

ASIA : CHINA

Hebei

GDP: **\$445.5bn**

Five-year economic growth rate: **13.5%**

Population: **73.8m**

Total clean energy investment, 2009-2014: **\$17.9bn**

Installed power capacity: **56.1GW**

Renewable share: **21.0%**

Total clean energy generation: **21.8TWh**

Top energy authority:

Provincial Development and Reform Commission

CHINA RANKING

2014

2015

OVERALL SCORE

2015

8

10

1.99

OVERVIEW

Located in the north of China and adjacent to Beijing, Hebei in 2014 had a nominal GDP of \$474bn, contributing about 4.3% to China's overall economy.

By year-end 2014, Hebei had total installed power generating capacity of 55.5GW with 77.1% (42.8GW) represented by thermal power. On a generation basis, thermal accounted for a larger share at 92.4% of the total with 238.2TWh produced in 2014.

Thanks to extensive coal burn, Hebei has been accused of being a major contributor to air pollution in neighboring Beijing and Tianjin municipalities. In response, the National Development and Reform Commission (NDRC) in September 2014 set a coal usage reduction target for Hebei by 2017.

As of year-end 2014, Hebei had 9.6GW of installed wind, up 1.7GW from 2013. Wind generation totalled 16.4TWh in 2014, up 8.3% from the year prior.

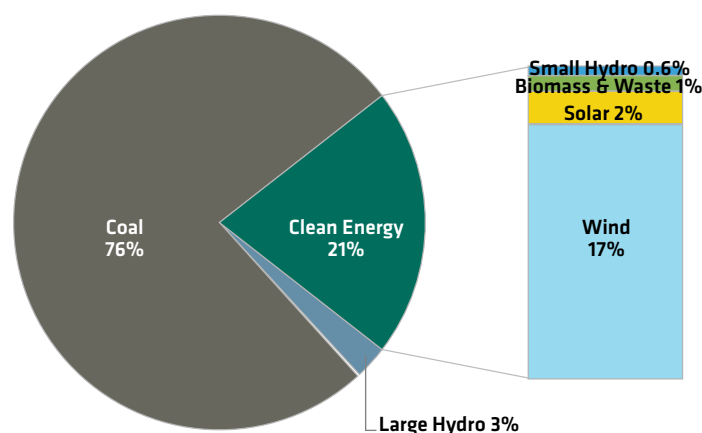
Despite rapid wind growth over the past five years, wind penetration remains relatively negligible at 6.8% in Hebei, largely due to inefficient grid integration. Hebei's wind curtailment rate was 20% in 2014, well above the 8% national average. In response, the Hebei local grid corporation plans three new 500kV cross-province transmission lines to improve wind connectivity and power exports.

To promote solar PV expansion, the Hebei provincial government offers a benefit of CNY 0.1-0.3/kWh (USD 0.016-0.048/kWh) in addition to the national subsidy. Despite these supports, solar build-out to date has been limited by land constraints and complex approval procedures.

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

INSTALLED POWER CAPACITY BY SOURCE, 2014 (%)

56.1GW total installed capacity

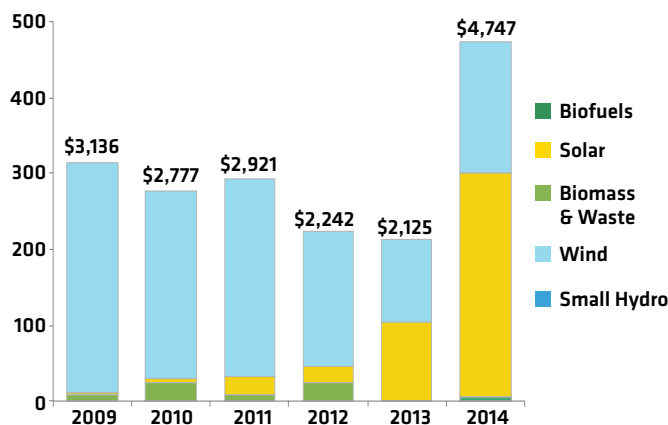


Source: Bloomberg New Energy Finance, National Energy Administration, Ministry of Water Resources, China Wind Energy Association, China Electric Power Yearbook
Note: Negligible values for oil & diesel cannot be graphically represented due to scale, see source data for the complete numbers.

Hebei's 12th Five-Year Plan for Greenhouse Gas Emission Management was released in February 2014 and seeks to cut the province's carbon intensity 18% by the end of 2015 compared to 2011 levels. However, Hebei is not one of the seven emission trading pilots initiated by the NDRC.

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

\$17.9bn total cumulative investment



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