Taxing Energy Use 2019: Country Note – India

This note explains how India 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](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 India can be found in Chapter 2 of the report. Chapter 3 additionally shows effective carbon tax rates per tonne of CO₂, and presents the corresponding carbon tax profiles for all countries. The report also contains StatLinks to the official data.

Structure of energy taxation

The main specific taxes on energy use in India are the following:

- As part of the central excise regime, the Basic Excise Duty (BED) applies to specified oil and gaseous products.
- The Special Additional Excise Duty (SAED) and the Additional Excise Duty (Road and Infrastructure Cess) additionally apply to gasoline and diesel fuel.
- The Clean Environment Cess applies to coal, lignite and peat consumption.
- Electricity consumption is untaxed at the federal level, with responsibility for the structure and level of taxation lying at the state level.

India does not have an emissions trading system (OECD, 2018[1]).
Effective tax rates on energy use in India

The taxes result in effective tax rates that can differ across energy products and uses, as described below. Figure 1 provides an overview of how energy and carbon taxes apply 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 the highest rate, followed by diesel fuel. Natural gas, as well as biofuels are untaxed as in the other economic sectors.

*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, diesel fuel is taxed at the highest rate. Aviation fuels are taxed at significantly lower rates than gasoline and diesel. Natural gas is untaxed as in the other sectors.

**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.
Industry

In the industry sector, solid and liquid fossil fuels are generally taxed. Natural gas and certain other gases are untaxed. Solids biofuels are untaxed as in the other sectors. Electricity produced by autogeneration plants may be subject to electricity excise taxes at the state level (not modelled due to data constraints).

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

In the agriculture and fisheries sector, fuels are assumed to be taxed as in the other sectors.

Figure 5. Effective tax rates on energy use in agriculture and fisheries

Note: Tax rates applicable on 1 July 2018. Energy use data is for 2016 and adapted from IEA (2018[1]), 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.
Residential and commercial

In the residential and commercial sector, coal and other solids fuels are taxed as in the other sectors. Kerosene and LPG are untaxed as in the other sectors. Solid biofuels are always untaxed.

Figure 6. Effective tax rates on energy use in the residential and 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

In the electricity sector, fuels used to generate electricity are taxed. Additionally, electricity consumption may be taxed at the state level (not modelled due to data constraints).

**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**
