

Creating value added for local projects and associations with wind

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farms



More than mere payments: Voluntary municipal charge raises prospects



Turbines in the Achim-Bollen wind farm

Since 1 January 2023, with the amendment of the Renewable Energies Act (EEG), direct payments from the operators of wind farms to municipalities have been permissible and legally secure for the first time. Payments are allowed up to a maximum amount of 0.2 ct/kWh. In a windy location, a modern turbine can generate on average around 15 million kWh of green electricity a year. On paper, that is enough to supply around 4,000 households with carbon-free electrical power for a whole year. With a payment of the 0.2 cents per kilowatt hour generated as mentioned, a wind project can in this way also generate around 30,000 euros per turbine in the form of a municipal levy. This will apply throughout the 20 years of its operating life.

This expands the opportunities open to municipalities home to wind farm projects by a massive amount. Because as the site of such a wind farm, they are not only sending a strong signal for climate protection and the energy turnaround. They can now deliver a major, sustainable economic boost and get regional developments off the ground for the benefit of residents. In this way, for example, the local infrastructure can be expanded and improved. Clubs and projects in areas such as sport and culture can also be fruitfully supported.

And the benefits of being a wind farm municipality don't stop there. In realising and operating projects, project developers such as wpd are often dependent on the use of municipal land which in turn also brings in considerable lease payments for the municipality. What's more, revenues are also created from trade tax and regional value added receives an important boost during construction.

wpd pays the municipal charge to all municipalities in a wind energy project. For this, we draw a 2.5 km radius around the wind farm as the basis. If there is only one municipality within this radius, it will receive 100% of the levy. In all other cases, a 2.5 km radius is drawn around each turbine. The shares of the various municipalities in the resulting land and the municipality charge are calculated and split between the individual municipalities on a pro rata basis.

For wpd, the municipalities providing locations for projects in its own portfolio represent important long-term partners. Now, thanks to the voluntary municipal charge, they can benefit financially to an even greater extent from the projects realised on their land than was previously possible through leases or taxes.

"We are currently operating wind farms in over 100 municipalities and we will pay the voluntary charge to each one of them", explains wpd board member, Dr. Hartmut Brösamle.

wpd currently has over 900 MW of total onshore wind energy capacity in its own portfolio in Germany. For the current year, wpd will distribute around 4 million euros to municipalities in its wind farm locations. "Payment of the charge naturally doesn't just apply to existing projects under our own operation but also to all future wind farms in Germany that remain in our own portfolio", Dr. Brösamle adds.

In this way, it's not just the climate that wins, local residents also benefit.



New locations, new structures: Organic growth at wpd

Dresden, Magdeburg, Hanover, Münster – four cities which expand wpd's list of locations in Germany from 14 to 18 offices. The offices in Münster and Dresden already have fixed addresses and the first of our coworkers are setting up their desks in order to initiate new projects from there and support them on their path to commissioning. Further important locations for the German market will follow in the shape of Hannover and Magdeburg. And even that won't be the end of the line.

Because the energy turnaround in Germany has finally received what may be the decisive boost for reaching our climate targets. To do so, not only new projects are needed to expand the share of renewable energies in electricity generation but also people to get these projects off the ground, develop them and bring them to fruition

More than 530 fellow workers are currently working in the German offices of wpd AG from Schleswig in the North to Munich in the South, with dedication and in a spirit of togetherness with their teams and those of other offices. And these teams are growing organically and the entire wpd Group around wpd AG, wpd windmanager and Deutsche Windtechnik is doing likewise. The search for new, motivated co-workers knows no end, therefore. From those starting out on their careers, new entrants to the renewables sector to those who already have experience in the field of wind and solar and who wish to continue their career at wpd.

However, growth also manifests itself in the emergence of new structures. wpd has now created such structures enabling it to spread responsibility onto more and at the same time younger shoulders. That relates both to project development and building the infrastructure for projects in Germany although it is also the result of the Group's strong growth in Finland and Sweden as well as the establishment and expansion of the business in South America and Iceland.

Responsibility for these tasks will in future increasingly lie with experienced managers who have already been committed to wpd for many years. The fact that wpd is excellently served when it comes to expertise and know-how is reflected in the way in which the diverse experiences gained within the company structure are continuously passed on.

Whatever knowledge is acquired at a managerial level is handed down to younger colleagues. And these are the very ranks from which many specialists are growing into new, stimulating positions with responsibility for projects who in turn will boost the company's positive development.

Besides its now 18 offices in Germany, wpd also operates in 28 other countries and is constantly expanding these activities. Success that is borne by strong project pipelines; worldwide by almost 16 GW of wind projects and over 3 GW of solar and in Germany by 4,800 MW of planned projects for wind onshore and 1,350 MW of solar energy.

Above: wpd's offices in Germany Below: wpd co-workers at team event in North Germany







Lifting the lid: wpd's new career pages

wpd is growing with the challenges of the energy turnaround. That's why we're always on the lookout for reinforcements. With our new career pages for German-speaking territories, we show that we are not only able to offer stimulating, sustainable, future-proof jobs but also a lively work environment. Besides current job advertisements, there are interesting stories about our everyday working lives, a presentation on our German locations and last but not least, the benefits that await you at wpd. Click here to find out more:

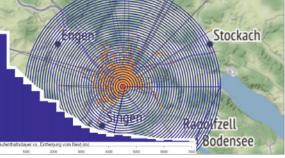
www.wpd.de/karriere



Max Planck Institute develops analytical workflows for effective bird protection in collaboration with wpd

The evaluation of wind farm plans under species protection legislation regularly leads to planning uncertainty due to a lack of benchmarks. The Max Planck Institute of Animal Behavior (MPI) in collaboration with wpd and Enertrag has developed two analytical workflows with which the flight of bird species in danger of colliding with turbines can be evaluated and collision estimates calculated. An

Visualisation of length of visit in relation to distance from breeding site



important contribution to enable nature conservation to be taken into account when planning and running wind turbines and thus at the same time a valuable step in the direction of greater acceptance. The workflows are open source, thus guaranteeing the greatest possible transparency.

Also on a high when it comes to solar: Photovoltaic success in the German market

wpd is also continuing to pick up speed in its photovoltaic division. The 10 MWp Wiernsheim Ortental project in Baden-Württemberg was commissioned in March. Construction is due to start on further wpd solar parks in Germany in 2023. The three federal states of Brandenburg, Saxony-Anhalt and Baden-Württemberg will see construction start on projects with a total output of 100 Mwp, among them a solar park which will become wpd's largest PV project in Germany with a capacity of 50 MWp. Emerging from a healthy pipeline, further projects will advance Germany's energy turnaround.



Module assembly in the Wiernsheim solar park

Meeting point trade fair: wpd attracts trade visitors

wpd is represented at important trade fairs and conferences both at home and abroad. When the industry meets, we're there too. This was recently the case in Copenhagen, too, at WindEurope, the leading European trade fair for wind energy where our highly frequented stand was once again the meeting point for many fascinating discussions and

for making new contacts. At domestic trade fairs, too, wpd will again be an important port of call, whether at E-world in Essen (23 - 25 May), Husum WIND (12 - 15 September), the "Spreewind Event" (8 - 10 November) or at Agritechnica in Hannover from 12 - 18 November.





Iceland offers huge potential for the use of wind energy. wpd has had an office in Reykjavik since last year and has started taking its first wind measurements at promising sites for new projects.

wpd now also has an office in the Belgian market. Working from its office in French-speaking Liège in the Wallonia region, a newly established team will help to ensure that the country takes the urgently needed, major steps to be generating completely carbonfree energy by 2050.

Shoulder to shoulder:

Experts for forestry and wind find a common voice



From the right:
Managing Director
Johannes Schmitt
and President
Georg Schirmbeck from
the DFWR with wpd
employees at the Green
Week in Berlin

The German Forestry Council – DFWR for short – perceives itself as the voice of the forest and it represents all stakeholders engaged in forest management and forestry throughout Germany, among them no fewer than two million public and private forest owners. As the political umbrella association and main lobbyist, the DFWR exercises a strong mandate to advance the correct political roadmap for forests and sustainable forestry. We caught up with Johannes Schmitt, Managing Director of the DFWR, to ask him some questions on the much discussed topic of "wind energy in the forest'.

In view of the land required to implement the energy turnaround, the use of windy locations in woodland areas is almost unavoidable but also a hotly debated and at times controversial subject. What's the view of the DFWR?

"It's always important here to view particular locations and the prevailing conditions there differently. Woods and forests perform crucial "ecological services": as a habitat for species diversity, for the timber industry, as a storage medium for carbon, as a water reservoir, water filter but also as a place of rest and recreation. The economic use and the profit from timber revenues alone cannot secure all these services. Wind energy can open up new sources of revenue and make a significant contribution. Above all, however, effective climate protection to secure the role forests play for society over the long term — that's

the order of the day. But that must always be accomplished with the inclusion of the locals on the ground by means of comprehensive education or different potential participation models."

Forest clearings are unavoidable for wind energy in forested areas. However, in the media this is often portrayed as the indiscriminate felling of tree stocks as we saw recently in the example of Reinhardswald forest in Hesse. Is that the reality or is it not like that? "It's always hard to judge individual cases. Nevertheless, in Germany we have very extensive, far-reaching nature conservation and environmental planning laws that govern all interventions in the natural world and forest habitat, not least also for wind energy projects. Here, the assessments made are very detailed and decision-making is highly differentiated. There are no clearances for their own sake."

The forest in Germany is changing, both directly and indirectly as a result of climate change. Can wind energy make a contribution here to making forests viable for the future?

"Converting forests to greater climate stability has been an important forestry topic for more than 30 years. Wind energy can take on a kind of bridging function. Thanks to the economic potential for forestowners, the necessary funds can be generated to make the forest climate-stable and equipped for the challenges of the future."

wpd has built up a high degree of know-how in the company on forestry but also of significance for nature conservation. The aim is to develop projects as far as possible in harmony with Nature. Is that realistic from the DFWR's perspective?

"Protecting species and Nature is a top priority in our view. In the case of wind energy in the forest, incisions are unavoidable but the use of existing paths and technical innovations are a recipe for success here. Mitigation and compensation measures also represent an important contribution although they must be based on pragmatic, targeted implementation on the ground. At the DFWR, we are first and foremost delighted to be standing shoulder to shoulder with renewables on a technical level, thanks also to our dialoque with wpd.



wpd France and wpd Finland: Strong growth leads to impressive anniversaries

Top right: wpd offices in France and Finland

Bottom left: Karhunnevankangas wind farm in Finland

wod wind turbine

In the north of Europe, Finland has set itself the ambitious goal of making its energy production carbon-neutral by 2035. For 15 years now, wpd and its Finnish team have been making a significant contribution to achieving this goal. Last year, the offices in Espoo, where the first site was opened in 2007, and Oulu (since 2021) celebrated a wonderful anniversary.

A good eight years passed before the first office opening was followed by the commissioning of the first projects in Finland. Between 2015 and 2016, a total of 45 wind turbines (WTGs) were realized at the Mäkikangas, Jokela and Tohkoja wind farms. This was followed in 2019 by the Kannus wind farm with almost 60 MW of capacity. In total, wpd has built onshore projects in Finland with a total capacity of 200 MW, has another 288 MW under construction and has a project pipeline of more than 1,000 MW. Currently, the two projects Nuolivaara (17 WTGs, 96.9 MW total capacity) and Karhunnevankangas are about to be commissioned. The latter, with 33 WTGs and 188 MW, is currently wpd's largest onshore wind farm in Europe.

wpd takes account of its growing market presence in Finland and is constantly expanding the wpd Finland team. Currently 25 fellow employees are working on projects as well as the expansion of the pipeline and were recently able to celebrate the construction of the 100th WTG. A great milestone in the far north!





of projects under development, both in the wind energy and solar energy sectors. By 2025, 400 MW of new solar and wind farms are expected to be commissioned. The project pipeline in the area of solar PV comprises a total of 950 MW, corresponding to 80 projects throughout France, which on paper will supply 1 million people per year with electricity in the future. Our French colleagues always keep an eye on the local conditions, from the involvement of the local population, politicians and the economy to the integration of the idea of environmental protection and the agricultural use of land for wind and solar energy generation.

Two great anniversaries in the history of wpd, which will be followed by further occasions for celebration.





Smooth transition: From project planning to operational management

As the operator of a wind farm, it is important to run each project economically and safely. The requirements are constantly increasing – from obligations arising from the area of critical infrastructure (KRITIS) to permit conditions such as bat shutdown or mitigation and compensation measures.

The formula for success for operating a wind farm successfully is obvious. As soon as the wind farm joins the grid and goes into operation, the challenge for the operations manager is to keep standstill times as low as possible, thereby maximising the yield.

The dialogue between the project developer and the operations manager plays a crucial role in wind farm management.

"Operational management begins long before commissioning. The earlier we are involved, the smoother the transition to wind farm operation", says Matthias Fröhlich, Technical Manager at wpd windmanager and responsible for transitioning projects into operation.

If they are involved from an early stage, the operations manager can put their stamp on the operation before commissioning. For example, this includes the planning and implementation of monitoring measures for bats and noise remeasurements in order to work proactively towards operator-friendly solutions, thereby reducing shutdowns. "Such applications usually take several months or even years", Fröhlich emphasises. "If we can initiate such monitoring measures before the wind farm actually goes into operation, the operators can benefit from optimised shutdown times correspondingly early. That can have a significant effect on the yield."

The operations manager can also accomplish important preliminary work in observing permit conditions, establishing contact with authorities and coordinating with direct marketers. The same applies to setting up security standards – both with respect to ensuring KRITIS-compliant implementation in the control room and on site by means of inspections, preparing risk assessments as well as equipment and hazard markings on the turbines.

"We receive the majority of our wind farms from wpd AG's pipeline. We conduct an intensive dialogue long before commissioning", Fröhlich says. "The processes here have been well oiled for many years. This allows us to establish our high operational standard in good time before the project starts.

The same applies, of course, to wind farm projects of external investors.



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