# Taxing Energy Use 2019: Country Note – France

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

#### **Structure of energy taxation in France**

Energy and carbon taxes in France 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 France are the following:

- The Excise Tax on Coal, Coke and Lignite (Taxe intérieure de consommation sur les houilles, lignites et cokes – TICC) applies to such fossil fuels.
- The Excise Tax on Energy Products (Taxe intérieure de consommation sur les produits énergétiques - TICPE) applies to liquid and gaseous fossil fuels and biofuels.
- The Excise Tax on Natural Gas (Taxe intérieure de consommation sur le gaz naturel – TICGN) applies to natural gas when used for heating purposes.
- The Carbon Charge Component (composante carbone, also known as Contribution Climat-Énergie) applies to all fossil fuel use at a nominal rate of EUR 44.6 per  $tCO_2$
- The Excise Tax on Final Electricity Consumption (Taxe intérieure sur la consommation finale d'électricité – TICFE).

France participates in the EU emissions trading system (ETS) (OECD, 2018<sub>[1]</sub>). Industries that participate in the EU ETS may benefit from lower tax rates on energy use, as further discussed below. Permit prices are not shown in the energy tax profiles.

#### Effective tax rates on energy use in France

Tax rates can differ across energy products and users, as described below. Figure 1 provides an overview of how energy and carbon 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.<sup>1</sup>

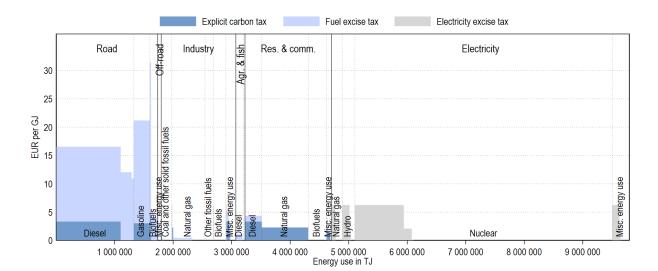


Figure 1. Effective tax rates on energy use by sector and energy category

Note: Tax rates applicable on 1 July 2018. Energy use data is for 2016 and adapted from IEA (2018<sub>[2]</sub>), 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.

<sup>&</sup>lt;sup>1</sup> Estimations are partly based on the ELFE model from CGDD (Commissariat Général au Développement Durable).

#### Road

Figure 2 shows that within the road sector, gasoline is taxed at a higher effective tax rate than diesel, but this diesel differential has decreased in recent year as steps were taken towards a gradual convergence of the rates. Diesel fuel is taxed at a lower effective tax rate when used by commercial goods vehicles (weighing over 7.5 tonnes) and by commercial passenger vehicles (buses and coaches and small touristic trains). Biofuels are also taxed.

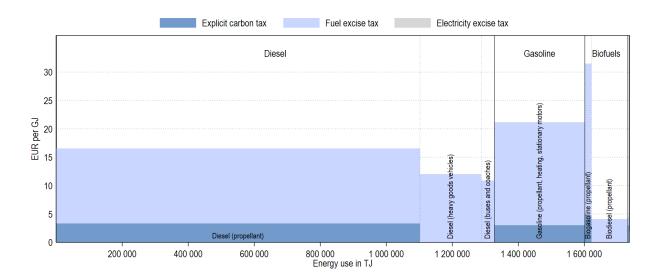


Figure 2. Effective tax rates on energy use in the road sector

Note: Tax rates applicable on 1 July 2018. Energy use data is for 2016 and adapted from IEA (2018<sub>[2]</sub>), 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

In the off-road sector (Figure 3), fossil fuels are untaxed when used for commercial navigation ("marine") and commercial aviation.<sup>2</sup> Diesel used for railway transport is taxed, albeit at a lower rate than when used as a road fuel. Natural gas used for pipeline transport is taxed.

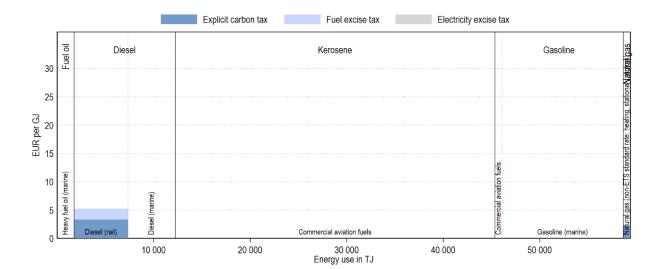


Figure 3. Effective tax rates on energy use in the off-road sector

*Note*: Tax rates applicable on 1 July 2018. Energy use data is for 2016 and adapted from IEA (2018<sub>[2]</sub>), *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.

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<sup>&</sup>lt;sup>2</sup> Diesel and kerosene used in private pleasure craft and private planes are taxed (not modelled in TEU due to a lack of consumption data).

## Industry

Fossil fuels used in the industry sector are taxed in principle (Figure 4). Entities that are covered by the EU ETS benefit from rate reductions for their use of coal and coke products as well as natural gas. Energy-intensive industries outside the EU ETS that are at risk of carbon leakage are equally entitled to a reduced rate.

Fuels used in mineralogical, metallurgical, electrolysis and chemical reduction processes are effectively untaxed. Energy industry own use, distribution losses of natural gas, and transformation process use are not taxed either. Non-renewable waste and biofuels are not taxed.

Electricity from autoproducer plants is generally subject to electricity excise taxes (see below) unless the electricity is generated in small autoproducer plants that self-consume the electricity.

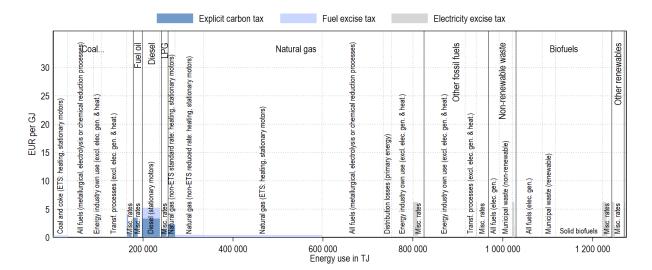


Figure 4. Effective tax rates on energy use in the industry sector

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

Most fossil fuel use in the agriculture and fisheries sector is taxed (Figure 5).<sup>3</sup> Diesel used for fishing is effectively untaxed. Biofuels used in the agricultural sector, i.e. solid biofuels and biogases, are not taxed.

Explicit carbon tax Fuel excise tax Electricity excise tax Natural gas LPG Diese 30 25 EUR per GJ 20 15 latural gas (agriculture) 10 Diesel (fishing) Solid biofuels 5 20 000 40 000 60 000 100 000 120 000 80 000 140 000 Energy use in TJ

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

*Note*: Tax rates applicable on 1 July 2018. Energy use data is for 2016 and adapted from IEA (2018<sub>[2]</sub>), *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.

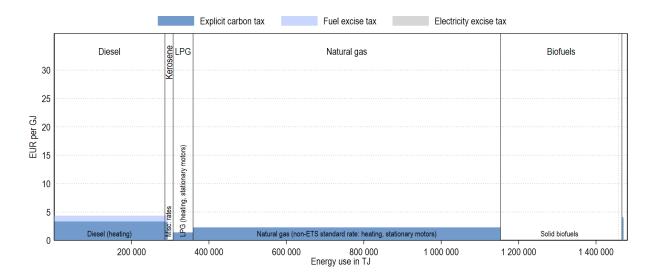
<sup>&</sup>lt;sup>3</sup> Agricultural fuel use benefits from a partial refund of the TICPE for heavy fuel oil and diesel, LPG and natural gas (French Ministry of the Environment, 2018<sub>[3]</sub>). In TEU, these refunds are shown as reduced tax rates. In the rare case where gasoline is used in the sector, it is taxed as in road transport (gasoline consumption is too small to be labelled in the figure).

#### Residential and commercial

In the residential and commercial sector (Figure 6), fossil fuels are taxed, albeit at lower rates than in road transport. Biofuels are not taxed.

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



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

Figure 7 shows how the electricity sector, as defined in TEU, is taxed in France. The fuels used to generate electricity are not taxed, but the electricity sector is covered by the EU ETS (OECD, 2018[1]).

The final consumption of electricity, on the other hand, is taxed in principle. ETS-covered and electricity-intensive industries pay reduced rates.<sup>4</sup> Electricity used for mineralogical, metallurgical, electrolysis and chemical reduction processes is effectively untaxed.

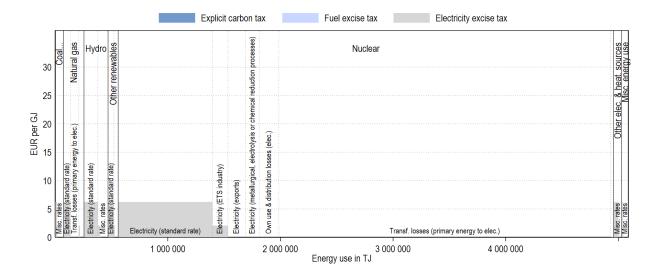


Figure 7. Effective tax rates on energy use in the electricity sector

*Note*: Tax rates applicable on 1 July 2018. Energy use data is for 2016 and adapted from IEA (2018<sub>[2]</sub>), *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

French Ministry of the Environment (2018), *Fiscalité des énergies*, <a href="https://www.ecologiquesolidaire.gouv.fr/fiscalite-des-energies">https://www.ecologiquesolidaire.gouv.fr/fiscalite-des-energies</a>.

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

OECD (2018), Effective Carbon Rates 2018: Pricing Carbon Emissions Through Taxes and Emissions Trading, OECD Publishing, Paris, <a href="https://dx.doi.org/10.1787/9789264305304-en">https://dx.doi.org/10.1787/9789264305304-en</a>.

<sup>&</sup>lt;sup>4</sup> Due to data limitations, TEU only includes the highest applicable rate applied to such industries as an upper bound.