ASIA: INDIA

Uttar Pradesh

GDP: **\$173.9bn**

Five-year economic growth rate: 4.2%

Population: 209.1m

Total clean energy investment, 2009-2014: \$417.0m

Installed power capacity: 22.7GW

Renewable share: 12.1%

Total clean energy generation: 4.3TWh

Top energy authority:

Department of Energy, Government of Uttar Pradesh

INDIAN RANKING

OVERALL SCORE

2014 2015 2015

10 7

1.20

OVERVIEW

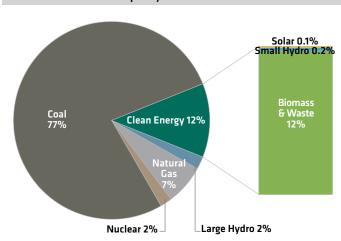
Situated on the highly fertile Gangetic Plain, Uttar Pradesh is India's most populous state with over 200 million inhabitants. It is also India's largest sugarcane producer and among its top wheat producers. And it has a sizeable presence of small and medium enterprises (SME).

Of 22GW total power capacity, coal represents 17.6GW and renewables 2.7GW, or 12%. Nearly all renewable capacity in the state is accounted for biomass. Several sugar mills operate in the state, and use bagasse (fibrous cane waste) for biomass-fired cogeneration. The state's policy of maintaining a high minimum sugarcane purchase price has affected the profitability and viability of sugar mills which can impact the operation of cogeneration plants as well.

Uttar Pradesh has no major wind projects installed to date. Its wind potential is regarded as relatively low and has as a result been largely unexploited. The government is keen on developing solar and has conducted tenders of 200MW and 300MW in 2013 and 2014, respectively. However, due to the poor financial health of local distribution utilities and problems associated with the structure of power purchase agreements, these auctions did not generate strong responses and received high bid prices. Solar projects totaling just 29MW were commissioned in 2014. The state has also allowed net-metering to encourage rooftop solar power generation.

INSTALLED POWER CAPACITY BY SOURCE, 2014 (%)

22.7GW total installed capacity

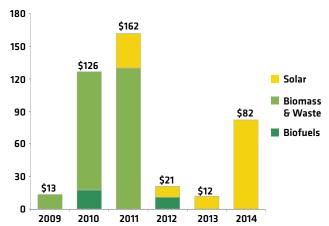


Source: Bloomberg New Energy Finance , Central Electricity Authority, Ministry of New and Renewable Energy, Nuclear Power Corporation of India

Many villages in the state lack access to reliable grid electricity. This has led to the deployment of micro-grid and off-grid systems by entrepreneurs and companies supported by various national and international grants.

ANNUAL INVESTMENT IN CLEAN ENERGY, 2009-2014 (\$m)

\$417m total cumulative investment



Source: Bloomberg New Energy Finance

Notes: Total investment includes: Asset Finance, Corporate Finance and Venture Capital / Private Equity Commitments.