technical departments can all be found under one roof at wpd.

“We like to use the image of a jigsaw puzzle here”, says Kim Becker, Head of Project Procurement at wpd onshore. “A project is made up of many different pieces like a jigsaw puzzle which all fit together to form the big picture.” If there are pieces missing, the optimum completion of the project that all participants are striving for, will also miss the mark.



wpd specialist departments

- Landscape planning & Environmental studies
- GIS and CAD applications
- Approval procedures & urban land use planning
- Compensation measures
- Site assessment (noise, shadow, wind, turbulence)
- Repowering conception
- Grid connection planning
- Realization management
- Wind turbine purchasing
- Legal department
- Financing department
- PPA department
- Operations management
- Solutions for special technical issues (On-demand night marking etc.)

“And thanks to the wide range of expertise available in house, we can provide comprehensive support at any time”, Lars Planitz adds.

This holistic approach offers a further benefit: wpd assumes risks in any collaboration and provides partners with financial support. The development of a wind or photovoltaic project can certainly be driven under your own steam – at least on paper – by engaging different service providers for different tasks. This may seem to add up to a financially lucrative proposition at first, but the bottom line is that you also bear the financial risk on your own. In addition, you may have to deal with ten contacts at the same time instead of one at wpd who supports, coordinates and acts as the fulcrum.

Linking the principle of “one face to the customer” to that of “one team for the customer” delivers success as wpd possesses the bundled expertise ultimately needed to fit all the pieces together from a single source.

Project realization on difficult terrain: wpd Italia starts implementation of first wind project

Planned
turbine location
near Licata



Soil samples taken
at the planned site

Licata on Sicily, Italy's largest island after Sardinia, can look back on a history as an important trading centre. For the team of wpd Italia, however, the town of 36,000 inhabitants has a very special significance.

It is here that the Licata wind farm will be built, the first project in wpd's pipeline in Italy to enter the realization phase. The Licata project in Sicily has a total capacity of 31.05 MW and will consist of nine turbines of 3.45 MW each. The company currently has a further 10 projects with a total capacity of about 700 MW in the approval process in the country, located in central and southern Italy, in the five regions of Lazio, Puglia, Campania, Calabria and Sardinia.

In February 2021, wpd Italy's team registered the project in the portal of GSE, the state authority for energy services, to participate in the fifth round of the auction. Under a new decree, government subsidies are to be awarded through a competitive auction system to project developers with approved projects ready for construction. The new subsidy system provides for seven quarterly auction rounds, each offering approximately 700 MW. With only a few projects registered with the GSE, the Licata project is virtually certain to be awarded a contract. The results of this auction round will be published at the end of May 2021, and the projects that are successful in this process must be commissioned within the following 15 months, i.e. by August 2022, in order to avoid tariff reductions.

The transformation of the energy system in Italy is particularly urgent. The recent study „The European Power Sector 2020“, published by the think tank Ember and Agora Energiewende, emphasises that in the EU in 2020, 38% of the energy demand will be covered by renewable energies. The percentage of renewable energies for Italy, on the other hand, is just 19%, making Italy one of the countries - according to the study - „that could continue to lag behind despite excellent solar and wind conditions.“

Promoting renewable energy is almost a political consensus. What makes their expansion so difficult are, on the one hand, bureaucratic obstacles and, on the other, the national approval process. The latter takes an average of five years for the approval of wind energy projects. Two ministries play a leading role in the approval process: the Ministry for the Environment and the Ministry responsible for Italy's cultural heritage. Here, two different guiding principles collide: the protection of the environment and climate meets the preservation of the landscape. Conflict is inevitable here, with the corresponding consequences of considerable delays.

In addition to an upcoming advertising campaign by the Italian wind association ANEV, the associations of renewable energies were recently received in the Italian parliament to take a position on new measures. They underlined the importance of the renewable energy sector and the contribution it can make, not only in terms of reducing emissions, but also in terms of job creation. Due to the clear backlog, not only by comparison with other European countries, Italy should promote the growth of renewable energies with much more emphasis.

wpd Italia is determined to make a decisive contribution as a key market player in the face of this challenge. The Licata project should be just the beginning.

Ready for new projects and partnerships: wpd starts in the Greek market

The Greek market for renewable energy is no terra incognita for wpd. For example, photovoltaic projects were already implemented in 2012. Now the company is resuming its project development work in the area of wind and solar. In contrast to its first involvement, wpd will this time establish a presence with its own national companies in Greece. New offices have been opened in Athens and the first employees have started work in order to build wpd's team. As usual, wpd's German team is closely involved in the planning work, providing advice and assistance, so that the market entry in Greece will be successful.

Conventional sources of energy still dominate the electricity mix in the Greek market but the continuously rising rate at which renewables have been added to the mix in the last few years underlines the outstanding conditions for wind and solar energy in Greece. Besides the high levels of sunshine with which everyone is familiar, there are also some extremely windy locations. Ideal prerequisites, in other words, for the planning and implementation of new projects.

On the PV side, the solar team will engage in a proven alliance to complement its in-house development and resume its past successful project development with Zephiros EPE. This collaboration is developing three photovoltaic portfolios ranging from 81 to 168 MW and split into a total of 35 projects. The projects were kicked off together in good time with the application for a production licence. The aim is to participate in state auctions this year and subsequently to implement and operate the portfolios. As an experienced partner for Power Purchase Agreements (PPAs), wpd is also available for this form of direct marketing of renewable energy.

In the wind sector, the focus of project development will be on in-house development, greenfield development and establishing new alliances. The intensive negotiations now being conducted will open up favourable opportunities to establish an attractive pipeline in the coming months.

The rule for wind and photovoltaic projects in Greece is that an available grid connection is a coveted asset. wpd and its teams will therefore be required to contribute all their experience and find constructive solutions. The Greek market offers excellent prospects for this commitment. Besides a tendering system for feed-in tariffs, there are locations with outstanding conditions for wind and solar energy as well as an approval process optimised in 2020 that will accelerate the implementation process on a lasting basis.

With these prospects in view, the wpd teams have rolled up their sleeves to secure a front row seat for wpd in the very active Greek market for renewable energies and to implement successful projects now and in the future.



 wpd location





Start of construction and successful approval in Germany

Wind turbines Nordex N149

On the national market, wpd continues to demonstrate staying power in project planning. In mid-March, the approval for the Ehra-Lessien project, located north of Wolfsburg in the district of Gifhorn, was celebrated. After two years of intensive work, the project planned for five V150 and one V136 from the manufacturer Vestas, each with 4.2 MW and a hub height of 166 m, can finally be implemented.

Structural implementation is also the goal in the Quenstedt project, in which the first approval success was celebrated in early March 2021. In the project planned in Saxony-Anhalt, two Nordex N149 turbines (4.5 MW each) will be built.

A good start to the year for wpd, and the project pipeline continues to develop promisingly.

Financial close for onshore projects in Taiwan

wpd's Taiwanese team has achieved financial close for the first phases of the onshore projects Chuangwei and Leadway. The Chuangwei project will comprise 10 turbines of type V117 from manufacturer Vestas, each with an output of 3.6 MW, and the Leadway project seven turbines of the same type. Both projects will be built in the pond systems of large fish farms. Both wpd wind farms are Vestas' first projects in Taiwan.

The important conclusion of the finance for the initial phases with the Taiwanese bank E.SUN as the lender and KfW IPEX Bank as the guarantor, puts the projects on a secure footing. This means wpd's Taiwanese onshore team can now tackle the next important steps.



Construction site wind farm Leadway in the middle of fish farms

wpd celebrates first commissioning in Chile



Wind turbines of the Negrete wind farm shortly before commissioning

The Negrete onshore project in Chile celebrated its commissioning in mid-March. Together with turbine manufacturer Vestas, the initial feed-in of the wind farm officially designated as “Parque Eólico Negrete” was achieved via an existing transformer substation. The first project of wpd Chile is thus entering commercial operation.

The project is situated in a location with outstanding conditions and consists of 10 turbines each with an output of 3.6 MW. The total installed power of 36 MW permits around 50,000 households to be supplied with CO₂-free energy. An important contribution to the development of regenerative energy in Chile.

French offshore project Fécamp decorated

While the start of construction was announced in 2021 for the sister project in the French offshore wind market, the Calvados project, the 498 MW Fécamp project for which construction started in 2020, has already won its first award. At the renowned PFI awards, the project implemented by the consortium partners, wpd, EDF Renewables and Enbridge, which is due to be commissioned in 2023, won the prize of “Europe Green Deal of the Year”. A success that confirms the excellent teamwork in the alliance bearing the name “Eolien Maritime France” and underlines the commitment of wpd France’s team.



With long breath: wpd nearing its goal in the French Calvados offshore project

Offshore projects present challenges of a special kind. It's not just the construction of wind farms in coastal waters or the operation of large wind turbines in the often rough conditions in the sea that entail complex tasks. Especially in the early stages of project planning, many hurdles have to be overcome, sometimes with a lot of tact and staying power. It can take up to 14 years before you obtain the green light for construction to start - an achievement that wpd was recently able to celebrate together with its consortium partners EDF Renewables and Enbridge for the Calvados offshore wind farm.

The team of wpd France can actually look back to 2007, when Calvados was initiated together with its sister project Fécamp. The Fécamp offshore wind farm, planned with the same consortium partners, went into construction in 2020. And Calvados has now reached the same milestone.

The 448 MW project consists of 64 wind turbines located more than 10 km off the Channel coast, in the Calvados department - giving its name to the project. When the park comes on line as planned in 2024, it will generate the equivalent of the annual electricity consumption of 630,000 people: more than 90% of the department's population.

The first major hurdle arose in July 2011 with the French government's decision to introduce a tendering process for the country's first offshore wind projects. In early March 2012, the French energy regulator (CRE) awarded contracts to a total of four projects: Saint-Nazaire (480 MW), Fécamp (498 MW), Calvados (450 MW) and Saint-Brieuc (496 MW). Fécamp and Calvados were awarded to the Eolien Maritime France consortium led by EDF Renewables, Enbridge and wpd.

The bids received were evaluated and selected according to the following criteria: industrial and social added value of the project, the price offered for the electricity produced, as well as marine environmental protection and preservation of use of the sea.

These criteria made it essential to involve local scallop fishermen, as there are important stocks of the coveted scallop off the coast of Normandy and in the immediate vicinity of the project site. There were a lot of concerns to be addressed here. The same was true with regard to the historical significance of Normandy as the site of D-Day, the Allied landings on June 6, 1944, a major offensive that marked an important turning point in World War II.

The great importance of the project site for history and the present necessitated a comprehensive dialogue with all stakeholders involved. More than 100 meetings were held to clarify questions regarding the most suitable location and the wind farm concept that would take into account all interests as equitably as possible. The fact that the wind farm has now entered the construction phase is not least testimony to the successful contribution of wpd's French offshore team in this early planning phase.

Now, however, the concrete realization of the Calvados project is imminent, and it will prove to be a particular advantage that all the infrastructure already implemented for the construction of the Fécamp project can be used for the construction.

Thus, in the not too distant future, Fécamp will be the second and Calvados should be the third offshore wind farm in France to be put into operation. The fact that wpd and the French team laid important foundations for both projects from 2007 onwards, overcame decisive hurdles and are now refining the projects until completion, distinguishes the company and all those involved as pioneers of the French offshore wind market!

*Photo composition
Calvados wind farm*



From Piteå to Los Angeles – operational management worldwide



wpd windmanager is growing. In 2020 alone, we added five new locations and three new target markets. The portfolio now comprises a total capacity of over 5,6 gigawatts. This growth and the various markets pose correspondingly differing challenges. What's happening currently in international wind farm management? What's afoot in individual countries and locations?

At home and abroad

In Germany, the subject of ISO certification played a central role in 2020. At the end of the year, wpd windmanager's quality management system was successfully certified to DIN EN ISO 9001:2015.

"At the moment, we are particularly preoccupied with the subject of post-EEG (Renewable Energies Act)", explains Delia Richter, Managing Director at wpd windmanager. "At many wind farms, we are faced with a decision: repowering, continued operation or site restoration. This will be with us for the next few years." The same goes for the subject of Obstruction Light Control (OLC). wpd windmanager looks after a total capacity of 3,5 gigawatts in Germany alone. Of this, around 1,000 turbines are required to have obstruction lighting and their operational managers have already been tasked with installation. Over the whole of Germany, there are around 10,000 wind turbines subject to the requirement to install obstruction lighting. This means that wpd windmanager currently has a market share of 10 percent.

"On the international front, we are devoting a lot of effort at the moment to the subject of quality management, for example", states Henning Rüpke, International Managing Director at wpd windmanager. "To provide our customers with even closer on-site support, we are now expanding our international key account management. We want to do more

to promote the independence of each location. We are therefore looking specifically at what services we provide centrally from Germany and what we offer at each individual location."

Once round the world

wpd windmanager maintained its growth in France in 2020, which is the largest foreign market in volume terms. At the beginning of the year, we opened a second office in Nantes in addition to our facility in Arras to enable us to provide better service to the wind farms of a major new customer. In 2020, we added projects totalling around 100 MW.

wpd windmanager's location in Taiwan is also on a growth trajectory. "In 2020, we integrated two further projects into our operational management", Rüpke explained. Two additional wind farm projects will follow in 2021 as well as the introduction of a further turbine technology.

wpd windmanager Polska has posted the strongest growth over the last two years. The portfolio now comprises almost 250 megawatts. In Finland, the operator was recently awarded further projects by an existing customer. And in Croatia, too, the company is further expanding its collaboration with an investor.

What's happening in the new markets?

With the opening of its site in Piteå, Sweden, wpd windmanager is increasing its presence in northern Europe. In Spain, the company took over management of its fourth project at the turn of the year in the shape of the Corralnuevo wind farm. wpd windmanager's most recent office was opened at the end of 2020 in Los Angeles in Chile. Here the first project is now going into operation in Negrete. This will be followed by Malleco and Duqueco. Total volume of the Chilean portfolio: 368 MW.

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