Taxing Energy Use 2019: Country Note – Ireland

This note explains how Ireland 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 <u>http://oe.cd/TEU2019</u>. 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 Ireland 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 Ireland

Energy taxes in Ireland 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 Ireland are the following:

- The Solid Fuel Carbon Tax (SFCT) applies to coal, coke and peat products consumption at a nominal rate of EUR 20 per tonne of CO₂.
- The Mineral Oil Tax (MOT) applies to liquid and gaseous fuels, including biofuels and natural gas used for propellant purposes. The MOT is composed of two components:
 - the Non-Carbon Charge Component ("fuel excise" according to the TEU methodology) applies to all fuels subject to the MOT, with the exception of kerosene and LPG used for non-propellant purposes;
 - \circ the Mineral Oil Tax Carbon Charge (MOTCC) component ("carbon tax" according to the TEU methodology), applies to all fuels subject to the MOT, with the exception of bioethanol and biodiesel, at a nominal rate of EUR 20 per tonne of CO₂;
- The Natural Gas Carbon Tax (NGCT) applies to natural gas consumption when used for non-propellant purposes, at a nominal rate of EUR 20 per tonne of CO₂.

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• The Electricity Tax, classified as an "electricity excise tax" according to the TEU methodology, applies to electricity consumption.

Ireland participates in the EU emissions trading system (ETS) (OECD, $2018_{[1]}$). Permit prices are not shown in the energy tax profiles. Industries that participate in the EU ETS are eligible for full or partial carbon tax refunds as further discussed below.

Effective tax rates on energy use in Ireland

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.

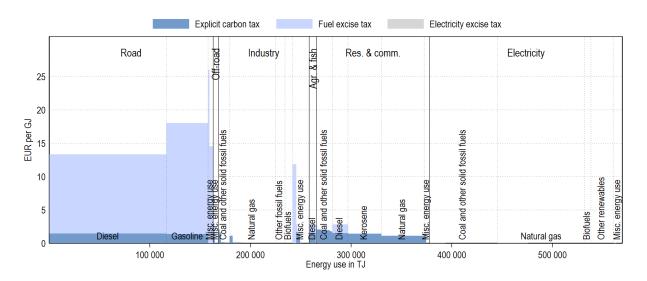


Figure 1. Effective tax rates on energy use by sector and energy category

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. Bioethanol and biodiesel are taxed at the same statutory MOT rate as their fossil fuel equivalents, minus their respective MOTCC. Biofuels' effective tax rate in EUR per GJ is nevertheless somewhat higher because these biofuels have a lower energy content per litre than their fossil fuel equivalents. Both natural gas and LPG are taxed at lower effective tax rates than gasoline and diesel, but their use is marginal and not visible in the figure.¹

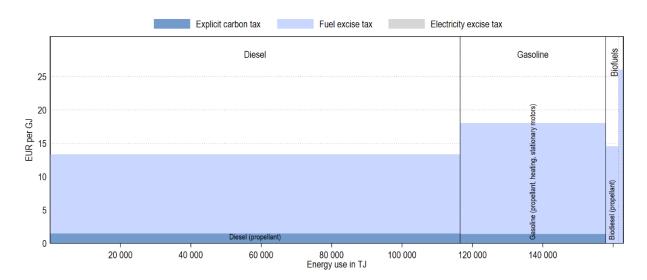
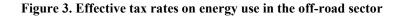


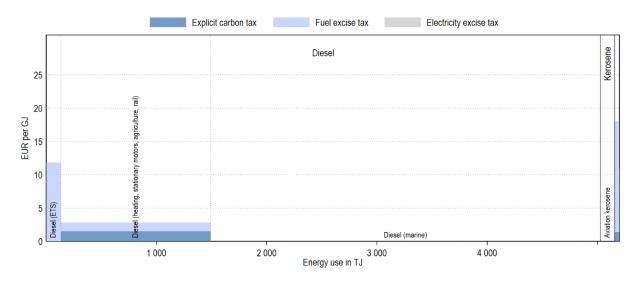
Figure 2. Effective tax rates on energy use in the road sector

¹ As of 2017, natural gas used for propellant purposes (vehicle gas) is subject to the MOT, not the NGCT.

Off-road

In the off-road sector, diesel used for railway transport is taxed at the rate of marked gas oil (MGO). Marine diesel and aviation kerosene used for commercial purposes are not subject to the MOT. In addition, aviation gasoline used for commercial purposes benefits from a partial refund on the Non-Carbon Charge Component (not labelled in the figure).





Industry

In the industry sector, coal and other solid fossil fuels are taxed as specified by the SFCT. Diesel is taxed at the statutory rate applied to marked gas oil (MGO). Natural gas in this sector is only subject to the NGCT. EU ETS participants benefit from partial refund on the SFCT paid on coal and coke products as well as on the NGCT. EU ETS participants also benefit from a full refund on the SFCT paid on peat products and the MOTCC paid on fuels. In addition, coal and coke products, and natural gas and used in chemical reduction, electrolytic and metallurgical processes benefit from a full tax relief. The portion of fuel used to generate electricity in High Efficiency Combined Heat and Power (labelled CHP in the figure) cogeneration plants benefits from a full tax relief.²

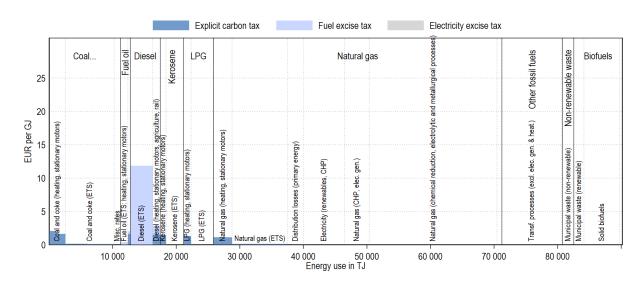
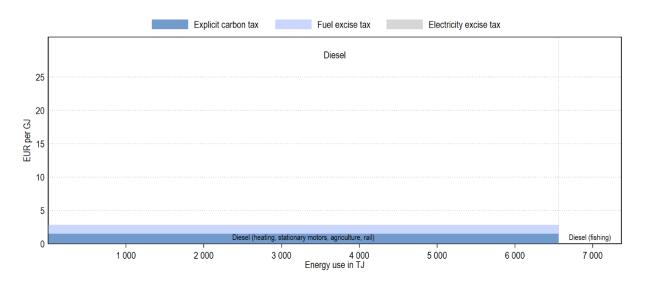


Figure 4. Effective tax rates on energy use in the industry sector

² TEU assumes that all CHP is high efficiency.

Agriculture & fisheries

Agricultural diesel is taxed at the rate applied to MGO. Fishing fuels benefit from a full tax refund.

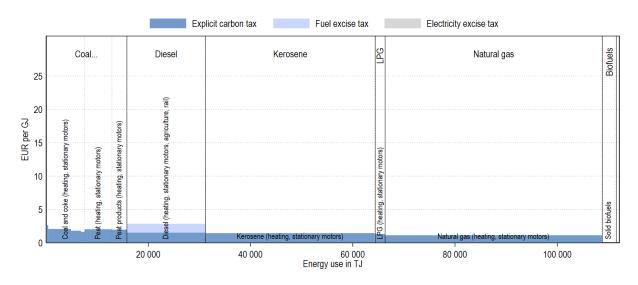




Residential & commercial

In the residential and commercial sector, fossil fuels are generally taxed. Coal and other solid fossil fuels are taxed as specified by the SFCT. Diesel and kerosene used for heating are taxed at reduced rates. Natural gas in this sector is only subject to the NGCT.





Electricity

In the electricity sector, no fuel or carbon taxes apply to fuels used for electricity generation, but the sector is covered by the EU ETS (OECD, $2018_{[1]}$). Electricity supply is taxed when used for business purposes. Electricity supplied for household use is not subject to the Electricity Tax but any other supply for non-business consumption (e.g. use by a public authority) is taxed. However, the rates are too low to be visible in the figure (which uses the same scale across all sectors for intra-country comparability). Electricity consumption additionally benefits from a full tax relief when the electricity is:

- generated from renewable energy sources, including from biomass and hydro, or comes from in High Efficiency Combined Heat and Power cogeneration;
- used for chemical reduction, electrolytic and metallurgical processes;
- consumed on board navigation vessels;
- used by the electricity industry (own use & distribution losses).

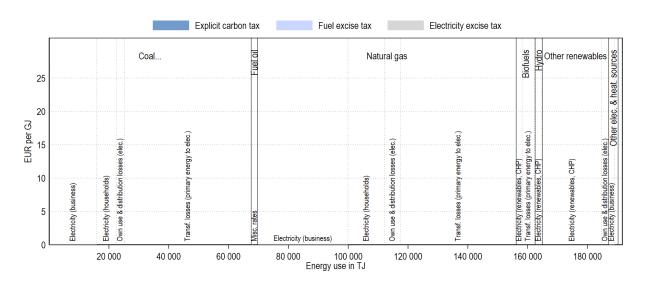


Figure 7. Effective tax rates on energy use in the electricity sector

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* ^[2] (database), <u>http://dx.doi.org/10.1787/data-00513-en</u> (accessed on 16 October 2018).
- OECD (2018), Effective Carbon Rates 2018: Pricing Carbon Emissions Through Taxes and [1] Emissions Trading, OECD Publishing, Paris, <u>http://dx.doi.org/10.1787/9789264305304-en</u>.