

Heilongjiang

GDP: **\$227.4bn**

Five-year economic growth rate: **13.7%**

Population: **38.3m**

Total clean energy investment, 2009-2014: **\$8.3bn**

Installed power capacity: **25.7GW**

Renewable share: **21.4%**

Total clean energy generation: **14.5TWh**

Top energy authority:

Provincial Development and Reform Commission

CHINA RANKING

OVERALL SCORE

2014

2015

2015

12 13 1.94

OVERVIEW

Located in the far northeast corner of China, Heilongjiang in 2014 had a nominal GDP of \$242bn, up 2% from 2013.

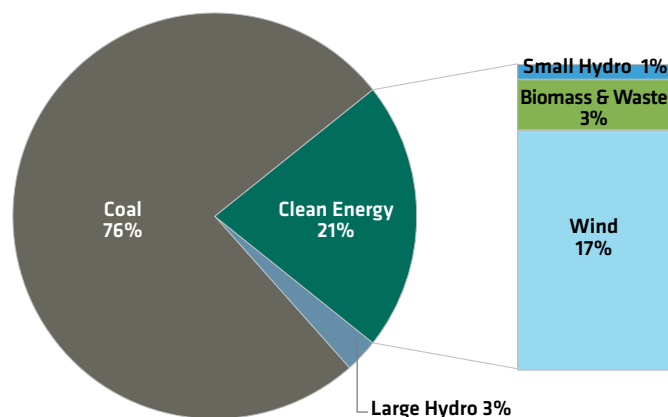
By year-end 2014, Heilongjiang had an installed power generation capacity of 24.8GW, of which 78.6% (19.5GW) was thermal, 17.4% (4GW) wind and 3.9% (1GW) hydro. Heilongjiang commissioned just one 20MW demonstration solar PV project in 2014 and has no major additional capacity in the project pipeline for 2015.

Heilongjiang has stated ambitious goals to rely more on zero-carbon of generation, but has largely failed to meet them thus far. In late 2010, the government released its Renewable Energy Industrial Development Plan for 2020. Targets included: boosting wind power's share of total local generation to 25% by 2015 and 30% by 2020; growing biomass power capacity to 480MW and 1.2GW by 2015 and 2020, respectively; and expanding solar PV capacity to 150MW and 500MW by 2015 and 2020, respectively. However, as of year-end 2014, wind accounted for just 2% of generation while biomass accounted for virtually no capacity.

Clean energy development should prove challenging in the province over the next five years. Already, the region has experienced bottlenecks related to its limited transmission network. In the winter, the pinch becomes tighter as the province's grid must reserve extra transmission capacity for combined heat and power coal-fired plants. The production of heat from those plants is considered critical to the province during the colder months.

INSTALLED POWER CAPACITY BY SOURCE, 2014 (%)

25.7GW total installed capacity

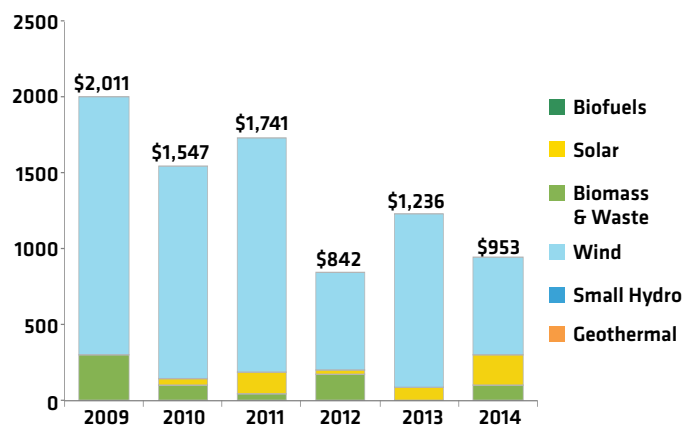


Source: Bloomberg New Energy Finance, National Energy Administration, Ministry of Water Resources, China Wind Energy Association, China Electric Power Yearbook
Note: Negligible values for solar and oil & diesel cannot be graphically represented due to scale, see source data for the complete numbers.

Despite falling short of its goals on clean energy to date, Heilongjiang has outlined other ambitions to rein in its CO2 emissions from both the power and industrial sectors. The local government has announced its goal to promote use of less energy-intensive machinery manufacturing for the 13th five-year period.

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

\$8328.6m 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/heilongjiang