

## *Taxing Energy Use 2018*

### **Brazil**

This note describes the taxation of energy use in Brazil. 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 Brazil:

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 Brazil

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

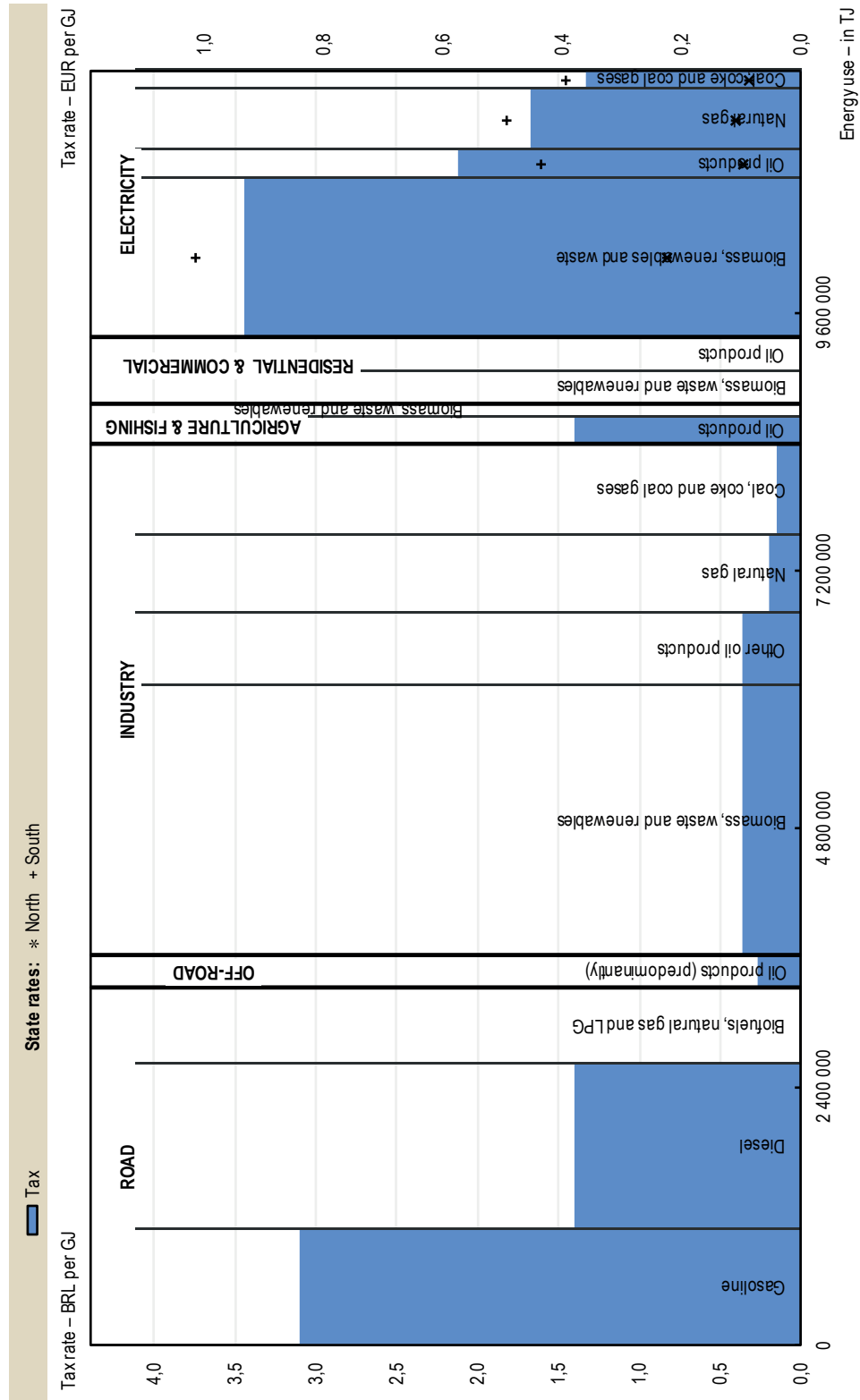


Figure 2. Effective tax rates on energy use in national currency and EUR/tCO<sub>2</sub>, 2015, including electricity output taxes and carbon emissions from biomass

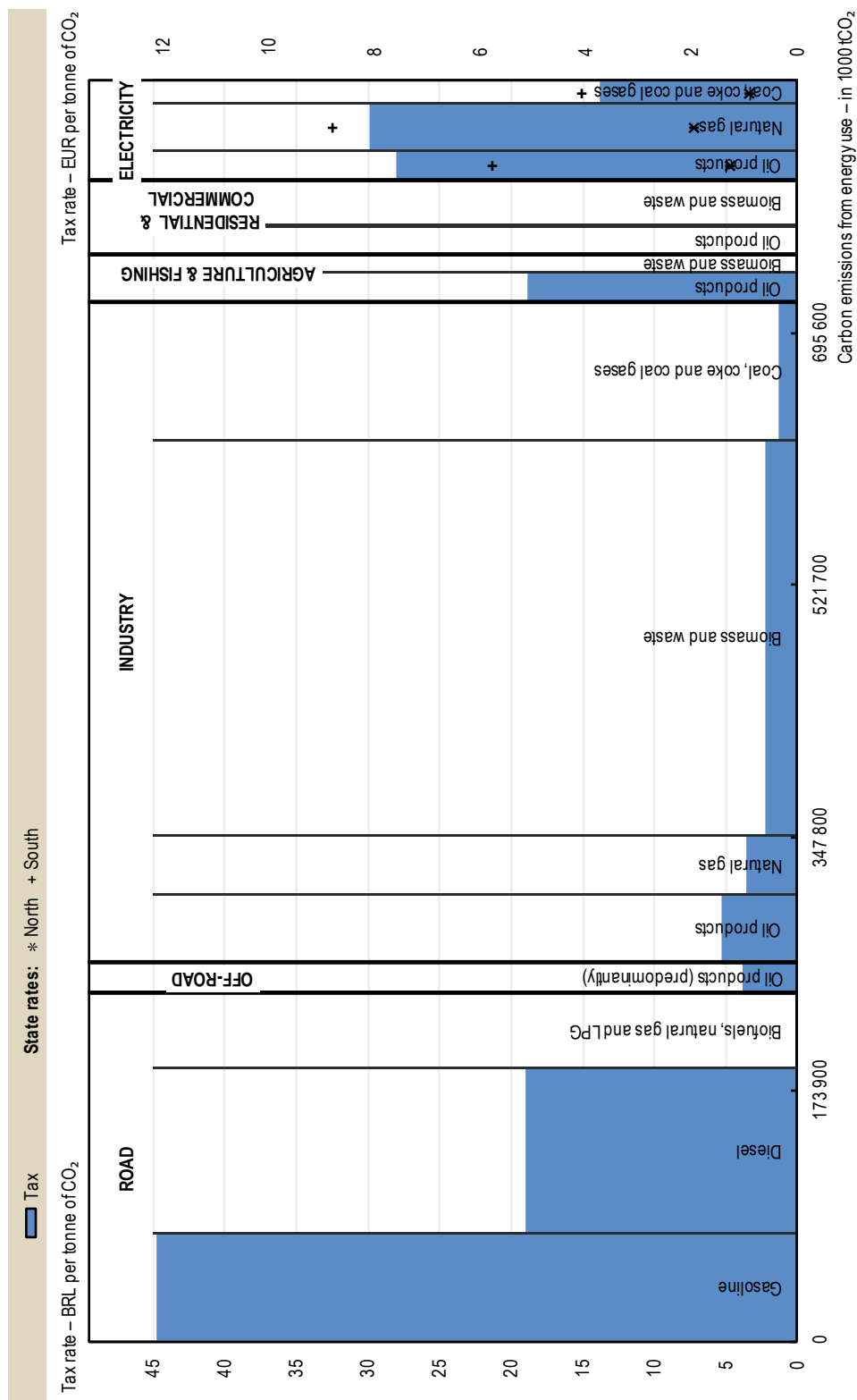


Figure 3. Effective tax rates on energy use in national currency and EUR/tCO<sub>2</sub>, 2015, excluding taxes on electricity output, including carbon emissions from biomass

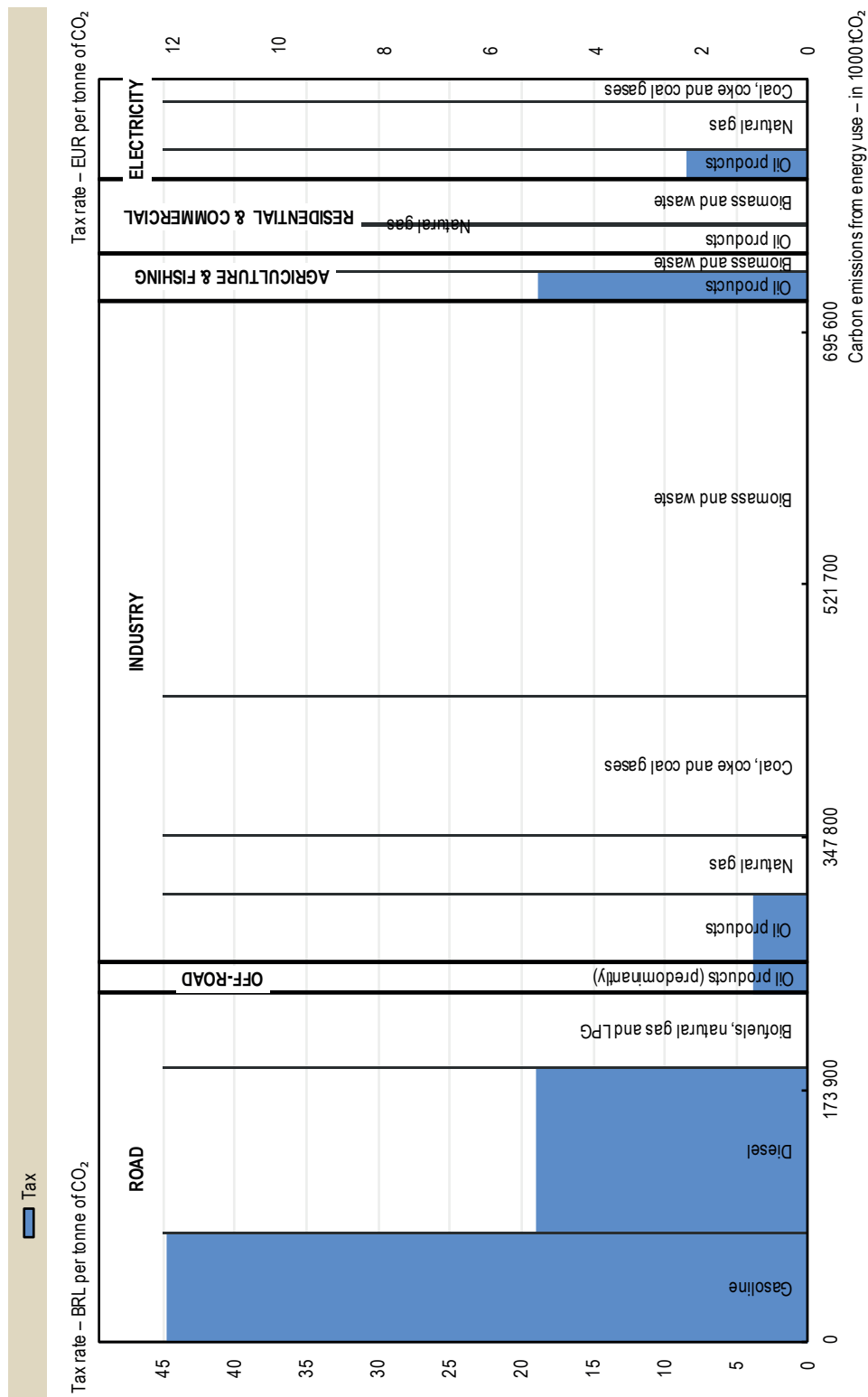
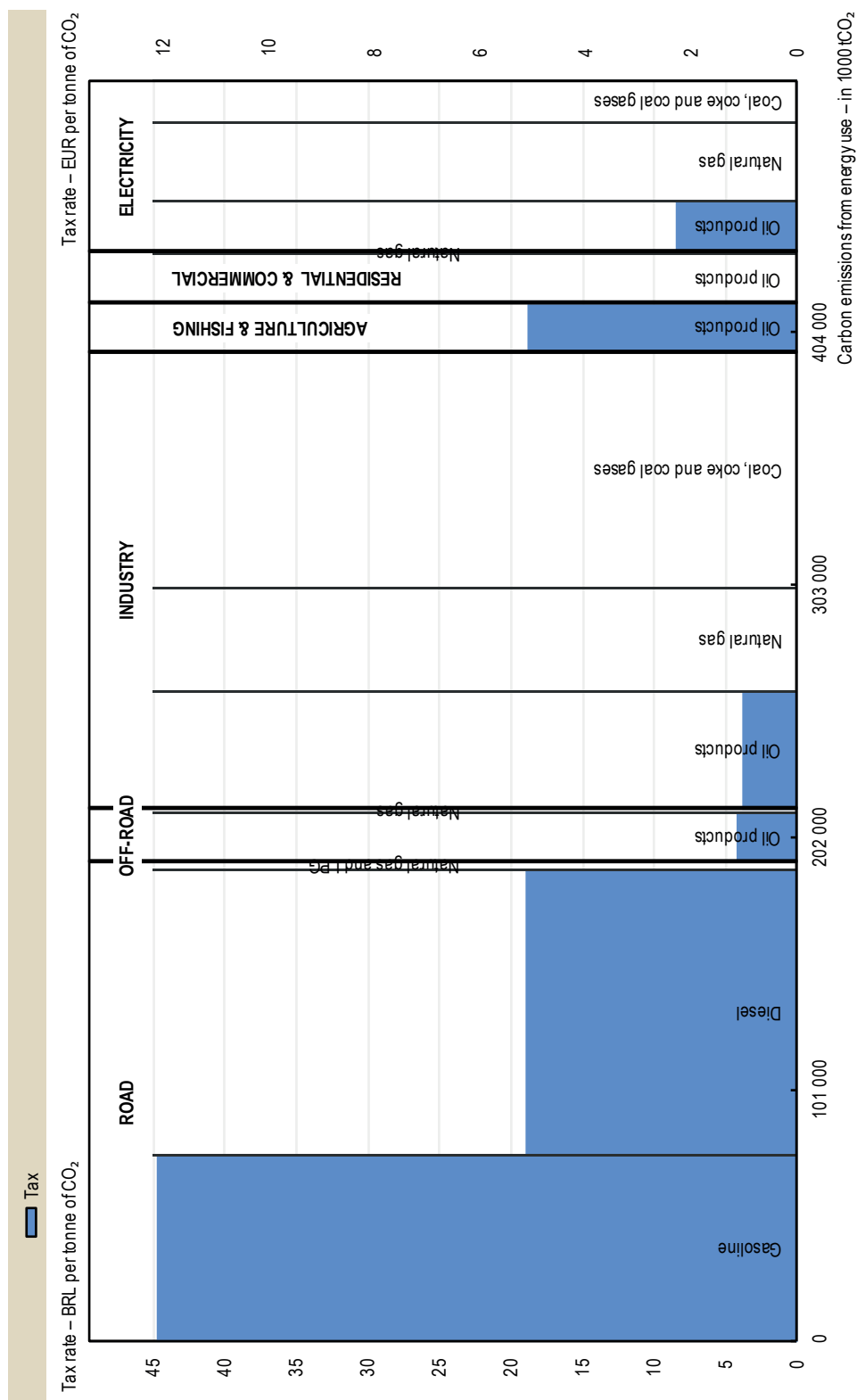


Figure 4. Effective tax rates on energy use in national currency and EUR/tCO<sub>2</sub>, 2015, excluding taxes on electricity output and carbon emissions from biomass



## 2. Country-specific notes

This note describes the taxation of energy use in Brazil. 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 *Taxing Energy Use* (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).

### *Energy and carbon taxes*

In Brazil, the main taxes on energy use are the following:

- A fuel tax (CIDE) applies to gasoline and diesel, including when used for electricity generation in the case of diesel. Fuels are taxed at uniform statutory rates across all sectors.
- Electricity output is taxed (per MWh), the output tax applies at a lower rate in the North-Eastern part of the country.

These taxes are included in the energy tax profiles of Brazil, but the tax on electricity output is only included when separately indicated (see below). Where more than one tax rate applies to an energy user or fuel, the energy tax profile shows their sum.

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

The tax rates on different fuels and uses are linked to Brazil's energy use<sup>1</sup> to calculate effective tax rates on energy use (in EUR/TJ and BRL/TJ) or CO<sub>2</sub> emissions from energy use (in EUR/tCO<sub>2</sub> and BRL/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 Brazilian 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>.
- Diesel used in **offroad transport** is taxed under the fuel tax, but other fuels used in offroad transport (e.g. natural gas and fuel oil) are untaxed.
- Of the fossil fuels used in the **industry**, the **residential and commercial sector**, and in **agriculture and fishing**, only diesel is taxed. Natural gas and coal, which together account for roughly a third of energy use and carbon emissions from energy use in

1. 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.

these sectors are untaxed. Energy use in industry is predominantly from biomass, which is untaxed (energy profile 3 excludes carbon emissions from biomass).

- Diesel is taxed when used to generate **electricity**, but natural gas and coal, as well as biofuels are untaxed. The tax on **electricity output** applies to electricity use throughout the country, but the rate is much lower in the North-Eastern part of the country. Where the tax on electricity output is shown, the energy tax profile shows a weighted average rate. The different subnational rates on electricity are plotted in the energy tax profile for illustration.

### *Assumptions and caveats*

- The fuel tax (CIDE) on gasoline and diesel was zero-rated until May 2015, but rates have since remained positive. To increase the relevance of the information shown, the tax rates are included in the *Taxing Energy Use* data as at 1 May 2015.
- Some other taxes in Brazil feature specific regimes for energy products, but are not included in the *Taxing Energy Use* data, and thus not shown in the energy tax profiles. For example, the Brazilian social security contributions (PIS/COFINS) are paid by companies on sales revenues, and most petroleum products are subject to a special PIS and COFINS regime. In addition, the Imposto sobre Produtos Industrializados (IPI) is a mix between an excise tax and a VAT, and it levies differential rates on some energy products. Due to the difficulty of assessing and comparing the impact of these differential rates on the prices of energy products, in particular when the differential rates also apply to other goods and services, these taxes could not be included into the *Taxing Energy Use* data.

Where not separately indicated, these assumptions have been arrived at in consultation with national officials, or otherwise are based on previous *Taxing Energy Use* publications.

### *Reported tax expenditures and rebates*

Brazil does not report tax expenditures with respect 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 general sources detailed in *Taxing Energy Use 2018* (OECD, 2018), and consultation with national delegates, no country-specific sources were used.