



BP Statistical Review – 2019

The US energy market in 2018

US oil and gas consumption and production growth accelerated in 2018 at a record pace solidifying the US as the world's largest oil and gas producer

1. Over the past five years the US has added 5 Mb/d to oil supplies (the equivalent of Canada) and around 176 bcm to gas supplies (the equivalent of Qatar).
2. Renewables' generation share reached 10% for the first time in 2018, up from 6% five years ago. Yet the US still contributes to 15% of global CO₂ emissions.

16.6%

Increase in oil production

21.5%

US share of global gas supply

+9.8%

Growth in non-hydro renewables generation

+2.6%

Growth in carbon dioxide emissions

- ▶ Energy consumption increased at 3.5% p.a after stagnating for the past three years.
- ▶ Oil remained the dominant source of energy at around 40%. Natural gas consumption increased the most (up 11%) while coal consumption fell almost 5%.
- ▶ Oil demand grew by 2.5% last year, well above the 1.5% trend seen over the past five years and despite the \$15/b increase in oil prices.
- ▶ Gas consumption increased by more than 10% (78 Bcm) last year, far in excess of the 2% seen in the prior decade and on par with annual gas consumption in the UK.
- ▶ Gas output has grown by 176 bcm over the past five years, the size of Qatar's current output. The US solidified its role as a net gas exporter, doubling its net exports since last year to 14 bcm.
- ▶ LNG exports increased over 65% last year and now account for 6.6% of global LNG exports.
- ▶ The growth rates in oil and gas output exceeded any other country's annual increase in our 50-year history.
- ▶ The US holds less than 4% of the world's oil and 6% of gas reserves, but now accounts for over 20% of global gas supply and 16% of global oil supply.
- ▶ Generation from renewables reached to over 10% of total US generation and more than half of current nuclear output, but this gain in renewables was slightly below the 15% average growth seen in the past two years.
- ▶ Renewables consumption in the US accounted for almost 19% of global renewables consumption.
- ▶ After four years of improvements in energy intensity (the amount of energy required per unit of GDP) the trend reversed in 2018.
- ▶ Carbon intensity (the amount of carbon emitted per unit of energy) continued to improve at a rate of 0.9%, a slower pace than the 1.3% seen over the past decade.
- ▶ Net oil imports fell 1.5mb/d (-38%) to just 2.8mb/d in 2018 as exports of crude and other petroleum products increased.
- ▶ After a shortlived rebound in 2017, coal output fell by almost 2% in 2018.





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	2,259	2,222	2,301	-0.4%	3.5%	-9	78	100%	100%	100%
Oil	903	902	920	-0.6%	2.0%	-6	18	40%	41%	40%
Natural gas	541	636	703	1.7%	10.5%	10	67	24%	29%	31%
Coal	536	331	317	-4.9%	-4.3%	-21	-14	24%	15%	14%
Nuclear	192	192	192	0.0%	0.3%	0	1	8.5%	8.6%	8.4%
Hydro	57	67	65	2.0%	-2.7%	1	-2	2.5%	3.0%	2.8%
Renewables (in power)	30	95	104	14%	10%	7	9	1.3%	4.3%	4.5%
Wind	13	58	63	22%	8%	5	5	0.6%	2.6%	2.7%
Solar	0.4	18	22	53%	24%	2	4	0.0%	0.8%	1.0%
Biomass & geothermal	17	19	19	1.2%	1.0%	0	0	0.7%	0.8%	0.8%
Native units										
Oil (Mb/d)	19.5	20.0	20.5	-0.4%	2.5%	-0.1	0.5			
Natural gas (Bcm)	629	739	817	1.7%	10.5%	11.5	78			
Electricity generation (Twh)										
Total	4,390	4,303	4,461	-0.3%	3.7%	-13	158	100%	100%	100%
Oil	50	23	26	-10.6%	14.9%	-5	3	1.1%	0.5%	0.6%
Natural gas	949	1,394	1,579	3.8%	13.2%	43	185	22%	32%	35%
Coal	2,148	1,310	1,246	-5.0%	-4.9%	-87	-64	49%	30%	27.9%
Nuclear	849	847	850	0.0%	0.3%	0	2	19%	20%	19%
Hydro	251	297	289	2.0%	-2.7%	5	-8	6%	7%	6%
Renewables	131	418	459	14.3%	9.8%	31	41	3.0%	9.7%	10.3%
Production										
Oil (Mb/d)	6.8	13.1	15.3	6.7%	16.6%	0.6	2.2			
Biofuels (Mb/d)	391	696	714	9.7%	2.6%	42	18			
Natural gas (Bcm)	546	746	832	3.6%	11.5%	22	86			
Coal	567	371	364	-4.0%	-1.9%	-19	-7			
Carbon										
CO ₂ emissions (million tonnes)	5,676	5,014	5,145	-1.5%	2.6%	-85	131			
Macro										
GDP (USD billion – PPP, 2010)	14,998	17,349	17,852	1.5%	2.9%	233	503			
Population (millions)	303	324	327	0.8%	0.7%	2	2			



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