

Shandong

GDP: **\$903.1bn**

Five-year economic growth rate: **13%**

Population: **96.9m**

Total clean energy investment, 2006-2013: **\$14.6bn**

Installed power capacity: **75.1GW**

Renewable share: **9%**

Total clean energy generation: **10,693GWh**

Top energy authority:

Provincial Development and Reform Commission

CHINA RANKING
2014

OVERALL SCORE
2014

9

1.14

PARAMETERS AT A GLANCE

Shandong ranked ninth among the 15 Chinese provinces surveyed by *Climatescope* 2014. It scored 1.14, performing best in Low-Carbon Business, Parameter III, thanks to high scores for its number of value chains and high level of investment (on the back of support from the provincial government).

Shandong is a coastal province in eastern China and the country's biggest industrial producer. In 2013, its nominal GDP was \$903.1bn, ranking it third nationally.

The province's clean energy sector has grown significantly owing to abundant natural resources, increasing power demand and government support. It is among the country's top five wind and biomass power producers.

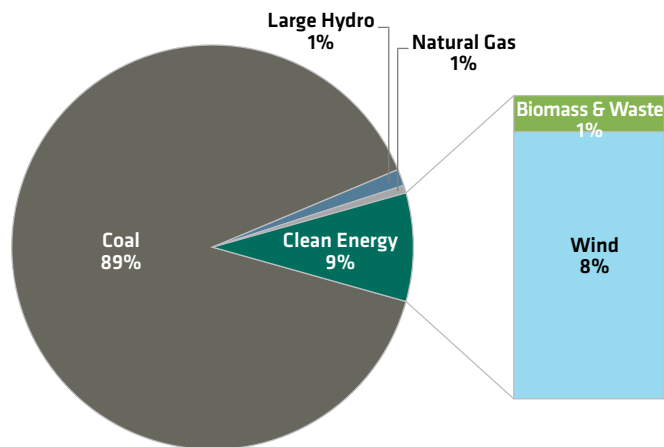
Shandong received \$1.9bn in clean energy investments in 2013, compared with a cumulative total of \$14.7bn between 2006 and 2013. Wind took the largest share of 2006-13 investment, and represented 72% of new capacity added in 2013. Overall, it accounts for 5.7GW out of total renewable capacity of 6.8GW.

In 2013, Shandong sourced 96% of its total 310TWh electricity needs from coal. Renewable power is therefore a very small part of the province's energy mix, corresponding to just 3.4% of generation and 9% of installed capacity.

The provincial government undertook further development of renewable energy in 2013 to lower its reliance on thermal power and address air pollution concerns. In addition to national feed-in tariffs, wind developers in Shandong can apply for a subsidy

INSTALLED POWER CAPACITY BY SOURCE, 2013 (%)

75.1GW total installed capacity



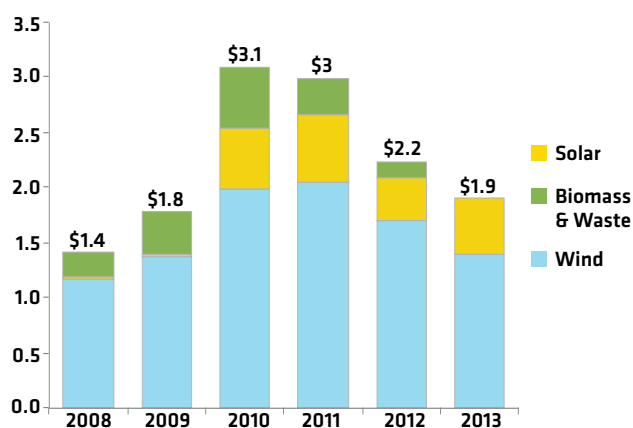
Source: Bloomberg New Energy Finance, National Energy Administration, Ministry of Water Resources, China Wind Energy Association, China Electric Power Yearbook
Note: Some values cannot be graphically represented due to scale, please see source data for the complete numbers.

of CNY0.06/kWh, while distributed PV projects are eligible for a subsidy of CNY0.2/kWh.

Shandong is a leader in distributed PV - it already makes up more than 60% of the province's solar capacity - and is likely to grow further due to national policy support.

ANNUAL INVESTMENT IN CLEAN ENERGY, 2008-2013 (\$bn)

\$13.4bn total cumulative investment



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

For further information, access www.global-climatescope.org/shandong