



# Statistical Review of World Energy – 2021

## The US energy market in 2020

US oil consumption fell by almost 2.3 Mb/d in 2020, the most of any country, accounting for a quarter of the decline in global oil demand. The mobility shock reduced US CO<sub>2</sub> emissions to levels not seen since the early 1980s and accounted for 28% of the global emissions decline, the most of any country

1. The US remained the world's largest oil and gas producer, accounting for almost 20% and almost 24% of the world's output of those fuels, respectively
2. LNG exports increased 30% and accounted for almost 13% of global LNG trade
3. Renewables' share (including hydro) in the power mix now rivals coal at almost 20%. Solar generation grew strongest at 24%, while wind grew by 14%

**-7.7%**

Decrease in US primary energy consumption

**16%**

Share of global energy consumption

**-3.5%**

Decrease in oil production

**-1.9%**

Decrease in natural gas production

- ▶ Primary energy consumption decreased by 7.7%. The largest absolute drop was in oil (-4.6 EJ), with the largest percentage drop in coal (-19%).
- ▶ Energy consumption per capita decreased by 8%.
- ▶ Renewables (including hydro) accounted for 10% of primary energy consumption.
- ▶ Electricity generation fell by 3.1%, with most of the reductions coming from coal generation. Renewables growth of 68 TWh was more than twice as large as the growth from natural gas.
- ▶ Gas's share of the power mix rose above 40% for the first time, while coal's share fell at the sharpest rate ever to 20%.
- ▶ Production of oil fell by almost 600 kb/d (-3.5%). The reduction in volume was the third largest of any country, and the most of any country outside the OPEC+ group.
- ▶ Production of natural gas decreased by 1.9% to 915 bcm as the US remains the world's largest producer.
- ▶ US net oil imports have fallen by an average of 1.7 Mb/d over the last three years to just 700 kb/d. In 2018 and 2019 supply increases reduced US import dependency, but the COVID-19 demand shock was solely responsible for the drop in 2020.
- ▶ Net LNG exports reached 60 bcm in 2020, almost 30% higher y/y. US LNG exports now account for 13% of global LNG trade, up from 1% just five years ago.
- ▶ Net CO<sub>2</sub> emissions from energy decreased by 11% to 4.4 billion tonnes.
- ▶ Of 17 total CCUS projects initiated in 2020 around the world, 12 were in the US, driven by the enhanced 45Q tax credit, California low carbon fuel standard and other state-level incentives.





Units in EJ unless otherwise stated	Level			Growth rate per annum				Share		
				(%)		(EJ)		(%)		
	2009	2019	2020	2009-19	2020	2009-19	2020	2009	2019	2020
<b>Consumption</b>										
Primary energy	90	95	88	0.5	-7.7	0.5	-7.1	100	100	100
Oil	35	37	33	0.6	-13	0.2	-4.6	39	39	37
Natural gas	22	31	30	3.2	-2.3	0.8	-0.6	25	32	34
Coal	20	11	9.2	-5.4	-19	-0.8	-2.1	22	12	10.5
Nuclear	7.9	7.6	7.4	-0.4	-3.0	0.0	-0.2	8.8	8.0	8.4
Hydro	2.6	2.5	2.6	-0.1	0.5	0.0	0.0	2.9	2.7	2.9
Renewables	2.3	5.7	6.1	9.3	7.4	0.3	0.4	2.6	6.0	7.0
Wind	0.7	2.7	3.0	14	13	0.2	0.4	0.8	2.8	3.4
Solar	0.0	1.0	1.2	48	23	0.1	0.2	0.0	1.0	1.4
Other renewables*	1.6	2.1	1.9	2.5	-7.5	0.0	-0.2	1.8	2.2	2.2
<b>Native units</b>										
Oil (Mb/d)	18	19	17	0.8	-12	0.1	-2.3			
Natural gas (bcm)	618	849	832	3.2	-2.3	23	-17			
<b>Electricity generation (TWh)</b>										
Total	4,206	4,411	4,287	0.5	-3.1	20	-125	100	100	100
Oil	42	20	19	-7.3	-4.9	-2.2	-0.9	1.0	0.4	0.4
Natural gas	990	1,705	1,738	5.6	1.7	71	33	24	39	41
Coal	1,900	1,051	844	-5.7	-20	-85	-207	45	24	20
Nuclear	841	852	831	0.1	-2.7	1.1	-21	20	19	19
Hydro	272	285	289	0.5	0.8	1.4	3.2	6.5	6.5	6.7
Renewables	150	484	552	12	14	33	68	3.6	11	13
<b>Production</b>										
Oil (Mb/d)	7.3	17	16	8.9	-3.5	1.0	-0.6			
Biofuels (Kboe/d)	423	665	602	4.6	-9.6	24	-64			
Natural gas (bcm)	558	930	915	5.2	-1.9	37	-15			
Coal	22	14	11	-4.1	-25	-0.7	-3.6			
<b>Carbon</b>										
CO <sub>2</sub> emissions (billion tonnes)	5.3	5.0	4.4	-0.6	-11	0.0	-0.6			
<b>Macro</b>										
Population (millions)	306	329	331	0.7	0.6	2.3	1.9			
GDP (USD billion – PPP, 2015)	15,912	19,975	19,278	2.3	-3.5	406	-696			

EJ = exajoules

\*includes biomass, geothermal and biofuels