

## Taxing Energy Use 2019: Country Note – Mexico

*This note explains how Mexico 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 Mexico 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 Mexico

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

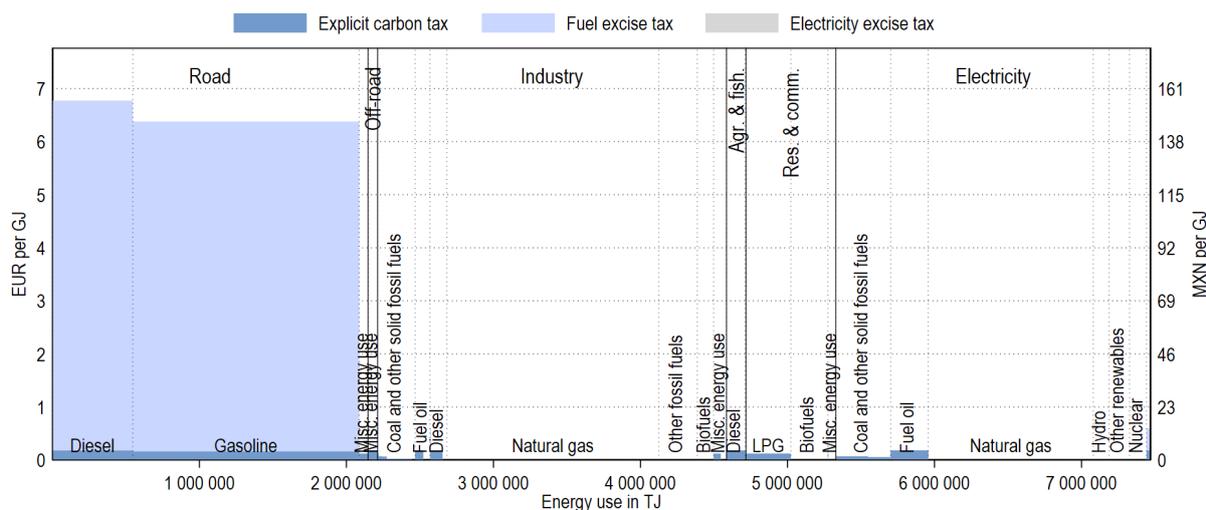
- The federal IEPS (*Impuesto especial sobre producción y servicios*) is an excise tax that applies to automotive gasoline, automotive diesel and their biofuel equivalents.
- The local IEPS applies to gasoline and diesel, and revenues are earmarked to states and municipalities.
- The carbon tax (*Impuesto al contenido de carbono en combustibles fósiles*) applies to fossil fuels (oil products, coal, coke and coal products across all sectors), including when used to generate electricity, at rates of up to MXN 46.67 per tonne of CO<sub>2</sub>. Natural gas is zero-rated under the CO<sub>2</sub> tax.

Mexico does not operate an emissions trading system for CO<sub>2</sub> emissions (OECD, 2018<sup>[1]</sup>). However, in December 2017, the government published general rules for an optional payment of the carbon tax through the delivery of carbon credits.

## Effective tax rates on energy use in Mexico

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**

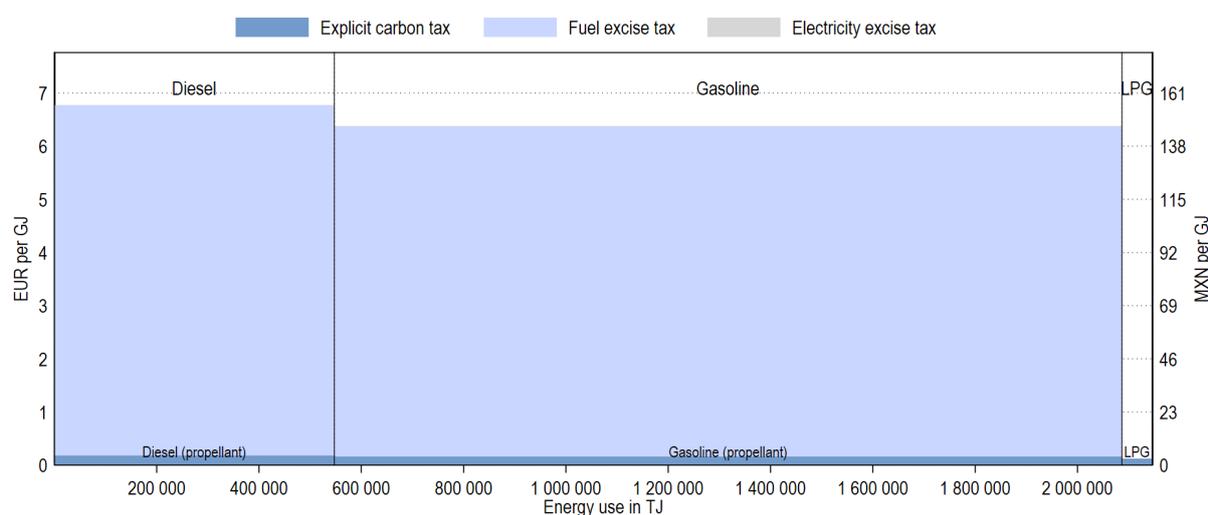


*Note:* Tax rates applicable on 1 July 2018. Energy use data is for 2016 and adapted from IEA (2018<sup>[2]</sup>), *World Energy Statistics and Balances*. Energy categories (labelled at the bottom) that represent less than 1% of a country's energy consumption are grouped into "misc. energy use" and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

## Road

Figure 2 shows that within the road sector, diesel is taxed at a higher effective tax rate than gasoline.<sup>1</sup> LPG is subject to the carbon tax.

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



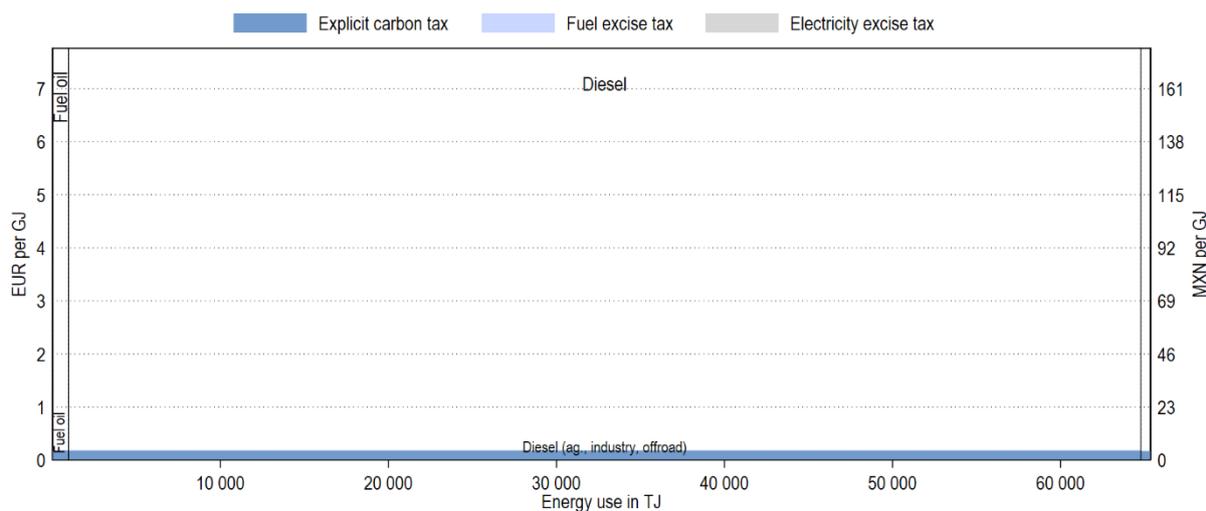
*Note:* Tax rates applicable on 1 July 2018. Energy use data is for 2016 and adapted from IEA (2018<sup>[2]</sup>), *World Energy Statistics and Balances*. Energy categories (labelled at the top) that represent less than 1% of a sector's energy consumption are grouped into "misc. energy use" and may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

<sup>1</sup> The gasoline rate included in TEU is the unweighted average of federal and local IEPS rates on gasoline use below 92 octane and above 92 octane. In order to avoid abrupt changes in retail prices due to market volatility, since February 2017 the federal tax is subject to weekly fiscal incentives that can reduce the tax paid. This incentive cannot be higher than the tax, precluding subsidies.

### Off-road

In the off-road sector, fuel oil used for commercial navigation (“marine”) is subject to the carbon tax. Diesel used for marine use generally benefits from a refund of the excise tax, and is hence only subject to the carbon tax. Aviation gasoline used for domestic commercial aviation is subject to the carbon tax.

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

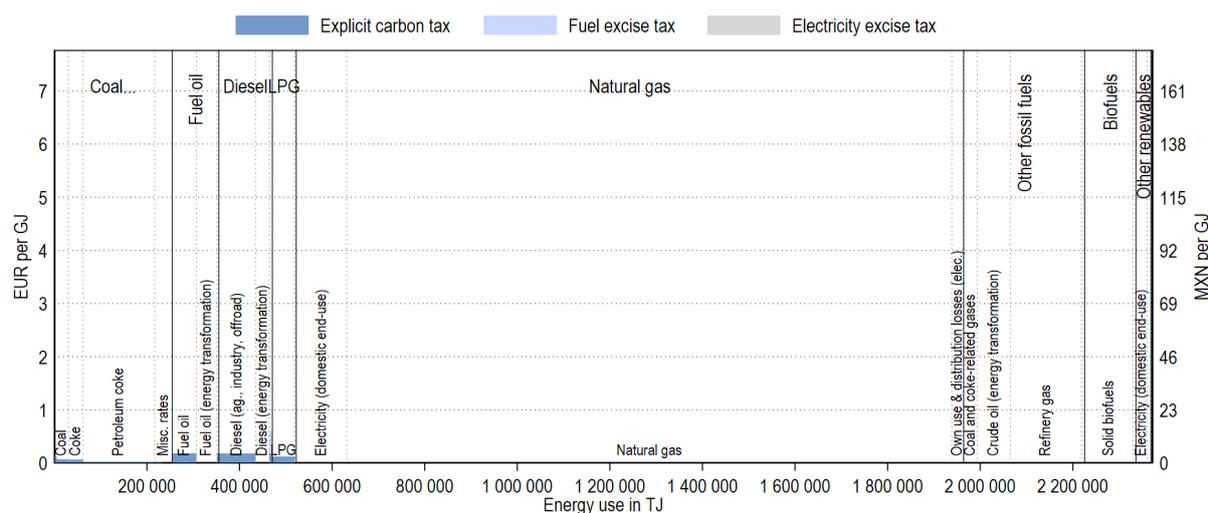


*Note:* Tax rates applicable on 1 July 2018. Energy use data is for 2016 and adapted from IEA (2018<sup>[2]</sup>), *World Energy Statistics and Balances*. Energy categories (labelled at the top) that represent less than 1% of a sector’s energy consumption are grouped into “misc. energy use” and may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

## Industry

Fossil fuels used in the industry sector are taxed in principle (Figure 4). However, a refund is available for the excise tax on diesel for most industrial end use. Non-renewable waste and solid biofuels are not taxed.

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

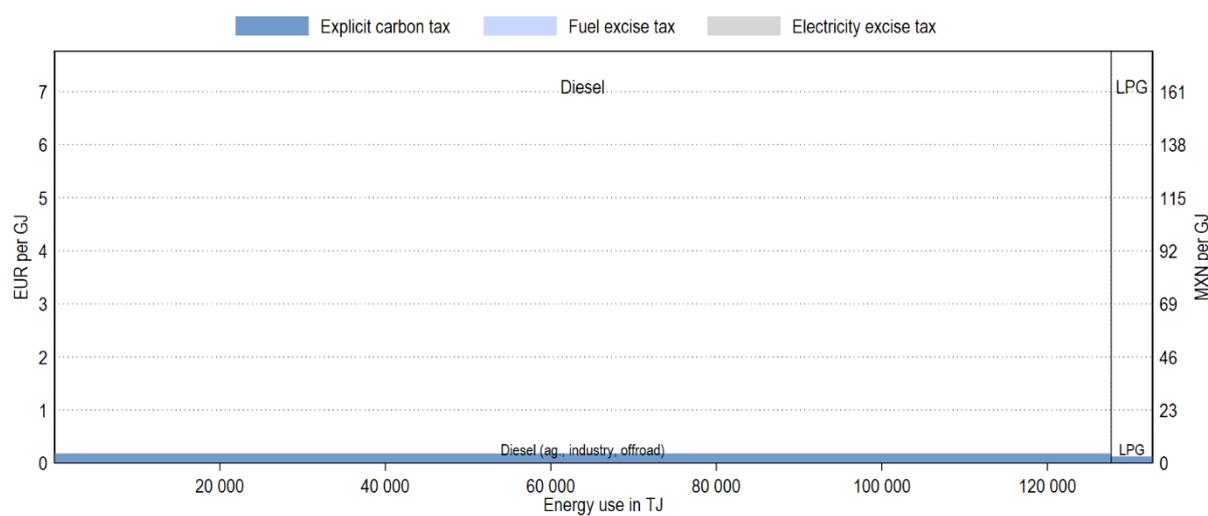


*Note:* Tax rates applicable on 1 July 2018. Energy use data is for 2016 and adapted from IEA (2018<sup>[2]</sup>), *World Energy Statistics and Balances*. Energy categories (labelled at the top) that represent less than 1% of a sector's energy consumption are grouped into "misc. energy use" and may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

### *Agriculture and fisheries*

Fossil fuel use in the agriculture and fisheries sector is taxed in principle (Figure 5). However, a refund is available for the excise tax on diesel for most industrial end use; and agriculture and fisheries users may benefit from additional reductions.<sup>2</sup>

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



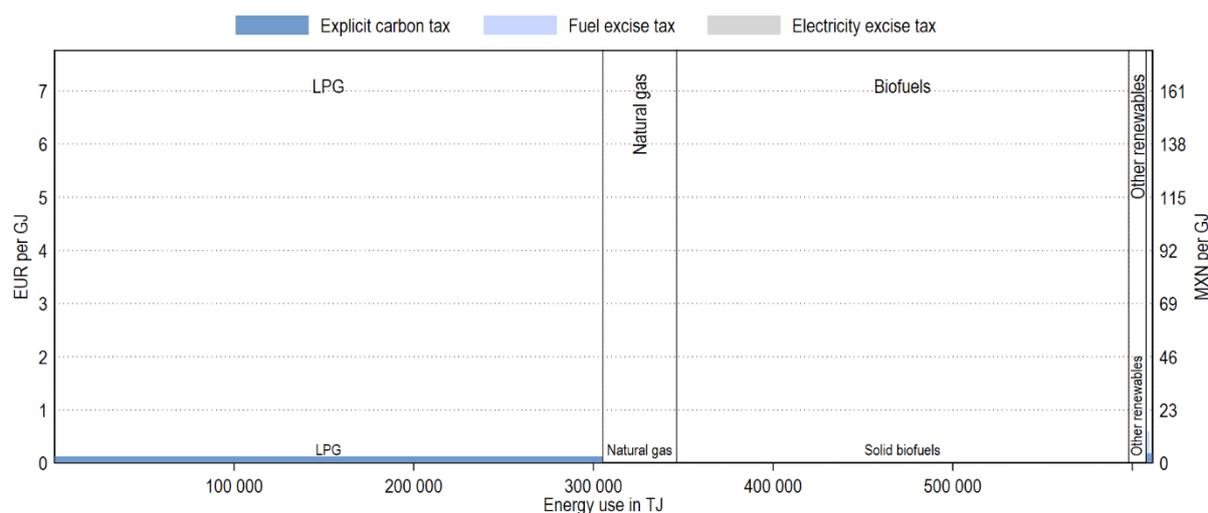
*Note:* Tax rates applicable on 1 July 2018. Energy use data is for 2016 and adapted from IEA (2018<sup>[2]</sup>), *World Energy Statistics and Balances*. Energy categories (labelled at the top) that represent less than 1% of a sector's energy consumption are grouped into "misc. energy use" and may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

<sup>2</sup> These additional reductions are not modelled due to data limitations.

### *Residential and commercial*

In the residential and commercial sector (Figure 6), fossil fuels are taxed, with the exception of natural gas. Notice that TEU reports the energy use associated with electricity consumption in the industry sector as that is where the primary energy consumption occurs.

**Figure 6. Effective tax rates on energy use in the residential & commercial sector**

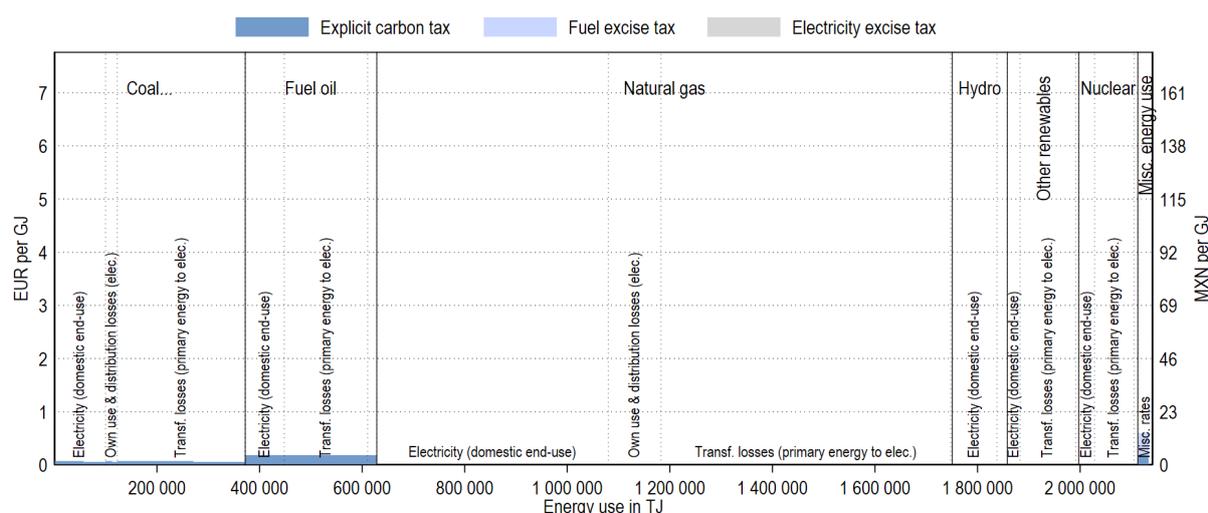


*Note:* Tax rates applicable on 1 July 2018. Energy use data is for 2016 and adapted from IEA (2018<sup>[2]</sup>), *World Energy Statistics and Balances*. Energy categories (labelled at the top) that represent less than 1% of a sector's energy consumption are grouped into "misc. energy use" and may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

## Electricity

Figure 7 shows how the electricity sector, as defined in TEU, is taxed in Mexico. The fuels used to generate electricity are subject to the carbon tax, which does not, however, apply to natural gas. Diesel also pays the fuel excise tax, but this is not discernible in the figure. Hydro, other renewables, and nuclear are not taxed. Electricity consumption is not taxed either.

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<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.

## 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]