

ASIA : CHINA

Hubei

GDP: **\$414.5bn**Five-year economic growth rate: **17.5%**Population: **58.2m**Total clean energy investment, 2009-2014: **\$4.9bn**Installed power capacity: **62.6GW**Renewable share: **7%**Total clean energy generation: **32.9TWh**

Top energy authority:

Provincial Development and Reform Commission**CHINA RANKING**

2014

2015

OVERALL SCORE

2015

14

8

2.02

OVERVIEW

Located in central China, Hubei in 2014 had a nominal GDP of \$441bn in 2014, contributing about 4% to China's overall economy. Hubei is one China's most industrialized provinces and industrial activity in 2014 accounted for 47% of its local economy, 5% above the national average of 42%.

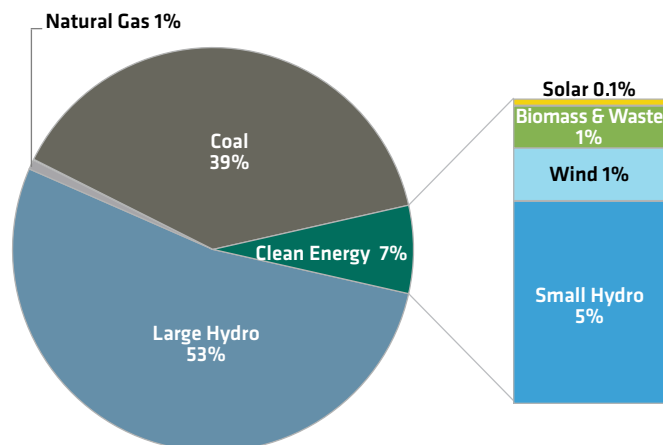
As of year-end 2014, Hubei had a total installed power generating capacity of 62.1 GW, of which 58.4% (36.3GW) was accounted for by hydro, 40.2% (25GW) thermal and 1.2% (770MW) wind. Hubei installed 90MW of PV in 2014 and has a healthy project pipeline with up to 500MW expected to be built in 2015. In terms of generation, thermal (mostly coal) and large hydro met over 99% of 2014 local power demand.

Given the Hubei government target of 1,300MW additional wind and 500MW solar PV by 2020, more aggressive incentives are expected soon. However, local natural resources are somewhat limited. Hubei's province-wide average annual wind speed of just 5m/second is the lowest among China's provinces (6m/second is typically needed to rotate a utility-scale turbine). To compensate, the local government provides a subsidy over that offered by the federal government. This benefit is set at roughly 10% the current national feed-in tariff to allow Hubei wind farms to earn the same as average Chinese projects.

The outlook for solar is somewhat brighter over the next five years, given relatively stronger local conditions and demand from industrial players.

INSTALLED POWER CAPACITY BY SOURCE, 2014 (%)

62.6GW total installed capacity

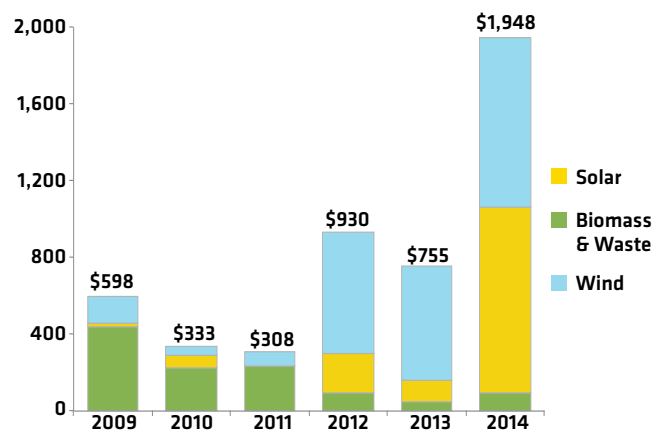


Source: Bloomberg New Energy Finance, National Energy Administration, Ministry of Water Resources, China Wind Energy Association, China Electric Power Yearbook
Note: Negligible values for oil & diesel cannot be graphically represented due to scale, see source data for the complete numbers.

Hubei was one of seven provinces where carbon emissions trading pilots were initiated in China in 2013 by April 2014 had become the country's second-biggest carbon market. The Hubei government has stated its interest in joining a national emission trading market planned for 2016-17.

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

\$4.9bn 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/hubei