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WORLD ENERGY MARKETS OBSERVATORY

China Energy
ID Card

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Country Description

Quick introduction

Country: **China**

Population: **1.4 billion**

GDP: **$14.3 trillion**

CO₂ footprint

Total 2020 CO2 emissions: **9,899 Mt**

2020 CO2/capita emissions: **6.59 tonnes**

Energy Demand

By 2040, the IEA predicts that Chinese oil demand will increase by a further 4 million barrels per day before plateauing

By 2040, the IEA forecasts China to be the largest importer of natural gas with Chinese gas demand reaching 600 bcm
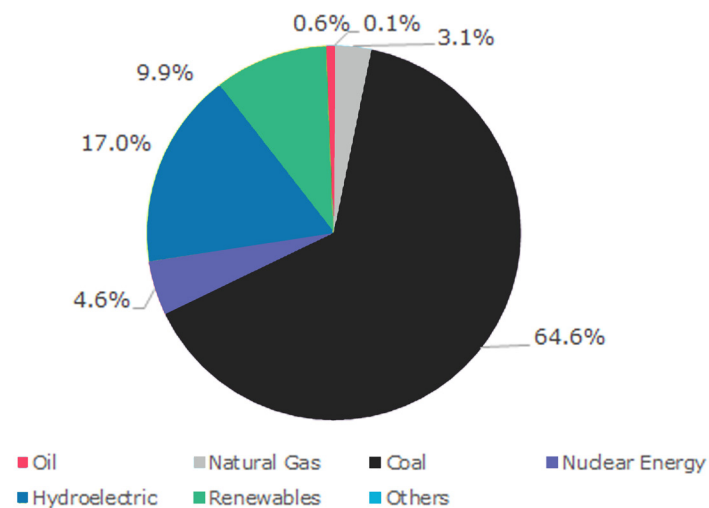
Renewable energy

Under current policies and investment patterns, the share of modern renewables in China's energy mix will rise to 16% by 2030

Gas

Total natural gas production: **6.98 EJ**

Total natural gas consumption: **11.90 EJ**

LNG imports: 94 bcm

Coal

Total coal production: **80.9 EJ (2020)**

Coal consumption: **82.27 EJ (2020)**

Electricity

Total electricity generation: **7779.1 TW**

Pie chart:
- 0.6% (Oil)
- 0.1% (Natural Gas)
- 3.1% (Natural Gas / Others)
- 9.9% (Renewables)
- 17.0% (Hydroelectric)
- 4.6% (Nuclear Energy)
- 64.6% (Coal)

Legend: ■ Oil ■ Natural Gas ■ Coal ■ Nuclear Energy ■ Hydroelectric ■ Renewables ■ Others

Oil

Total oil production: **3,901 thousand barrels** daily (4.4% of the world's total)

Total oil consumption: **14,225 thousands barrels** daily (16.1% of the world's total)

Oil refining capacity: **16,691 thousand barrels/day** (16.4% of the world's total)

Electric mobility

Number of electricity charging stations: 1.68 million units; 806,000 public and 874,700 privately-owned charging stations
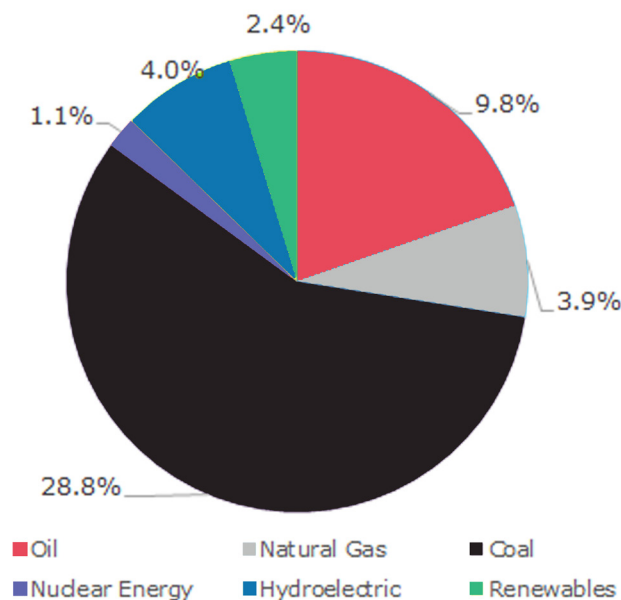
Number of electric vehicles (2020): 4.92 million

It is estimated that China's new energy vehicle ownership will amount to 17.82 million units by 2025; the number of charging piles will reach an estimated 9.39 million units by 2025

Nuclear

Consumption: 3.25 EJ, (13.6% of the world's total consumption of Nuclear Energy)

45 nuclear power reactors in operation, 12 under construction, 2 EPR reactors built

Country highlights

Key policies: In the 14th Five-Year Plan, approved by the National People's Congress, China has outlined energy and climate policies for the next decade that are an extension of the current strategy

Quick facts:

- China's primary energy demand rose 2.1% in 2020, driven by a rapid economic recovery from the pandemic

- China's renewables consumption growth accounted for more than one-third of global growth in renewable energy consumption in 2020

- While China's carbon emissions continued to grow for a fourth consecutive year, rising by 0.6% in 2020, its carbon intensity decreased by 1%

- China's energy mix continues to shift to a greener one, with coal's share decreasing to 57% in 2020, compared to 58% in 2019

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