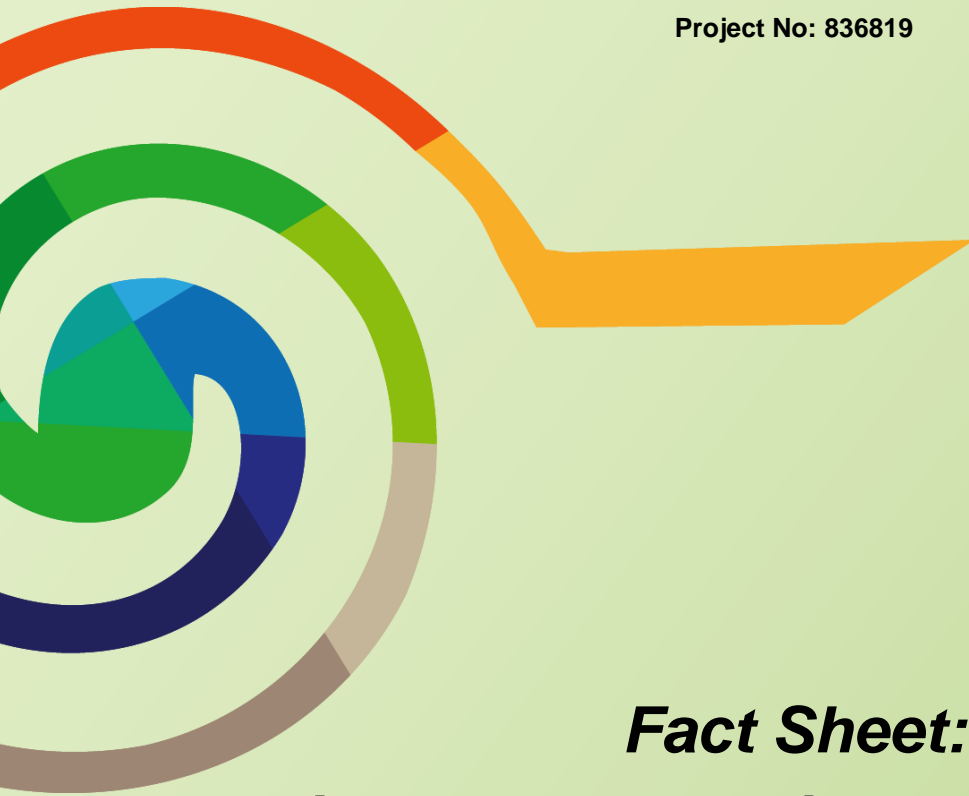


Smart strategies for the transition in coal intensive regions

Project No: 836819



Fact Sheet:
***Wind park "Klettwitz"& Vestas blade
factory Lauchhammer***

September 2019



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Description

The wind farm complex "Klettwitz" is located on agricultural reclaimed sites of the former lignite opencast mine Klettwitz (operating period 1949 to 1991) in the Lusatian Lignite District bordering to the west on the communities Klettwitz, Kostebrau and city of Schipkau (Southern Brandenburg, Lower Lusatia, county: Oberspreewald-Lausitz / DE40B). The area belongs to the mentioned communities.

The wind park takes 497 hectares of the former opencast mine and was established already in the late 1990s with initially 44 wind mills and 63 MW - at this time the most powerful wind energy complex in Europe. At present, there are 58 wind turbines with a total installed capacity of 89 MW in two sections "Klettwitz Nord" and "Klettwitz Süd". In addition, there are three other suitable areas reserved for wind energy production nearby: "Sallgast Süd" (26 MW), "Kostebrau" (9.9 MW) and "EuroSpeedway Lausitz" (7.6 MW), all of them operating on reclaimed land. Further expansions of the existing windparks are already approved or in the planning.

The wind turbines at Klettwitz are operated by Enercity AG (Hannover, Lower Saxony) and (most of them) the John Laing Group PLC since 2015, a British investment and infrastructure projects developing company, now implementing their first wind energy project in Germany. As they say: "Our investment in Klettwitz takes John Laing into renewable energy in Germany for the first time and provides us with attractive prospects there. Investing in wind turbine repowering is an area where we believe there are likely to be further opportunities to capitalise on the major advances in wind turbine technology made in recent years."

Moreover, the conception and establishment of the wind park "Klettwitz" the 1990s, the lighthouse project seems to be an driver for other regional investments within the renewable energy sector: For example, it was one of the deciding arguments (initial spark) for the Vestas Blades Deutschland GmbH company - a subsidiary company of the Danish Vestas Wind Systems A/S, the world market leader for wind turbines - to open a new blade factory in the "Industrial Park Emanuel" nearby Lauchhammer in May 2002. It is located on the area of the former "Briquette Factory 69" close to the wind farm "Klettwitz". The production facility is the second largest in Europe. It has 45,000 m² including the production but also surface coating of 57 m and new 67 m rotor blades, manufactured with innovative hybrid technology. The production started with 300 workers 17 years ago, nowadays the plant is giving jobs to approx. 1,400 employees (inclusive temporary workers), thereof circa 30 apprentices. Summing up, Vestas Lauchhammer is one of the most modern, efficient and fast growing plants within the Vestas group.

Achievements

Since starting, the wind park "Klettwitz" expands continually. After the repowering and replacing of 36 older Vestas wind mills type V66 by 27 Vestas wind mills V112 (3.3 MW each) in 2014/2015 a further construction phase gets established with additional 15 wind turbines of the 3.3 MW category (49.5 MW). Only the repowering means an investment of 200 million EUR. The financial close was reached in December 2015, with Uncredit, Bayern LB and BVK providing senior facilities.

Below the line, the wind energy market in Lusatia is very dynamic and expanding: a prime example for energy transition in the coal region, now supplying the world market with high-end technologies "Made in Lausitz". Alone in the first 15 years after setting up and production start about 20,000 rotor blades have left the factory in Lauchhammer, producing for the world market, offshore and onshore.

At least, coming to the ecological and climate-protecting benefits of wind energy in the coal region, quite concrete. Only looking at the climate-friendly substitution of lignite for energy generation. About 2.2 hectares of land can be saved from mining by green electricity produced with only one 3.3 MW wind mill on average.

Challenges

So far the development of wind park "Klettwitz" together with the nearby Vestas production site in Lauchhammer is a success story. However, when looking at the regional potential for wind energy production there is an increasing public discussion about the compatibility with landscape and nature protection, especially in Brandenburg, which is one of the leading wind energy producers in Germany with 128.5 wind turbines per 1,000 km² surface area in 2018. To increase the acceptance for additional wind mills by local residents and affected communities the federal government has passed just recently a law giving financial compensation to the municipalities within a radius of 3 kilometres to any new wind turbine installed. The special contribution is 10,000 EUR per community.

Enabling conditions

(1) The project "Klettwitz" benefits from a feed-in tariff for up to 20 years. Moreover, the short distance to the production facilities in Lauchhammer of less than 10 kilometers provides financial advantages for the investors. Thus wind energy sector has established as an ecological sounding regional market and production chain.

(2) Thereby, the wind energy sector is overall profiting from the well-trained and highly motivated specialists connected with the established mining and generation industry in the region. That applies above all for employees coming from the mining and lignite processing supply industry, like energy technology, steel construction and plant engineering.

(3) Now there are intensive regional business networks and a good cooperation between the wind energy industry and approval authorities as well as active communities like Schipkau or Klettwitz.

(4) On the other, site the land-use conflicts in post-mining sites, can be kept to a minimum, especially considering the legitimate interests of local residents and nature protection issues, because there is a strict separation of land use by a proper mine reclamation planning integrated into the regional spatial development plan.

(5) The unbureaucratic regional administrations and licensing authorities speed up the projects, for example when looking at the spatial development of priority areas for wind energy and the expansion of production sites. In short: Also from that point of view, it is a quite favourable climate for further investments.

(6) The profound know-how of the employees, a high production efficiency and nearby large-scale windparks around and beyond Klettwitz and Schipkau are key arguments for Vestas to invest in Lauchhammer. Moreover, the federal state of Brandenburg is promoting the qualification of new staff, also refugees coming to Germany.

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