

Taxing Energy Use 2018

Finland

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

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

Figure 2: Effective tax rates on energy use in EUR/tCO₂, 2015, including electricity output taxes and energy use from biomass

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

Figure 4: Effective tax rates on energy in 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 Finland

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

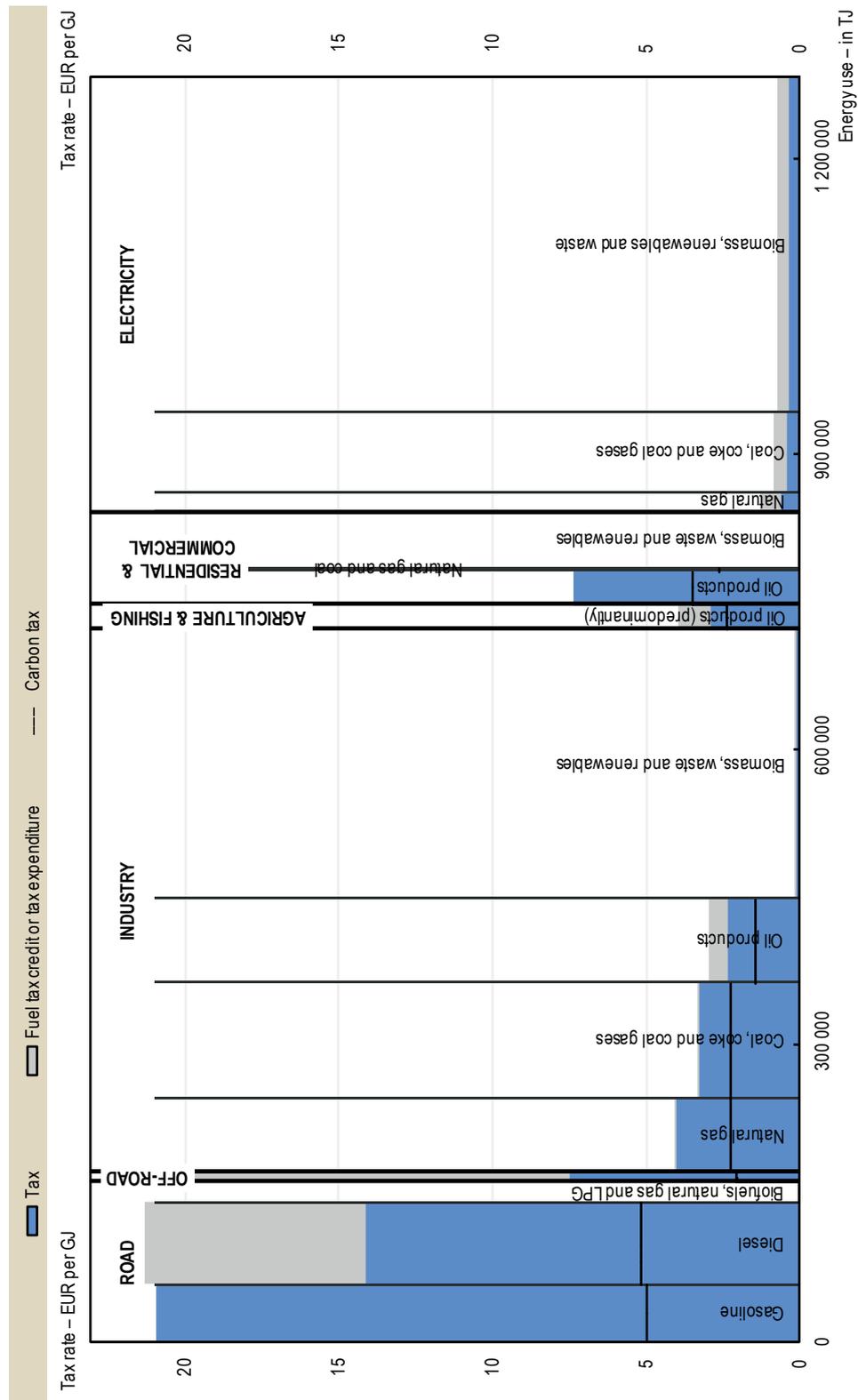


Figure 2. Effective tax rates on energy use in EUR/tCO₂, 2015, including electricity output taxes and carbon emissions from biomass

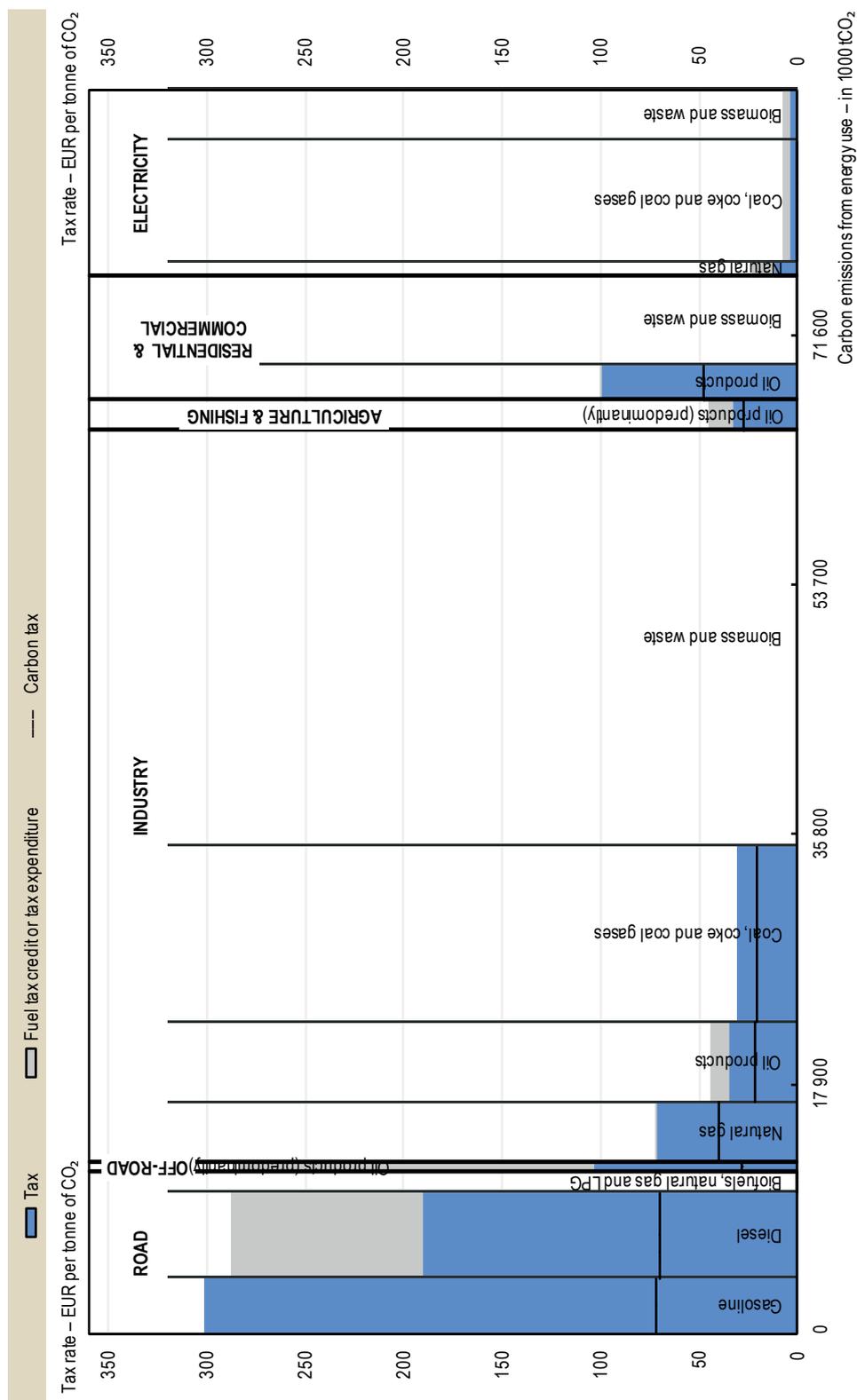


Figure 3. Effective tax rates on energy use in EUR/tCO₂, 2015, excluding taxes on electricity output, including carbon emissions from biomass

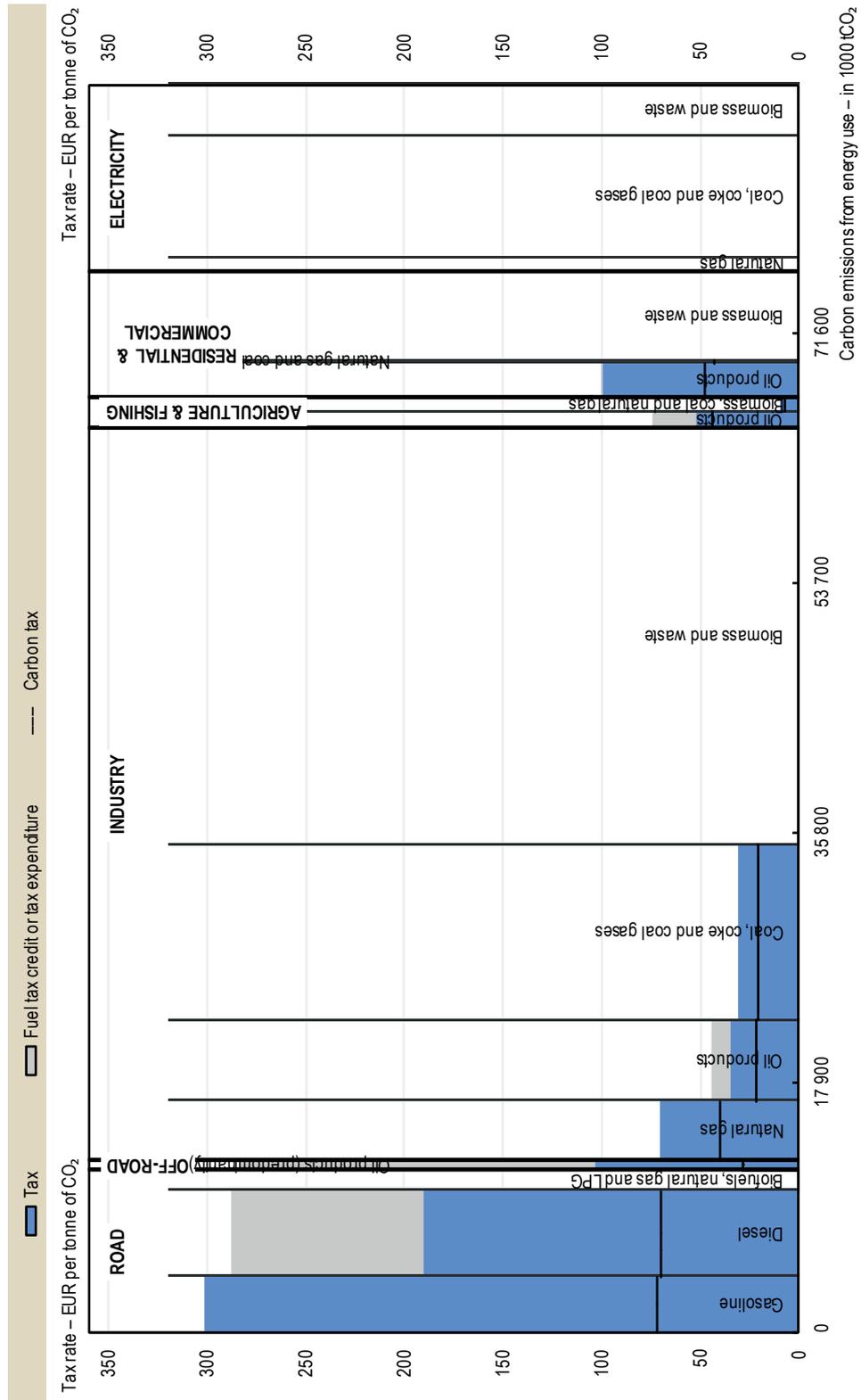
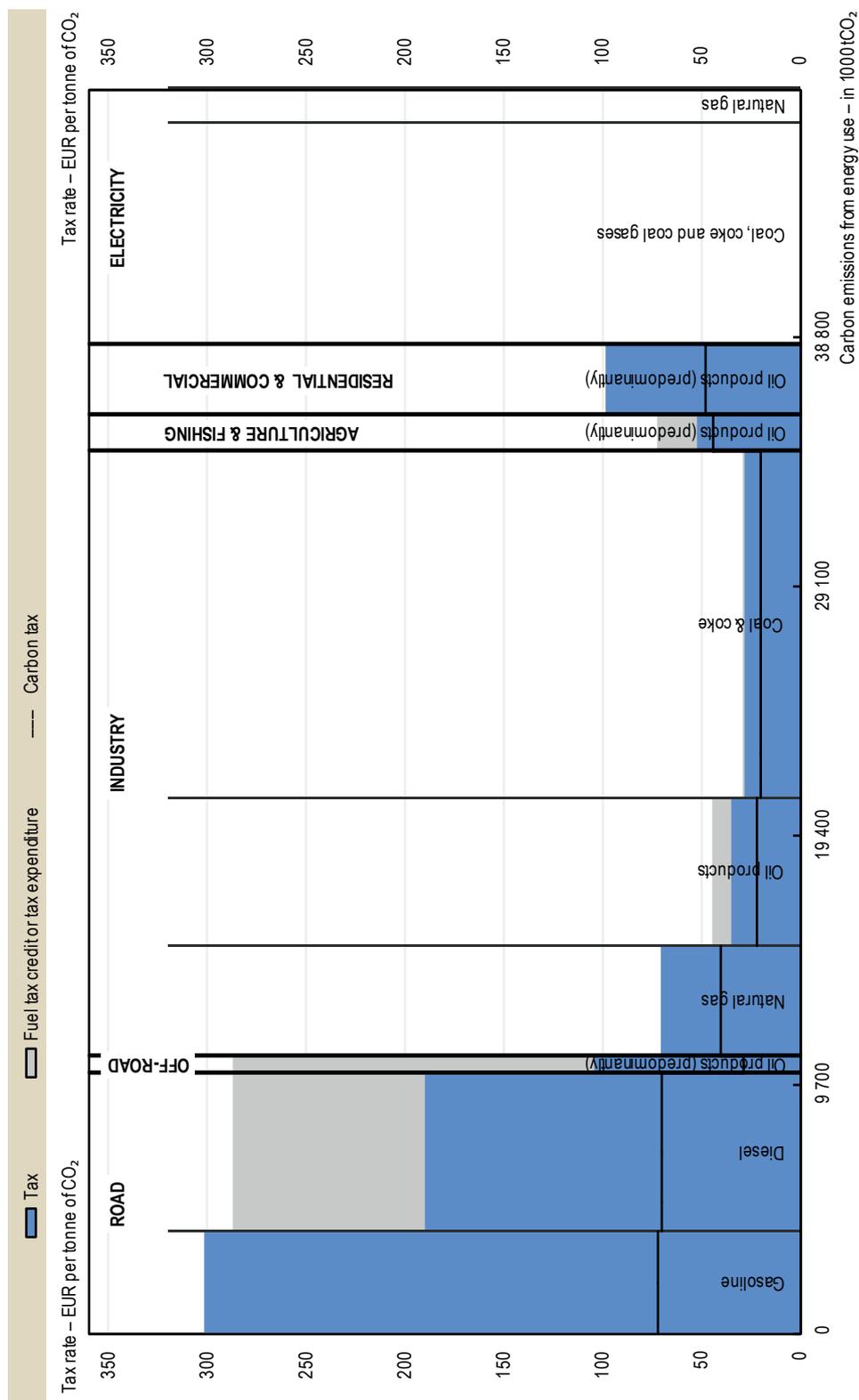


Figure 4. Effective tax rates on energy use in EUR/tCO₂, 2015, excluding taxes on electricity output and carbon emissions from biomass



2. Country-specific notes

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

Finland participates in the European Union emissions trading system (ETS), not shown in the energy tax profiles.¹ The entities that participate in the ETS are fully subject to the CO₂ tax, so the corresponding amount of carbon emissions from energy use is shown as taxed under the CO₂ tax in the energy tax profile.

Energy and carbon taxes

Energy taxes in Finland are levied within the framework of the 2003 EU Energy Tax Directive, which sets minimum rates for the taxation of energy products in member states. Within this framework, the main taxes on energy use in Finland are the following:

- The Energy Content Tax applies to fossil fuels at statutory rates which vary in line with the volumetric energy content of each fuel. It applies to fossil fuels consumed across all sectors, except for LPG.
- A CO₂ tax applies to most fossil fuels and across all sectors except electricity, at statutory rates varying in proportion to fuels' carbon content.
- The Strategic Stockpile Fee² applies to most fossil fuels across all sectors, but at relatively low rates compared to the energy and carbon tax rates.
- Electricity consumption is taxed (per MWh), at a higher rate when used in the residential and commercial sector and in agriculture than when used in industry.

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

These taxes are included in the energy tax profiles of Finland, 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 Finland's energy use³ to calculate effective tax rates on energy use (in EUR/TJ) or CO₂ emissions from energy use (in 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.

-
1. The OECD's *Effective Carbon Rates* contains information on emissions trading systems.
 2. Revenues from the Strategic Stockpile Fee are earmarked to the National Emergency Supply Agency.
 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.

The Finnish 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 CO₂. Natural gas is taxed at a lower statutory and effective rate. Biofuels for road use are untaxed.
- Fuels used in domestic **off-road** transport sector are taxed, but at lower rates than fuel use in road transport.
- All fossil fuels used in the **industry** sector are taxed, including when used for the conversion of energy into another form of energy. Fuels used to generate combined heat and power (CHP) are taxed at lower statutory and effective rates.
- All fossil fuels used in the **agriculture and fishing** sector are taxed. Lower rates are applied to diesel and fuel oil use, which account for the majority of fuel use in this sector.
- All fossil fuels used in the **residential and commercial** sector are taxed.
- Fuels used to generate electricity are untaxed, but electricity output is taxed (see above).

Assumptions and caveats

A mileage-based tax (“propelling-force tax”) is applied to private passenger cars which run on diesel. This tax is meant to cover the difference which arises from the lower excise tax applied to diesel compared to gasoline. Due to the different tax base of this instrument, it is not included in 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

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

- Compared to the tax rate of gasoline, a lower differential excise rate applies to diesel use in road transport.
- Natural gas used in road transport is exempt from the Strategic Stockpile Fee.
- Biogasoline and biodiesel consumption in road transport are untaxed.
- Diesel and fuel oil consumption in agriculture are exempt from the Energy Content Tax.
- A 50% reduction in the CO₂ tax is applied to fossil fuels used for combined heat and power (CHP) production.

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*.

Energy-intensive industries can claim refunds on various energy products are applied to energy-intensive industries. The tax refund is contingent on excise taxes exceeding a percentage of the industry's value added, and is capped at EUR 50 000. Due to uncertainty about the amount of energy use and carbon emissions concerned, these refunds are not included in the graphs.

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.