China’s energy market in 2017

China’s gas consumption rose by 15% – the largest annual percentage increase since 2012; China’s coal consumption grew by 0.5% after three consecutive year of decline.

Fast facts

1. China accounted for 23.2% of global energy consumption and 33.6% of global energy consumption growth in 2017; China was the largest contributor to global growth for the 17th consecutive year.
2. China’s gas consumption increased by 15% in 2017, accounting for 32.6% of global gas consumption net growth.
3. The share of coal in China’s primary energy mix declined to 60.4% in 2017 from 62.0% in 2016 and 74% just 10 years ago.

+3.1%
Growth in China’s energy consumption

+15%
Growth in China’s gas consumption

+76%
Growth in China’s solar power consumption

+1.6%
Growth in CO₂ emissions, half the 10-year average

- China’s energy consumption grew by 3.1% in 2017, increasing from 1.2% in 2016, but still falling short of the 10-year average of 4.4%.
- China remained the world’s largest energy consumer, accounting for 23.2% of global energy consumption and contributing 33.6% of global energy demand growth in 2017.
- Among the fossil fuels, consumption growth was led by natural gas (+15%) and oil (+3.9%), while coal use rebounded (+0.5%) after three years of decline.
- China’s energy mix continued to evolve. While coal remained the dominant fuel, its share of total energy consumption in 2017 (60.4%) was the lowest on record.
- China’s renewables consumption grew by 31% in 2017, accounting for 36.0% of global renewables consumption growth. China’s renewables consumption accounted for 21.9% of the global total.
- Both coal (+3.6%) and gas (+8.5%) production increased in 2017, while oil production declined by 3.8%.
- Oil production declined by 153 Kb/d to 3.8 Mb/d. The pace of decline was much smaller than that of last year (-310 Kb/d).
- China’s oil import dependency ratio rose to 68% in 2017, the highest in its history.
- Natural gas production increased by 11 Bcm (+8.5%) to 149 bcm.
- Among non-fossil fuels, solar consumption grew the fastest (+76%), followed by biomass (+25%) and wind (+21%). Hydro grew by 0.5%, the slowest pace since 2012.
- China’s nuclear power generation increased by 17%, above the 10-year average growth of 15%. China accounted for all of the global nuclear power increment.
- China’s CO₂ emissions from energy use increased by 1.6% in 2017, half the 10-year average growth of 3.2%.