Taxing Energy Use 2019: Country Note – Belgium

This note explains how Belgium taxes energy use. The note shows the distribution of effective energy tax rates – the sum of fuel excise taxes, explicit carbon taxes, and electricity excise taxes, net of applicable exemptions, rate reductions, and refunds – across all domestic energy use. It also details the country-specific assumptions made when calculating effective energy tax rates and matching tax rates to the corresponding energy base.

The note complements the Taxing Energy Use 2019 report that is available at http://oe.cd/TEU2019*. The report analyses where OECD and G20 countries stand in deploying energy and carbon taxes, tracks progress made, and makes actionable recommendations on how governments could do better to use taxes to reach environmental and climate goals.*

The general methodology employed to calculate effective energy tax rates and assign tax rates to the energy base is explained in Chapter 1 of the report. The official energy tax profile for Belgium can be found in Chapter 2 of the report. Chapter 3 additionally shows effective carbon tax rates per tonne of CO_2, and presents the corresponding carbon tax profiles for all countries. The report also contains StatLinks to the official data.

Structure of energy taxation in Belgium

Energy and carbon taxes in Belgium are levied within the framework of the 2003 European Union (EU) Energy Tax Directive, which sets minimum rates for the taxation of energy products in EU member states. Within this framework, as at 1 July 2018, the main taxes on energy use in Belgium are the following:

- The Excise Tax (*droit d'accise*) applies to petrol, diesel, kerosene, LPG and fuel oil;[1]
- The Special Excise Tax (*droit d'accise special*) additionally applies to the fuels listed above, as well as to coal and coke products;
- The Energy Contribution (*cotisation sur l'énergie*) also applies to the fuels listed above as well as to natural gas and electricity;[2]

Belgium participates in the EU emissions trading system (ETS) (OECD, 2018[1]). Permit prices are not shown in the energy tax profiles.

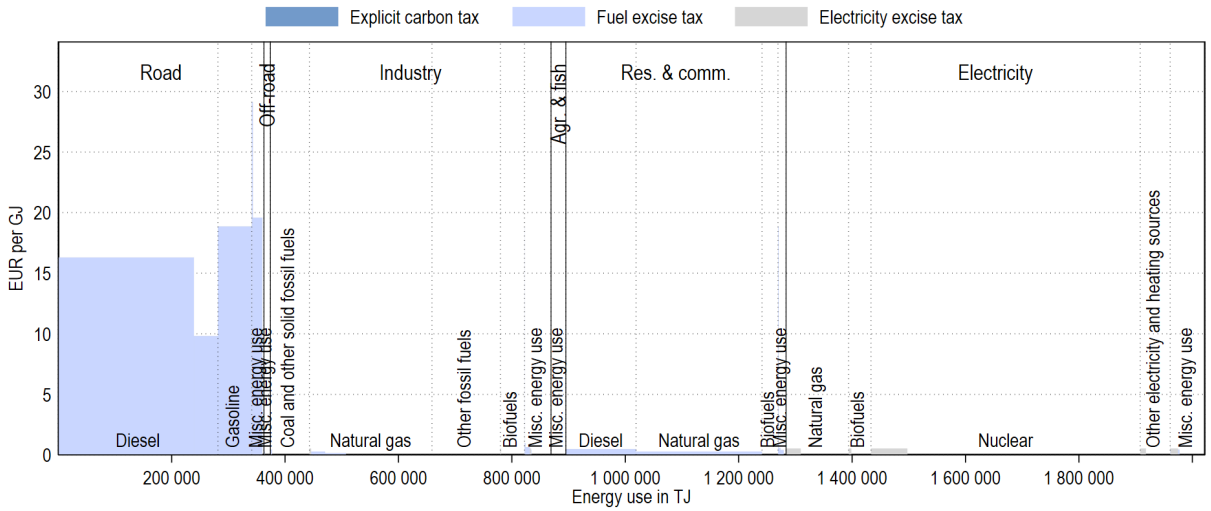
[1] An Inspection Fee (redevance de contrôle) of EUR 10 per 1000 litres additionally applies to diesel consumed for heating purposes.

[2] Natural gas and electricity consumption are additionally subject to a Federal Contribution (cotisation fédérale). In line with previous vintages of Taxing Energy Use, this surcharge is not included in TEU.

Effective tax rates on energy use in Belgium

Tax rates can differ across energy products and users, as described below. Figure 1 provides an overview of how energy and CO_2 taxes apply to different energy categories across the economy. The remainder of this document discusses details on tax rates and tax bases for each of the six economic sectors.

Figure 1. Effective tax rates on energy use by sector and energy category

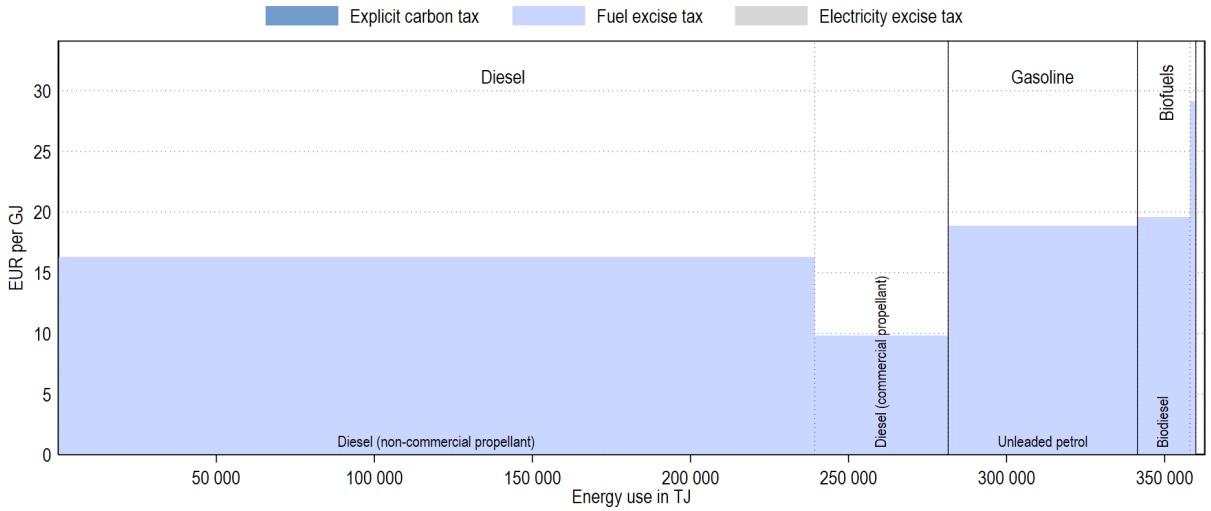


Note: Tax rates applicable on 1 July 2018. Energy use data is for 2016 and adapted from IEA (2018[2]), *World Energy Statistics and Balances*. Energy categories (labelled at the bottom) that represent less than 1% of a country's energy consumption are grouped into "misc. energy use" and may not be labelled.

Road

Figure 2 shows that within the road sector, gasoline is taxed at a higher effective tax rate than diesel. Diesel use benefits from a refund of when consumed for professional purposes, which translates into a reduced rate according to the TEU methodology. Biofuels are taxed at the same statutory rate as fossil fuels, which translates into higher effective energy rates per GJ because the energy content of a litre of biofuels is lower than that of its fossil fuel equivalents.

Figure 2. Effective tax rates on energy use in the road sector

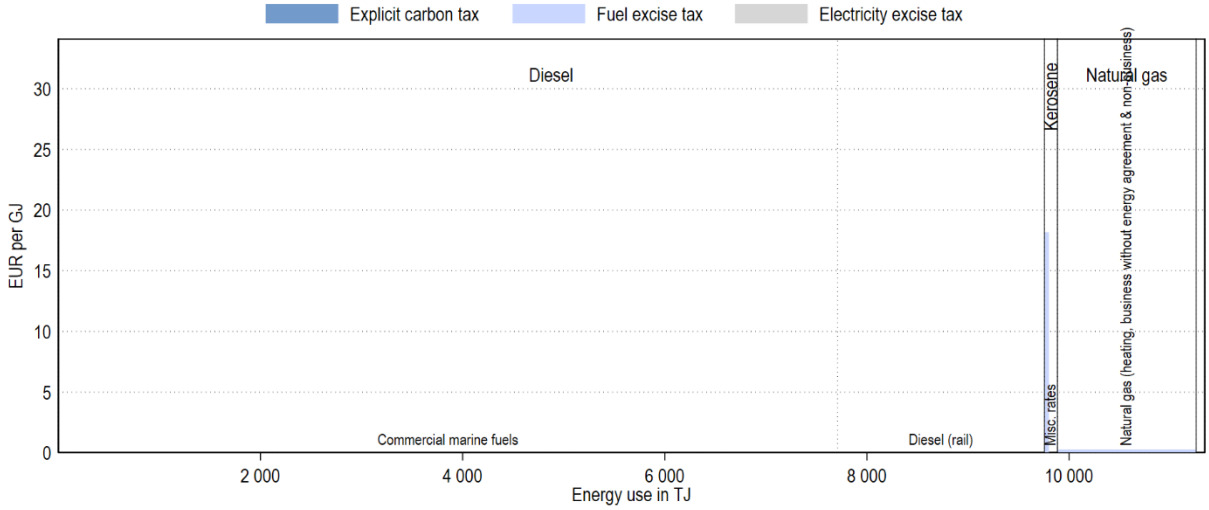


Note: Tax rates applicable on 1 July 2018. Energy use data is for 2016 and adapted from IEA (2018[2]), *World Energy Statistics and Balances.* Energy categories (labelled at the top) that represent less than 1% of a sector's energy consumption are grouped into "misc. energy use" and may not be labelled. Similarly, rate labels (shown at the bottom) are grouped into "misc. rates" using the same threshold.

Off-road

Fossil fuels used in the off-road sector are untaxed when used for commercial navigation, commercial aviation (not visible in the figure), or rail, as shown in Figure 3.[3] Natural gas is taxed, albeit at a low rate that is barely discernible in the figure.

Figure 3. Effective tax rates on energy use in the off-road sector



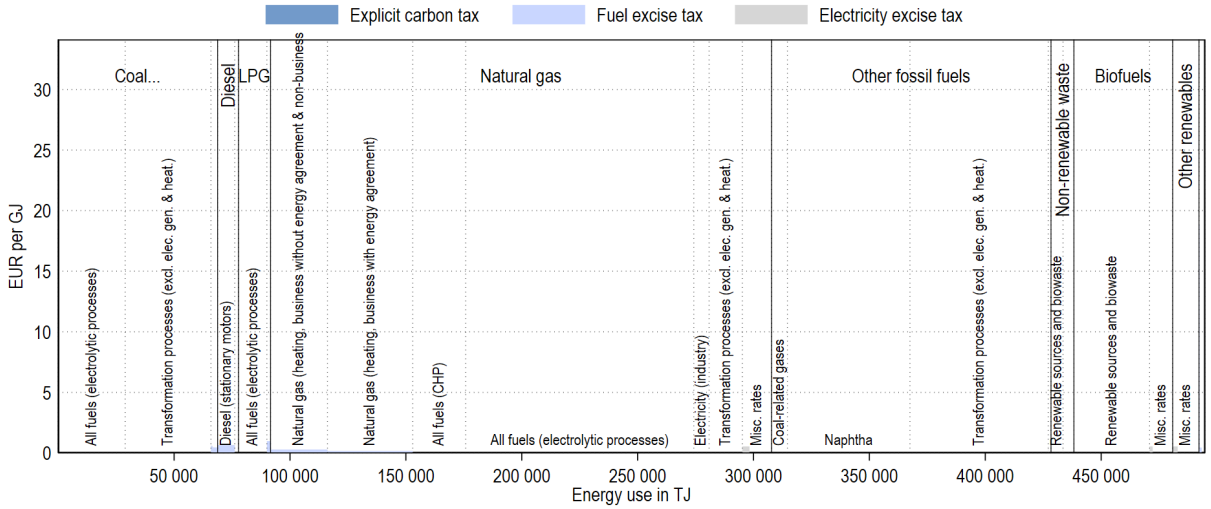
Note: Tax rates applicable on 1 July 2018. Energy use data is for 2016 and adapted from IEA (2018[2]), *World Energy Statistics and Balances.* Energy categories (labelled at the top) that represent less than 1% of a sector's energy consumption are grouped into "misc. energy use" and may not be labelled. Similarly, rate labels (shown at the bottom) are grouped into "misc. rates" using the same threshold.

[3] Diesel and kerosene used in private pleasure craft and private plants are taxed (not modelled in TEU due to a lack of consumption data)

Industry

Coal and coke use is taxed in principle, but in practice, most use benefits from exemptions (Figure 4). Diesel is taxed. LPG is taxed unless exemptions apply. Natural gas is generally taxed, albeit at low rates that are barely discernible in the figure – given that the cotisation fédérale is not included in TEU. Natural gas, and other fuels, are not taxed when used in combined heat and power (CHP) plants. Other fossil fuels, which are mainly used for industrial processes, are generally not taxed. Electricity produced by autoproducer electricity plants is in principle subject to the electricity excise tax (see electricity section below).

Figure 4. Effective tax rates on energy use in the industry sector



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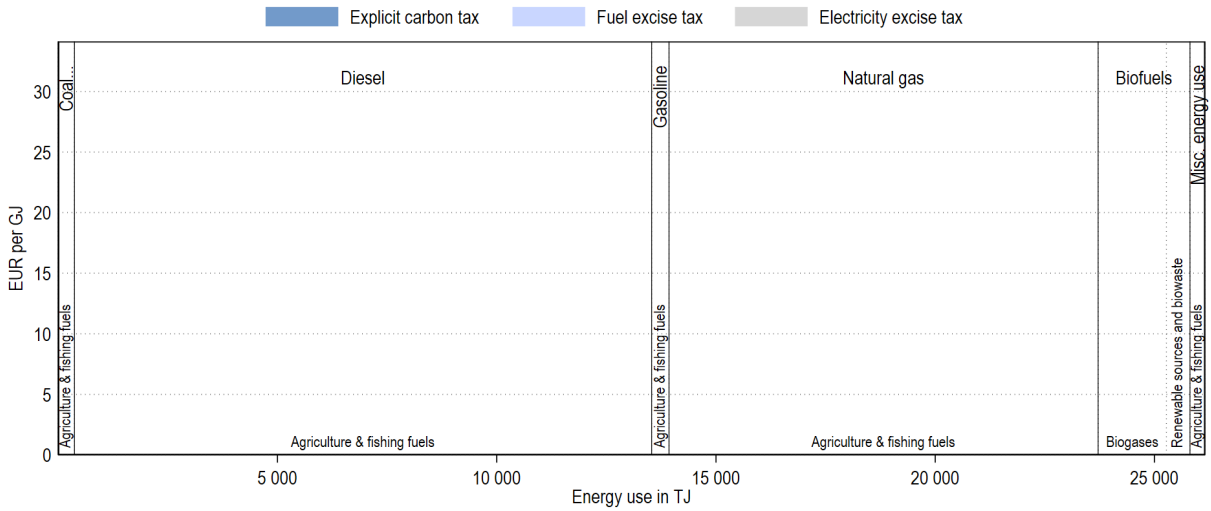
Agriculture and fisheries

Energy use in the agriculture and fisheries sector is not taxed (Figure 5).

Figure 5. Effective tax rates on energy use in the agriculture & fisheries sector



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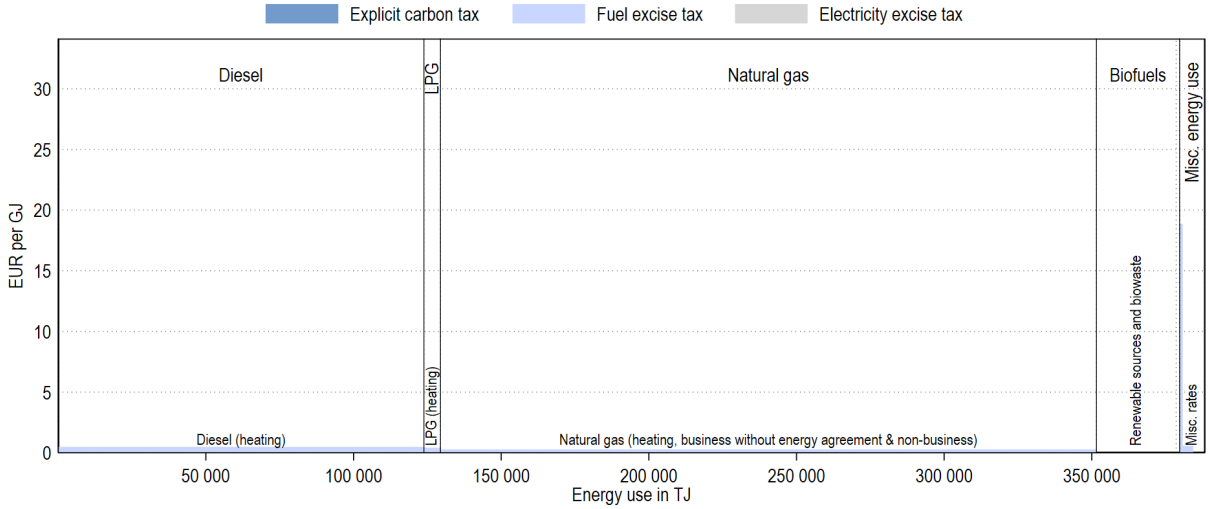
Residential and commercial

Fossil fuel use in the residential and commercial sector is taxed (Figure 6). The tax on natural gas is barely discernible in the figure (TEU does not include the *cotisation fédérale*). Biofuels are not taxed as in the other sectors.

Notice that TEU reports the energy use associated with electricity and district heating consumption in the industry and electricity sector as that is where the primary energy consumption occurs.

Figure 6. Effective tax rates on energy use in the residential & commercial sector



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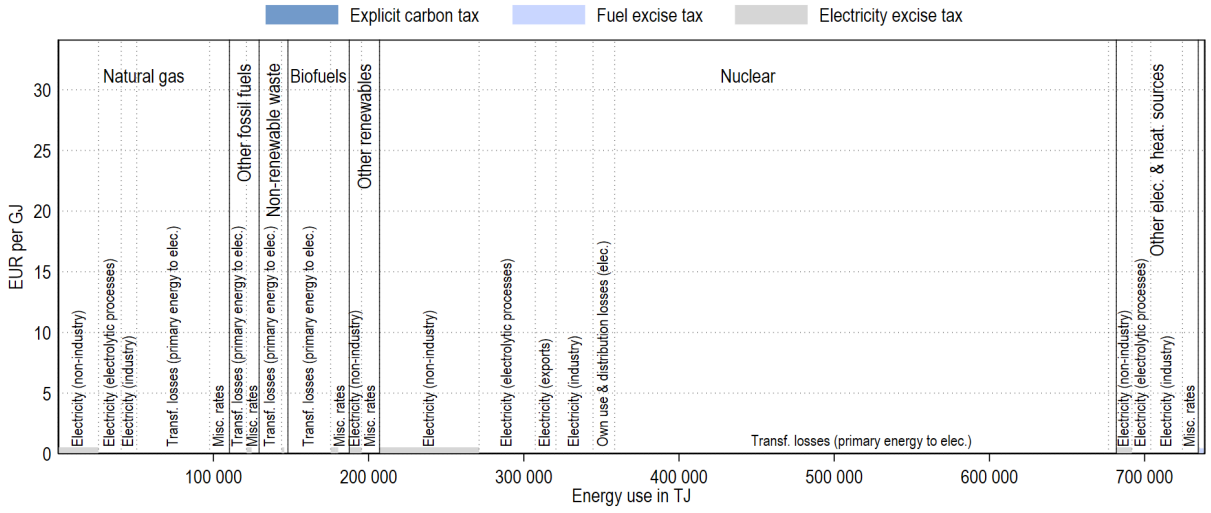
Electricity

Figure 7 shows how the electricity sector, as defined in TEU, is taxed in Belgium. Coal and coke products that are used to generate electricity are taxed, and so is fuel oil, but their use is low and not discernible in the figure. Natural gas is not taxed when used to generate electricity. Notice, however, that the electricity sector is covered by the EU ETS (OECD, 2018[1]). Non-renewable waste, biofuels and other renewables, as well as nuclear are not taxed as inputs either.

The use of electricity, on the other hand, is subject to a tax if it is used by non-industrial consumers (=<1kV). This rate is barely visible in the figure because TEU uses the same scale for all sectors in a given country to facilitate inter-sectoral comparisons (and does not include the *cotisation fédérale*). As is standard, electricity exports are not subject to the electricity tax in Belgium, but may be subject to electricity taxes elsewhere.

Figure 7. Effective tax rates on energy use in the electricity sector



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References

IEA (2018), "Extended world energy balances", *IEA World Energy Statistics and Balances* (database), http://dx.doi.org/10.1787/data-00513-en (accessed on 16 October 2018). [2]

OECD (2018), *Effective Carbon Rates 2018: Pricing Carbon Emissions Through Taxes and Emissions Trading*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264305304-en. [1]