



BP Statistical Review – 2019

Brazil's energy market in 2018

Brazil's primary energy consumption reached 298 mtoe in 2018, 1.3% higher than in 2017. Hydro and renewables growth offset declines in oil, gas and coal

1. Energy consumption in 2018 increased below the 10-year average as fossil fuel demand dropped by 2.3 mtoe.
2. CO₂ emissions dropped by 3.7% in 2018 while energy intensity remained flat.
3. 2018 saw a strong growth in hydro and renewables so that non-fossil fuel share in the energy mix increased from 37% in 2017 to 39% in 2018.
4. Brazil is the world's second largest Biofuels producer and in 2018 production reached its record high.

+1.3%

Growth in primary energy consumption in 2018

-3.7%

Growth in CO₂ emissions in 2018

2nd

World's second largest hydro consumer

401 Kboe/d

Biofuels production in 2018, a new record high

- ▶ Energy consumption increased at 1.3% p.a. in 2018, below the 10-year average of 2.5%. Growth was driven by hydro (+4 mtoe; 4.5%) and renewables (+2 mtoe; 11%).
- ▶ CO₂ emissions declined by 3.7% in 2018 reaching levels last seen in 2012. Between 2014 (when they reached its highest level) and 2018 emissions have decreased by 12%.
- ▶ Energy intensity (the amount of energy required per unit of GDP) remained flat in 2018 with respect to 2017 after having increased swiftly since 2013.
- ▶ Fossil fuel consumption dropped by 2.3 mtoe in 2018 after having increased by 4.5 mtoe in 2017. In 2018, fossil fuels' share in the energy mix was 61%, down from 63% in 2017.
- ▶ Hydro consumption in Brazil increased by 4.5% in 2018 and reached 88 mtoe. In 2018, Brazil surpassed the US as the second largest hydro consumer in the world
- ▶ Renewables increased strongly in 2018 (+10.6%), but below the 10-year average (17.6%). Brazil accounted for two thirds of renewables consumption in South and Central America in 2018.
- ▶ Electricity generation remained flat in 2018. Since 2014 it has remained fairly stable. In contrast, between 2009 and 2014 it increased at 4.8% each year.
- ▶ Oil production in 2018 declined marginally to average 2.7 Mb/d. This was the first decline in production since 2013. Brazil is the 10th largest oil producer in the world
- ▶ Natural gas production dropped in 2018 by 7.4%. This is the first decline since 2009. The 10-year average growth is 8.9% p.a.
- ▶ Brazil is the world' second largest Biofuels producer. In 2018 production increased by 17%, reaching 401 Kboe/d, a new record high.





Units in Mtoe unless otherwise stated	Level			Growth rate per annum				Share		
				(%)	(Mtoe)			(%)		
	2008	2017	2018	2007-17	2018	2007-17	2018	2008	2017	2018
Consumption										
Primary energy	240	294	298	2.5%	1.3%	6.5	3.7	100%	100%	100%
Oil	113	136	136	2.6%	-0.1%	3.1	-0.2	47%	46%	46%
Natural gas	22	32	31	5.6%	-4.6%	1.4	-1.5	9.2%	11%	10%
Coal	14	17	16	2.0%	-4.0%	0.3	-0.7	5.7%	5.6%	5.3%
Nuclear	3.2	3.6	3.5	2.5%	-0.7%	0.1	0.0	1.3%	1.2%	1.2%
Hydro	84	84	88	-0.1%	4.5%	-0.1	3.8	35%	29%	29%
Renewables (in power)	4.7	21	24	18%	11%	1.7	2.3	2.0%	7.3%	7.9%
Wind	0.3	9.6	11	52%	14%	0.9	1.4	0.1%	3.3%	3.7%
Solar	0.0	0.2	0.7		277%	0.0	0.5	0.0%	0.1%	0.2%
Biomass & geothermal	4.4	12	12	11%	3.2%	0.8	0.4	1.8%	3.9%	4.0%
Native units										
Oil (Mb/d)	2.5	3.1	3.1	2.8%	0.9%	0.1	0.0			
Natural gas (Bcm)	26	38	36	5.6%	-4.6%	1.6	-1.7			
Electricity generation (TWh)										
Total	463	588	588	2.8%	0.0%	14	0.1	100%	100%	100%
Oil	18	15	12	1.5%	-26%	0.2	-4.0	3.8%	2.6%	2.0%
Natural gas	29	66	47	16%	-29%	5.0	-19	6.2%	11.2%	8.0%
Coal	12	26	22	8.6%	-15%	1.5	-3.9	2.6%	4.4%	3.7%
Nuclear	14	16	16	2.5%	-0.7%	0.3	-0.1	3.0%	2.7%	2.7%
Hydro	370	371	388	-0.1%	4.5%	-0.3	17	80%	63%	66%
Renewables	21	94	105	18%	11%	7.6	10	4.5%	16%	18%
Production										
Oil (Mb/d)	1.9	2.7	2.7	4.1%	-1.4%	0.1	0.0			
Biofuels (Kboe/d)	290	342	401	3.9%	17%	11	59			
Natural gas (Bcm)	14	27	25	8.9%	-7.4%	1.6	-2.0			
Coal	2.9	1.9	1.2	-2.7%	-37%	-0.1	-0.7			
Carbon										
CO ₂ emissions (million tonnes)	374	459	442	2.7%	-3.7%	11	-17			
Macro										
GDP (USD billion – PPP, 2010)	2,609	2,903	2,938	1.6%	1.2%	42	35			
Population (millions)	193	209	211	0.9%	0.8%	1.8	1.6			

