

Taxing Energy Use 2018

Switzerland

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

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/tCO₂, 2015, including electricity output taxes and energy use from biomass

Figure 3: Effective tax rates on energy use in national currency and EUR/tCO₂, 2015, excluding taxes on electricity output, including carbon emissions from biomass

Figure 4: Effective tax rates on energy in national currency and EUR/tCO₂, 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 Switzerland

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

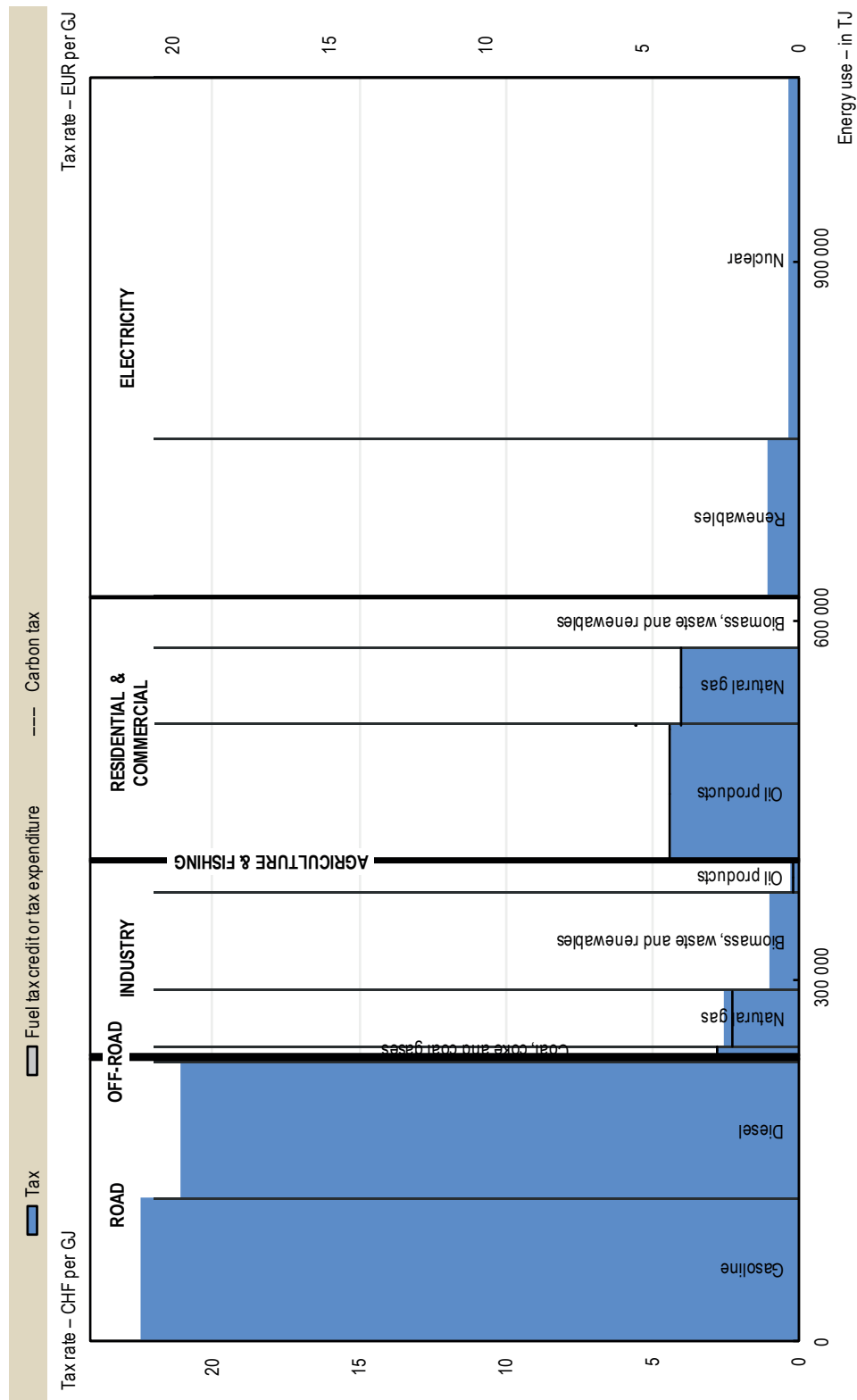


Figure 2. Effective tax rates on energy use in national currency and EUR/tCO₂, 2015, including electricity output taxes and carbon emissions from biomass

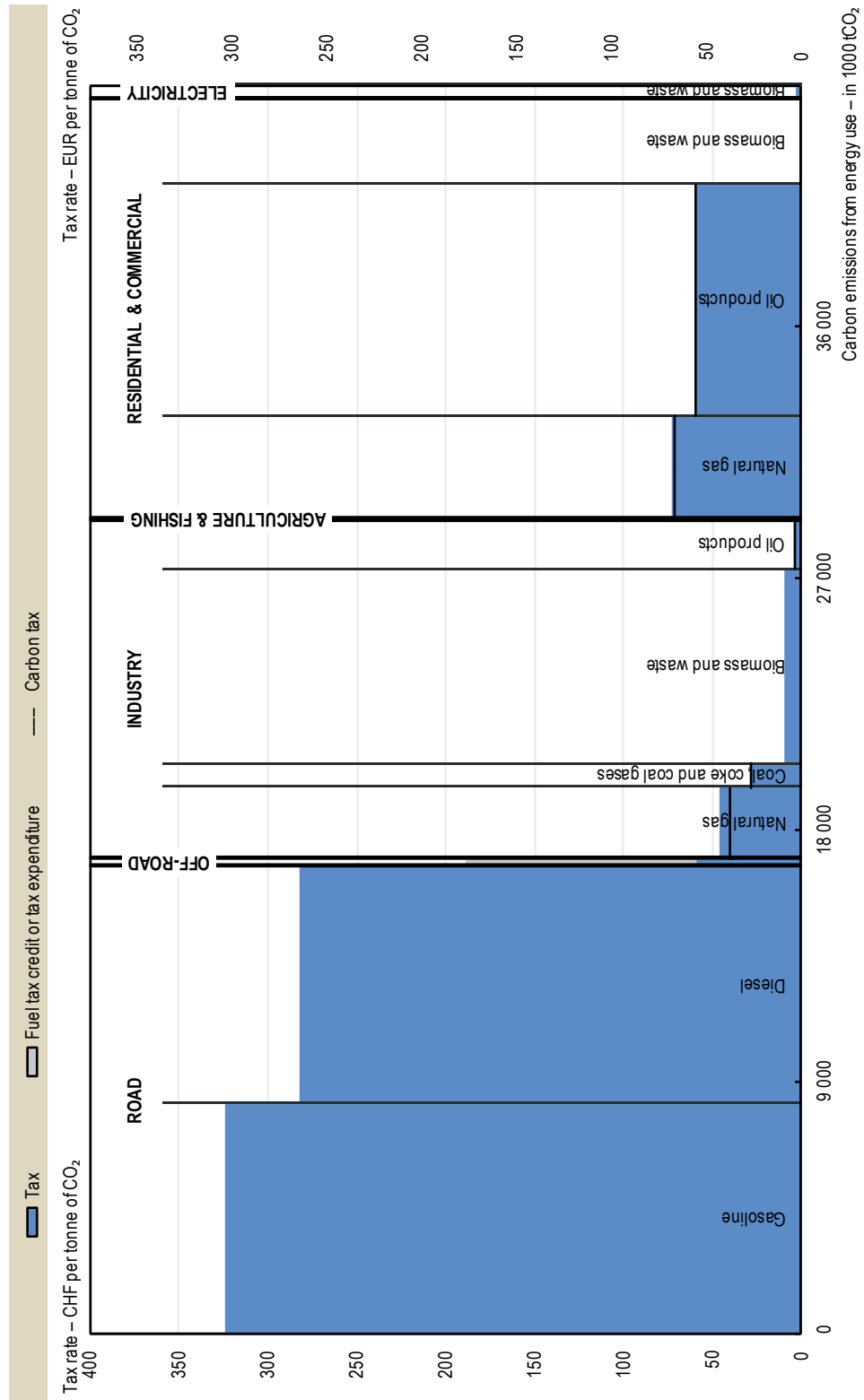


Figure 3. Effective tax rates on energy use in national currency and EUR/tCO₂, 2015, excluding taxes on electricity output, including carbon emissions from biomass

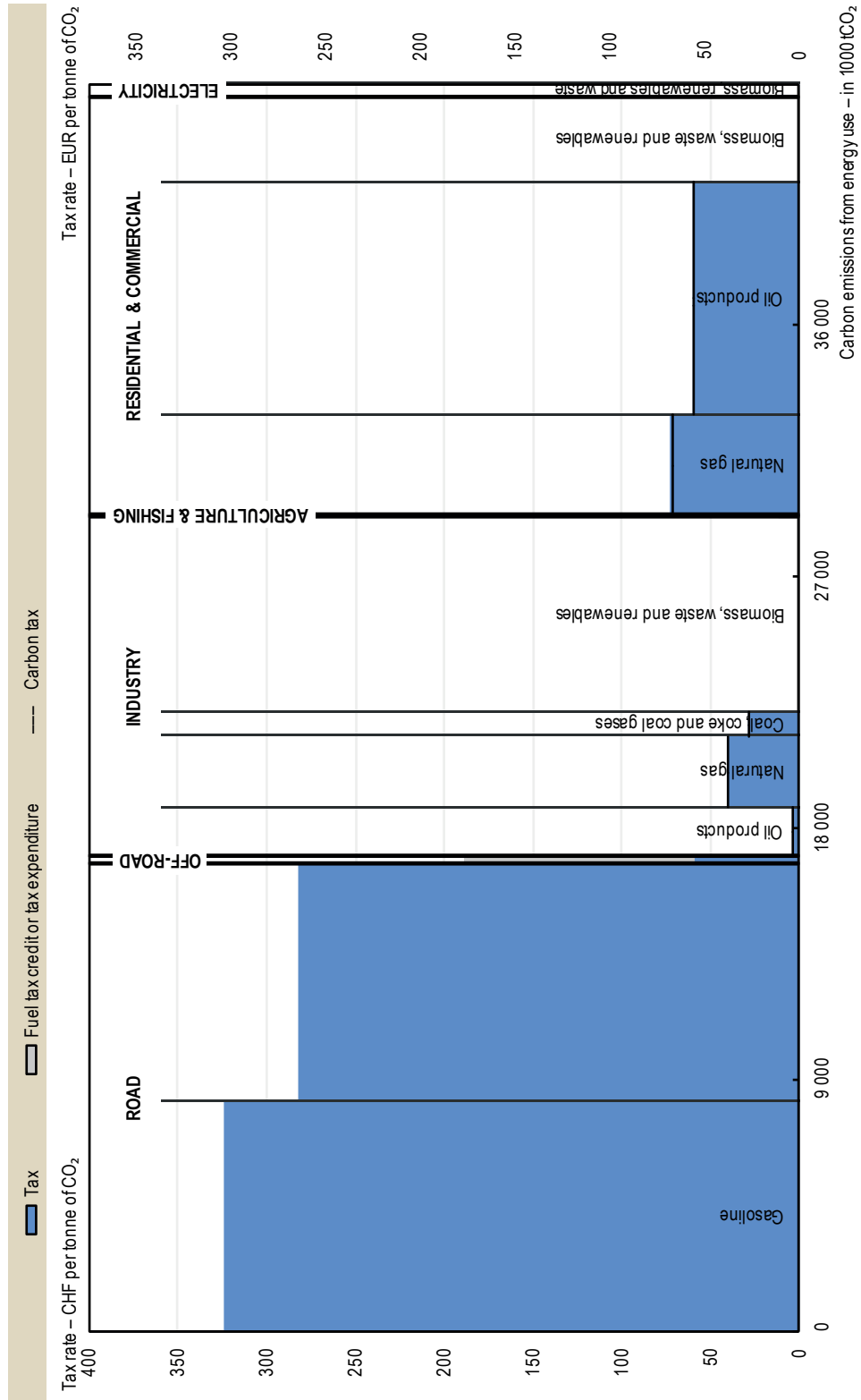
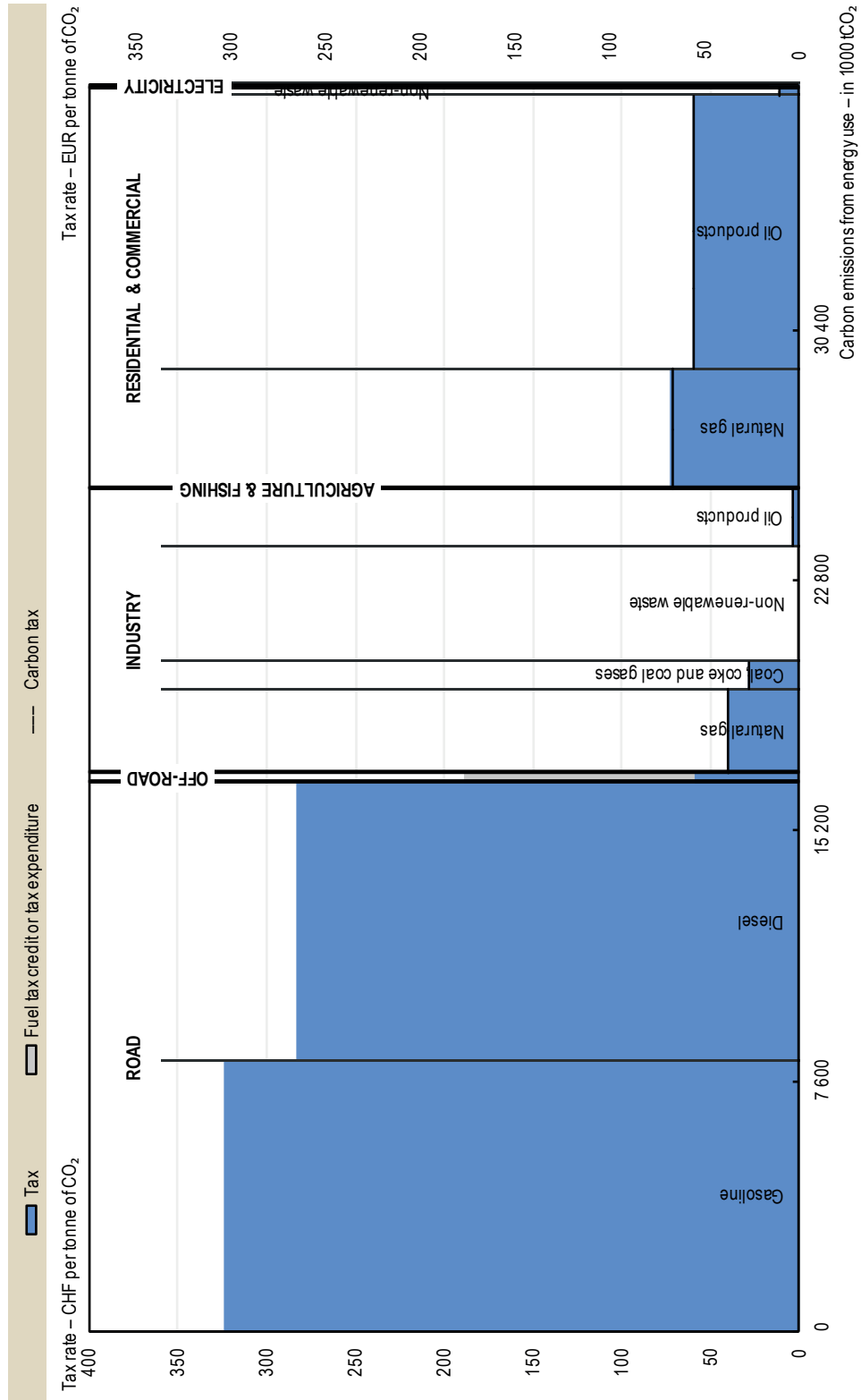


Figure 4. Effective tax rates on energy use in national currency and EUR/tCO₂, 2015, excluding taxes on electricity output and carbon emissions from biomass



2. Country-specific notes

This note describes the taxation of energy use in Switzerland. 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).

Switzerland operates an emissions trading system (ETS), not shown in the energy tax profiles.¹

Energy and carbon taxes

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

- A mineral oil tax applies to oil products and natural gas at uniform statutory rates across all sectors.²
- A surtax is added to the mineral oil tax for fuels used in road and offroad transport.
- A CO₂ tax applies to oil products, coal, coke and coal products, and natural gas when used outside of road transport, at rates varying in proportion to fuels' carbon content.
- Electricity output is taxed, at a fixed rate across all electricity use.

The rates at which these taxes apply can further differ across different fuels and users, as described below.

These taxes are included in the energy tax profiles of Switzerland, but the levy 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 Switzerland's energy use³ to calculate effective tax rates on energy use (in CHF/TJ and EUR/TJ) or CO₂ emissions from energy use (in CHF/tCO₂ and EUR/tCO₂). Energy use and the CO₂ 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 Swiss 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.

1. The OECD's *Effective Carbon Rates* contains information on emissions trading systems.
 2. The revenues of the mineral oil tax are largely earmarked to finance road infrastructure.
 3. 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.

- 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 CO₂. Natural gas and LPG are also taxed, but at substantially lower rates than gasoline and diesel. Biofuels are untaxed.
- Fuels used in **offroad transport** are taxed under the mineral oil tax and the surtax, but domestic aviation fuels are exempt. This derogation is shown in the profile.
- Except for biomass and waste, all fuels used in the **industry** and the **residential and commercial** sector are taxed under the mineral oil and the carbon tax.

Switzerland operates an emissions trading system (ETS), not shown in the energy tax profile. The Swiss ETS covers 23% of carbon emissions from energy use in the **industry** sector. Since the firms which participate in the ETS do not pay the CO₂ tax, a corresponding amount of carbon emissions from energy use is shown as untaxed under the CO₂ tax in the energy tax profile.

- Fuels used in **agriculture and fishing** benefit from a refund of the mineral oil surtax and a part of the mineral oil tax. This derogation is shown in the profile.
- In Switzerland, fossil fuels used to generate **electricity** are subject to the CO₂ tax, but these fuels account for a minor portion of the electricity generation mix. A tax on **electricity output** (per MWh) applies at a uniform rate across all electricity users.

Assumptions and caveats

Biofuels benefit from a full tax refund, provided that it can be shown that their production complies with specific ecological and social minimum criteria (detailed in Article 12b of Swiss Government, 2012). Based on consultation with national officials, it has been assumed that all biofuels comply with these minimum standards. Consequently, biofuels are shown as untaxed in the graphical profiles.

Reported tax expenditures and rebates

The following tax expenditures are included in the *Taxing Energy Use* data for Switzerland:

- Natural gas used by agriculture and fishing is exempt from the mineral oil tax;
- Domestic aviation fuels are exempt from the mineral oil tax and the surtax;
- All firms which participate in or are subject to the Swiss ETS are exempt from the CO₂ tax.

Reported tax expenditures or rebates might be averaged with tax rates on other energy uses, in which cases they are not visibly identifiable in the graphical profile. Additional detail on the treatment of tax expenditures is available in Chapter 1 of *Taxing Energy Use 2018*.

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>.

In addition to the sources included in the *Taxing Energy Use 2018* (OECD, 2018), and consultation with national delegates, the following country-specific sources were used:

Swiss Government (2015), “Verordnung über die Reduktion der CO₂ Emissionen (CO₂ Verordnung), vom 30. November 2012 (Stand am 1. Januar 2015)“.

Swiss Government (2012), „Mineralölsteuergesetz (MinöStG) vom 21. Juni 1996 (Stand am 1. Januar 2017)“.

Eidgenössische Steuerverwaltung ESTV (undated), „Liste der Steuervergünstigungen beim Bund – Tabelle 4: Klassierung im Bereich der uebrigen Steuern und Abgaben der EZV“: www.estv2.admin.ch/d/steuerverguenstigungen/tabelle_4_uebrige_steuern_und_abgaben_ezv.htm.