# Taxing Energy Use 2018

# The People's Republic of China

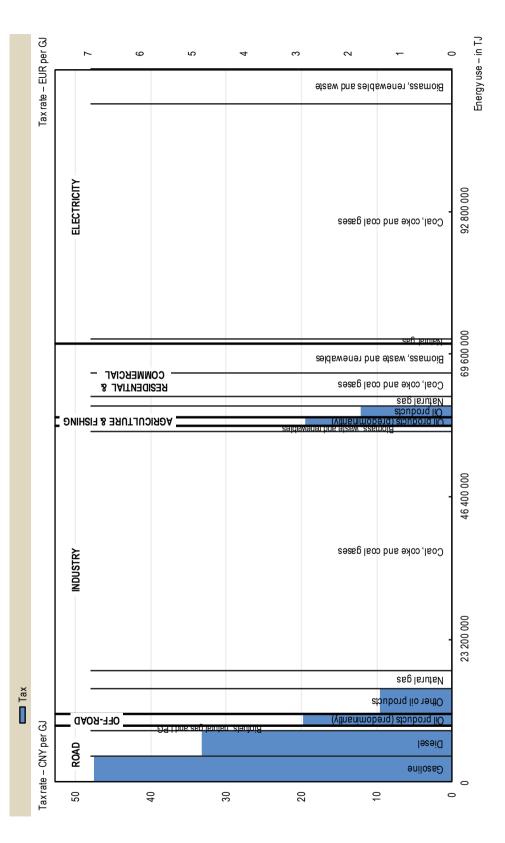
This note describes the taxation of energy use in China. It contains the country's energy tax profiles, followed by country-specific information to complement the general discussion in *Taxing Energy Use 2018* (OECD, 2018). The note contains four energy tax profiles for China:

- Figure 1: Effective tax rates on energy use in national currency and EUR/GJ, 2015, including electricity output taxes and energy use from biomass
- Figure 2: Effective tax rates on energy use in national currency and EUR/tCO<sub>2</sub>, 2015, including electricity output taxes and energy use from biomass
- Figure 3: Effective tax rates on energy use in national currency and EUR/tCO<sub>2</sub>, 2015, excluding taxes on electricity output, including carbon emissions from biomass
- Figure 4: Effective tax rates on energy in national currency and EUR/tCO<sub>2</sub>, 2015, excluding taxes on electricity output and carbon emissions from biomass

The main insights from the second vintage of the *Taxing Energy Use* database, including a systematic comparison of patterns of the taxation of energy use across countries, sectors and fuels are available in *Taxing Energy Use 2018* (OECD, 2018) at: http://oe.cd/TEU2018.

1. Energy tax profiles for China

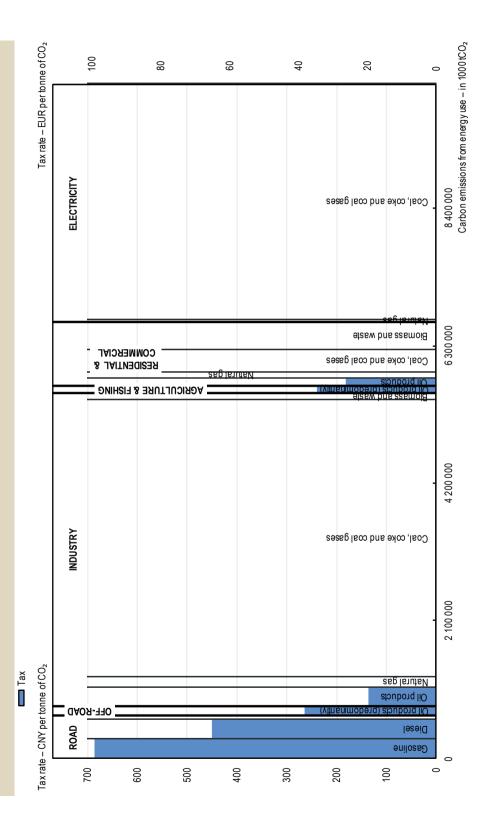
Figure 1. Effective tax rates on energy use in national currency and EUR/GJ, 2015, including electricity output taxes and energy use from biomass



Carbon emissions from energy use - in 1000 tCO<sub>2</sub> Tax rate - EUR per tonne of CO<sub>2</sub> 100 8 09 49 20 ELECTRICITY Coal, coke and coal gases 6 300 000 Biomass and waste COMMERCIAL Coal, coke and coal gases RESIDENTIAL & Natural gas AGRICULTURE & FISHING 4 200 000 **NDUSTRY** Coal, coke and coal gases 2 100 000 Tax Tax rate - CNY per tonne of CO<sub>2</sub> Natural gas OFF-ROAD ROAD Diesel Gasoline 0 009 200 400 300 200 100 0 700

Figure 2. Effective tax rates on energy use in national currency and EUR/tCO<sub>2</sub>, 2015, including electricity output taxes and carbon emissions from biomass

Figure 3. Effective tax rates on energy use in national currency and EUR/tCO<sub>2</sub>, 2015, excluding taxes on electricity output, including carbon emissions from biomass



Tax rate – EUR per tonne of CO<sub>2</sub> Carbon emissions from energy use – in 1000 tCO<sub>2</sub> 90 8 9 40 20 ELECTRICITY Coal, coke and coal gases 000 000 9 & RESIDENTIAL & COMMERCIAL Coal, coke and coal gases Natural gas AGRICULTURE & FISHING Natural gas (predominantly), non-renewable waste 4 000 000 INDUSTRY Coal, coke and coal gases 2 000 000 Tax rate – CNY per tonne of CO<sub>2</sub> Tax Oil products OFF-ROAD ROAD Gasoline 800 700 009 300 200 0 500 400 100

Figure 4. Effective tax rates on energy use in national currency and EUR/tCO<sub>2</sub>, 2015, excluding taxes on electricity output and carbon emissions from biomass

### 2. Country-specific notes

This note describes the taxation of energy use in China. It contains the country's energy tax profiles, accompanied by country-specific information to complement the general discussion in *Taxing Energy Use 2018* (OECD, 2018). Tax rates are those applicable in April 2015, energy use data are for 2014.

The data shown in the energy tax profiles is from the OECD's TEU Database. More detail on the TEU Database, the calculation of effective tax rates on energy use and the interpretation of the energy tax profiles can be found in *Taxing Energy Use 2018* (OECD, 2018).

China operates several regional emissions trading systems (ETS), and a national ETS is set to be implemented. ETS are not included in the energy tax profiles.<sup>1</sup>

#### Energy and carbon taxes

China levies an excise tax on gasoline and diesel, which applies to diesel and gasoline use across all sectors, at CNY 1.52 and CNY 1.2 per litre, respectively. This tax is included in the Chinese energy tax profiles.

#### Effective tax rates on energy use for different fuels and users

The tax rates on different fuels and uses are linked to China's energy use<sup>2</sup> to calculate effective tax rates on energy use (in CNY/TJ and EUR/TJ) or CO<sub>2</sub> emissions from energy use (in CNY/tCO<sub>2</sub> and EUR/tCO<sub>2</sub>). Energy use and the CO<sub>2</sub> emissions associated with it are shown for six economic sectors: road transport, domestic offroad transport, industry, agriculture and fishing, residential and commercial, and electricity.

The Chinese energy tax profiles (Figures 1 and 2) show effective tax rates for different fuels and uses in terms of the fuels' energy and carbon content, respectively. Figures 1 and 2 include energy use and carbon emissions from biomass and they show output taxes on electricity. Figure 3 is identical to Figure 2, except that taxes on electricity output are excluded. Figure 4 excludes carbon emissions from biomass and taxes on electricity output.

- Of the six economic sectors, the **road** sector is taxed at the highest rates, both in terms of the fuels' energy and carbon content. Within the road sector, gasoline is taxed at the highest effective tax rate, diesel is taxed at a lower rate in terms of TJ and in terms of CO<sub>2</sub>. Taxed gasoline and diesel account for more than 90% of energy use and carbon emissions from the road sector. Other fuels used in the road sector (LPG, natural gas and biofuels) are untaxed.
- Gasoline and diesel used in **offroad transport** are taxed, and they account for close to 90% of energy use and carbon emissions in the sector. Other fuels used in offroad transport (mainly natural gas, coal and coke) are untaxed.
- Except for gasoline and diesel, all fuels used in the **industry**, **agriculture and fishing**, **residential and commercial** sector and **electricity** are untaxed. As can be seen in the energy tax profiles, taxed oil products account for a very small proportion fuel use in these. Untaxed coal and coke dominate energy use and carbon emissions from energy use in the industry (88% of carbon emissions from energy use) and the electricity sector (99%).
- 1. The OECD's Effective Carbon Rates contains information on emissions trading systems.
- 2. Data on energy use is taken from the IEA's *Extended World Energy Balances*, see Chapter 1 of *Taxing Energy Use 2018* (OECD, 2018) for additional detail.

### Reported tax expenditures and rebates

China does not report any tax expenditures with regards to the taxes included in the Taxing Energy Use data.

# Sources

The main insights from the second vintage of the Taxing Energy Use database are analysed in:

OECD (2018), Taxing Energy Use 2018 – Companion to the Taxing Energy Use Database, OECD Publishing, Paris. http://dx.doi.org/10.1787/9789264289635-en.

Apart from the sources included in *Taxing Energy Use 2018* (OECD, 2018), and consultation with national delegates, no country-specific sources were used.