

## 10 FACTS ON LIGNITE

1. Lignite is the **only fossil fuel in Germany** which does not have to be imported. It is abundantly available, and it does not require any subsidies.
2. With a total output of about **107 mt (2020)**, lignite contributes a major proportion to a safe and secure energy and power supply. With an electric power production of about **92 TWh** from flexible generation capacities that are constantly available, lignite-fired power plants are indispensable in supplying energy to industry, commerce, and private households, and they will continue to do so for many years to come.
3. The close technical and local combination of open-pit mines and power plants provides maximum **security, economic efficiency, and value creation**.
4. Modern lignite-fired power plants are as flexible as combined cycle power plants (CCPP); they provide system services to **compensate for the fluctuating grid feed-in and network supply** of wind turbines and PV plants.
5. The **recultivation efforts** following lignite mining are considered to be **exemplary** around the entire globe. The requisite measures compensate for mining-related, limited land utilization and create new cultural, economic, and natural environments.
6. The DEBRIV member companies make a vital **contribution towards climate protection** and stand for an economically efficient **transformation of the energy sector** in Germany which takes the concerns of its members and the interests of the coal regions into account. DEBRIV and the lignite industry are committed towards meeting the objectives listed in the international Paris Agreement on climate change.
7. German lignite accounts for **less than 0.5 percent of the global CO<sub>2</sub> emissions**. A national abandonment of the energy carrier will ultimately have no sustainable impact on the anthropogenically influenced climate change.
8. According to the recommendations of the Structural Commission and based on the decommissioning list by the **Coal Phase-Out Act**, the extraction of lignite and its conversion into electricity will come to an end by no later than 2038. Given that there is assured and guaranteed planning and investment security, lignite will continue to be **important for the energy supply** and development in the individual mining districts **until this target date**.
9. The end of lignite utilization, which will be earlier than had previously been anticipated and planned by the companies, requires **compensation payments** as well as financial aid in order to implement the structural change in the mining districts. The lignite industry, thus, makes a vital contribution towards reaching the national climate goals.
10. Lignite safeguards and assures nearly **70,000 jobs** in Germany. The Coal Phase-Out Act will lead to **massive job reductions** in mines and power plants as well as among suppliers and service providers. In addition, increasingly higher prices for electricity will threaten jobs in **energy-intensive industries**.

### Bundesverband Braunkohle

Am Schillertheater 4  
10625 Berlin  
phone +49 30 315182-22  
debriv@braunkohle.de



Employees (end of year) <sup>1)</sup>				
Mining area	1989 <sup>2)</sup>	2016	2019	2020
Rhineland	15,565	9,716	9,785	9,418
Lusatia	79,016	8,765	8,116	7,822
Central Germany	59,815	2,414	2,334	2,190
Helmstedt	1,693	199	101	53
Small firms	642	-	-	-
<b>Germany</b>	<b>156,731</b>	<b>21,094</b>	<b>20,336</b>	<b>19,483</b>

1) including employees in own public power stations

2) Annual average – without employees in own public power stations

Lignite reserves in bn t			
Mining area	Geological reserves	Economically minable reserves	Approved and developed opencast mines
Rhineland	50.8	30.8	0.9 <sup>1)</sup>
Lusatia	11.4	2.9	0.6 <sup>2)</sup>
Central Germany	10.0	2.0	0.3
<b>Germany</b>	<b>72.2</b>	<b>35.7</b>	<b>1.8</b>

1) According to RWE's adjusted planning of 02/26/2020 as a result of KWSB, the stockpile was reduced from 2.1 to 0.9 billion t.

2) Other reserves by lignite plans of Tagebau Nochten, Teufeld Mühlrose = 0.15 Mrd. t.

Source: information provided by the company / Status: December 31, 2020

Production of lignite products (in mt)				
Products	1989	2019	2020	Changes 2020/2019 in %
Briquettes	49.39	1.47	1.29	-12.6
Dry and pulverized/Fluidized-bed coal	4.41	4.32	3.77	-12.7
Coke	5.09	0.16	0.14	-7.9

### Selected coal qualities operational and planned mining areas

Mining area	Calorific value kJ/kg	Ash content in %	Water content in %	Sulphur content in %
Rhineland	7,800 - 10,500	2.5 - 8.0	50 - 60	0.15 - 0.5
Lusatia	7,900 - 10,000	2.5 - 14.0	49 - 58	0.2 - 1.5
Central Germany	9,000 - 11,300	6.5 - 12.0	48 - 54	1.3 - 2.1

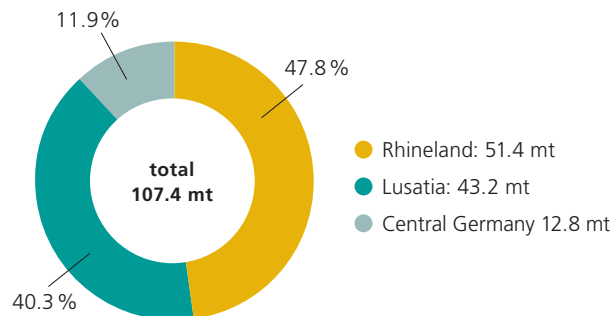
Source: information provided by the company / Status: 12/2020

**Deadline:** March 2021 (Data preliminary for 2020)  
Source, if not specified: Statistik der Kohlenwirtschaft  
Summed deviations due to roundings

# LIGNITE IN GERMANY

Facts and Figures 2020

## Lignite production according to mining areas

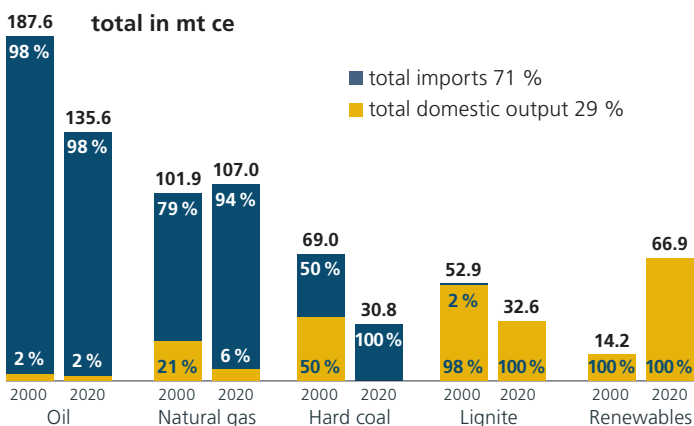


## Utilisation of lignite 2020

Mining areas	Use <sup>1)</sup>		
	Generation of electricity and heat	Refining	Others
in million tons			
Rhineland	43.1	8.1	0.2
Lusatia	40.3	2.9	0.0
Central Germany	11.7	0.5	0.5
<b>Germany</b>	<b>95.2</b>	<b>11.5</b>	<b>0.7</b>

<sup>1)</sup> Deviations between production and utilisation caused by change in stocking and deliveries between the mining areas

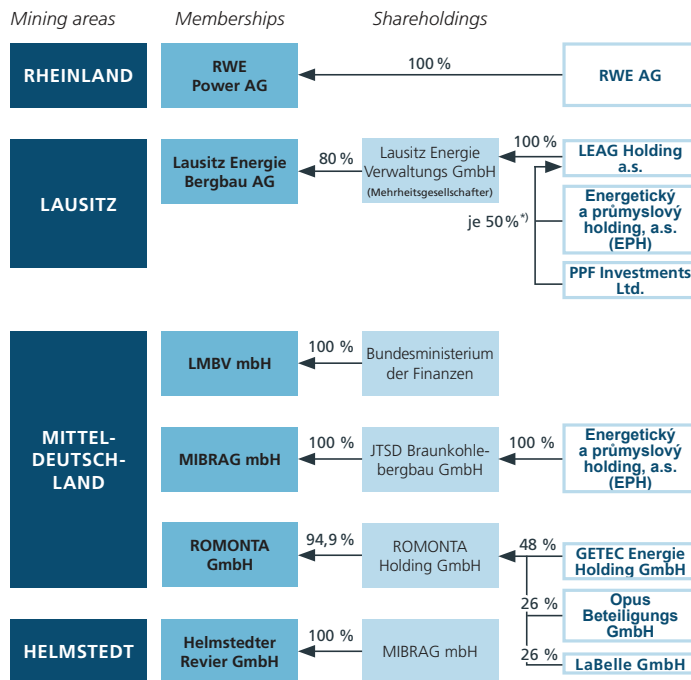
## Share of domestic output in primary consumption in Germany between 2000 and 2020<sup>\*)</sup>



<sup>\*)</sup> provisional / Status: 03/2021

Source: Arbeitsgemeinschaft Energiebilanzen

## Participation ratios of the lignite companies



<sup>\*)</sup> indirect holdings

Source: DEBRIV / Status: 12/2020

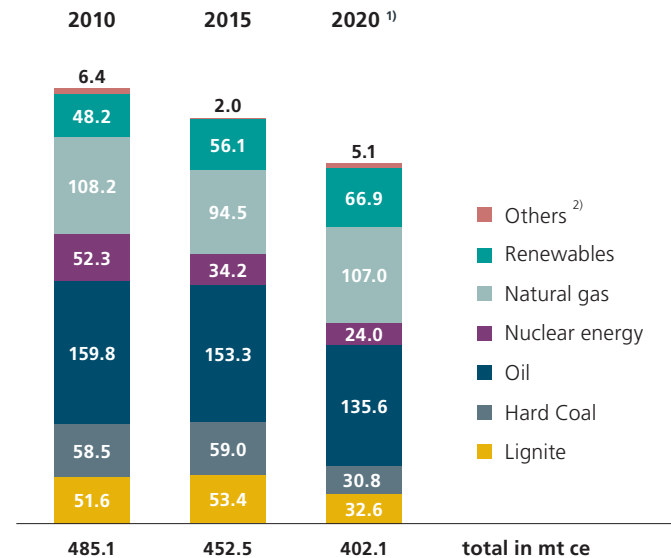
## Capacity and generation of lignite powerstations

Federal State	Gross installed power Jan. 1, 2021	Gross electricity generation 2020 <sup>1)</sup>
	MW	TWh
North Rhine-Westphalia	11,170	41
Brandenburg	4,722	23
Saxony	4,563	24
Saxony-Anhalt	1,220	3.9
Lower Saxony	17	
Hesse	42	
Bavaria	2	0
Baden-Wuerttemberg	2	
<b>Total</b>	<b>21,738 <sup>2)</sup></b>	<b>91.9</b>

<sup>1)</sup> estimate

<sup>2)</sup> 2,612 MW security standby reserve

## Primary energy consumption

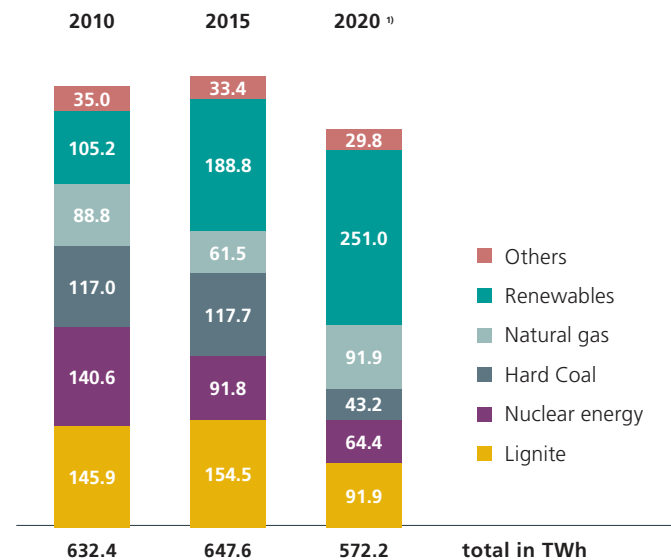


<sup>1)</sup> provisional

<sup>2)</sup> including power exchange balance

Source: Arbeitsgemeinschaft Energiebilanzen / Status: 03/2021

## Total gross electricity generation in Germany



<sup>1)</sup> provisional

Source: Arbeitsgemeinschaft Energiebilanzen / Status: 03/2021