

ENERGY IN CHINA

KEY STATISTICS

China has been a remarkable example of the role that affordable coal can play in improving access to energy and supporting economic development. Now, as it transitions to a less energy-intensive period of development, it is a leading example of the opportunities HELE technology can provide in meeting the challenge of reducing emissions.



“An ‘energy revolution’ [that will] vigorously promote clean and efficient use of coal.”

President Xi Jinping

KEY ENERGY FACTS

Between 2004 and 2013, China’s power generation capacity grew at an average of 89,433MW per year – a figure higher than the UK’s total installed capacity.

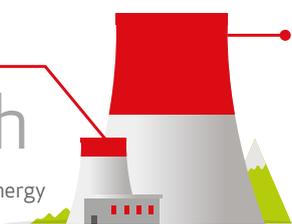
246%

Growth in China’s total primary energy demand from 1990 to present



1/5th

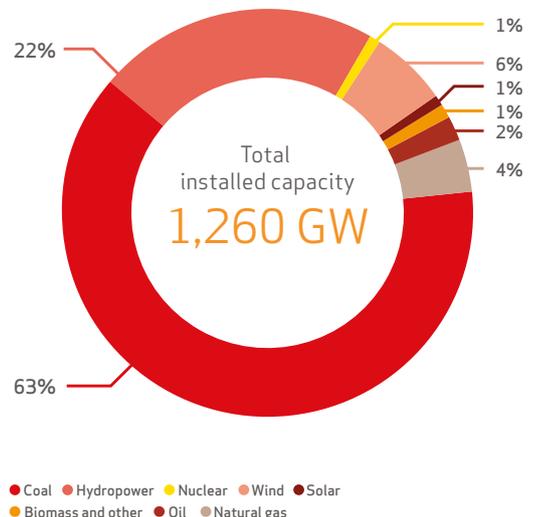
China’s share of global energy consumption by 2035



48%

Growth in China’s energy consumption by 2035

China’s installed electricity capacity share by fuel, end 2013

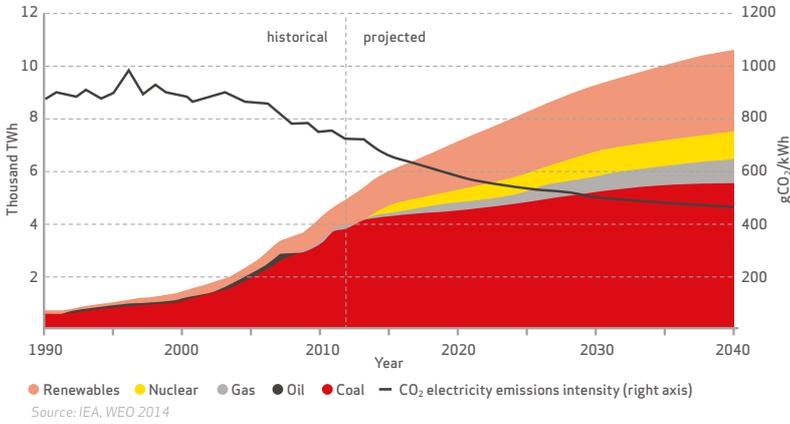


Source: FACTS Global Energy

ELECTRICITY

Coal is the leading source of the country's electricity generation and installed capacity.

China electricity generation by source and CO₂ intensity in the New Policies Scenario

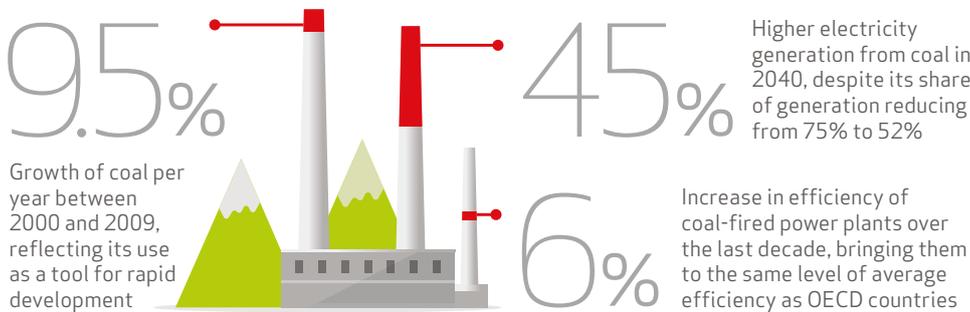


5,126 TWh
 China's net power generation in 2013. China surpassed the US as the world's leading power generator in 2011.

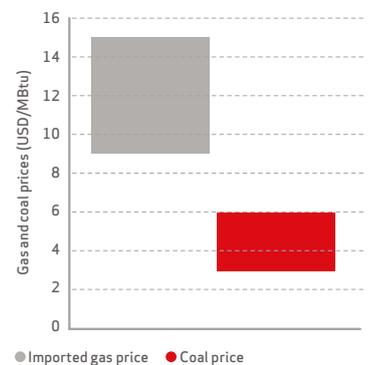
2,265 GW
 China's projected installed capacity by 2040. Driven by economic development of the eastern and southern regions of China and fuelled by coal.

COAL IN THE ENERGY MIX

Coal is deeply integrated into China's economic development. Moves to diversify the energy mix bring significant challenges; therefore it is important that coal continues to play a significant role.

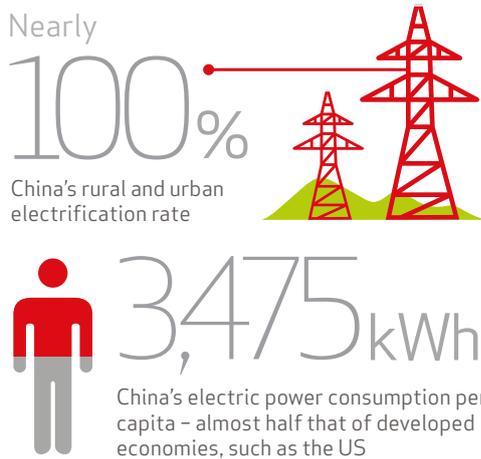


Typical price ranges of coal and imported gas



ENERGY POVERTY IN CHINA

China provides an excellent example of an electrification strategy based on coal, with a 400% increase in China's coal consumption and 660 million people lifted out of poverty since the 1980s.



CHINA'S NDC

China's pledge suggests that it will seek to meet climate objectives through a focus on efficiencies: 'Enhanced use of cleaner coal, increase the share of concentrated and highly-efficient electricity generation from coal and lowering coal consumption of newly built coal-fired power plants to around 300 grams coal equivalent per kilowatt-hour'. The NDC also pledged to increase R&D for low-carbon technologies, such as CCS.