

Taxing Energy Use 2019: Country Note – Czech Republic

This note explains how the Czech Republic 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 the Czech Republic can be found in Chapter 2 of the report. Chapter 3 additionally shows effective carbon tax rates per tonne of CO₂, and presents the corresponding carbon tax profiles for all countries. The report also contains StatLinks to the official data.

Structure of energy taxation

Energy and carbon taxes in the Czech Republic 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 the Czech Republic are the following:

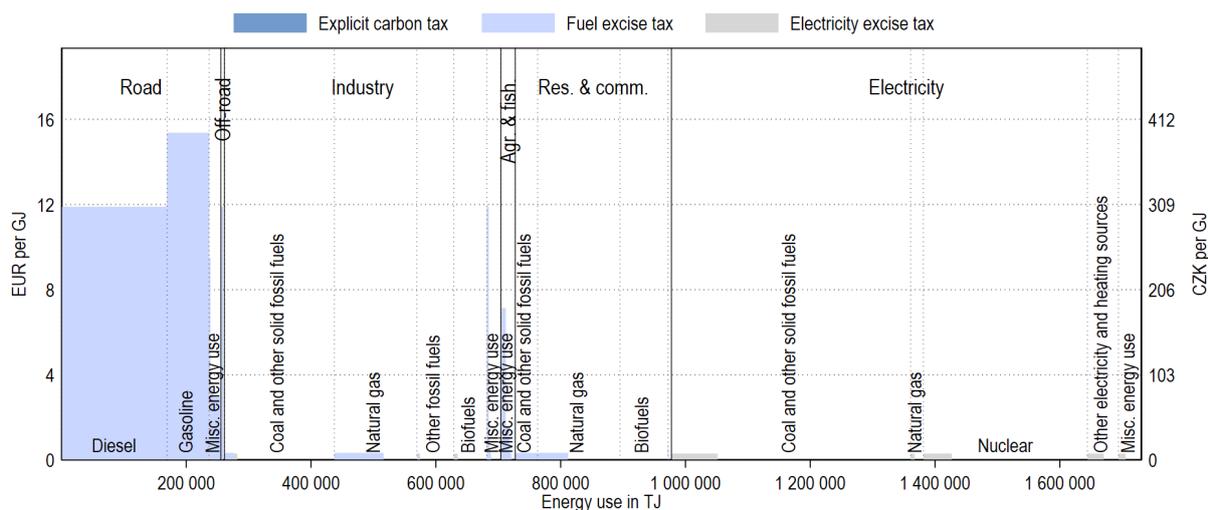
- The Mineral Oil Tax (*daň z minerálních olejů*);
- The Natural Gas Tax and Certain Other Gases Tax (*daň ze zemního plynu a některých dalších plynů*);
- The Solid Fuel Tax (*daň z pevných paliv*);
- The Electricity Tax (*daň z elektřiny*).

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

Effective tax rates on energy use in the Czech Republic

The taxes result in effective tax rates that can differ across energy products and uses, as described below. Figure 1 provides an overview of how energy and carbon taxes apply 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

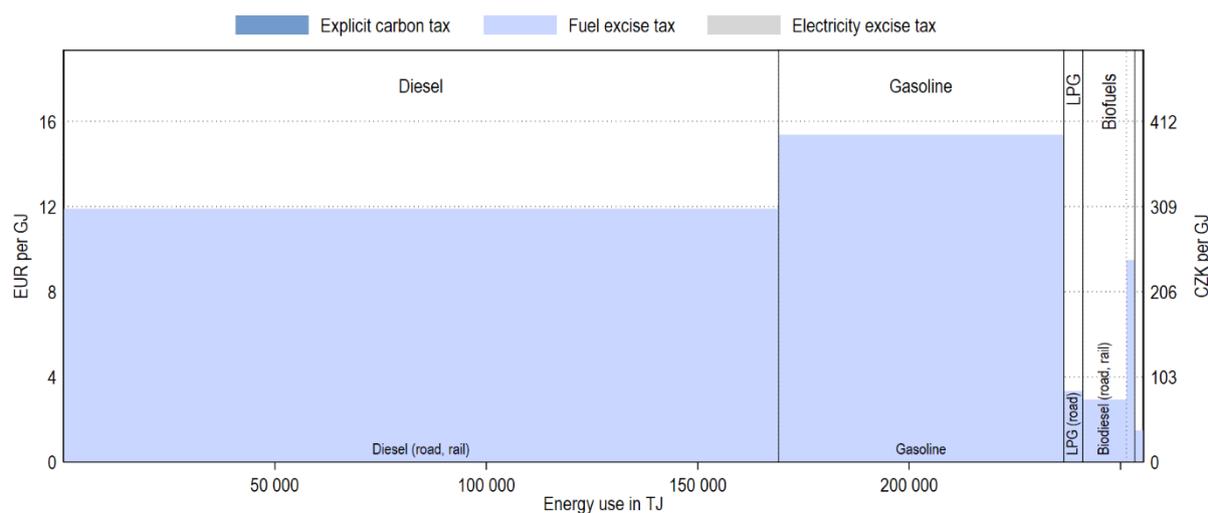


Note: Tax rates applicable on 1 July 2018. Energy use data is for 2016 and adapted from IEA (2018^[2]), *World Energy Statistics and Balances*. Energy categories (labelled at the bottom) that represent less than 1% of a country's energy consumption are grouped into "misc. energy use" and may not be labelled.

Road

In the road sector, gasoline is taxed at the highest rate, followed by diesel. LPG and natural gas use (not labelled in the figure) are taxed at significantly lower rates than gasoline and diesel. Bioethanol and biodiesel used for propellant purposes, typically blended together with fossil fuels, are taxed at lower rates than their fossil fuel equivalents.¹

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



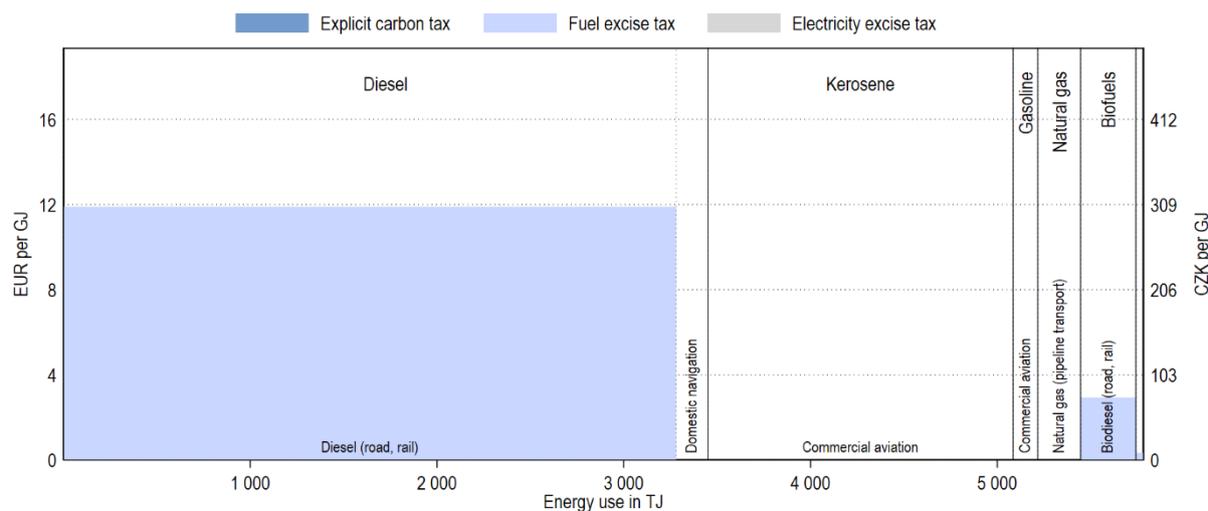
Note: Tax rates applicable on 1 July 2018. Energy use data is for 2016 and adapted from IEA (2018^[2]), *World Energy Statistics and Balances*. Energy categories (labelled at the top) that represent less than 1% of a sector's energy consumption are grouped into "misc. energy use" and may not be labelled.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

¹ Applicable rates may vary depending on the share of biofuels in the blends, as well as the extent to which biofuels meet sustainability criteria. TEU used the 1 July 2018 rate for E85 where 70 % of ethanol meets the sustainability criteria in blend as an upper bound estimate of the applicable rate.

Off-road

In the off-road sector, diesel used in the rail sector is taxed as in road transport. Fuels used for domestic navigation and commercial aviation are untaxed. Natural gas used for storing and transporting natural gas (“pipeline transport”) is exempt. Biodiesel used in railways is taxed as in road transport.

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.

Industry

In the **industry** sector, coal and coke products as well as natural gas, most other gases, and fuel oil (the latter is grouped under misc. energy use) are in principle taxed at their standard rate when used for heating and stationary combustion.

However, these fossil fuels are generally not taxed when used:

- for energy transformation (e.g. coking coal to coke);
- in mineralogical and metallurgical processes;
- as inputs in combined heat and power (CHP) plants with the exception of diesel that is taxed at the heating rate;²
- as inputs in autoproducer electricity plants.³

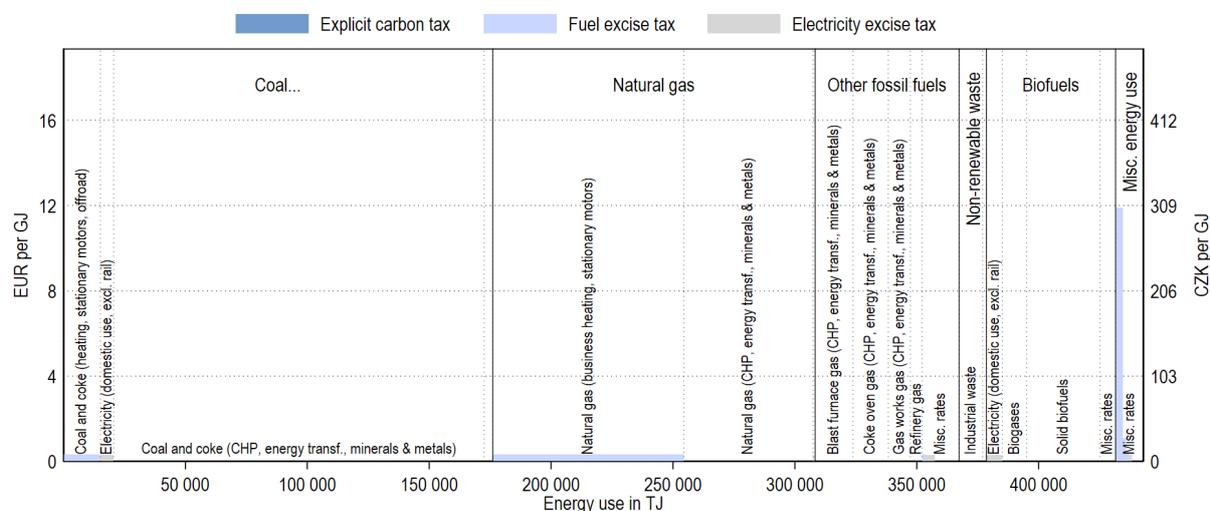
As in other sectors, renewable waste and non-liquid biofuels are not taxed. Electricity produced by autogeneration plants with a capacity of more than 2 MW are subject to electricity excise taxes under the same conditions as main-producer electricity plants.⁴

² This tax exemption for cogeneration only applies to generators with a minimum efficiency and on condition that the heat is delivered to households. TEU assumes that all CHP plants reported by the IEA comply with these requirements.

³ Certain small autoproducer plants may not be eligible for this exemption (see footnote below).

⁴ Electricity produced from taxed natural gas or taxed solid fuels is exempt from the electricity excise tax when such electricity is consumed directly within the facility or is supplied through the grid in which only such electricity is supplied, on condition that the installation's capacity does not exceed 2 MW.

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

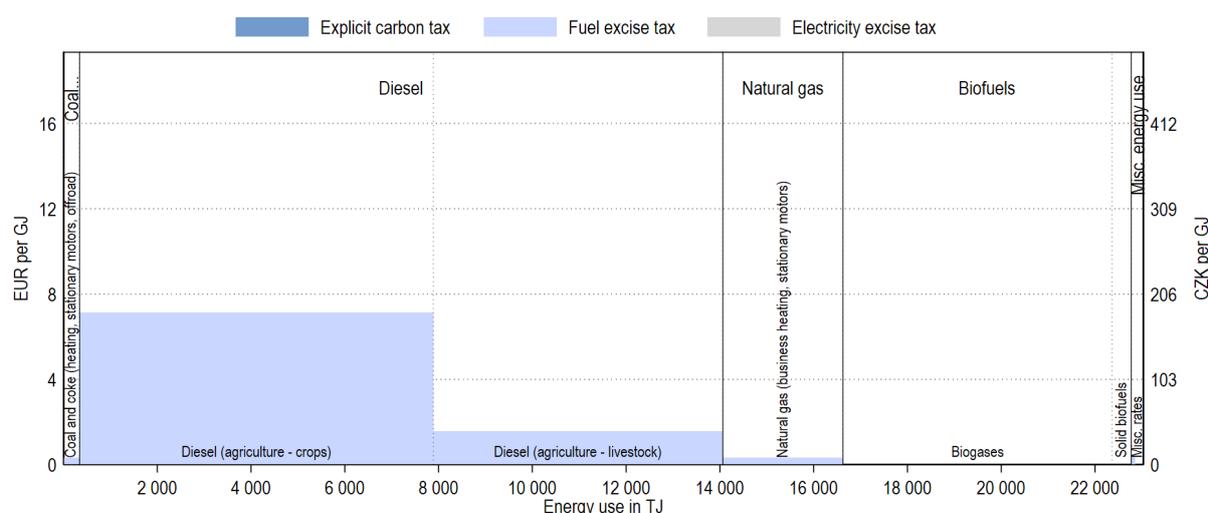


Note: Tax rates applicable on 1 July 2018. Energy use data is for 2016 and adapted from IEA (2018^[2]), *World Energy Statistics and Balances*. Energy categories (labelled at the top) that represent less than 1% of a sector's energy consumption are grouped into "misc. energy use" and may not be labelled.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

Agriculture and fisheries

In the agriculture and fishing sectors, coal and coke are taxed at the standard rate. Diesel used in agriculture benefits from partial tax refunds, which is shown as reduced rates. The refund is larger for diesel used for livestock farming. Natural gas used for heating purposes is taxed at the business rate.⁵ Biogases and solid biofuels are not taxed as in the other sectors.

Figure 5. Effective tax rates on energy use in agriculture and fisheries



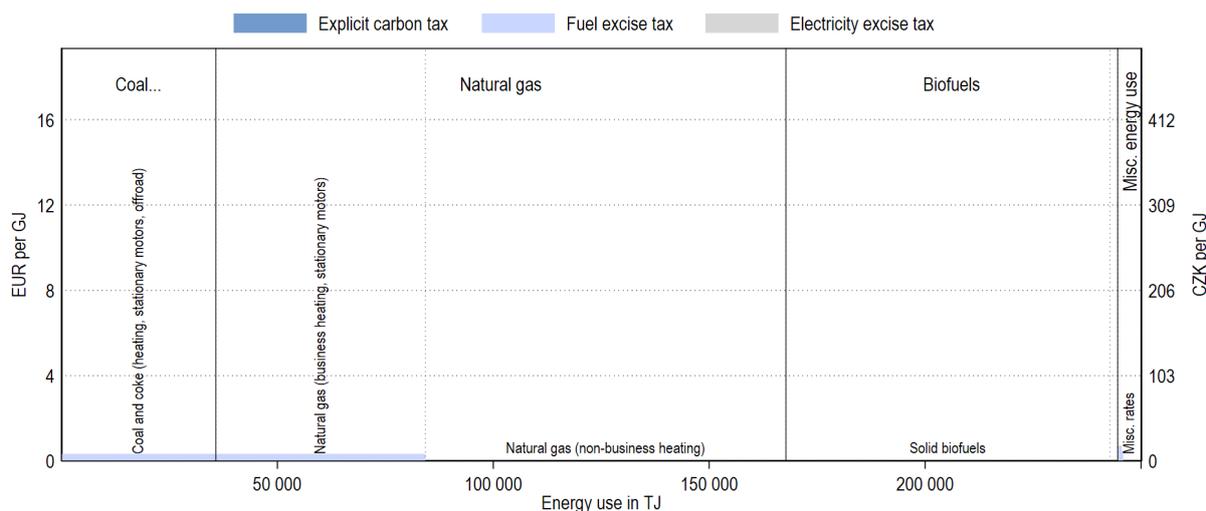
Note: Tax rates applicable on 1 July 2018. Energy use data is for 2016 and adapted from IEA (2018^[2]), *World Energy Statistics and Balances*. Energy categories (labelled at the top) that represent less than 1% of a sector's energy consumption are grouped into "misc. energy use" and may not be labelled.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

⁵ Natural gas that is used as propellant is taxed at its motor fuel rate. However, TEU assumes that all reported natural gas use for agriculture is heating use.

Residential and commercial

In the residential and commercial sector, coal and coke products are taxed at the standard rate. Natural gas is taxed for business use, but is untaxed if used by households. Solid biofuels are not taxed as in the other sectors.

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

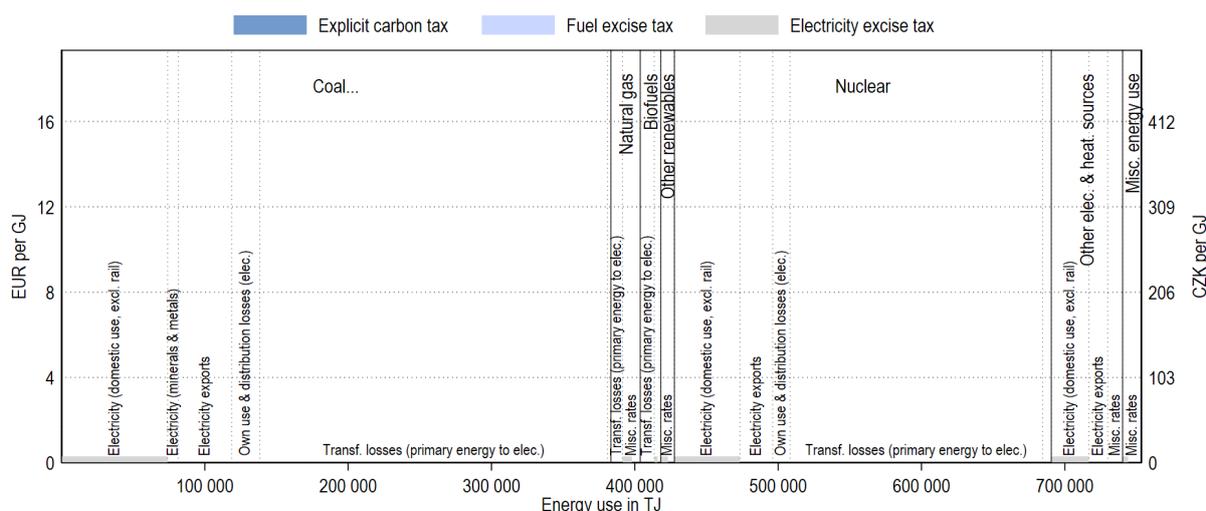


Note: Tax rates applicable on 1 July 2018. Energy use data is for 2016 and adapted from IEA (2018^[2]), *World Energy Statistics and Balances*. Energy categories (labelled at the top) that represent less than 1% of a sector's energy consumption are grouped into "misc. energy use" and may not be labelled.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

Electricity

All energy sources used to generate electricity are untaxed. Electricity consumption, on the other hand, is subject to an electricity excise tax (per MWh), unless when it is used in electrolytical, mineralogical and metallurgical processes, or in rail transport (not visible in the figure). Electricity exports are not taxed in the Czech Republic, but may be subject to electricity taxes elsewhere.

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

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]