



Statistical Review of World Energy – 2021

UK's energy market in 2020

Primary energy consumption declined sharply in 2020. Driven by growth in wind energy production, renewables took the lead in electricity generation

1. Primary energy consumption in the UK fell by 11% in 2020, the sharpest reduction since 1980
2. Renewables share of power generation exceeded 40% for the first time, and renewables grew to 17% of the UK's primary energy mix
3. Oil consumption fell by 22% to 1.2 Mb/d. The dramatic fall in aviation activity caused by COVID-19 was responsible for almost half (47%) of the decline

-11%

Fall in primary energy consumption

-15%

Combined fall in oil and gas consumption

25%

Share of primary energy from non-fossil sources

-16%

Decline in CO₂ emissions from energy use

- ▶ Primary energy consumption fell by 11%. The largest fall since 1980. This was clearly the impact of restrictions imposed by the COVID-19 pandemic, which dramatically reduced demand for energy in transportation.
- ▶ Coal consumption declined by 11% and provided less than 3% of the country's primary energy mix.
- ▶ Renewables output increased by 10% in 2020 to 1.2 EJ. Benefiting from the declines in other sources, renewables also grew to 17.3% of the primary energy mix.
- ▶ For the first time since 2010, natural gas returned to being the largest source of primary energy.
- ▶ The growth in renewables was largely due to increased wind energy output, which was up 17% to 0.7 EJ.
- ▶ Oil and gas remained the dominant sources of energy, accounting for 35% and 38% of primary energy consumption, respectively. But for the first time the share of primary energy of decarbonised sources (nuclear, hydro, and renewables) rose to 25% of the mix.
- ▶ Total power generation declined, falling by 4.0% to 313 TWh owing to lower demand for electricity as the wider economy shrank. Renewables' share of the generation mix exceeded 40% for the first time.
- ▶ Oil consumption decreased by 22%, to 1.2 Mb/d. 47% of the 0.3 Mb/d fall was from lower jet fuel consumption.
- ▶ Domestic fossil fuel production declined, with falls across the board in oil (-8%), gas (-0.4%), and coal (-23%) production.
- ▶ Gas consumption also fell, by 6.5% with power generation from gas declining by more than 13%.
- ▶ Energy intensity (energy demand per unit of GDP) fell by 1.0%, much lower than the 10-average decline of 3.0%.
- ▶ In line with lower consumption, net CO₂ emissions from energy use fell by 16%.





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
Consumption										
Primary energy	8.7	7.7	6.9	-1.2	-11	-0.1	-0.8	100	100	100
Oil	3.2	3.1	2.4	-0.5	-23	0.0	-0.7	37	40	35
Natural gas	3.3	2.8	2.6	-1.6	-6.5	-0.1	-0.2	38	36	38
Coal	1.2	0.2	0.2	-16	-11	-0.1	0.0	14	2.8	2.8
Nuclear	0.7	0.5	0.4	-2.6	-11	0.0	-0.1	7.5	6.5	6.5
Hydro	0.0	0.1	0.1	0.7	8.5	0.0	0.0	0.6	0.7	0.8
Renewables	0.2	1.1	1.2	17	10	0.1	0.1	2.6	14	17
Wind	0.1	0.6	0.7	21	17	0.0	0.1	1.0	7.4	10
Solar	0.0	0.1	0.1	90	-1.5	0.0	0.0	0.0	1.5	1.6
Other renewables*	0.1	0.4	0.4	11	3.3	0.0	0.0	1.6	5.2	6.0
Native units										
Oil (Mb/d)	1.6	1.5	1.2	-0.6	-22	0.0	-0.3			
Natural gas (bcm)	91	77	72	-1.6	-6.5	-1.4	-4.8			
Electricity generation (TWh)										
Total	377	325	313	-1.5	-4.0	-5.2	-12	100	100	100
Oil	6.0	1.1	0.9	-15	-21	-0.5	-0.2	1.6	0.3	0.3
Natural gas	166	132	114	-2.3	-14	-3.5	-18	44	41	36
Coal	103	6.9	5.4	-24	-21	-10	-1.4	27	2.1	1.7
Nuclear	69	56	50	-2.0	-11	-1.3	-5.9	18	17	16
Hydro	5.2	5.9	6.5	1.3	8.9	0.1	0.5	1.4	1.8	2.1
Renewables	20	115	128	19	11	9.5	13	5.3	35	41
Production										
Oil (Mb/d)	1.5	1.1	1.0	-2.7	-8.0	0.0	-0.1			
Biofuels (Kboe/d)	4.0	11	10	11	-5.7	0.7	-0.6			
Natural gas (bcm)	61	40	39	-4.3	-0.4	-2.2	-0.1			
Coal	0.5	0.1	0.0	-18	-23	0.0	0.0			
Carbon										
CO ₂ emissions (billion tonnes)	0.5	0.4	0.3	-3.0	-16	0.0	-0.1			
Macro										
Population (millions)	63	68	68	0.7	0.5	0.5	0.4			
GDP (USD billion – PPP, 2015)	2,458	2,947	2,657	1.8	-10	49	-290			

EJ = exajoules

*includes biomass, geothermal and biofuels