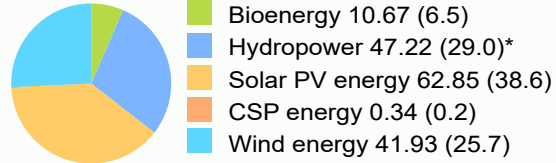


India • Renewable energy • Bioenergy

Total installed renewable energy power capacity by 2022, GW (%)



Total: 163.01 (100)

Source: Renewable Energy Statistics 2023 © IRENA
*excluding pumped storage

Major Waste-to-energy plants, MWe:

- 1 Narela-Bawana, Delhi, 24.0
- 2 Ghazipur, Delhi, 12.0
- 3 Okhla-Timarpur, Delhi, 12.0
- 4 Kanpur, 15.0
- 5 Saligao, 7.0

Major waste gasification plants by plasma, MWth:

- 1 Nagpur, SMS Envocare, 6.3
- 2 Pune, SMS Envocare, 6.3

Major biomass gasification plants from biowaste over 1 MW, MW:

- 1 Faridabad, Nuchem, 4.0
- 2 Kuttam, BMC, 1.5
- 3 Arashi, Energreen Power, 1.0
- 4 Delhi, Ashoka Distillers & Chemicals, 1.0
- 5 Gomathy, Energreen Power, 1.0

Major waste gasification plants from MSW, MWth:

- 1 Pune I, Concord Blue Energy, 6.0

Major biogas plants over 1 MW, MW:

- 1 Namakkal, 2.4
- 2 Ankleshwar, Kanoria Chemicals, 2.0
- 3 Haebowal Dairy Complex Ludhiana, 1.0

Top-5 Indian states of biomass power/cogeneration projects by total MW in 2016, MW:

- 1 Maharashtra, 1112.8
- 2 Uttar Pradesh, 936.7
- 3 Karnataka, 737.3
- 4 Tamil Nadu, 662.3
- 5 Andhra Pradesh, 389.8

Major biodiesel plants:

- 1 Haldia, Emami Agrotech
- 2 Krishnapatnam, Emami Agrotech
- 3 Kakinada, Universal Biofuels
- 4 Peenya, Eco Green Fuels

Major bioethanol plants:

- 1 Rampur, Rampur Distillery
- 2 Dhampur, Dhampur Sugar Mills
- 3 Asmoli, Dhampur Sugar Mills

Major wood pellet plants:

- 1 Siddaramanagara, Anki Bio Fuels
- 2 Dholpur / Gwailor, 3e Savers India

Major 2G bioethanol plants:

- 1 Pune, Praj Industries



At the end of 2016 India had around 330 distilleries producing over 4.5 billion litres of rectified spirit (alcohol) per year in addition to over 2.2 billion litres of ethanol fuel. India has 5-6 biodiesel plants with capacity to produce from 10 000 metric ton to 250 000 metric tons of biodiesel per year.

India has 47 490 biogas plants, where the Top-5 producing states for 2014-2015 years are Maharashtra (3578 lakh m³), Andhra Pradesh (2165 lakh m³), Karnataka (1985 lakh m³), Gujarat (1965 lakh m³) and Uttar Pradesh (1693 lakh m³). Recently, small-scale or family type biogas plants with installed capacity of less than 3 kW have become popular in India, and approx. 5 million biogas plants are currently in operation.

Sources: India Biofuels Annual 2017 Report by USDA FAS GAIN; Ministry of New and Renewable Energy, Government of India; Factly et al.

