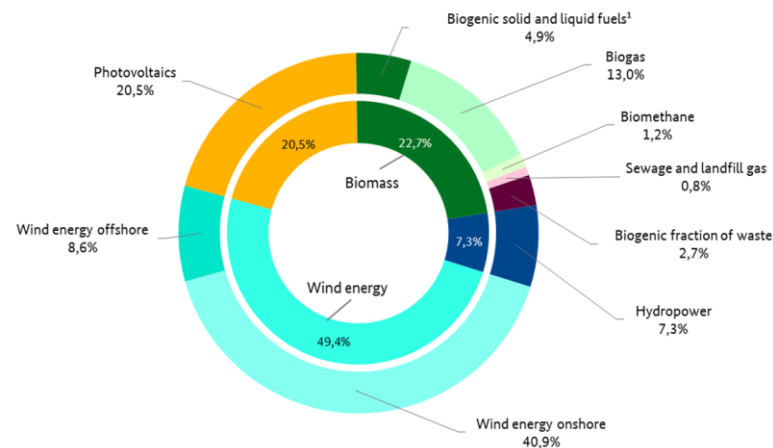


### Renewables-based electricity generation in Germany in the year 2018

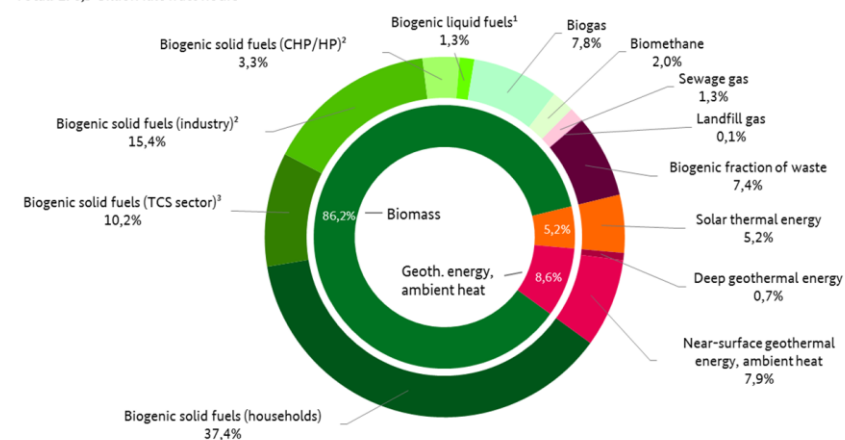
Total: 225,7 billion kilowatt hours



<sup>1</sup> incl. sewage sludge  
Electricity production from geothermal power plants (0,08%) not shown because of very small share.  
BMWi based on Working Group on Renewable Energy-Statistics (AGEE-Stat); as of February 2019; all figures provisional

### Renewables-based heat consumption in Germany in the year 2018

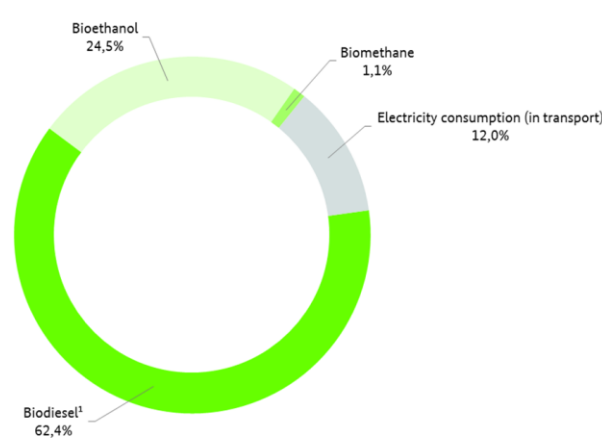
Total: 170,9 billion kilowatt hours



<sup>1</sup> incl. biofuels used in agriculture, forestry, construction and military; <sup>2</sup> incl. sewage sludge and charcoal; <sup>3</sup> TCS corresponds to trade, commercial and service sector  
BMWi based on Working Group on Renewable Energy-Statistics (AGEE-Stat); as of February 2019; all figures provisional

### Renewables-based final energy consumption in the transport sector in Germany in the year 2018

Total: 35,9 billion kilowatt hours



<sup>1</sup> consumption of biodiesel (including HVO) in the transport sector (excluding consumption in agriculture, forestry, construction and military)  
Share of vegetable oil (0,03%) not shown because of very small contribution.  
BMWi based on Working Group on Renewable Energy-Statistics (AGEE-Stat); as of February 2019; all figures provisional

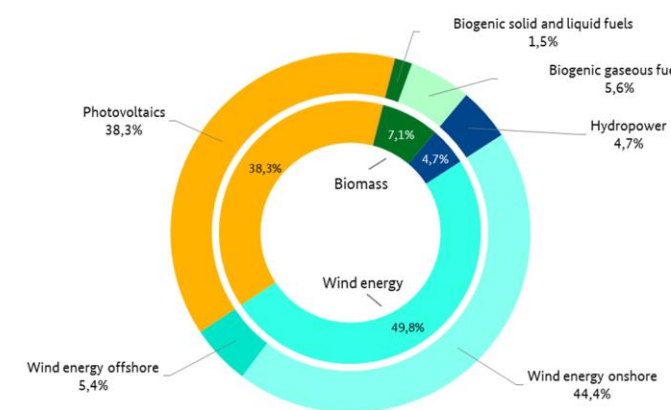
## Renewable Energy Sources in Germany Key information of the year 2018 at a glance

BMWi based on Working Group on Renewable Energy-Statistics (AGEE-Stat)  
Status: February 2019

Renewable energy sources in the year 2018		RE 2018 [GWh]	Share of renewable energy [%]	avoided GHG-emissions [1.000 t CO <sub>2</sub> -Äq.]	
Gross electricity production	Hydropower	16.500	2,8	12.452	
	Wind energy onshore	92.249	15,4	61.512	
	Wind energy offshore	19.341	3,2	13.050	
	Solar Photovoltaic	46.164	7,7	28.353	
	Solid biofuels & sewage sludge	10.730	1,8	7.391	
	Liquid biofuels	437	0,1	245	
	Biogas	29.450	4,9	10.617	
	Biomethane	2.703	0,5	1.248	
	Sewage gas	1.490	0,2	947	
	Landfill gas	300	0,1	190	
Final energy consumption for heating and cooling	Biogenic fraction of waste	6.155	1,0	4.673	
	Geothermal energy	172	0,03	98	
	Solid biofuels & charcoal (households)	63.860	5,2	11.622	
	Solid biofuels & charcoal (TCS sector)	17.496	1,4	4.946	
	Solid biofuels & sewage sludge (industry)	26.326	2,1	7.151	
	Solid biofuels & sewage sludge (HP/CHP)	5.659	0,5	1.208	
	Liquid biofuels	2.242	0,2	510	
	Biogas	13.288	1,1	2.039	
	Biomethane	3.444	0,3	479	
	Sewage gas	2.159	0,2	490	
Final energy consumption in the transport sector	Landfill gas	122	0,01	36	
	Biogenic fraction of waste	12.719	1,0	2.799	
	Solar thermal energy	8.877	0,7	2.204	
	Deep geothermal energy	1.133	0,1	327	
	Near-surface geothermal energy & ambient heat	13.551	1,1	1.435	
	<b>Total</b>	<b>170.876</b>	<b>13,9</b>	<b>35.244</b>	
	Final energy consumption transport	Biodiesel	22.419	3,5	5.437
		Vegetable oil	10	0,002	2
		Bioethanol	8.795	1,4	2.189
		Biomethane	401	0,1	89
RE electricity consumption transport		4.296	0,7		
<b>Total</b>		<b>35.921</b>	<b>5,6</b>	<b>7.717</b>	

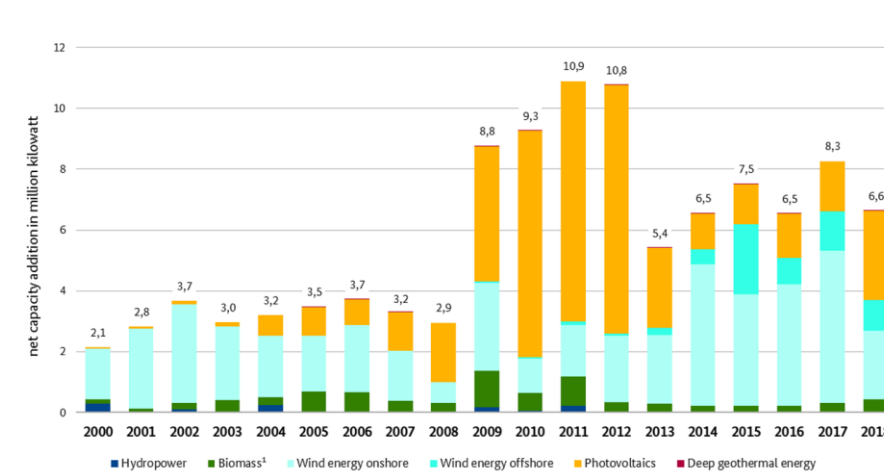
### Installed capacity for renewables-based electricity generation in Germany in the year 2018

Total: 118,3 million kilowatt



<sup>1</sup> Biogas, biomethane, landfill gas and sewage gas  
Geothermal power plants are not shown here because of their very small share (0,04%).  
BMWi based on Working Group on Renewable Energy-Statistics (AGEE-Stat); as of February 2019; all figures provisional

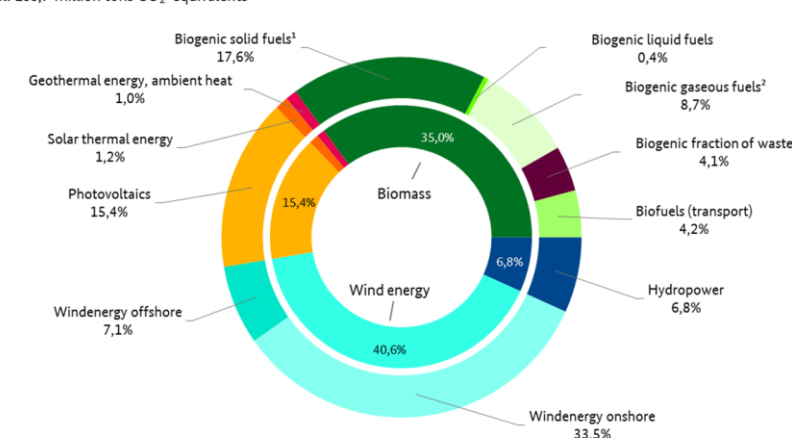
### Development of net capacity addition for renewables-based electricity generation in Germany



<sup>1</sup> incl. solid and liquid biomass, biogas, biomethane, sewage gas and landfill gas, excl. biogenic fraction of waste  
BMWi based on Working Group on Renewable Energy-Statistics (AGEE-Stat); as of February 2019; all figures provisional

### Greenhouse gas emissions avoided through the use of renewable energy sources in the year 2018

Total: 183,7 million tons CO<sub>2</sub>-equivalents



<sup>1</sup> incl. sewage sludge, without charcoal; <sup>2</sup> biogas, biomethane, sewage gas and landfill gas  
BMWi based on AGEE-Stat using data of the German Environment Agency (UBA); as of February 2019; all figures provisional

Development of renewable energy sources		2005	2010	2011	2012	2013	2014	2015	2016	2017	2018
Gross final energy consumption <sup>1)</sup>	TWh	188,0	305,5	315,3	352,3	365,7	360,0	388,4	387,5	419,8	430,5
Gross final energy consumption EU-Directive <sup>2)</sup>	TWh	187,9	311,7	316,8	352,5	366,8	363,2	382,7	388,7	407,4	430,0
Gross electricity production	TWh	63,4	105,2	124,0	143,0	152,3	162,5	188,8	189,7	216,3	225,7
Final energy consumption for heating and cooling	TWh	102,1	165,5	157,0	173,3	180,2	163,1	167,6	165,6	170,9	170,9
Final energy consumption in the transport sector <sup>3)</sup>	TWh	23,2	36,0	35,5	37,2	34,4	35,5	33,4	33,7	34,3	35,9
Primary energy consumption	PJ	769	1.413	1.463	1.385	1.499	1.519	1.644	1.676	1.790	1.809

1) according to the German government's Energy Concept; 2) according to the European Directive 2009/28/EC; 3) consumption of biogenic fuels and renewables-based electricity in the transport sector (excluding consumption in agriculture, forestry and military)  
all figures provisional

Shares of renewable energy sources in %		2005	2010	2011	2012	2013	2014	2015	2016	2017	2018
of gross final energy consumption <sup>1)</sup>	%	7,1	11,4	12,4	13,6	13,8	14,3	15,1	14,8	15,9	16,7
of gross final energy consumption EU-Directive <sup>2)</sup>	%	7,1	11,7	12,5	13,6	13,8	14,4	14,9	14,9	15,5	16,6
of gross national electricity consumption	%	10,3	17,0	20,4	23,5	25,1	27,4	31,5	31,6	36,0	37,8
of final energy consumption for heating and cooling	%	8,0	12,4	12,9	14,2	14,1	14,2	14,0	13,5	13,4	13,9
of final energy consumption in the transport sector	%	3,7	5,8	5,7	6,0	5,5	5,6	5,2	5,2	5,2	5,6
of primary energy consumption	%	5,3	9,9	10,8	10,3	10,8	11,5	12,4	12,4	13,3	14,0

1) according to the German government's Energy Concept; 2) according to the European Directive 2009/28/EC  
all figures provisional