



Indonesian primary energy consumption accelerated in 2018, underpinned by strong demand for transportation services amid rising domestic incomes

1. Indonesian primary energy demand increased by 4.9% in 2018, well ahead of its 10-year average annual growth rate of 2.8% 2007-17.
2. Most of the new consumption was underpinned by increased demand for transportation services, reflected in higher demand for gasoline, diesel and jet fuel.
3. Energy consumption per capita has increased steadily over the past decade.

+4.9%

Indonesian primary energy demand growth in 2018

-1.5%

Annual decline in oil production 2007-17

+19%

Growth in Indonesian coal production in 2018

+81%

Growth in biofuels production in 2018

- ▶ Primary energy demand in Indonesia grew by 4.9% in 2018, well ahead of its average annual rate of 2.8% between 2007-17. This was underpinned by steady economic growth of 5.2% in 2018, marginally below its average annual rate of 5.6% 2007-17.
- ▶ Oil accounted for 45% of incremental increase in primary energy consumption in 2018. This was underpinned by steady consumption of gasoline, diesel and jet fuel, in turn reflecting higher incomes and demand for transportation services. Conversely oil production declined by 3.5% in 2018, ahead of its 10-year average annual decline rate of 1.5%.
- ▶ Coal consumption increased to 62 Mtoe (+7.7%) in 2018 – ahead of average annual growth of 4.7% p.a. 2007-17. This was underpinned by strong growth in coal fired power generation, accounting for 66% of the total increase in power output in 2018. This was matched by a 19% jump in coal production, up from average annual growth of 7.8% in 2007-17.
- ▶ Natural gas consumption increased marginally by 0.4 Bcm or 1.1% in 2018. Power output from gas-fired capacity increased slightly from 56 TWh in 2017 to 60 TWh in 2018.
- ▶ Biofuels production surged by 81% in 2018 from 50 Kboe/d to 91 Kboe/d, reflecting strong regional demand for biodiesel especially.
- ▶ Wind and solar power generation remain negligible in Indonesia, but biomass and geothermal output increased 8.9% in 2018 to reach 3 Mtoe. Renewables accounted for 5.5% of total generation in 2018, slightly up from 5.3% in 2017.
- ▶ Total carbon emissions from energy increased to 543 Mt in 2018, up 5.2% from 2017. This accounts for around 1.5% of total global emissions.
- ▶ Energy consumption per capita has increased 24% since 2008 but remains less than 40% of the global average.





Units in Mtoe unless otherwise stated	Level			Growth rate per annum				Share (%)		
	2008	2017	2018	(%)		(Mtoe)		2008	2017	2018
				2007-17	2018	2007-17	2018			
Consumption										
Primary energy	133	177	186	2.8	4.9	4.2	8.7	100	100	100
Oil	63	79	83	2.1	5.2	1.5	4.1	47	45	45
Natural gas	34	33	34	1.1	1.1	0.3	0.4	26	19	18
Coal	32	57	62	4.7	7.7	2.1	4.4	24	32	33
Nuclear	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0
Hydro	2.6	4.2	3.7	5.1	-12	0.2	-0.5	2.0	2.4	2.0
Renewables (in power)	1.9	3.0	3.3	6.6	10	0.1	0.3	1.4	1.7	1.8
Wind	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0
Solar	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0
Biomass & geothermal	1.9	3.0	3.3	6.6	8.9	0.1	0.3	1.4	1.7	1.8
Native units										
Oil (Mb/d)	1.3	1.7	1.8	2.5	5.2	0.0	0.1			
Natural gas (Bcm)	40	39	39	1.1	1.1	0.4	0.4			
Electricity generation (TWh)										
Total	149	255	267	6.0	5.0	11	13	100	100	100
Oil	21	19	20	0.4	6.7	0.1	1.3	14	7.4	7.6
Natural gas	47	56	60	2.9	7.0	1.4	3.9	32	22	22
Coal	61	148	156	8.8	5.7	8.4	8.4	41	58	58
Nuclear	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0
Hydro	12	19	16	5.1	-12	0.7	-2.2	7.7	7.3	6.1
Renewables	8.4	13	15	6.6	10	0.6	1.4	5.6	5.3	5.5
Production										
Oil (Mb/d)	1.0	0.8	0.8	-1.5	-3.5	0.0	0.0			
Biofuels (Kboe/d)	8.3	50	91	29	81	4.6	41			
Natural gas (Bcm)	75	73	73	0.0	0.4	0.0	0.3			
Coal	142	272	323	7.8	19	14	51			
Carbon										
CO ₂ emissions (million tonnes)	376	516	543	2.9	5.2	13	27			
Macro										
GDP (USD billion – PPP, 2010)	1,799	2,894	3,044	5.6	5.2	122	150			
Population (millions)	236	264	267	1.3	1.1	3.1	2.8			

