

## Statistical Review of World Energy - 2021

India's energy market in 2020

India's primary energy consumption fell by 5.9% in 2020, the first fall in consumption this century due to the coronavirus pandemic

- 1. Lockdowns and other coronavirus restrictions saw GDP decline by 7.2%
- 2. The largest decline in energy demand occurred in oil with a drop of 9.9% reflecting reduced road and air transport activity
- 3. Coal consumption declined by 6.0% in 2020. India accounted for 17% of the global decline in coal consumption

-5.9% India's primary energy decline in 2020

-7.1% Decline in carbon emissions in 2020

-9.9% Decrease in oil consumption

11.6% Share of global coal consumption



- Primary energy consumption in India decreased from 33.9 to 32.0 EJ, a reduction of -5.9%, in contrast to the 10-year average of +4.7%.
- The combined share of energy consumption from oil, gas and coal fell from 90.6 to 89.7% and for renewables increased from 3.9 to 4.5%.
- Indian coal consumption declined by 6.0% in 2020. At a global level, India accounted for 17% of the total decline in coal consumption.
- The share of coal in India's primary energy mix in 2020 was 55%, compared to 27% at a global level and India still accounts for 11.6% of global coal consumption.
  - The decrease in coal consumption was accompanied by minimal (0.4%) increase in domestic production. India was the third largest producer of coal in the world in 2020 (behind China and Indonesia).

- Natural gas consumption increased slightly to 60 bcm (0.3% increase). The share of natural gas consumption in India's primary energy mix increased to 6.7% in 2020, compared to 6.3% in 2019 and 8.2% in 2009.
- Total electricity generation declined from 1,604 to 1,561 TWh, a decline of 2.9%, in contrast to the 10-year average of +6.2%. Coal's share in power generation declined marginally from 74% in 2019 to 72% in 2020. Renewables generation increased from 139 TWh to 151 TWh.
- Indian natural gas production decreased 11.9%, the largest fall since 2013 and compared to 10year average decline of 3% p.a.
- Indian biofuels production decreased from 21.5 to 19.7 kboe/d, a reduction of 8.1%, in contrast to the 10-year average of +26.2%.
- CO<sub>2</sub> emissions from energy use decreased by 7.1%, compared to the 10-year average increase of 4.5%.



| Units in EJ unless                            | Level |       |       | Growth rate per annum |      |         |      | Share |      |      |
|---|-------|-------|-------|-----------------------|------|---------|------|-------|------|------|
| otherwise stated                              |       |       |       |                       | (%)  |         | (EJ) |       | (%)  |      |
|   | 2009  | 2019  | 2020  | 2009-19               | 2020 | 2009-19 | 2020 | 2009  | 2019 | 2020 |
| Consumption                                   |       |       |       | 1                     |      |         |      |       |      |      |
| Primary energy                                | 21    | 34    | 32    | 4.7                   | -5.9 | 1.2     | -1.9 | 100   | 100  | 100  |
| Oil   | 6.5   | 10    | 9.0   | 4.5                   | -9.9 | 0.4     | -1.0 | 30    | 29   | 28   |
| Natural gas                                   | 1.8   | 2.1   | 2.1   | 1.9                   | 0.3  | 0.0     | 0.0  | 8.2   | 6.3  | 6.7  |
| Coal  | 11    | 18    | 17    | 4.7                   | -6.0 | 0.7     | -1.1 | 55    | 55   | 55   |
| Nuclear                                       | 0.2   | 0.4   | 0.4   | 9.7                   | -1.8 | 0.0     | 0.0  | 0.7   | 1.2  | 1.2  |
| Hydro   | 1.0   | 1.4   | 1.5   | 3.7                   | 0.4  | 0.0     | 0.0  | 4.7   | 4.3  | 4.5  |
| Renewables                                    | 0.3   | 1.3   | 1.4   | 16                    | 7.6  | 0.1     | 0.1  | 1.4   | 3.9  | 4.5  |
| Wind  | 0.2   | 0.6   | 0.5   | 13                    | -5.2 | 0.0     | 0.0  | 1.7   | 1.7  | 1.7  |
| Solar   | 0.0   | 0.4   | 0.5   | 89                    | 26   | 0.0     | 0.1  | 0.0   | 1.2  | 1.6  |
| Other<br>renewables*                          | 0.1   | 0.3   | 0.4   | 9.4                   | 6.4  | 0.0     | 0.0  | 0.7   | 1.0  | 1.2  |
| Native units                                  |       |       |       |                       |      |         |      |       |      |      |
| Oil (Mb/d)                                    | 3.2   | 5.1   | 4.7   | 4.8                   | -9.3 | 0.2     | -0.5 |       |      |      |
| Natural gas (bcm)                             | 49    | 59    | 60    | 1.9                   | 0.3  | 1.0     | 0.4  |       |      |      |
| Electricity generation (TWh)                  |       |       |       |                       |      |         |      |       |      |      |
| Total   | 880   | 1,604 | 1,561 | 6.2                   | -2.9 | 72      | -43  | 100   | 100  | 100  |
| Oil   | 13    | 5.1   | 4.9   | -9.1                  | -4.1 | -0.8    | -0.2 | 1.5   | 0.3  | 0.3  |
| Natural gas                                   | 104   | 64    | 71    | -4.3                  | 4.6  | -3.7    | 3.3  | 12    | 4.2  | 4.5  |
| Coal  | 611   | 1,185 | 1,125 | 6.8                   | -5.3 | 57      | -59  | 69    | 74   | 72   |
| Nuclear                                       | 17    | 45    | 45    | 10                    | -1.5 | 2.8     | -0.5 | 1.9   | 2.8  | 2.9  |
| Hydro   | 106   | 162   | 164   | 4.3                   | 0.7  | 5.6     | 1.6  | 12    | 10   | 10   |
| Renewables                                    | 28    | 139   | 151   | 17                    | 8.3  | 11      | 12   | 3.2   | 8.7  | 9.7  |
| Production                                    |       |       |       |                       |      |         |      |       |      |      |
| Oil (Mb/d)                                    | 0.8   | 0.8   | 0.8   | -0.1                  | -7.2 | 0.0     | -0.1 |       |      |      |
| Biofuels (Kboe/d)                             | 2     | 21    | 20    | 26                    | -8.1 | 1.9     | -1.7 |       |      |      |
| Natural gas (bcm)                             | 36    | 27    | 24    | -2.9                  | -12  | -0.9    | -3.1 |       |      |      |
| Coal  | 10    | 13    | 13    | 2.0                   | 0.4  | 0.2     | 0.1  |       |      |      |
| Carbon  |       |       |       |                       |      |         |      |       |      |      |
| CO <sub>2</sub> emissions<br>(billion tonnes) | 1.6   | 2.5   | 2.3   | 4.5                   | -7.1 | 0.1     | -0.2 |       |      |      |
| Macro   |       |       |       |                       |      |         |      |       |      |      |
| Population<br>(millions)                      | 1,218 | 1,366 | 1,380 | 1.2                   | 1.0  | 14      | 13   |       |      |      |
| GDP (USD billion –<br>PPP, 2015)              | 4,787 | 9,308 | 8,640 | 6.9                   | -7.2 | 452     | -669 |       |      |      |

EJ = exajoules

\*includes biomass, geothermal and biofuels