

## Taxing Energy Use 2019: Country Note – South Africa

*This note explains how South Africa 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 South Africa 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 South Africa

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

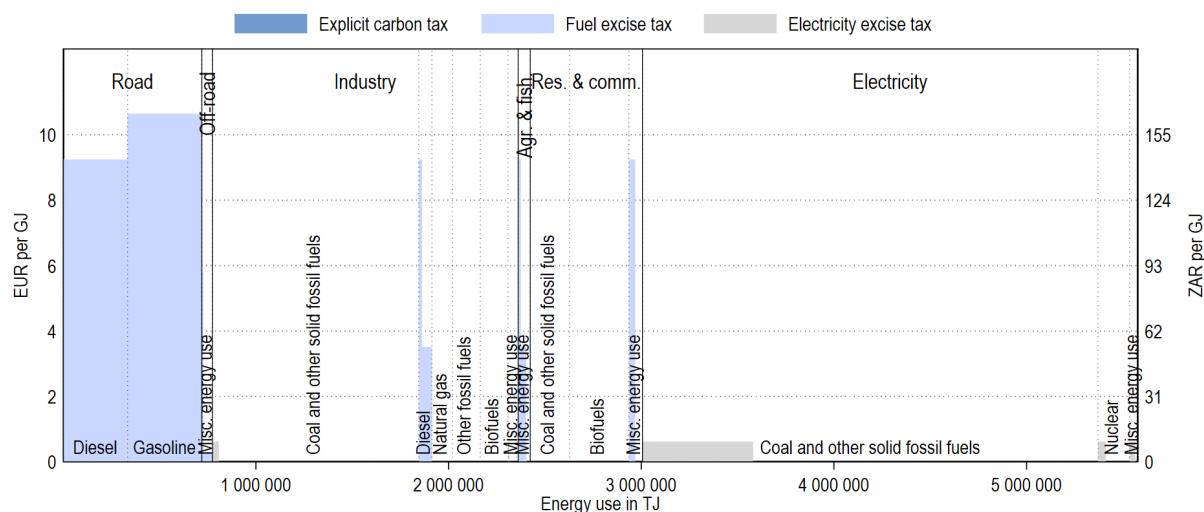
- The Fuel Levy applies to gasoline, diesel and its biofuel equivalent, as well as to kerosene.
- The Road Accident Fund (RAF) Fuel Levy and the Customs and Excise Levy apply to gasoline and diesel, and the latter's biofuel equivalent.
- The Demand Side Management Levy (DSML) additionally applies to gasoline (95 unleaded petrol in the inland area).
- The Illuminating Paraffin (IP) Tracer Dye levy applies to diesel and kerosene use.
- The Petroleum Pipelines (PP) Levy applies to gasoline and diesel, and the latter's biofuel equivalent.
- The Fuel Levy on the sale of aviation fuels applies to aviation fuels.
- The Environmental Levy on Electricity Generated in the Republic (an “electricity excise tax” according to the TEU methodology) applies to electricity consumption.

South Africa does not have a CO<sub>2</sub> emissions trading system (OECD, 2018<sup>[1]</sup>).

## Effective tax rates on energy use in South Africa

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**

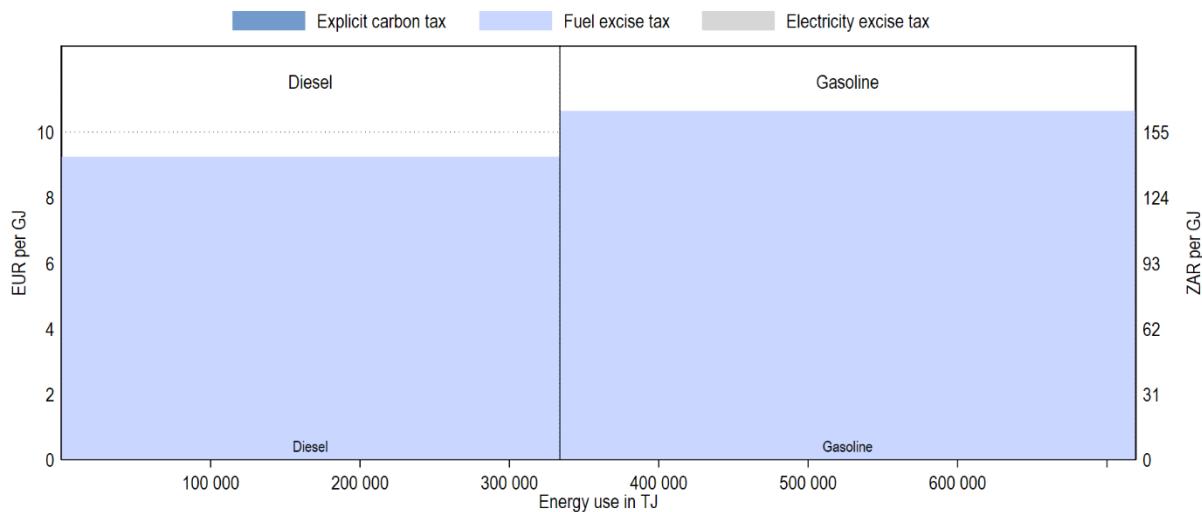


Note: Tax rates applicable on 1 July 2018. Energy use data is for 2016 and adapted from IEA (2018<sup>[2]</sup>), *World Energy Statistics and Balances*. Energy categories (labelled at the bottom) that represent less than 1% of a country's energy consumption are grouped into "misc. energy use" and may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

## Road

Figure 2 shows that within the road sector, gasoline is taxed at a higher effective tax rate than diesel.

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

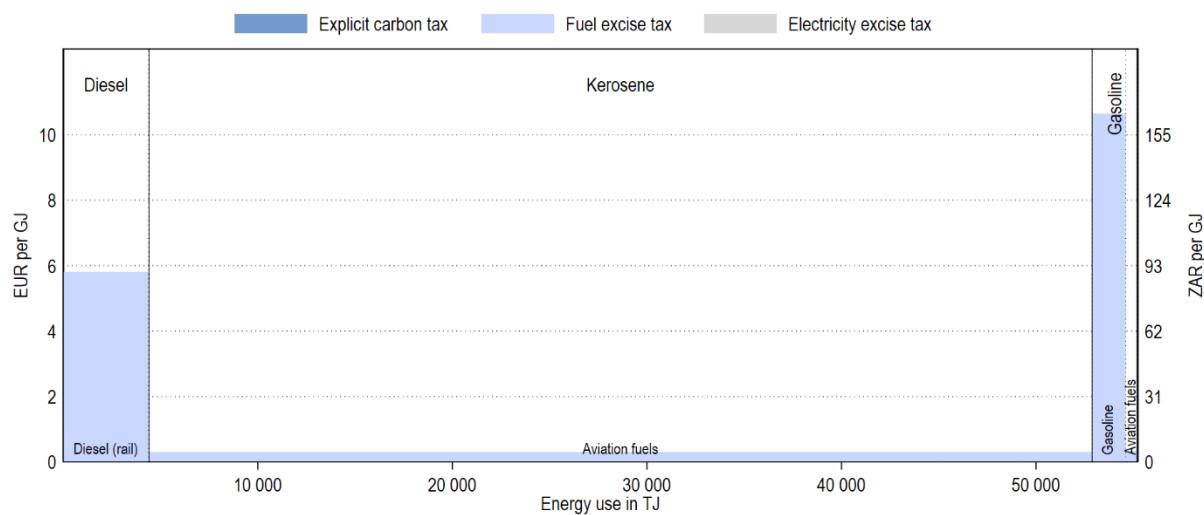


Note: Tax rates applicable on 1 July 2018. Energy use data is for 2016 and adapted from IEA (2018[2]), *World Energy Statistics and Balances*. Energy categories (labelled at the top) that represent less than 1% of a sector's energy consumption are grouped into “misc. energy use” and may not be labelled.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

### Off-road

In the off-road sector (Figure 3), diesel consumed for domestic navigation and railway transport purposes benefits from a full refund on the Fuel Levy and the RAF Fuel Levy.<sup>1</sup> Aviation gasoline and aviation kerosene are only subject to the Aviation Fuel Levy. Gasoline is taxed as in road transport.

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



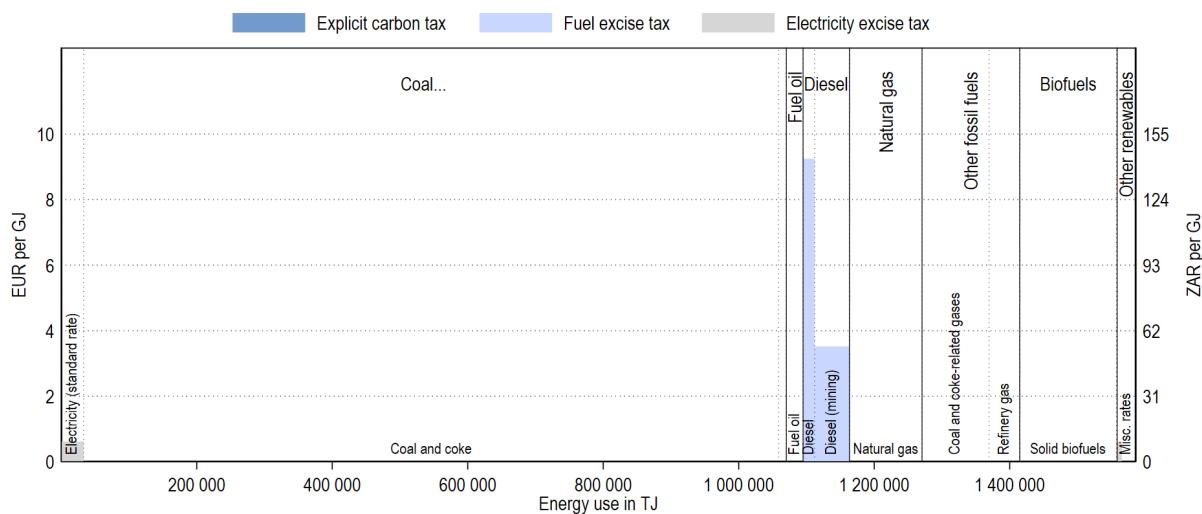
Note: Tax rates applicable on 1 July 2018. Energy use data is for 2016 and adapted from IEA (2018[2]), *World Energy Statistics and Balances*. Energy categories (labelled at the top) that represent less than 1% of a sector's energy consumption are grouped into "misc. energy use" and may not be labelled.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

<sup>1</sup> Notice that diesel that benefits from refunds is still subject to the SACU levy, the IP Tracer Dye Levy and the PP Levy.

## Industry

Coal and coke and fuel oil used in industry are not taxed as in the other sectors (Figure 4). Diesel consumed for on-land mining purposes benefits from a partial refund on the Fuel Levy, as well as from a full refund on the RAF Fuel Levy.<sup>2</sup> This total refund applies to 80% of total purchased diesel. Natural gas is not taxed, and neither are other fossil fuels, biofuels and other renewables.

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



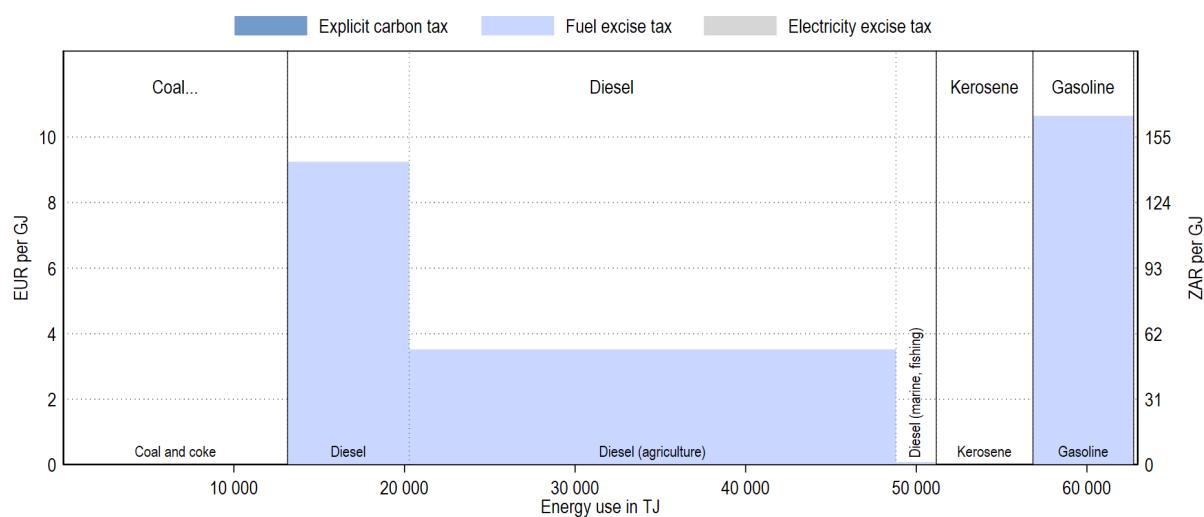
Note: Tax rates applicable on 1 July 2018. Energy use data is for 2016 and adapted from IEA (2018<sup>[2]</sup>), *World Energy Statistics and Balances*. Energy categories (labelled at the top) that represent less than 1% of a sector's energy consumption are grouped into "misc. energy use" and may not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

<sup>2</sup> Notice that diesel that benefits from refunds is still subject to the SACU levy, the IP Tracer Dye Levy and the PP Levy, but these are barely discernible in the figure.

### Agriculture and fisheries

Coal and coke used in the agriculture and fisheries sector are not taxed, as in the other sectors (Figure 5). Diesel consumed for agriculture purposes benefit from a partial refund on the Fuel Levy, as well as from a full refund on the RAF Fuel Levy. The full refund applies to 80% of total purchased diesel. Diesel consumed for fishing purposes benefits from a full refund on the Fuel Levy and the RAF Fuel Levy.<sup>3</sup>

**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<sup>[2]</sup>), *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.

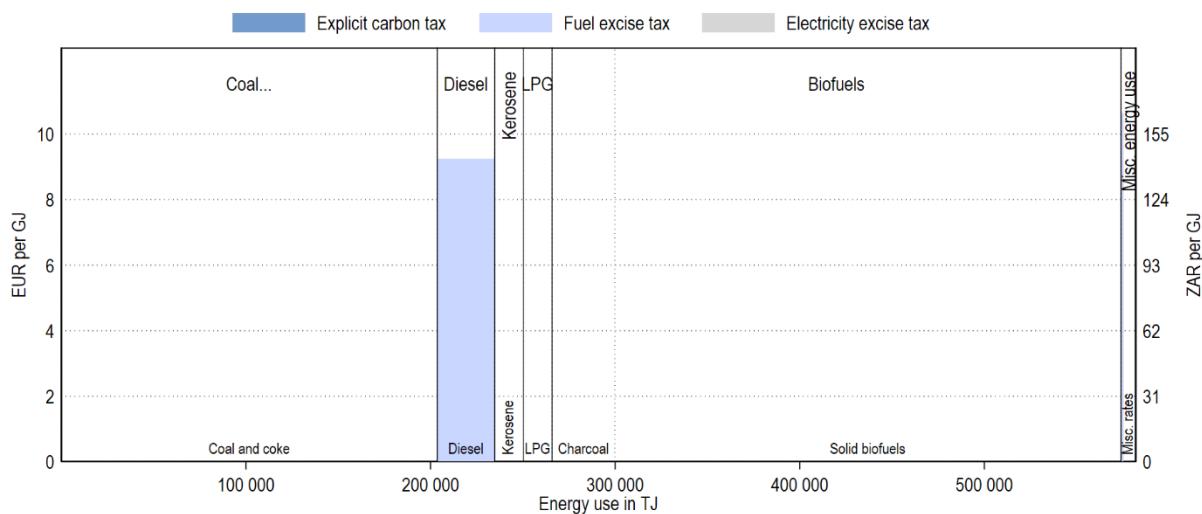
<sup>3</sup> Notice that diesel that benefits from refunds is still subject to the SACU levy, the IP Tracer Dye Levy and the PP Levy, but these are barely discernible in the figure.

### **Residential and commercial**

In the residential and commercial sector (Figure 6), coal and coke is not taxed as in the other sectors. Diesel is taxed. Kerosene and LPG are subject to the marker levy, but the rate is too low to be discernible in the figure. Biofuels 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**

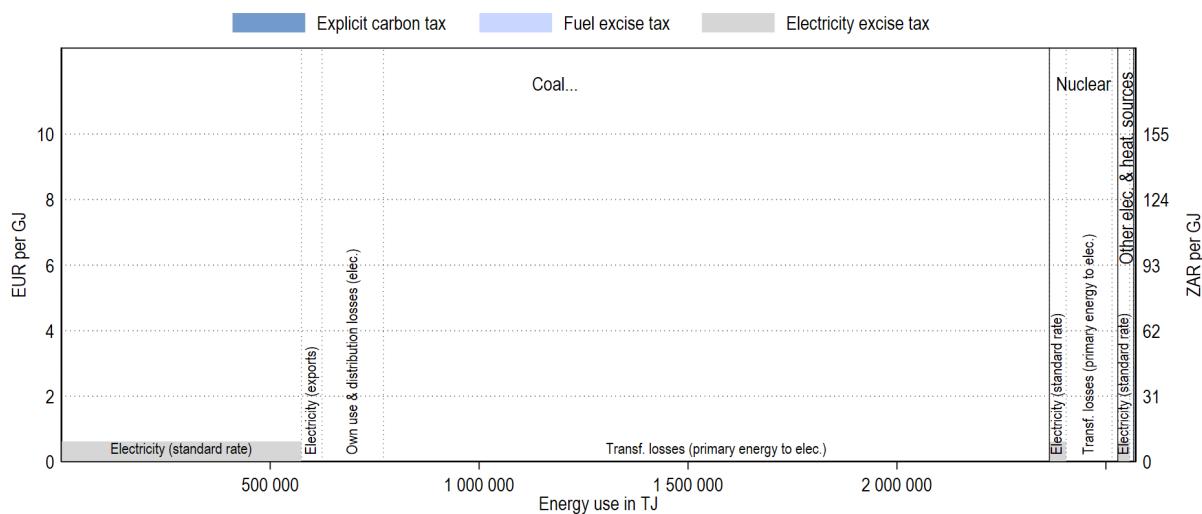


Note: Tax rates applicable on 1 July 2018. Energy use data is for 2016 and adapted from IEA (2018[2]), *World Energy Statistics and Balances*. Energy categories (labelled at the top) that represent less than 1% of a sector's energy consumption are grouped into "misc. energy use" and may not be labelled. 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 South Africa. The fuels used to generate electricity are generally not taxed.<sup>4</sup> The final consumption of electricity, on the other hand, is taxed, unless the electricity was generated from renewable energy sources, from power plants with an installed capacity of not more than 5 MWh, or from combined heat and power cogeneration (CHP).<sup>5</sup>

**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), <http://dx.doi.org/10.1787/data-00513-en> (accessed on 16 October 2018).
- 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]

<sup>4</sup> Diesel used for electricity generation benefits from a partial refund on the Fuel Levy, as well as a full refund on the RAF Fuel Levy. However, its consumption is too low to be discernible in the figure.

<sup>5</sup> The energy balances do not report the use of CHP plants.