

## Japan

*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 large partner economies (Argentina, Brazil, the People's Republic of China, Colombia, India, Indonesia, the Russian Federation, and South Africa).*

### Energy resources and market structure

Japan has negligible fossil-energy resources and relies almost entirely on imported fuels. The suspension in the operation of nearly all of the country's nuclear power plants following the 2011 Great East Japan Earthquake resulted in a sharp decline in the share of nuclear power in Japan's total primary energy supply, from 15% in 2010 to nil in 2014. Japan is the fourth-largest oil consumer in the world—behind the United States, China, and India—the fourth-largest net importer of crude oil, and the largest importer of LNG.

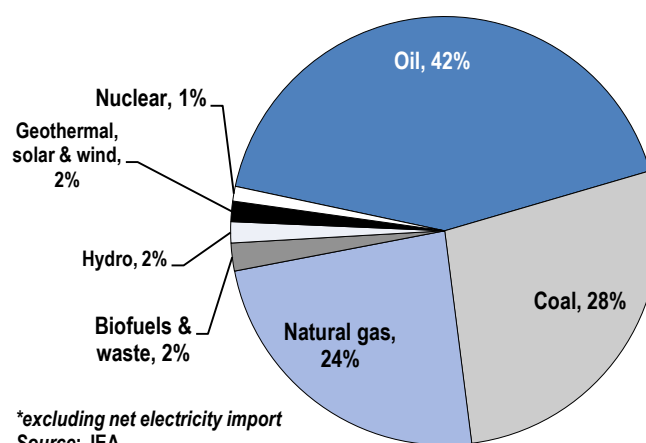
Japan's energy sector is dominated by private, domestic companies, with public-sector ownership largely limited to a few municipal gas and electricity utilities, most of which are small. Oil exploration and development abroad are supported by the Japan Oil, Gas and Metals National Corporation (JOGMEC) — a government agency set up in 2004. All of Japan's oil refineries are privately owned along with the distribution of oil products, with increasing market penetration by foreign companies seen in recent years. The natural-gas industry is also largely in private hands with the majority of gas imported by Japan's electricity companies for power generation. These utilities, and some large industrial users, purchase their gas independently from the city gas industry. The four major gas utilities — Tokyo Gas, Osaka Gas, Toho Gas, and Saibu Gas — supply about three-quarters of the total gas market. There are also about 1 400 small, community gas utilities. Although most pipelines in Japan are owned by gas utilities, some power utilities and domestic gas producers own pipelines as well.

Japan's electricity sector is comprised of ten former General Electricity Utilities—such as Tokyo Electric Power Company (TEPCO) and Kansai Electric Power Company (KEPCO), which deal in generation, transmission, distribution and retail sectors independently—, numerous electricity generators, including J-Power, and various large and small retail electricity suppliers. The biggest electricity entity in both the generation and retail sector is TEPCO. In Japan, electricity and gas market reforms have been implemented gradually since the mid-1990s. In recent years, the Administration has implemented the Energy System Reform which fully liberalised the Japanese electricity retail market in 2016 and the gas retail market followed in 2017. However, these market reforms are considered to be at a slower pace when compared with most other OECD countries.

### Energy prices and taxes

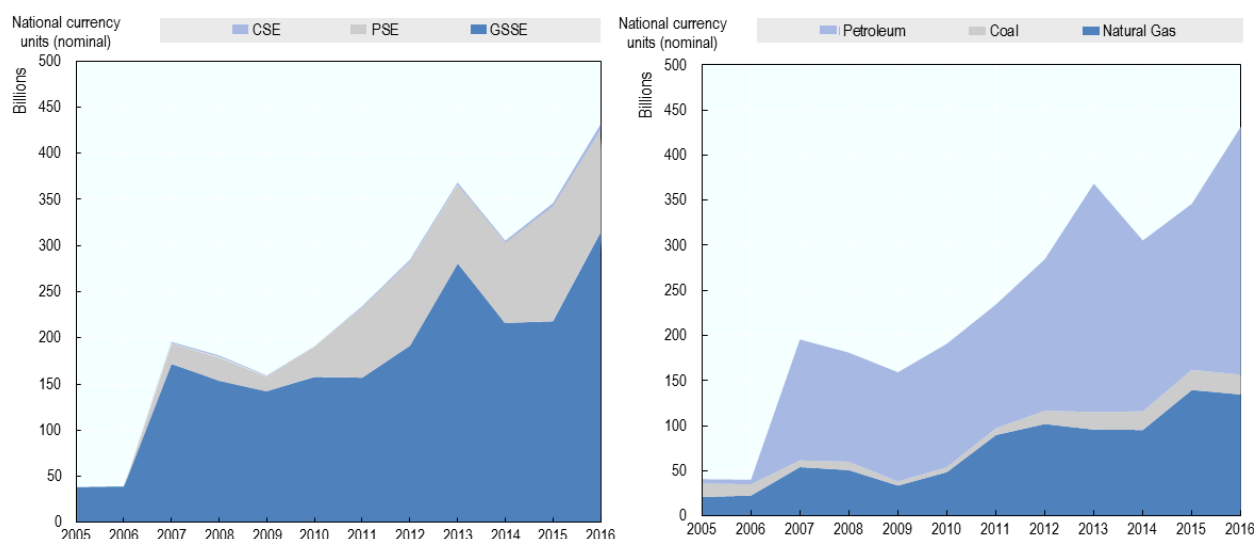
There are no price controls on oil products or coal in Japan. Gas tariffs in the non-liberalised sector and electricity tariffs in specific retail sectors are regulated, as are network charges which retail providers in the liberalised sector have to pay. All fuels and energy services are subject to a general consumption tax at a flat rate of 8%, as well as to excise and other taxes at varying rates according to the type of fuel. A petroleum and coal tax is levied on crude oil, imported oil products, natural gas and coal while gasoline, diesel fuel and LPG are subject to additional excise taxes.

Total Primary Energy Supply\* in 2016



\*excluding net electricity import  
Source: IEA

## Total support for fossil fuels in Japan by support indicator (left) and fuel type (right)



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

Aviation fuel tax is imposed on domestic aviation fuel to finance airport infrastructure construction. Electricity supplied through general transmission and distribution companies' network is subject to a power source development tax to finance measures facilitating installation, operation, utilisation and security of power plants and to ensure the smooth flow of power supply.

### Recent developments and trends in support

Japan is a world leader in energy research and development with direct public spending on energy research as a percentage of its GDP being the largest in the OECD. Recent boosts in research funding were seen after the 2011 Great East Japan Earthquake, particularly for developing technologies relating to the extraction of natural gas from frozen methane hydrate in Japan's Nankai Trough. Besides scientific research, the government also provides direct and indirect funding in support of Japanese companies participating in fossil-fuel exploration projects overseas, especially with natural gas, a fuel whose importance has grown following the 2011 Fukushima nuclear accident. Furthermore, since 2011 the government provides financing for investments aimed at increasing the efficiency of the oil refining and distribution segments.

#### Examples of measures

##### Large-scale Oil Disaster Prevention Subsidy (2007-)

This measure is geared towards the preparation for possible large-scale oil spills through research on oil-spill control technologies and the production and rapid deployment of such equipment. In 2016, this measure amounted to JPY 900 million.

##### Oil Product Quality Assurance Subsidy (2007-)

This measure fully subsidises the analysis of petroleum products sold in gasoline stations, as well as the development of analytical techniques employed in determining compliance with the Act on the Quality Control of Gasoline and Other Fuels. In 2016, this measure amounted to JPY 1.15 billion.