



Statistical Review of World Energy – 2021

Africa's energy market in 2020

Africa's primary energy consumption declined by 6.7%, the first fall in consumption since 1991 due to the coronavirus pandemic

1. Lockdowns and other coronavirus restrictions saw GDP decline by 3.4% across the continent, causing a fall in demand in fossil fuels of -7.9%
2. The largest decline occurred in energy demand occurred in oil with a drop of 13.4% reflecting reduced road and air transport activity
3. The share of coal in electricity production dropped to 28%, down from 39% a decade earlier offset by growth in natural gas and renewables

-6.7%

Africa's primary energy decline in 2020

-8.1%

Decline in carbon emissions in 2020

+10.9%

Growth in renewables generation

-18.8%

Significant decline in oil production

- ▶ Primary energy demand fell from 19.9 EJ to 18.6 EJ, a reduction of 6.7%, the same energy demand as in 2016. Splitting the reduction by fuel, oil explains 85% of the decline.
- ▶ Energy consumption per capita fell 9% versus a global average decline of 5%. African energy per capita is now less than 20% of the global average.
- ▶ The combined share energy consumption from fossil fuels fell from 92% to 90%. The change in mix resulted in carbon emissions falling more steeply than energy consumption leading to a decline in carbon intensity of 1.5%.
- ▶ Coal production fell by 5.6%, slightly more than the global average of 5.2%. South African mining accounted for two thirds of the decline.
- ▶ Africa's total CO₂ emissions from energy was 1.2 bn tonnes, representing 3.7% of the world's total.
- ▶ African oil production dropped by 1.6 Mb/d to 6.9 Mb/d. Over half the drop in production occurred in Libya. Nigerian production dropped by 0.3 Mb/d in the context of agreed OPEC production cuts.
- ▶ Renewables generation increased by 4.3 TWh to 42.3 TWh, although this was a lower increase than 2019. Wind continues to be the dominant technology versus solar at scale. Egypt had the most pronounced increase in wind generation, up nearly 50% as the Ras Ghareb wind farm became operational.
- ▶ Natural Gas production declined by 5.4%. Algeria maintained its position as Africa's largest natural gas producer although volumes fell by 6%. Egypt the continent's second larger producer saw a steeper decline with a 10% drop in volumes.
- ▶ South Africa's Koeberg power station generated 15.6 TWh of electricity, a record for Africa's nuclear generation surpassing previous peak in 2015.





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	15	20	19	2.5	-6.7	0.4	-1.3	100	100	100
Oil	6.8	8.3	7.2	2.1	-13	0.2	-1.1	44	42	39
Natural gas	3.4	5.6	5.5	5.1	-1.8	0.2	-0.1	22	28	30
Coal	4.2	4.3	4.1	0.2	-5.1	0.0	-0.2	27	22	22
Nuclear	0.1	0.1	0.1	0.0	14	0.0	0.0	0.8	0.6	0.7
Hydro	0.9	1.2	1.3	2.6	3.2	0.0	0.0	6.1	6.2	6.8
Renewables	0.1	0.3	0.4	21	10	0.0	0.0	0.3	1.7	2.0
Wind	0.0	0.2	0.2	27	15	0.0	0.0	0.1	0.8	1.0
Solar	0.0	0.1	0.1	60	13	0.0	0.0	0.0	0.5	0.6
Other renewables*	0.0	0.1	0.1	8.1	-2.5	0.0	-0.0	0.2	0.4	0.4
Native units										
Oil (Mb/d)	3.3	4.1	3.6	2.2	-13	0.1	-0.5			
Natural gas (bcm)	94	155	153	5.1	-1.8	6.1	-2.4			
Electricity generation (TWh)										
Total	627	863	844	3.2	-2.5	24	-20	100	100	100
Oil	71	76	70	0.7	-8.7	0.5	-6.4	11	8.8	8.2
Natural gas	190	338	332	5.9	-1.8	15	-5.3	30	39	39
Coal	248	256	236	0.3	-7.9	0.8	-20	39	30	28
Nuclear	13	14	16	0.6	14	0.1	2.0	2.0	1.6	1.8
Hydro	100	137	143	3.2	3.6	3.7	5.4	16	16	17
Renewables	5.2	38	42	22	11	3.3	4.3	0.8	4.4	5.0
Production										
Oil (Mb/d)	9.9	8.5	6.9	-1.6	-19	-0.1	-1.6			
Biofuels (Kboe/d)	5.1	2.7	2.7	-6.0	0.0	-0.2	0.0			
Natural gas (bcm)	191	244	231	2.5	-5.4	5.2	-12			
Coal	5.9	6.8	6.5	1.4	-5.6	0.1	-0.4			
Carbon										
CO ₂ emissions (billion tonnes)	1.1	1.3	1.2	2.0	-8.1	0.0	-0.1			
Macro										
Population (millions)	1,013	1,308	1,341	2.6	2.5	30	33			
GDP (USD billion – PPP, 2015)	4,656	6,552	6,330	3.5	-3.4	190	-222			

EJ = exajoules

*includes biomass, geothermal and biofuels