ASIA: INDIA

Karnataka

GDP: **\$116.5bn**

Five-year economic growth rate: 3.8%

Population: 63.9m

Total clean energy investment, 2009-2014: \$4.6bn

Installed power capacity: 14.0GW

2015

Renewable share: 33.3%

Total clean energy generation: 10.1TWh

Top energy authority:

Energy Department, Government of Karnataka

INDIAN RANKING

OVERALL SCORE

2014

2015

1 2

1.36

OVERVIEW

Karnataka is perhaps best known for Bangalore, 'India's Silicon Valley', where much of the country's information technology and software services industries reside. A number of companies in these sectors are today contemplating procuring dedicated renewable energy, particularly solar, to power their offices and data centers.

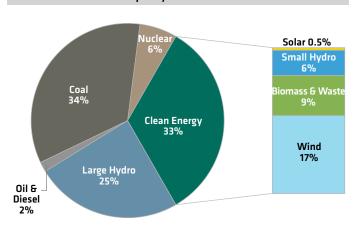
Of Karnataka's 14GW of power-generating capacity, 4.8GW is coal and 3.4GW is large hydro. Renewables account for 4.7GW, or one-third of the total, and wind represents half of that. Still, some of the state's best wind resources remain unexploited in forested areas. It is estimated that projects in some of the best sites could achieve capacity utilization factors of 40% – far above India's national average for wind of just 23%. Karnataka's regulators appear comfortable with wind's rising share of generation because of the additional significant presence of large hydro capacity to stabilize the grid.

Karnataka had just 74MW solar installed at year-end 2014 but that is poised to grow considerably in coming years. The state has set a target of 2GW solar by 2022 and conducted a 500MW tender in 2014 after three smaller tenders in 2012 and 2013.

Finally, Karnataka has considerable biomass capacity (1.3GW) online operating at a higher capacity factor compared to many other states.

INSTALLED POWER CAPACITY BY SOURCE, 2014 (%)

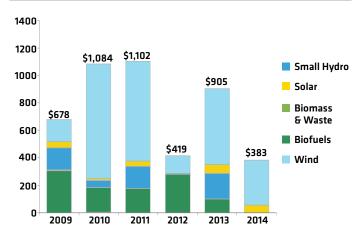
14.0GW total installed capacity



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

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

\$4.6bn total cumulative investment



Source: Bloomberg New Energy Finance

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