



Press Release

Stuttgart / Berlin, November 9, 2018

ZSW and BDEW on gross electricity consumption in Q1-Q3 2018:

Renewables Cover 38 Percent of Germany's Electricity Consumption

More wind and solar power, less from coal and gas / momentum must be maintained / mounting pressure to expand the grid

Renewable energies collectively covered 38 percent of Germany's gross electricity consumption in Germany in the first three quarters of 2018, an increase of three percentage points over the same period last previous year. Yield was even higher in January, April and May with unusually strong winds and unseasonably sunny days pushing renewables' share up as high as 43 percent. The Centre for Solar Energy and Hydrogen Research Baden-Württemberg (ZSW) and the German Federal Association of Energy and Water Management (BDEW) arrived at this figure in an initial assessment. If wind speeds in the fourth quarter are in line with the last few years' average, renewables could come very close to covering 38 percent of demand throughout 2018.

Solar, wind and other renewable sources generated nearly 170 billion kilowatt hours (billion kWh) of electricity in the first three quarters of 2018 (Q1-3 2017: 155.5 billion kWh). Renewables are closing in on lignite and bituminous coal, which accounted for around 172 billion kWh of electricity, down nearly 7 percent from last year's figure (Q1-3 2017: 184.0 billion kWh). Natural gas-fired electricity production also decreased by nearly 8 percent to around 59 billion kWh (Q1-3 2017: 63.6 billion kWh).

Onshore wind power remained the leading source of renewable energy in the period under review with nearly 63 billion kWh, a 13 percent increase from the same period last year (Q1-3 2017: 55.4 billion kWh). Photovoltaics posted the steepest growth, rising nearly 16 percent to more than 41 billion kWh (Q1-3 2017: 35.6 billion kWh). Biomass came in third with around 34 billion kWh (Q1-3 2017: 33.4 billion kWh). A prolonged drought left hydropower in fourth place, with production dropping almost 10 percent to around 13 billion kWh (Q1-3 2017: 14.9 billion kWh). Offshore wind contributed around 13 billion kWh (Q1-3 2017: 11.7 billion kWh).

"Renewables are definitely in the fast lane, while conventional energy sources' contribution to covering gross electricity consumption is steadily declining. However, we still have a lot of work to do to achieve the goal of a 65 percent share of renewable power by 2030. It is

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imperative to keep this expansion from stalling: First, enough of space has to be made available, particularly for new onshore wind projects. Second, it is high time for special onshore wind and PV tenders to go out. Third, an all-out effort has to be made to drive the north-to-south high-voltage lines' urgently needed expansion at full speed, and to establish the framework conditions needed to operate electricity storage facilities. These are the prerequisites for using electricity generated from renewables on a wide scale and achieving climate goals," says Stefan Kapferer, Chairman of BDEW's General Executive Management Board, by way of explanation.

"This increase in renewable power generation is great news," says Prof. Frithjof Staiß, Managing Director of ZSW. "However, the heating and transport sectors are worrying. We have to start making some real progress here. This is also pursuant to European laws such as the Effort Sharing Regulation, which came into force in July 2018. It requires Germany to reduce greenhouse gas emissions in sectors that are not subject to emissions trading – and that means heating and transport – by 38 percent from 2005 to 2030. The prospect of billions in fines is looming as early as 2020 if these targets are not met. This is one of the reasons why it is wise to invest far more in a successful transition in heating and transport."

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 250 scientists, engineers and technicians employed at ZSW's three locations in Stuttgart, Ulm and Widderstall. In addition, there are 90 research and student assistants.

The ZSW is a member of the Innovationsallianz Baden-Württemberg (innBW), a group of 13 non-university, applied research institutes.

The German Association of Energy and Water Industries (BDEW), Berlin, represents over 1,800 companies. The range of members stretches from local and communal through regional and up to national and international businesses. It represents around 90 percent of the electricity production, over 60 percent of local and district heating supply, 90 percent of natural gas as well as 80 percent of drinking water extraction as well as around a third of wastewater disposal in Germany.

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