Revenue from environmentally related taxes in Brazil

As a share of GDP, Brazil has the 2nd lowest environmentally related tax revenue among 34 OECD and 5 partner economies. In 2014, environmentally related tax revenues were at 0.62% of GDP, compared to 2.0% on average among the 39 countries.

In Brazil, taxes on energy represented 2% of total environmentally related tax revenue, compared to 70% on average among the 39 countries.

Environmentally related tax revenue as a percentage of GDP, 2014

Taxes on energy use in Brazil

The *OECD’s Taxing Energy Use (2015)* publication compares taxes on energy use (excise and carbon taxes) across 34 OECD and 7 partner economies. The chart below shows average tax rates, expressed in EUR per GJ, by sector across all fuels and the economy-wide average. The bubble size represents the weight of the sector in total energy use.

- Brazil has higher average tax rates on transport fuels (0.61 EUR/GJ) than on fuels used for heating and process purposes (0.04 EUR/GJ) or electricity generation (1.44 EUR/GJ);
- Brazil has the 8th lowest tax rate on energy on an economy-wide basis, at EUR 0.55 per GJ, compared with EUR 2.7 per GJ on a simple-average basis across the 34 OECD and 7 partner economies.

**Average tax rates on energy in transport, heating and process use, and electricity generation**

Data from *Taxing Energy Use* are for 2012 and include all OECD countries (except Latvia) and Argentina, Brazil, China, India and South Africa.

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¹Data from OECD.Stat include all OECD countries (except Latvia) and Argentina, Brazil, China, India and South Africa. Please see OECD.Stat for country specific notes.

²Data from *Taxing Energy Use* are for 2012 and include all OECD countries (except Latvia) and Argentina, Brazil, China, India, Indonesia, Russia and South Africa.
Effective carbon rates in Brazil

The [OECD’s Effective Carbon Rates (2016)](http://oe.cd/emissionsdata) publication presents the combined price signal on CO₂ emissions from taxes on energy and emissions trading systems (ETS), or the effective carbon rate (ECR). The charts below show shares of CO₂ emissions subject to different price ranges, for road, non-road and all emissions from energy use. EUR 30 is a conservative estimate of the climate damage from one tonne of CO₂ emissions.

In Brazil, 63% of carbon emissions from energy use face no price signal at all; 36% face a price at or above EUR 5 per tonne of CO₂; and 0% face a price at or above EUR 30 per tonne of CO₂. This compares to a zero price for 60% of emissions across all countries, a price at or above EUR 5 per tonne for 30% and at or above EUR 30 per tonne for 10% of emissions.

Excluding road use, 80% of carbon emissions from energy use in Brazil face no price signal at all; 18% face a price at or above EUR 5 per tonne of CO₂; and 0% face a price at or above EUR 30 per tonne of CO₂. This compares to a zero price for 70% of emissions across all countries, a price at or above EUR 5 per tonne for 19% and at or above EUR 30 per tonne for 4% of emissions.

Distribution of Effective Carbon Rates (ECR) on CO₂ emissions from energy use in Brazil

![Distribution of Effective Carbon Rates](http://oe.cd/emissionsdata)

Figures shown in the charts may not add up to 100% due to rounding.


**CO₂ emissions priced and average rates in Brazil**

The table below shows the average price signals from taxes and trading systems, and the share of emissions priced by these instruments.

- Brazil does not currently have an ETS.
- In total, taxes in Brazil price 37% of CO₂ emissions from energy use. The sectors with the highest tax coverage are electricity (100%) and road transport (81%).

<table>
<thead>
<tr>
<th>CO₂ emissions by sector (in t CO₂)</th>
<th>Average price (in EUR/CO₂)</th>
<th>Share of emissions priced</th>
<th>Average price (in EUR/CO₂)</th>
<th>Share of emissions priced</th>
<th>Overlap of tax and ETS5</th>
<th>Emissions not priced by tax or ETS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture &amp; Fishing</td>
<td>29 754</td>
<td>7.4</td>
<td>61%</td>
<td>0.0</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Electricity</td>
<td>34 973</td>
<td>11.3</td>
<td>100%</td>
<td>0.0</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Industry</td>
<td>434 004</td>
<td>8.1</td>
<td>13%</td>
<td>0.0</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Offroad transport</td>
<td>19 745</td>
<td>7.4</td>
<td>22%</td>
<td>0.0</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Residential &amp; Commercial</td>
<td>53 507</td>
<td>7.4</td>
<td>0%</td>
<td>0.0</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Road transport</td>
<td>218 721</td>
<td>11.2</td>
<td>81%</td>
<td>0.0</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>790 704</strong></td>
<td><strong>3.8</strong></td>
<td><strong>37%</strong></td>
<td><strong>0.0</strong></td>
<td><strong>0%</strong></td>
<td><strong>63%</strong></td>
</tr>
</tbody>
</table>

Access the data for all 41 countries: [http://oe.cd/emissionsdata](http://oe.cd/emissionsdata)

5Total average prices are weighted by the share of emissions in each sector that is priced in the country.

5Tax and ETS can apply to the same emissions base. The overlap describes the percentage of emissions in a sector that is priced by both tax and ETS.