

## Energiewende is changing the eastern federal states

Rafał Bajczuk, Niemiecka strategia energetyczna zmienia wschodnie landy

On 28 August, the Federal Government Commissioner for the New Federal States presented a report entitled 'The impact of the energy transformation on eastern Germany'. This report suggests that the new federal states are of special significance for the future of the German energy sector. Already at present, the eastern federal states can boast a larger share of RES in electricity production than the western states (29% vs. 20%). By 2020, this share is set to rise to 49% (in Germany as a whole, the share of RES in power production is set to reach 30% by 2020). The eastern German states are a net exporter of electricity (both to Poland and the Czech Republic and towards the west). According to the authors of the report, the new *Länder* have assumed the role of forerunner in the new German energy policy and will maintain this role in the future. The reasons for this include favourable natural conditions for investments in wind farms and an energy sector based on biomass (good wind conditions and large agricultural areas), and also greater engagement by the federal states and local governments in obtaining new investments in RES. It can be concluded from the document that the greatest problem the energy sector in the new federal states needs to confront is that of the insufficiently developed power supply network and the absence of energy storage systems.

### Commentary

- The state governments see the expansion of RES as a great opportunity for the development of the new federal states, and investments in this sector are expected to bring positive effects, such as acting as a catalyst to business activity, increasing budget incomes and the creation of new jobs. In 2011, the RES sector in the eastern federal states employed 1.8% of all workers (around 95,000 people), while the proportion in the west of the country was 1.2%. The largest wind turbine manufacturing plants are located in Mecklenburg-Vorpommern and Brandenburg (including Enercon, Vestas and Repower Systems). The photovoltaic industry is active primarily in Brandenburg.
- One negative consequence of the rapid development of RES is that there are higher fees for using the power supply network in the east than in the western states, resulting in higher electricity bills. Furthermore, a great part of the profits generated by RES producers is transferred to western Germany, from where the investors originate. The solar industry, which was intended to be a driving force for the new federal states, went

bankrupt as it was unable to cope with international (predominantly Chinese) competitors. The share of German manufacturers in the German photovoltaic panel market shrank from 59.5% in 2008 to 15% in 2011, while Chinese manufacturers increased their market share over the same timeframe from 21% to 60%. The number of people working in the photovoltaic industry dropped from approximately 10,000 in 2012 to approximately 6,000 in February 2013.

- The eastern federal states, like Thuringia or Mecklenburg-Vorpommern, are planning a more rapid development of RES than the rest of the country. According to the authors of the report, this situation is causing additional problems to transmission network operators. This is already resulting in worse system performance, and uncontrolled transmissions within the network from northern Germany to Bavaria are destabilising the work of the Polish and Czech transmission systems. To resolve this problem, Polish and German transmission network operators will build phase shifters to block undesired electricity transmissions from Germany by 2016. The necessary German transmission network expansion is still in the initial stages. The current plans envisage 2,800 km being added to the transmission network and 2,900 km of the existing network being renovated.