

Energy Statistics 2008

HIGHLIGHTS

Reserves/ Potential for Generation (Section 1)

- As on 31.3.08 estimated reserves for coal stand at 264536 million tonnes, for lignite 38929 million tonnes, for crude oil 770 million tonnes, for natural gas 1089.97 billion cubic meter and estimated potential for renewable power (wind power, small hydro power, cogeneration bagasse and energy from waste) at 86188 megawatt respectively.
- Karnataka has the highest estimated potential for renewable power (12693 MW) followed by Gujarat (11213 MW), chiefly on account of wind power potential.

Installed Capacity (Section 2)

- The total installed capacity of coal washeries as on 31.3.08 is 30.23 Million Tonnes per year (MTY) for coking coal and 112.17 MTY for non coking coal.
- The public sector crude oil refineries showed 106.7% capacity utilization, against an installed capacity of 105468 Thousand Metric Tonnes per Annum (TMTPA); while private refineries showed 100% capacity utilization against an installed capacity of 43500 TMTPA during 2007-08.
- The total installed generating capacity for electricity increased by 8.6 percent from 154664 mega watt in 2007 to 168047 megawatt in 2008. The highest increase in installed capacity was of 9257 megawatt for thermal power followed by 2651 megawatt for self generating industries during this period. The total installed capacity of grid connected renewable power is 12403 MW as on 31.3.08 which is 8.7% of the installed generating capacity in utilities.
- Tamilnadu has the highest installed capacity of grid connected renewable power(4257 MW) followed by Maharashtra (2082 MW) chiefly on account of wind power.
- Upto 31st March 2008, through various initiatives in the 'off Grid Decentralised Energy systems' category, 4399 remote villages have been electrified, 4,025,781 Biogas plants, 7148 Solar Photovoltaic Pumps and 1,340 water pumping wind mills have been installed in various parts of the Country.

Production(Section 3)

- Production of all the primary sources viz. Coal, Lignite, Crude Petroleum, Natural gas and Electricity(Hydro & Nuclear); of conventional energy in 2007-08 increased marginally over the production in 2006-07. However the highest increase was for lignite(9%) and coal(6%) followed by natural gas(2%). Coal and Lignite account for 72% of production of energy by primary sources in peta joules.
- Production of kerosene and light diesel oil are showing declining trend since 2003-04
- Gross generation of electricity(Thermal, Hydro, Nuclear & Renewable) from utilities and non utilities in 2007-08 was at 813102 giga watt hour (GWH) as compared to 752,454 GWH in 2006-07 showing an increase of 8%.
- Average generation of electricity per kilowatt of installed capacity remained more or less at the same level during the last two years. Average generation of electricity per Kilowatt of the installed capacity is found to be the highest for Thermal (5,681 KWH) followed by Nuclear (4,116 KWH) and Hydro (3,353KWH).
- Tamilnadu is at the top in renewable power generation followed by Karnataka, Maharashtra, Andhra Pradesh and Gujarat respectively.

Foreign Trade(Section 4)

- India is net importer of coal and crude oil, showing a consistent increasing trend over the years. However India has become a net exporter of petroleum products since 2001-02. In 2007-08 exports of petroleum products stood at 39 million tonnes, against imports of 23 million tonnes.

Availability (Section 5)

- In 2007-08, the total availability of raw coal for consumption stood at 503 million tonnes, lignite 35 million tonnes, petroleum crude 156 million tonnes, natural gas 31 billion cubic meters and electricity (hydro and nuclear) 137344 giga watt hour respectively.

Consumption(Section 6)

- Per capita consumption of conventional energy increased from 1204 KWH in 1970-71 to 3928 KWH in 2007-08.

- Per Rupee of GDP(at 1999-2000 prices) consumption of conventional energy increased from 0.13 KWH in 1970-71 to 0.17 KWH in 1985-86 but seems to have again come down to 0.13 KWH in 2007-08.
- Presently electricity sector accounts for highest consumption of raw coal in India. In 2007-08 consumption of raw coal stood at 361 million tonnes by electricity industry, 39 million tonnes by steel and washery industry, 21 million tonnes by cement industry, 2.6 million tonnes by paper industry, 0.4 million tonnes by cotton industry and 78 million tonnes by other industries including jute, bricks, fertilizer, colliery etc.
- It is noted that high speed diesel oil accounted for 34% of total consumption of all types of petroleum products in 2007-08. This was followed by naphtha (9.4%), fuel oil (9%), liquefied petroleum gas (8.6%) and refinery fuel (8.3%).
- Transport sector accounts for the lion's share (50.4%) of the total consumption of high speed diesel oil.
- The total off-take of natural gas for energy purposes stood at 22 billion cubic meters and for non-energy purposes at 11.9 billion cubic meters in 2007-08.
- Of the total quantity of natural gas off-take in India in 2007-08, the largest share was for power generation (35%), followed by fertilizer industry (28.6%).
- Of the total electricity sales in 2007-08, industry sector accounted for the largest share followed by domestic, agriculture and commercial sector. However, it may be seen that electricity consumption in domestic sector and agriculture sector has increased at a much faster pace compared to other sectors during 1970-71 to 2007-08.
- The electricity transmission losses slightly declined from 28.6% in 2006-07 to 27.18% in 2007-08.

Energy Commodity Balance(Section 7)

- The table on Energy Commodity Balance has been included for the first time based on the data readily available with the source agencies. The format of the table is adapted from Energy Balance format given in the publication "Energy Statistics of non-OECD Countries", 2008 edition, of the International Energy Agency(IEA).

Price Indices (Section 8)

- As compared to 2006-07 price levels, price indices of petrol and high speed diesel oil have shown a decline in 2007-08. The highest increase in price index is noted for furnace oil, followed by lubricants, aviation turbine fuel, coking coal and electricity. Price indices for

kerosene, light diesel oil, liquefied petroleum gas, coke and lignite remaining stable at the previous years level.

International Petroleum and Natural Gas Statistics (Section 9)

- Of the total world production of 3,906 million tonnes of crude oil in 2007, India's share is about 1.0% whereas in consumption, its share is 3.3% of the total world consumption of 3,953 million tonnes. In case of production and consumption of natural gas, India's share is to the tune of 1% and 1.4% respectively.
- Saudi Arabia and Russian Federation are the largest producers of crude oil, each producing 12.6% of the world production in 2007. While United States is the largest consumer of crude oil, consuming 23.8% of the world consumption.
- Russian Federation is the largest producer of natural gas, producing 20.6% of the world production in 2007. While United States again is the largest consumer of natural gas, consuming 22.6% of the world consumption.