

Taxing Energy Use 2019: Country Note – Italy

This note explains how Italy 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 Italy 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 in Italy

Energy taxes in Italy 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 Italy are the following:

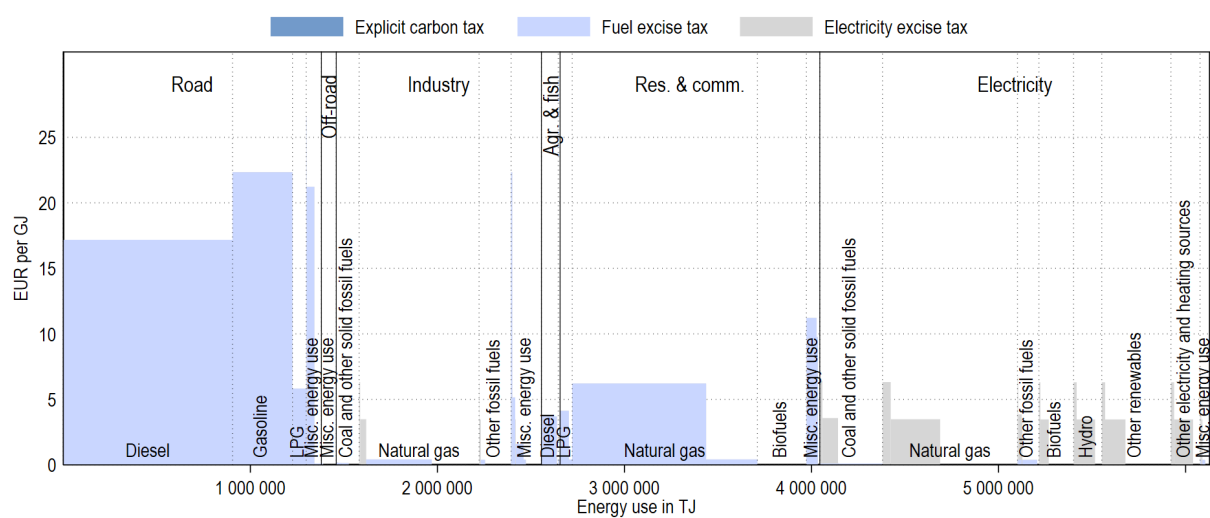
- An excise tax on energy applies to most use of oil products, natural gas and coal and coke. Fuels used to generate electricity are also taxed, but at substantially lower rates.
- Electricity consumption is in principle taxed (per MWh)

Italy 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 Italy

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

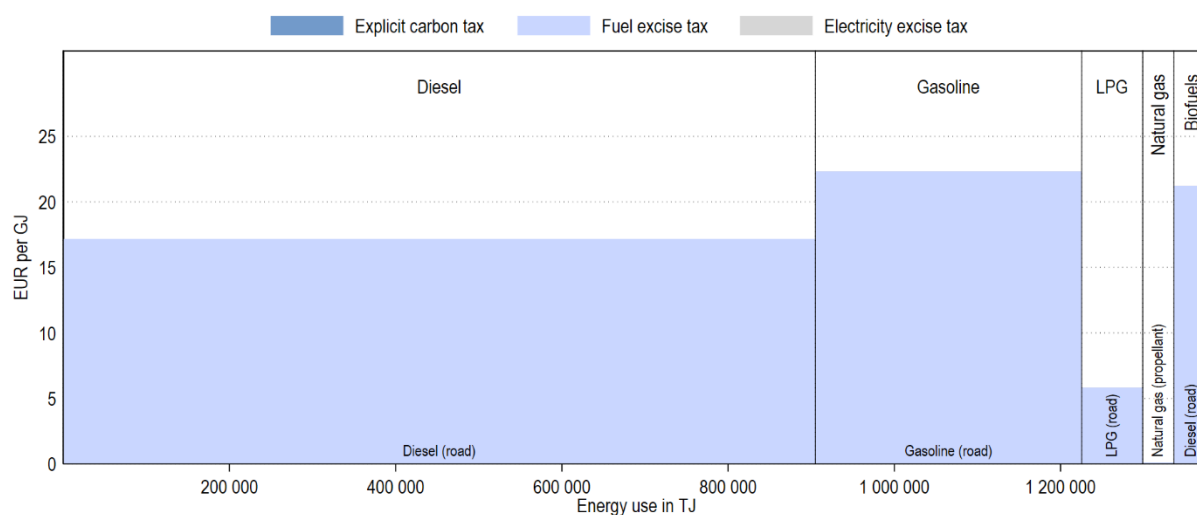


Note: Tax rates applicable on 1 July 2018. Energy use data is for 2016 and adapted from IEA (2018^[2]), *World Energy Statistics and Balances*. Energy categories (labelled at the bottom) that represent less than 1% of a country's energy consumption are grouped into "misc. energy use" and may not be labelled.

Road

In the road sector, gasoline is taxed at a higher rate than diesel fuel.¹ LPG and natural gas are taxed, but the latter's tax rate is too low to be discernible in the figure. Biofuels are taxed at the same statutory rates as their fossil fuel equivalents. However, due to biofuels' lower heating value, their effective rate is higher.

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



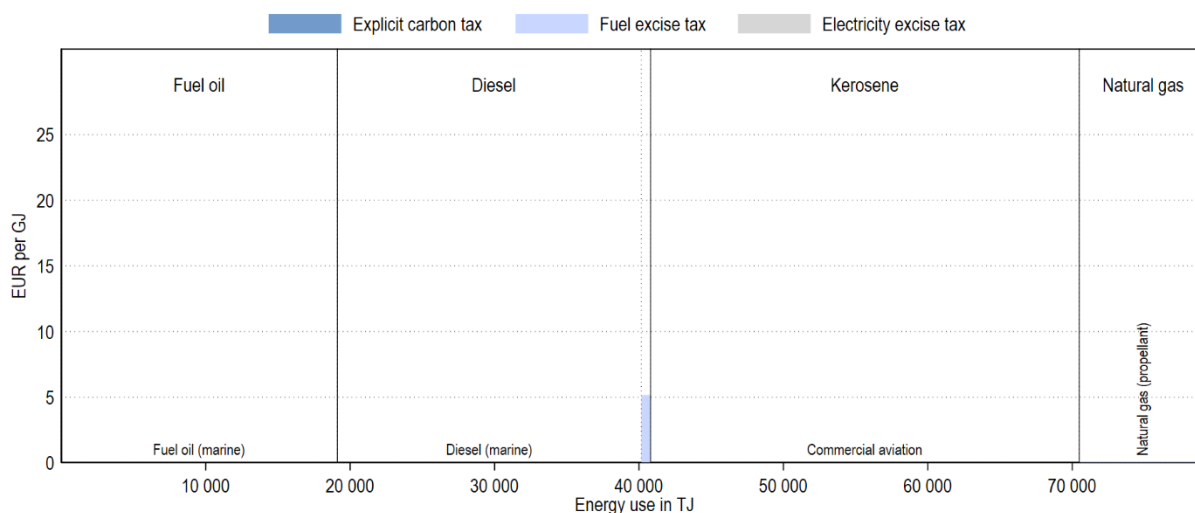
Note: Tax rates applicable on 1 July 2018. Energy use data is for 2016 and adapted from IEA (2018^[2]), *World Energy Statistics and Balances*. Energy categories (labelled at the top) that represent less than 1% of a sector's energy consumption are grouped into "misc. energy use" and may not be labelled.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

¹ According to the Italian catalogue of environmentally friendly subsidies and environmentally harmful subsidies, diesel fuel used for freight and passenger transport benefits from a refund under certain conditions. Due to data limitations, this refund is not included in TEU.

Off-road

Fuels used for domestic navigation (“marine”) and commercial aviation are not taxed in Italy. Diesel used by railways pays 30% of the road rate (not labelled in the figure). Natural gas used for propellant purposes is taxed, albeit at a rate that is not discernible in the figure.

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



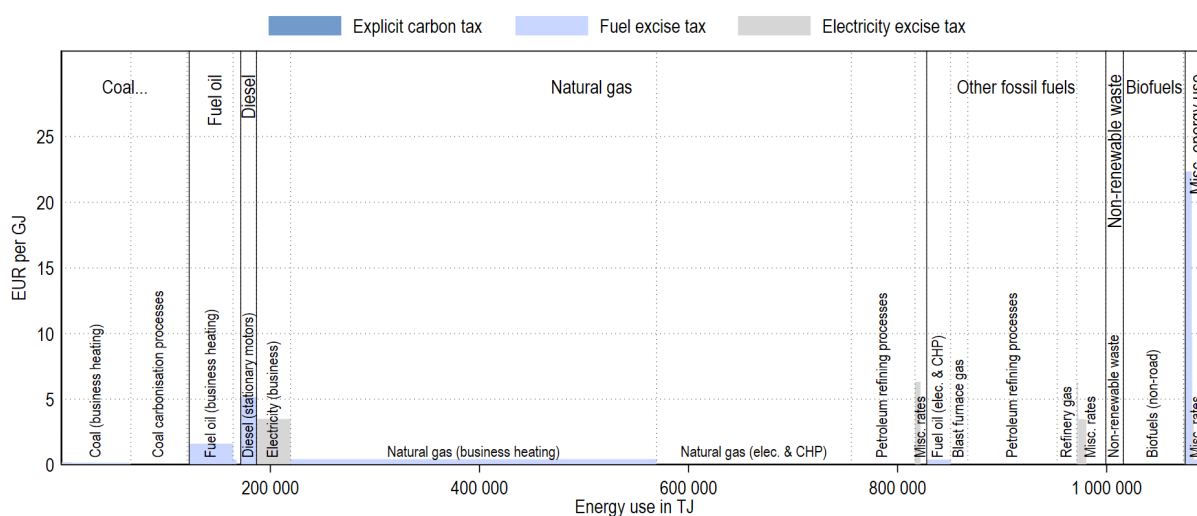
Note: Tax rates applicable on 1 July 2018. Energy use data is for 2016 and adapted from IEA (2018^[2]), *World Energy Statistics and Balances*. Energy categories (labelled at the top) that represent less than 1% of a sector’s energy consumption are grouped into “misc. energy use” and may not be labelled.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

Industry

Fossil fuels consumed in the industry are generally taxed, but often at rates that are too low to be discernible in the figure. Natural gas is generally taxed at rates that vary with the consumption volume (as rates are low, they are difficult to see in the figure). Non-renewable waste, biofuels are other renewables are not taxed.

Electricity produced by autogeneration plants is generally subject to electricity excise taxes under the same conditions as main-producer electricity plants (see next section).²

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



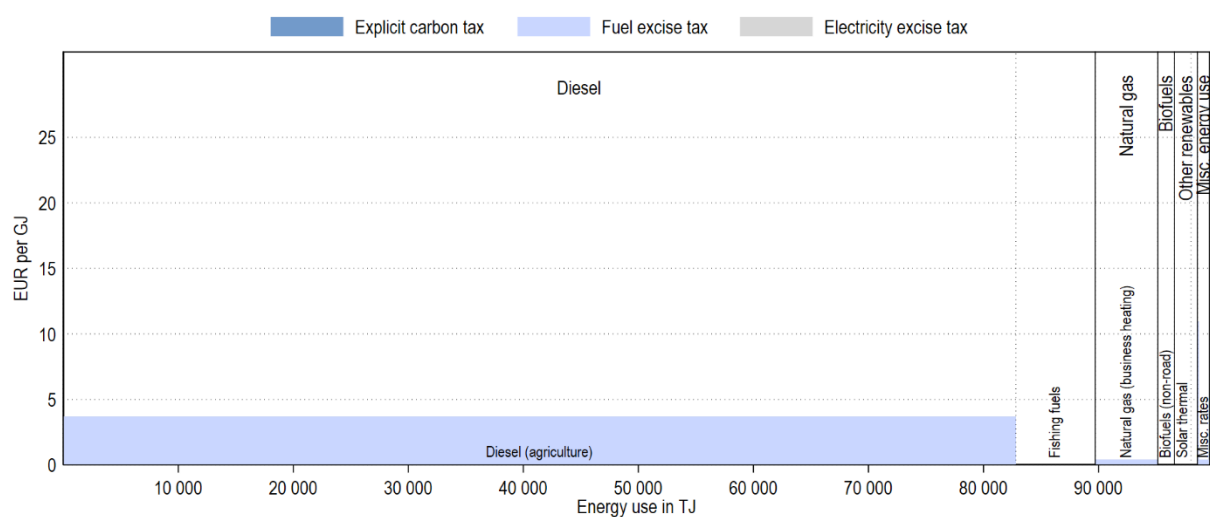
Note: Tax rates applicable on 1 July 2018. Energy use data is for 2016 and adapted from IEA (2018^[2]), *World Energy Statistics and Balances*. Energy categories (labelled at the top) that represent less than 1% of a sector’s energy consumption are grouped into “misc. energy use” and may not be labelled.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

² The exemption from excise on electricity produced by RES in plants with a capacity up to 20 kW for self-consumption is not modelled due to data constraints.

Agriculture and fisheries

Diesel and gasoline used in agriculture are taxed, albeit at lower rates than in road transport. Fuels used in fishing are not taxed. Natural gas is taxed. Biofuels and other renewables are not taxed.

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

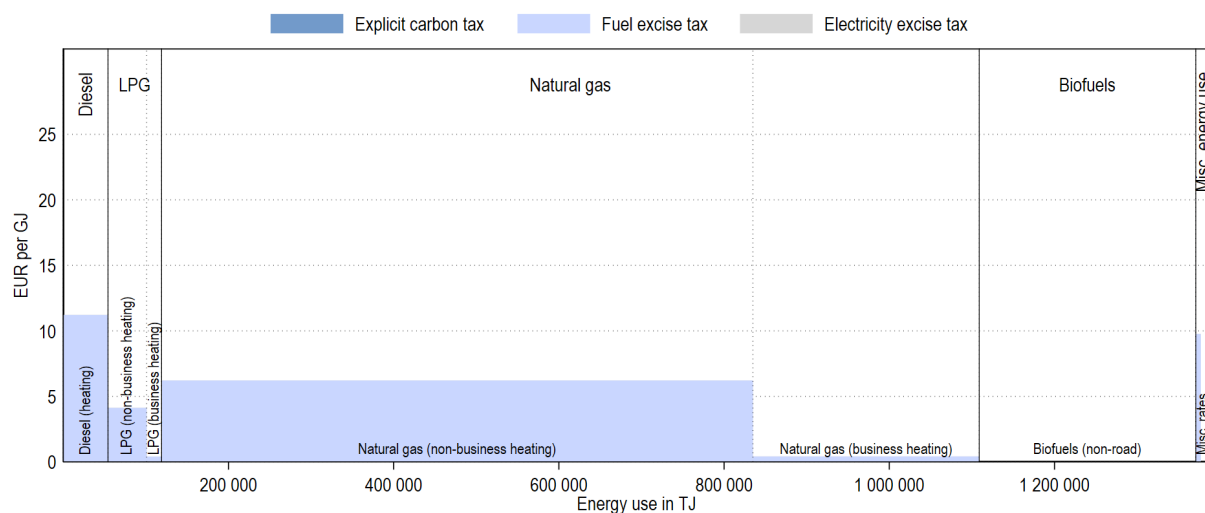


Note: Tax rates applicable on 1 July 2018. Energy use data is for 2016 and adapted from IEA (2018^[2]), *World Energy Statistics and Balances*. Energy categories (labelled at the top) that represent less than 1% of a sector's energy consumption are grouped into "misc. energy use" and may not be labelled.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

Residential and commercial

In the residential and commercial sectors, fossil fuels are taxed, albeit at lower rates than in road transport. The taxation of natural gas use by households in Italy is differentiated by consumption level.³ Commercial users benefit from lower rates. Biofuels are not taxed, as in the other non-road 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.

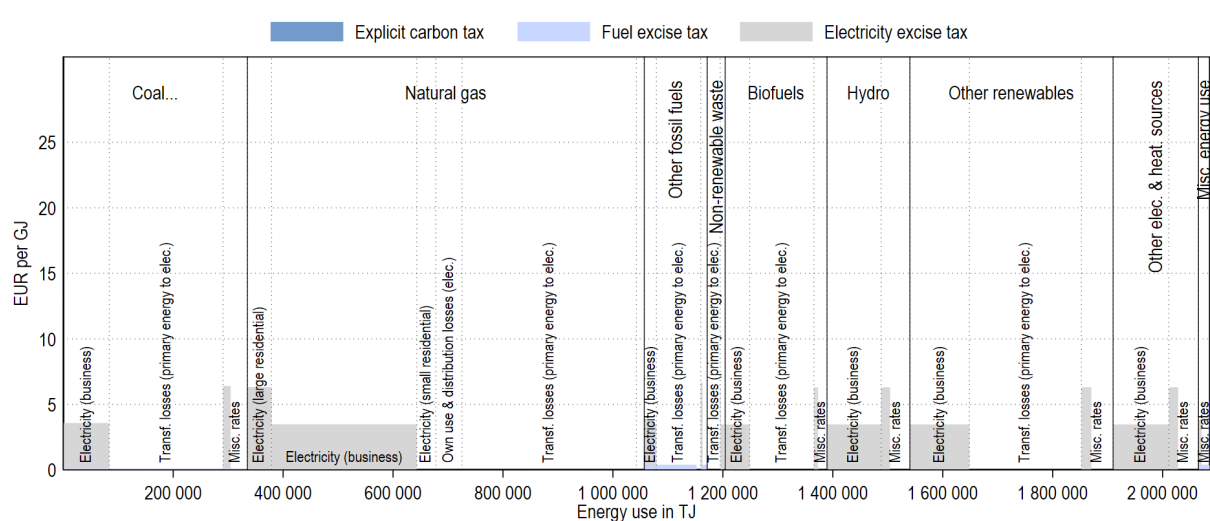
³ However, since data on natural gas consumption volumes was not available, TEU assumes that the highest possible rate applies. Reduced rates paid by households in Southern Italy are not modelled either.

Electricity

Coal and coke products, natural gas, fuel oil, diesel LPG, and natural gas that are used to generate electricity are taxed, albeit at rates that are too low to be discernible in the figure.

In addition, electricity consumption is in principle subject to an electricity excise tax (per MWh). The rate is generally higher for non-business use, and lower for business use. However, small residential electricity consumers benefit from a tax exemption. Large business users additionally benefit from lower rates for higher consumption volumes.⁴ Own use by the electricity industry is not taxed, and neither are exports, which may, however, be subject to electricity taxes in other countries.

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]

⁴ These reduced rates for large users are not modelled due to data constraints.