FRAUNHOFER INSTITUTE FOR SOLAR ENERGY SYSTEMS ISE

Net Public Electricity Generation in Germany in the first half year 2020



Prof. Dr. Bruno Burger

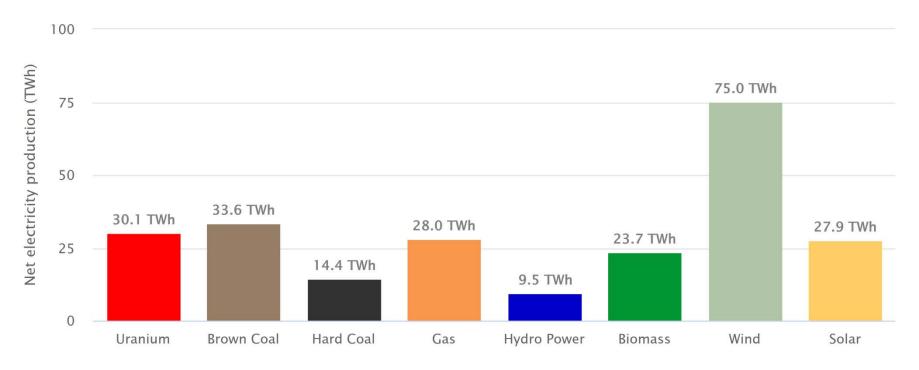
Fraunhofer Institute for Solar Energy Systems ISE

Freiburg, July 1, 2020

www.ise.fraunhofer.de

www.energy-charts.de

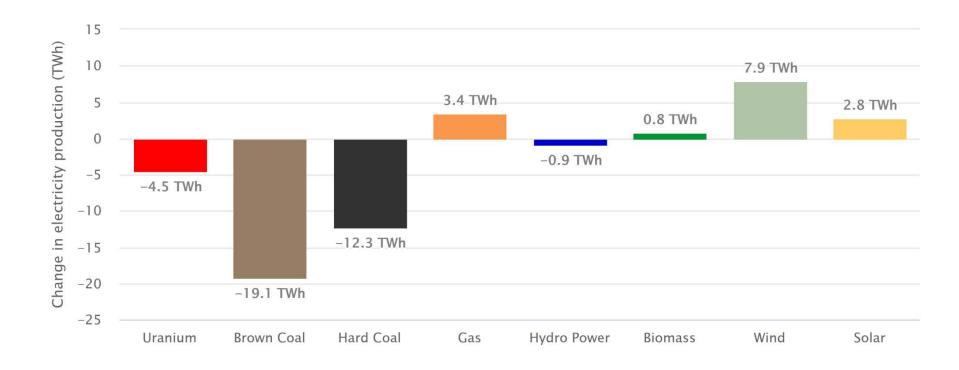
First half year 2020



The chart shows the net electricity generation from power plants for the public power supply. Generation from power plants in the manufacturing, mining and quarrying industries, i.e. the self-generation of electricity in industry, is not included.

Graph: B. Burger, Fraunhofer ISE; Data: DESTATIS and Leipzig electricity exchange EEX, energetically corrected values

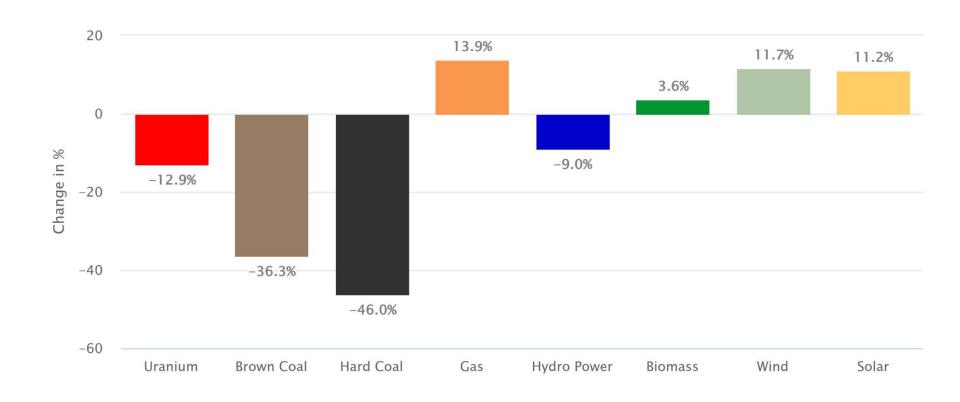
Absolute change in net public electricity generation First half year 2020 compared to first half year 2019



Graph: B. Burger, Fraunhofer ISE; Data: DESTATIS and Leipzig electricity exchange EEX, energetically corrected values

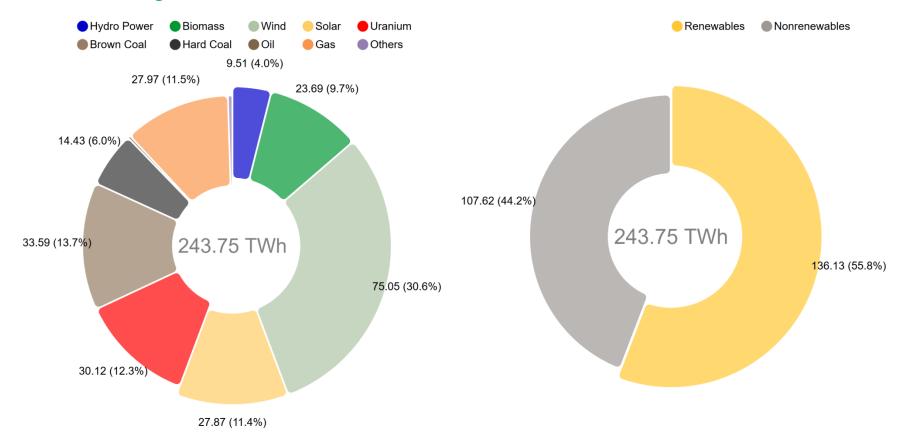
ISE

Relative change in net public electricity generation First half year 2020 compared to first half year 2019



Graph: B. Burger, Fraunhofer ISE; Data: DESTATIS and Leipzig electricity exchange EEX, energetically corrected values

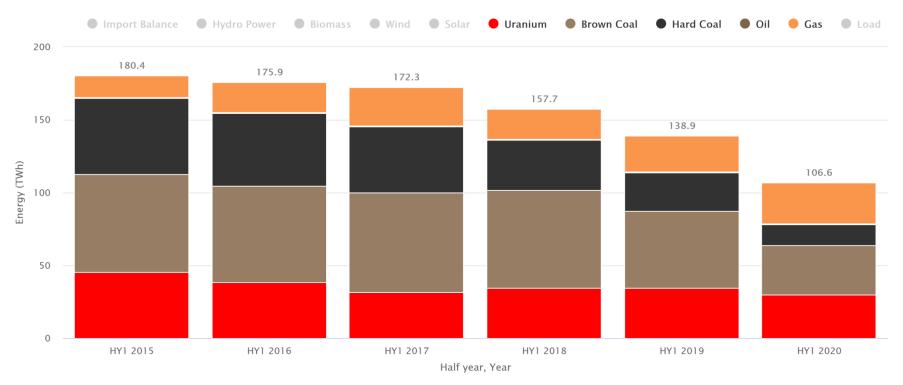
First half year 2020



The chart shows the net electricity generation from power plants for the public power supply. Generation from power plants in the manufacturing, mining and quarrying industries, i.e. the self-generation of electricity in industry, is not included.

Graph: B. Burger, Fraunhofer ISE; Source: https://www.energy-charts.de/energy_pie.htm?year=2020

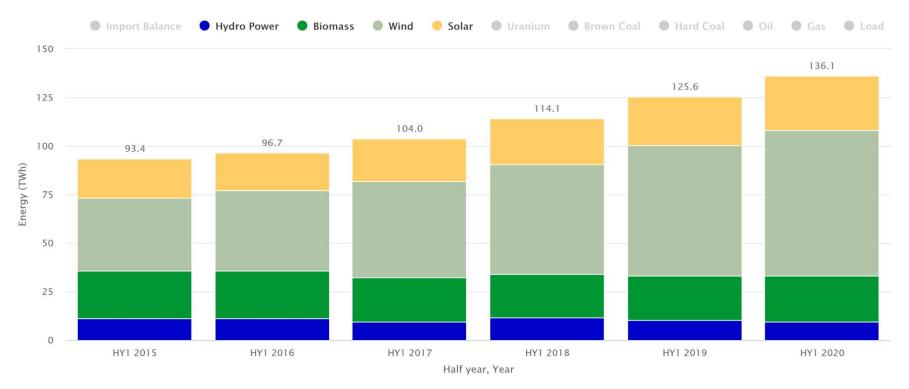
First half year 2015 - 2020, non-renewable sources



The chart shows the net electricity generation from power plants for the public power supply. Generation from power plants in the manufacturing, mining and quarrying industries, i.e. the self-generation of electricity in industry, is not included.

Graph: B. Burger, Fraunhofer ISE; Source: https://www.energy-charts.de/energy.htm

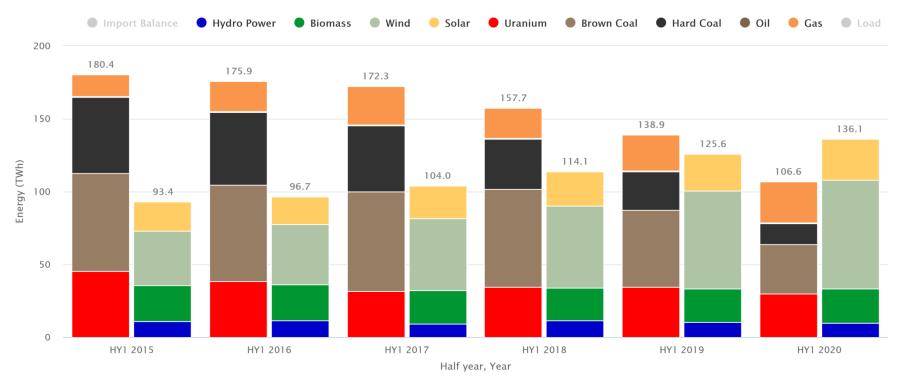
First half year 2015 - 2020, renewable sources



The chart shows the net electricity generation from power plants for the public power supply. Generation from power plants in the manufacturing, mining and quarrying industries, i.e. the self-generation of electricity in industry, is not included.

Graph: B. Burger, Fraunhofer ISE; Source: https://www.energy-charts.de/energy.htm

First half year 2015 - 2020, all sources

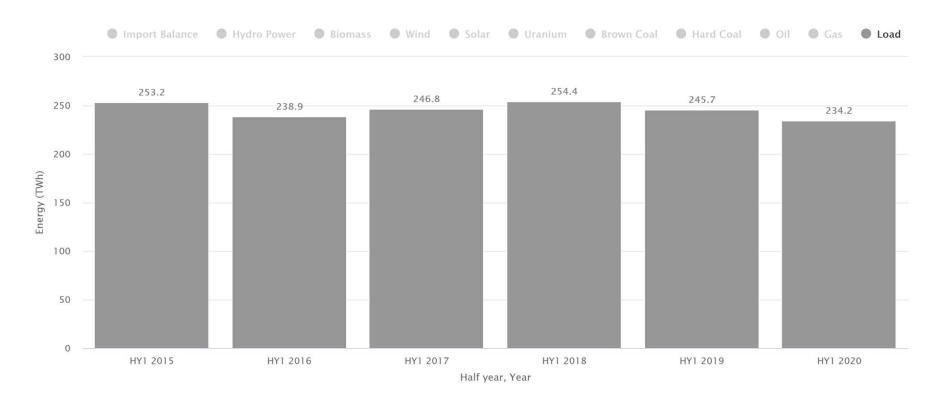


The chart shows the net electricity generation from power plants for the public power supply. Generation from power plants in the manufacturing, mining and quarrying industries, i.e. the self-generation of electricity in industry, is not included.

Graph: B. Burger, Fraunhofer ISE; Source: https://www.energy-charts.de/energy.htm

Load

First half year 2015 - 2020

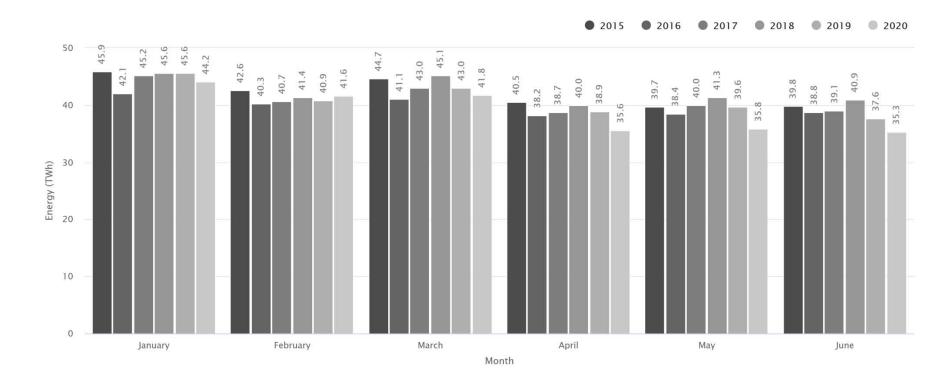


The load includes the electricity consumption and grid losses, but not the pump electricity consumption and the own consumption of conventional power plants.

Graph: B. Burger, Fraunhofer ISE; Source: https://www.energy-charts.de/energy.htm?source=all-sources

Load

January to June 2015 to 2020

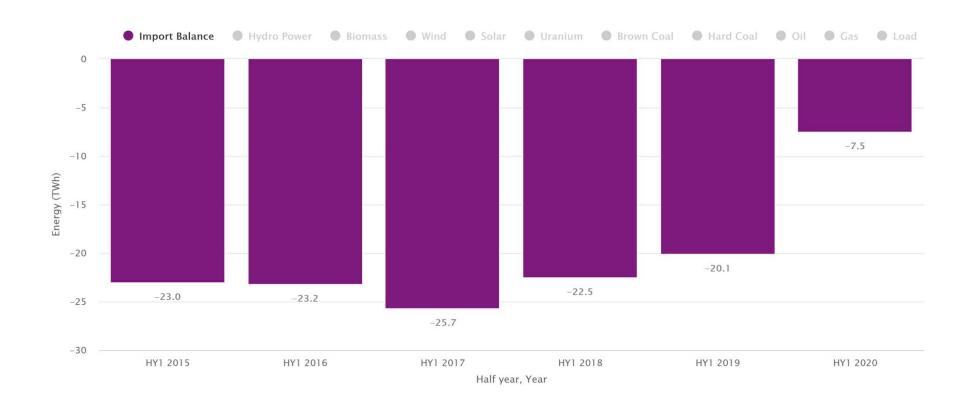


The load includes the electricity consumption and grid losses, but not the pump electricity consumption and the own consumption of conventional power plants.

Graph: B. Burger, Fraunhofer ISE; Source: https://www.energy-charts.de/energy.htm?source=all-sources

Electricity exchange balance

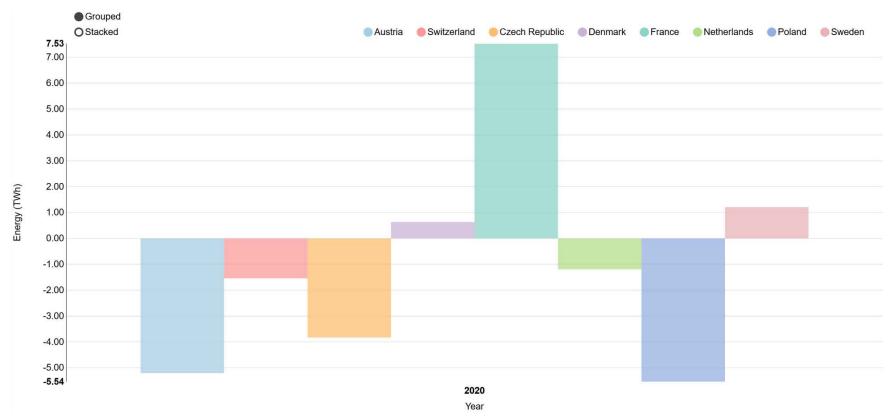
First half year 2015 - 2020



Physical flows. Positive values mean import, negative values mean export. Graph: B. Burger, Fraunhofer ISE; Source: https://www.energy-charts.de/energy_de.htm?source=conventional

German power import / export

First half year 2020

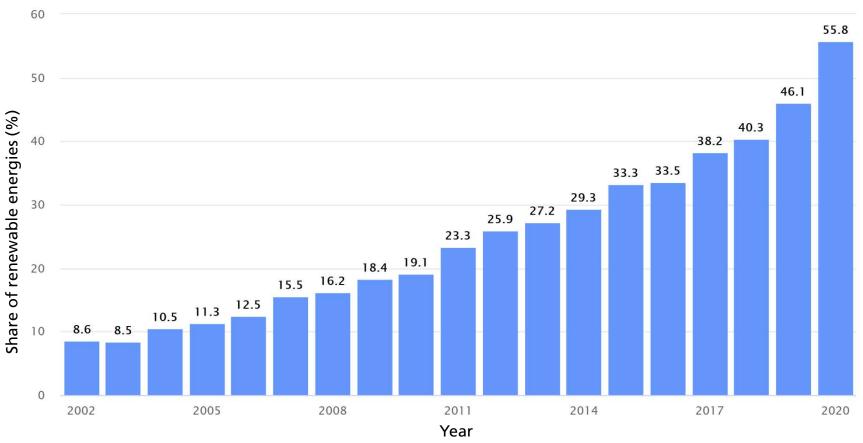


Physical flows. Positive values mean import, negative values mean export.

Graph: B. Burger, Fraunhofer ISE; Source: https://www.energy-charts.de/energy_de.htm?source=import-export

Share of renewables in net public electricity generation

Year 2002 – 2019 and half year 2020

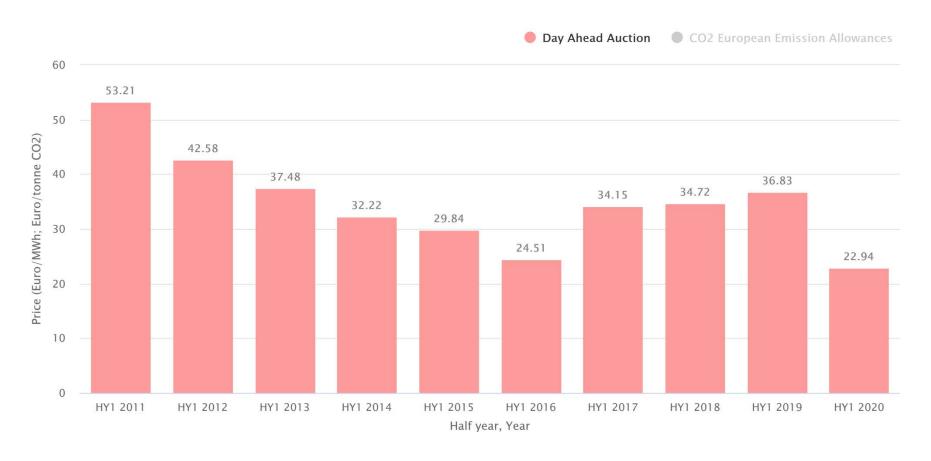


The chart shows the net electricity generation from power plants for the public power supply. Generation from power plants in the manufacturing, mining and quarrying industries, i.e. the self-generation of electricity in industry, is not included.

Graph: B. Burger, Fraunhofer ISE; Source: https://www.energy-charts.de/ren_share.htm

EPEX day ahead spot price

Weighted by volume, nominal prices, not inflationadjusted, first half year 2011 - 2020



Graph: B. Burger, Fraunhofer ISE; Data: EPEX, Source: http://www.energy-charts.de/price_avg.htm

CO2 European Emission Allowances (EUA)

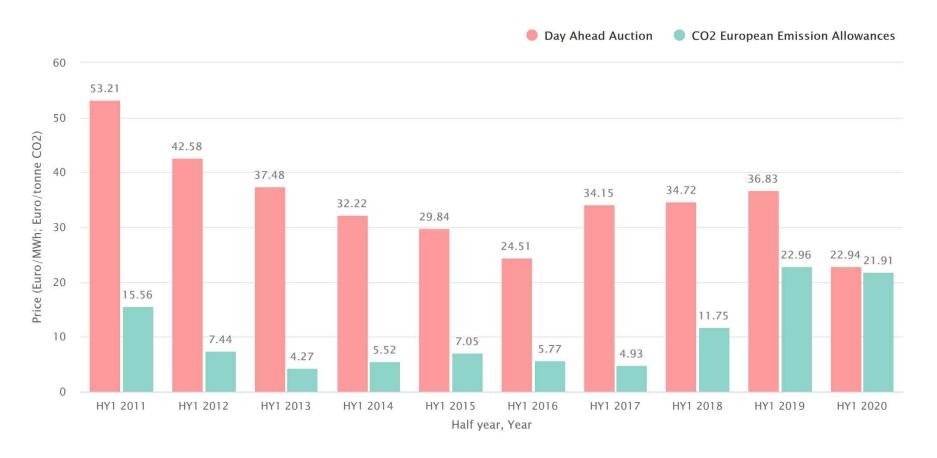
Average price, first half year 2015 - 2020



Graph: B. Burger, Fraunhofer ISE; Data: EEX, Source: http://www.energy-charts.de/price_avg.htm

Day Ahead Spotprice and European Emission Allowances

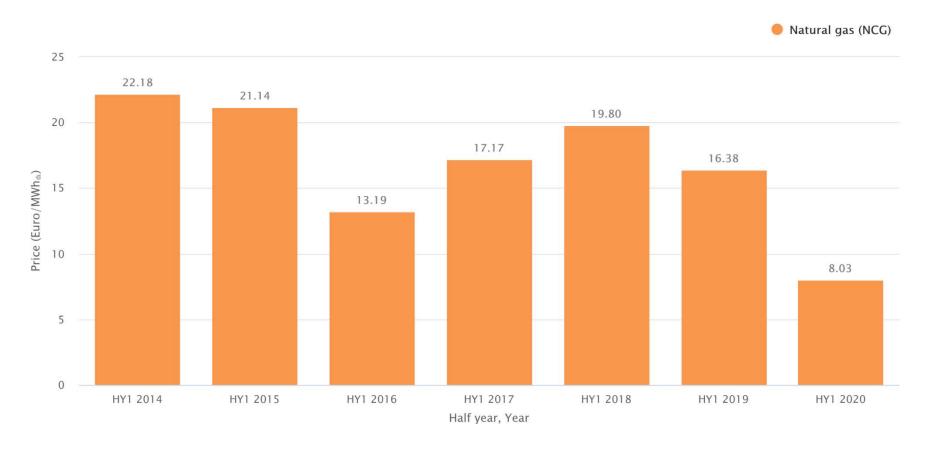
First half year 2015 - 2020



Graph: B. Burger, Fraunhofer ISE; Data: EEX and EPEX, Source: http://www.energy-charts.de/price_avg.htm

Gas price, Net Connect Germany (NCG)

Average price, first half year 2015 - 2020



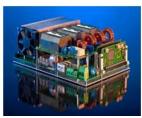
Graph: B. Burger, Fraunhofer ISE; Data: Quandl

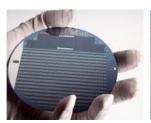
Thank you for your Attention!













Fraunhofer Institute for Solar Energy Systems ISE

Prof. Dr. Bruno Burger bruno.burger@ise.fraunhofer.de

www.energy-charts.de

twitter.com/@energy charts d