# Guangdong

#### GDP: **\$1,026bn**

Five-year economic growth rate: 14.1% Population: 107.2m Total clean energy investment, 2009-2014: \$7.2bn Installed power capacity: 91.1GW Renewable share: 10.3% Total clean energy generation: 34.5TWh Top energy authority: Provincial Development and Reform Commission CHINA RANKING OVERALL SCORE 2014 2015 2015 CHINA BANKING 11.944

### **OVERVIEW**

Located in the south of China, Guangdong has the largest nominal GDP of any of the country's provinces at \$1,092bn.

As of year-end 2014, Guangdong had total installed power generation capacity of 90.8GW, of which 15.4GW (17%) was accounted for by renewables, inclusive of large hydro which represents the lion's share at 13.2GW. A total of 1.7GW of wind and 500MW of solar were also on line in 2014.

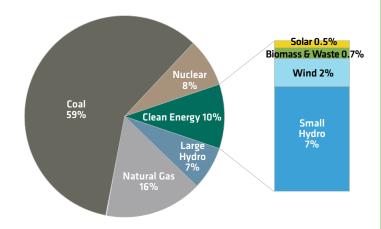
In generation terms, fossil sources dominate with 78.3% or 279.2TWh in 2014 coming from thermal power. The province relies heavily on imported coal (41m tons in 2014) and lique-fied natural gas (1.8m tons) for electricity generation. Nuclear is Guangdong's second largest power source, accounting for 13.4%. Renewables are by comparison a small player, generating only 8.4% of the total in 2014. And of that generation, 96.6% came from hydropower.

Guangdong tends to be a weather vane for predicting China's larger energy policy trends, both in terms of power generation and transportation. Shenzhen, one of Guangdong's major cities, has attracted attention most recently after announcing plans for major power market reforms.

Guangdong has also launched pilot programs to promote electric vehicle use to support local manufacturing. The local government offers purchase tax exemptions for new energy vehicle sales. Guangdong's 12<sup>th</sup> Five-year Plan for Energy Development set an overall energy consumption cap. Non-fossil fuel's share of consumption was targeted to rise to 20% by 2015. Energy intensity was to be cut 18% compared with 2010 levels.

#### INSTALLED POWER CAPACITY BY SOURCE, 2014 (%)

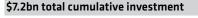


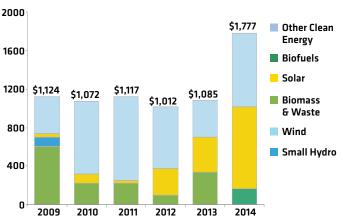


Source: Bloomberg New Energy Finance , National Energy Administration, Ministry of Water Resources, China Wind Energy Association, China Electric Power Yearbook Note: Negligible values for oil & diesel cannot be graphically represented due to scale, see source data for the complete numbers.

Guangdong's 12<sup>th</sup> Five-year Plan for Greenhouse Gas Emissions Management proposed improving by 19.5% carbon intensity by 2015 compared with 2010. The Shenzhen Emissions Exchange has as participants 635 local enterprises that have been allocated emission quotas, representing 38% of Shenzhen's overall CO2 emissions.

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





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/guangdong