

China

The OECD Inventory of Support Measures for Fossil Fuels identifies, documents and estimates direct budgetary support and tax expenditures supporting the production or consumption of fossil fuels in OECD countries and eight partner economies (Argentina, Brazil, Colombia, the People's Republic of China, India, Indonesia, the Russian Federation, and South Africa).

Energy resources and market structure

The People's Republic of China (hereafter "China") is the largest producer of coal in the world, capturing 45.4% of the world's total in 2018. While domestic coal meets most of China's needs, imports in 2018 still amounted to 223.8 million tonnes, making the country the largest importer of coal. The bulk of imports come from Australia and Indonesia, the world's top two coal net exporters. China also relies heavily on imported oil and natural gas, a fact which underlies the country's recent efforts to develop unconventional hydrocarbons (e.g. shale gas and coal-bed methane). Fossil fuels continue to dominate the power sector with more than half (68%) of electricity being generated from coal, followed by hydro (17%) and wind (5%), higher than nuclear (4%) or natural gas (3%).

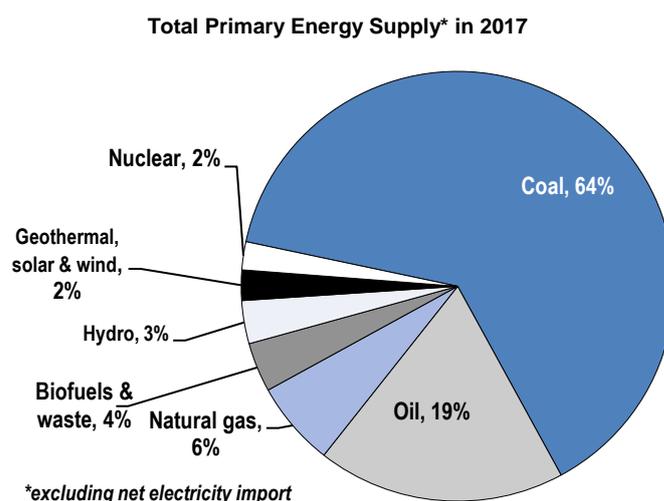
Energy production and sales of energy products have historically been strictly regulated in China. State-owned companies play a crucial role at various stages of the supply chain, and many of these firms retain monopoly power in key segments relating to the production, distribution or consumption of fossil fuels. Major oil and natural-gas firms, power generation and distribution companies, and the world's second largest coal company by volume,

China Energy Investment Corporation (CEIC), are all nominally supervised by the State-owned Assets Supervision and Administration Commission (SASAC) of the State Council. Meanwhile, the National Development and Reform Commission (NDRC) regulates the energy sector and has anti-trust responsibilities, including the authority to fine oil and gas firms that breach price controls.

China's thermal-coal production involves a wide range of public and private actors, though problems of overcapacity are increasingly driving consolidation towards larger state-run actors. The largest consumers are public power utilities (e.g. the Huaneng Group) that are subject to price regulation by the NDRC on their electricity and heat output. Despite an increasing focus on renewables as a cleaner power source, coal remains the dominant fuel in power generation. To meet the growing demand for natural gas, China significantly increased its import capacity through capital expenditures on pipelines and LNG terminals. State oil and gas companies (e.g. PetroChina or Sinopec) and partner companies retain an effective monopoly on crude-oil imports, processing, and domestic extraction.

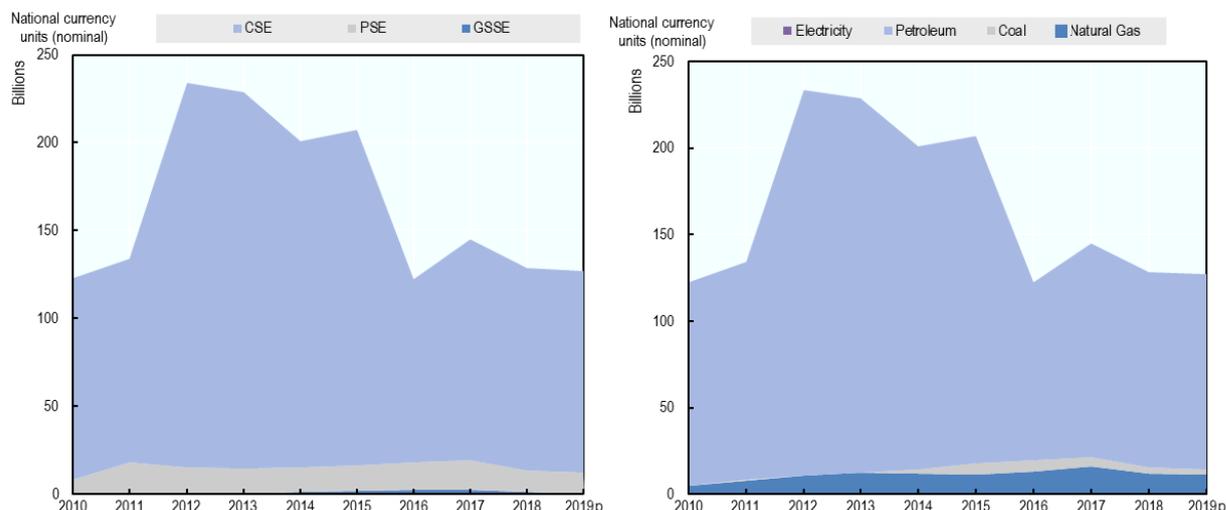
Energy prices and taxes

Prices of fossil fuels in China are regulated by national, regional, and local authorities. The NDRC is ultimately responsible for price setting and competition regulation in most segments of the energy market. Since 2015, natural-gas prices in China have been tied at the city-gate level to prices applying in the Shanghai urban market for fuel oil and LPG. In 2016, stricter regulation policies on gas transmission and distribution tariffs have been introduced, as well as the liberalisation of gas prices for fertiliser. For electricity, the NDRC and its regional counterparts set on-grid wholesale prices received by utilities administratively; retail electricity prices are set for each province and are regularly adjusted. Reforms implemented in 2017 progressively liberalise electricity tariffs at the wholesale level. Since 2018, China began pilot projects to build a national electricity spot market, further liberalising electricity pricing. On-grid power price is negotiated between the utilities and consumers, while NDRC regulates the transmission and distribution price. For crude oil, a price floor of USD 40 per barrel and a price ceiling of USD 130 per barrel were also introduced in 2016. This mechanism prevents the prices for refined oil products from dropping below what they would cost if crude oil remained at USD 40 per barrel. When the international price of crude oil drops below USD 40



per barrel, the difference with the domestic price floor is collected in a special “risk reserve fund” set by the central government, and used to fund programmes on energy saving, oil quality improvement, and other projects. Similarly, if oil price exceeds USD 130 USD per bbl, the government will subsidise oil companies for higher international oil price from the reserve fund. In March 2019, the Administration lowered the VAT rate for refined oil products from 16% to 13%. Fossil fuels used for heating and other residential purposes is subjected to a lower VAT rate of 9%. Excise duties apply on a range of oil products (e.g. gasoline, naphtha, solvent oil and lubricating oil at CNY 1.52/litre; diesel, aviation kerosene and fuel oil at CNY 1.2/litre).

Total support for fossil fuels in China by support indicator (left) and fuel type (right)*



Note: CSE=Consumer Support Estimate; PSE=Producer Support Estimate; GSSE=General Services Support Estimate.

*The above charts are based on an arithmetic sum of the individual support measures identified in the Inventory. Because they focus on budgetary costs and revenue foregone, the estimates for partner economies do not reflect the totality of support provided by means of artificially lower domestic prices. Particular caution should therefore be exercised when comparing these estimates to those reported by the IEA for these countries.

Recent developments and trends in support

Support for fossil fuels in China mainly comes in the form of direct payments under the petroleum price-reform support programmes. This measure seeks to compensate professional fuel users that were directly affected by the reform of petroleum pricing after the NDRC switched from price bands to price caps in 2009. Taxi drivers, public transport, and fuel users in farming, forestry, and fisheries have been the largest beneficiaries of the measure. The payments are scheduled to be gradually reduced down to 60% in 2020, after which further policies will be decided. The central government, as well as provincial and even municipal governments provide these subsidies. Local government have significant control over the amount. The Central Government has also at times compensated financially state-owned oil and gas companies (CNOOC, PetroChina, and Sinopec) for losses they had incurred downstream due to differences between domestic regulated prices and import prices. This does not seem to be the case any longer owing to the lower crude-oil prices that have prevailed since late 2014 and the price crashes observed in the covid-19 era, and to the energy price reforms that China has undertaken over recent years. Per-unit subsidies exist for encouraging the production or utilisation of unconventional gas such as shale gas and coal-bed methane, although such support is being gradually reduced. Conventional hydrocarbon extraction is also supported by way of targeted reductions of China’s resource tax.

Examples of measures

Shale-gas subsidy (2012-)

Shale gas extracted in China attracted until 2015 a unit subsidy of CNY 0.4 per m³ of output. Starting in 2016, this subsidy has now been reduced to CNY 0.3 per m³ of output, and will be further reduced to CNY 0.2 per m³ starting in 2019. The support this implies cost the Chinese government an estimated CNY 2.7 billion in 2017, pushed by the boom in shale gas extraction witnessed in China in recent years.

Petroleum Fuels Price-Reform Support Programmes (2006-)

The measure was initiated in order to compensate fuel users for the changes in petroleum pricing that were decided in 2006 and 2009. The measure cost a total CNY 145.3 billion in 2015 and mainly benefits taxi drivers, public transport, and primary industries (e.g. farming and fisheries).