Taxing Energy Use 2019: Country Note – Australia

This note explains how Australia 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 Australia 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 Australia

As at 1 July 2018, the main taxes on energy use in Australia are the following:

- The Excise Duty applies to gasoline and diesel, heating oil, kerosene and fuel oil and other liquid petroleum-based products, LNG and CNG, denatured ethanol (bio-gasoline) and biodiesel.
  - The Fuel Tax Credit (FTC), equivalent to the full excise duty paid, is available to eligible businesses for gasoline, diesel, LPG, heating oil, fuel oil, LNG and CNG used for business purposes.[1] FTCs are not available where they relate to the use of light vehicles on public roads.
- The Road User Charge (RUC) applies to gasoline and diesel consumed by heavy vehicles travelling on public roads.

Excise rates on fuels and petroleum products (excl. aircraft fuels) are adjusted twice a year in line with the consumer price index (CPI).

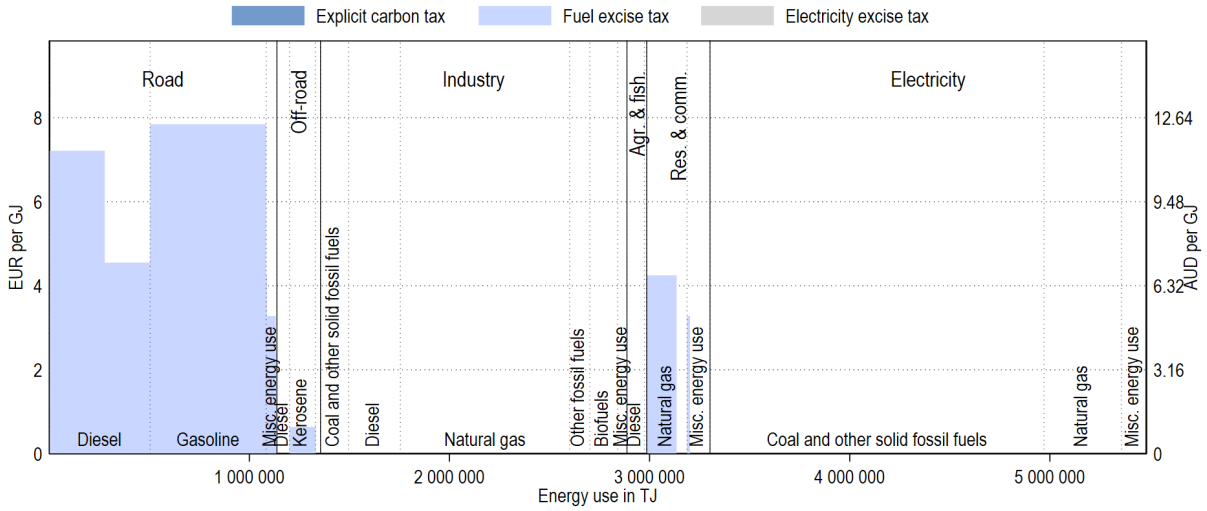
Australia does not have a CO_2 emissions trading system (OECD, 2018[1]).

[1] In line with previous vintages of TEU, it is assumed that all eligible entities have claimed and received these refunds. Notice that in TEU a full refund is treated as untaxed energy use.

Effective tax rates on energy use in Australia

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

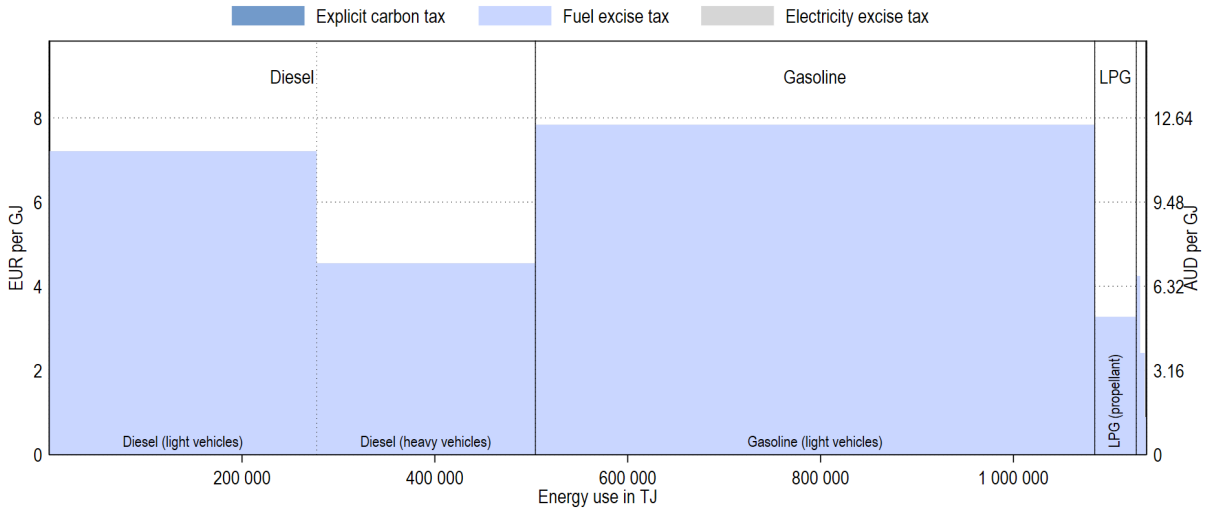


Note: Tax rates applicable on 1 July 2018. Energy use data is for 2016 and adapted from IEA (2018[2]), *World Energy Statistics and Balances*. Energy categories (labelled at the bottom) that represent less than 1% of a country's energy consumption are grouped into "misc. energy use" and may not be labelled.

Road

Figure 2 shows that within the road sector, gasoline is taxed at a higher effective tax rate than diesel. Notice, however, that the statutory rate for gasoline and diesel used in light vehicles is the same. This translates into a higher effective rate per GJ for gasoline because the heating value of gasoline is lower. Heavy vehicles receive a full refund from the Excise Duty, but have to pay the Road User Charge.[2] LPG is taxed, and so are biofuels (not labelled in the figure).

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



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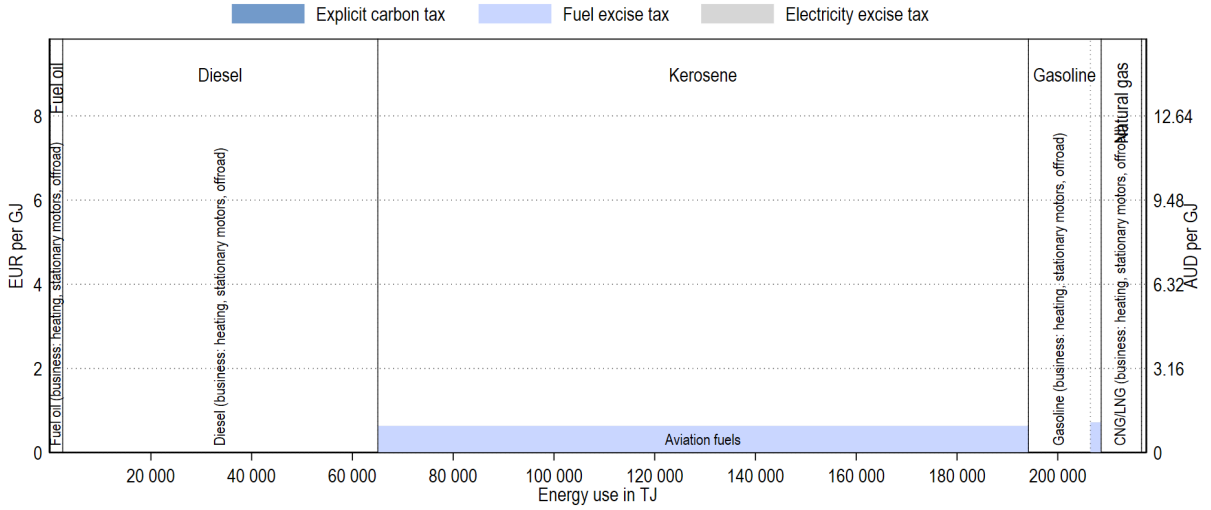
[2] TEU assumes that only non-heavy ("light") vehicles consume gasoline, and heavy vehicles represent 45% of total diesel consumption (Australian Bureau of Statistics, 2017[4]).

Off-road

In the off-road sector (Figure 3), fossil fuel use outside of aviation benefits from the FTC, and hence appear as untaxed in TEU.[3] Aviation fuels (jet kerosene and aviation gasoline) are taxed when used for domestic aviation.[4]

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



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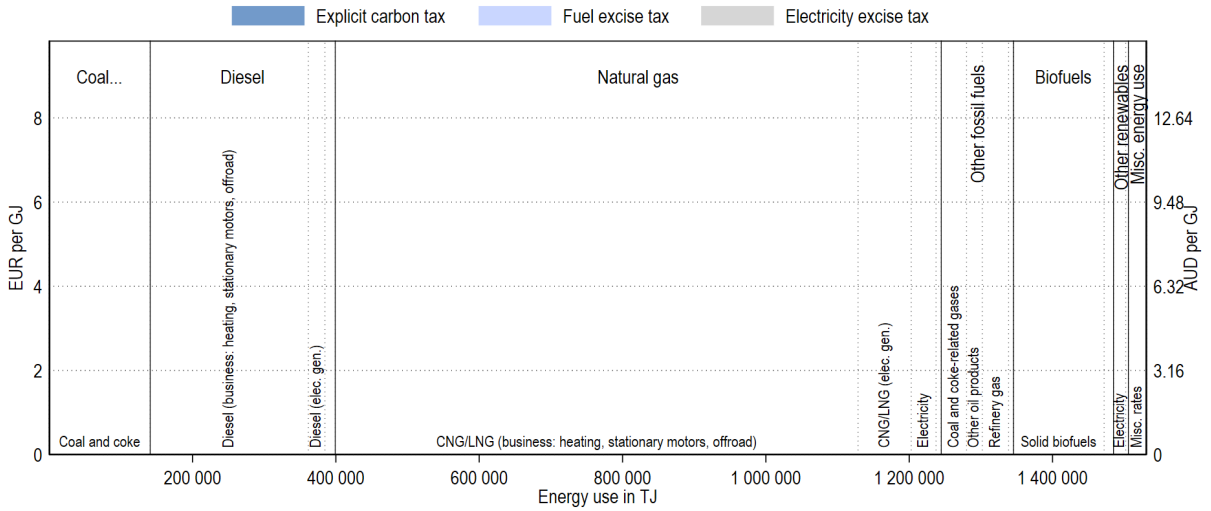
[3] This inter alia applies to business use of fuel by a shipping operator transporting domestic cargo between Australian ports. Resident shipping operators are eligible to claim fuel tax credits for fuel used in voyages within Australian territorial waters, when transporting domestic cargo between Australian ports. When using resident shipping agents, non-resident shipping operators must claim their fuel tax credits through the resident agent. Alternatively, where a shipping agent has not been engaged to supply the fuel, the non-resident shipping operators must be registered (for GST and to receive fuel tax credits) to claim the fuel tax credits on the fuel acquired.

[4] Fuel tax credits cannot be claimed for aviation fuels, although petroleum or diesel used in an aircraft for business use may be eligible for fuel tax credits. Excise is not payable on fuel used for international travel.

Industry

Fossil fuels used in the industry are either untaxed or benefit from the FTC and hence are shown as untaxed in TEU (Figure 4).

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



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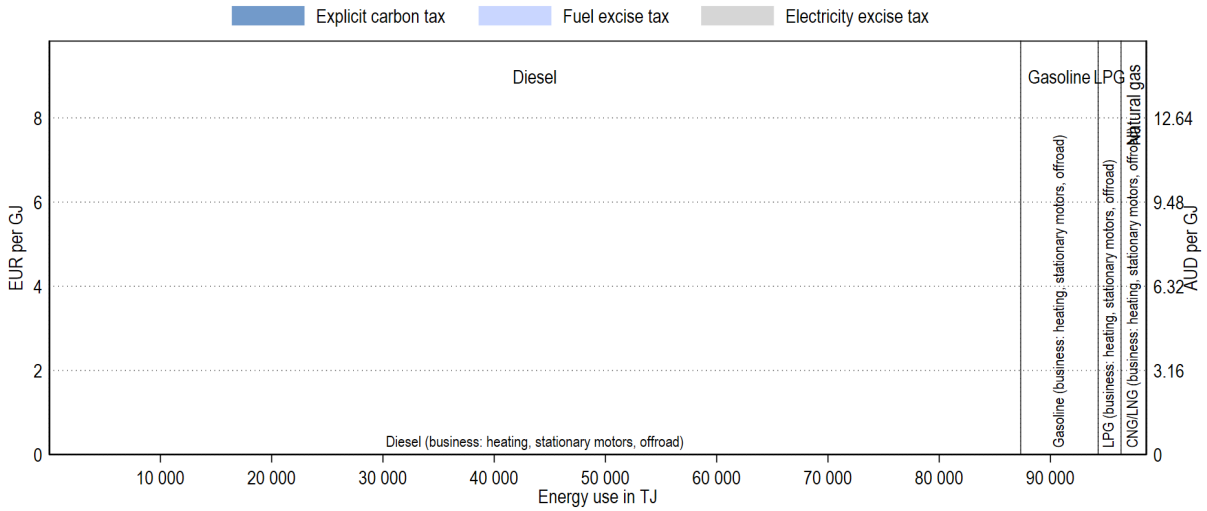
Agriculture and fisheries

All fuels use in the agriculture and fisheries sector benefit from the full FTC, and are thereby untaxed (Figure 5).

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



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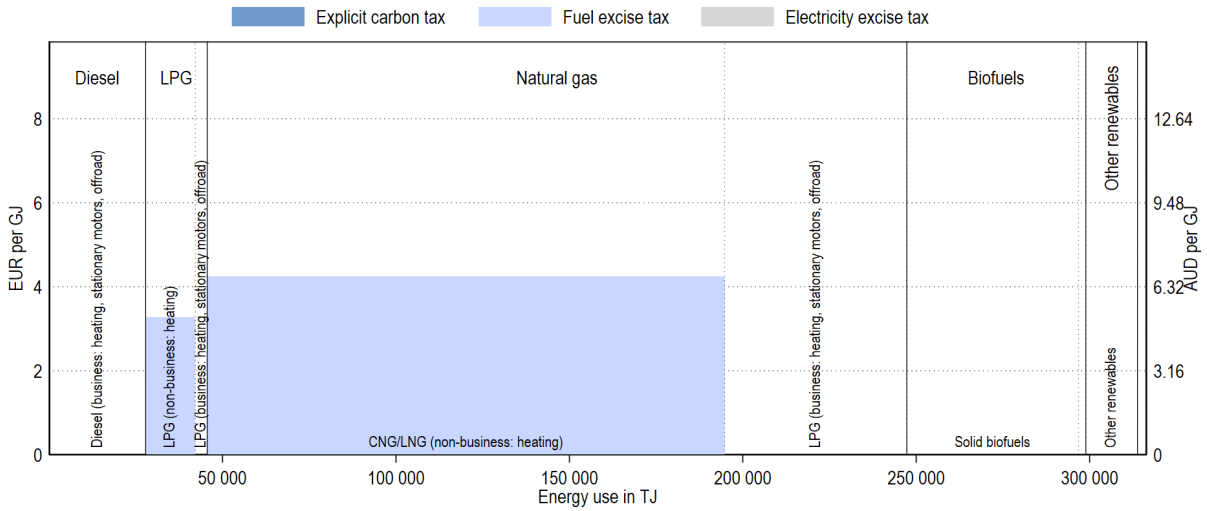
Residential and commercial

In the residential and commercial sector (Figure 6), fossil fuels are only taxed when used for heating in households. Biofuels and other renewables are not taxed.

Notice that TEU reports the energy use associated with electricity 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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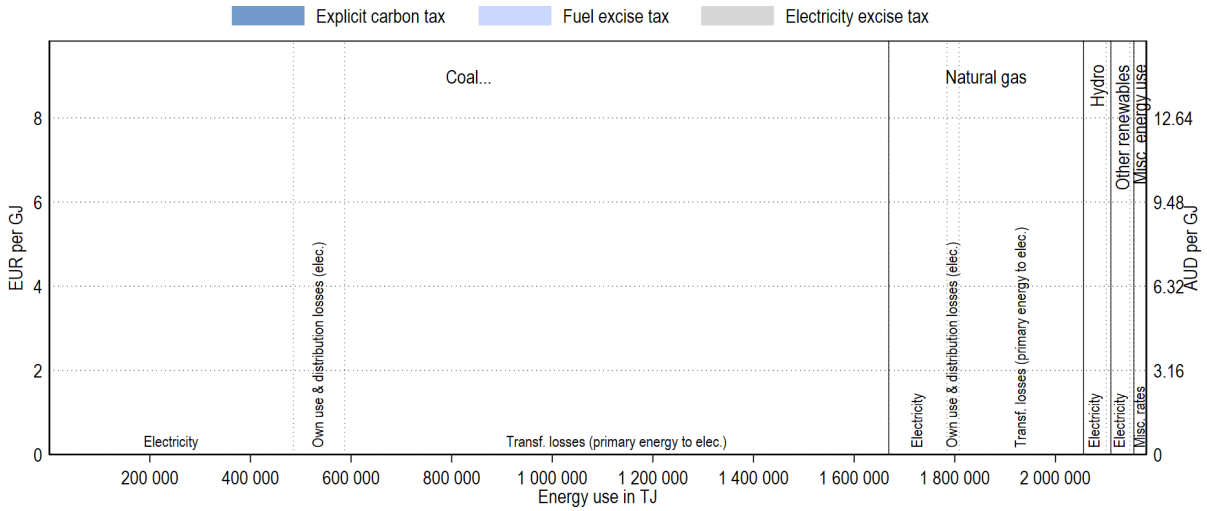
Electricity

Figure 7 shows that the neither the primary energy sources used to produce electricity, not electricity consumption itself, are taxed in Australia.

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, http://dx.doi.org/10.1787/9789264305304-en. [1]