



# Press Release 18/2016

Stuttgart / Berlin, December 21, 2016

## **ZSW and BDEW on renewable energies' share of electricity consumed in 2016:**

### **Renewables Account for around 32 Percent in 2016**

#### **Record offshore wind power production / pressure to expand grid on the rise**

Renewable energies are expected to cover 32 percent of the gross amount of electricity consumed in Germany in 2016. The Centre for Solar Energy and Hydrogen Research Baden-Württemberg (ZSW) and the German Association of Energy and Water Industries (BDEW) arrived at this figure in an initial estimate. According to these projections, over 191 billion kWh (kilowatt hours) of electricity will have been generated from sun, wind and other regenerative sources by the end of the year. This would mark a slight increase from the previous year. In 2015, renewable sources delivered just over 187 billion kWh, which is 31.5 percent of the gross amount of electricity consumed that year. The federal government's energy targets call for renewables' share in gross electricity consumption to arrive at 35 percent by 2020.

Offshore wind power production increased markedly, rising almost 57 percent to around 13 billion kWh (2015: 8.3 billion kWh). Onshore wind power production took a downward turn, dropping nearly 6 percent to 67 billion kWh (2015: 70.9 billion kWh), despite more wind turbines going up. This is attributable to poor wind conditions in 2016. Land-based wind power remains the strongest source of renewable energy with a share of almost 35 percent of electricity generated from renewables, followed by biomass, which accounted for nearly 27 percent (more than 3 percent of biogenic share of waste thereof).

A brief summary of developments in electric power generated from other renewable sources follows: PV power dropped slightly by around 1 percent to more than 38 billion kWh (2015: 38.7 billion kWh). Hydropower rose some 13 percent to just short of 22 billion kWh (2015: 19.0 billion kWh). Biomass and waste (the biogenic share) energy increased by nearly 3 percent to around 52 billion kWh (2015: 50.4 billion kWh). Geothermal power saw a 12 percent rise to 0.2 billion kWh (2015: 0.1 billion kWh).

"The steadily growing share of renewables in electricity consumption is positive and takes us closer to the goal of a low-carbon energy mix. However, we still need conventional production capacities to back up the ongoing conversion of our energy supply. At the same time, the pressure to expand the grid is rising. The Federal Ministry of Economic Affairs has just confirmed in its monitoring report on the Energiewende [Germany's energy transition] that the grid expansion is clearly lagging

Zentrum für Sonnenenergie- und Wasserstoff-Forschung Baden-Württemberg (ZSW)

Stuttgart site:  
Industriestr. 6, 70565 Stuttgart

**bdew**

Energie. Wasser. Leben.



behind established and necessary goals. The gears of grid and renewables expansion have to be meshed more closely to reduce the enormous costs of stabilizing grids. This will also lighten the load on consumers," says Stefan Kapferer, Chairman of BDEW's General Executive Management Board.

Prof. Frithjof Staiss, Managing Director of ZSW, says, "The current figures show that the Energiewende remains on track in the area of sustainable electricity generation. However, urgent action is needed in other areas. Fossil fuel consumption is still too high, especially in the transport sector, and so are greenhouse gas emissions for that same reason. This is why policymakers, businesses and society will have to make a more determined effort to achieve climate protection targets and successfully transform the entire energy system."

The Zentrum für Sonnenenergie- und Wasserstoff-Forschung Baden-Württemberg (Centre for Solar Energy and Hydrogen Research Baden-Württemberg, ZSW) is one of the leading institutes for applied research in the areas of photovoltaics, renewable fuels, battery technology, fuel cells and energy system analysis. There are currently around 230 scientists, engineers and technicians employed at ZSW's three locations in Stuttgart, Ulm and Widderstall. In addition, there are 90 research and student assistants.

### Media contacts

Alexander Del Regno, Zentrum für Sonnenenergie- und Wasserstoff-Forschung Baden-Württemberg (ZSW) / Centre for Solar Energy and Hydrogen Research, Industriestr. 6, 70565 Stuttgart, Phone +49 (0)711 7870-310, Fax +49 (0)711 7870-230, [alexander.delregno@zsw-bw.de](mailto:alexander.delregno@zsw-bw.de), [www.zsw-bw.de](http://www.zsw-bw.de)

Manuela Wolter, Bundesverband der Energie- und Wasserwirtschaft e. V. (BDEW) / German Association of Energy and Water Industries, Reinhardtstraße 32, 10117 Berlin, Phone +49 (0)30 300199-1162, Fax +49 (0)30 300199-3162, [presse@bdew.de](mailto:presse@bdew.de), [www.bdew.de](http://www.bdew.de)

Zentrum für Sonnenenergie- und Wasserstoff-Forschung Baden-Württemberg (ZSW)

Stuttgart site:  
Industriestr. 6, 70565 Stuttgart

**bdew**  
Energie. Wasser. Leben.