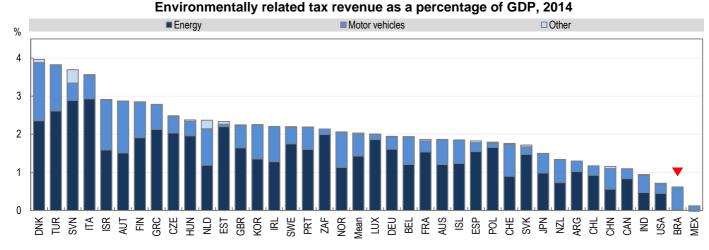


#### BETTER POLICIES FOR BETTER LIVES

### Revenue from environmentally related taxes in Brazil<sup>1</sup>

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.



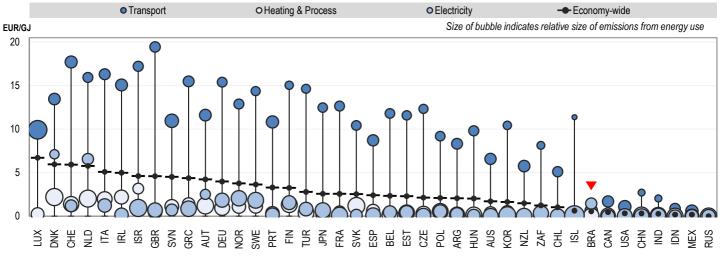
<sup>1</sup>Data from OECD.Stat include all OECD countries (except Latvia) and Argentina, Brazil, China, India and South Africa. Please see OECD.Stat for country specific notes.

#### Taxes on energy use in Brazil<sup>2</sup>

The <u>OECD's Taxing Energy Use (2015)</u> 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



<sup>2</sup>Data from Taxing Energy Use are for 2012 and include all OECD countries (except Latvia) and Argentina, Brazil, China, India, Indonesia, Russia and South Africa.

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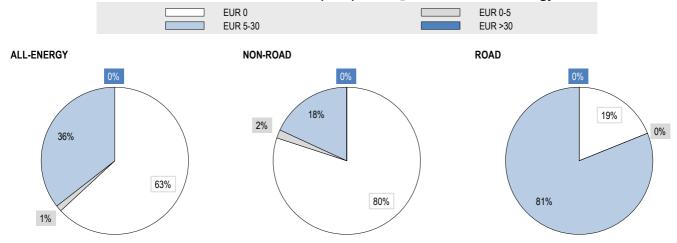
## Effective carbon rates in Brazil

The <u>OECD's Effective Carbon Rates (2016)</u> publication presents the combined price signal on  $CO_2$  emissions from taxes on energy and emissions trading systems (ETS), or the effective carbon rate (ECR).<sup>3</sup> The charts below show shares of  $CO_2$  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  $CO_2$  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 CO<sub>2</sub>; and 0% face a price at or above EUR 30 per tonne of CO<sub>2</sub>. 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 CO<sub>2</sub>; and 0% face a price at or above EUR 30 per tonne of CO<sub>2</sub>. 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 CO<sub>2</sub> emissions from energy use in Brazil



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

<sup>3</sup>Notes on the interpretation of effective carbon rates: Box 3.1 (p.38-40), OECD's Effective Carbon Rates (2016), or consult http://oe.cd/ECRinterpretation

#### CO<sub>2</sub> 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 CO<sub>2</sub> emissions from energy use. The sectors with the highest tax coverage are electricity (100%) and road transport (81%).

#### Share of emissions priced and average price signals from tax, Brazil

	CO <sub>2</sub> emissions by sector (in t CO <sub>2</sub> )	Tax		ETS			Emissions not
		Average price (in EUR/tCO <sub>2</sub> )	Share of emissions priced	Average price (in EUR/tCO <sub>2</sub> )	Share of emissions priced	Overlap of tax and ETS <sup>5</sup>	priced by tax or ETS
Agriculture & Fishing	29 754	7.4	61%	0.0	0%	0%	39%
Electricity	34 973	11.3	100%	0.0	0%	0%	0%
Industry	434 004	8.1	13%	0.0	0%	0%	87%
Offroad transport	19 745	7.4	22%	0.0	0%	0%	78%
<b>Residential &amp; Commercial</b>	53 507	7.4	0%	0.0	0%	0%	100%
Road transport	218 721	11.2	81%	0.0	0%	0%	19%
Tota	<sup>4</sup> 790 704	3.8	37%	0.0	0%	0%	63%

Access the data for all 41 countries: http://oe.cd/emissionsdata

<sup>4</sup>Total average prices are weighted by the share of emissions in each sector that is priced in the country.

<sup>5</sup>Tax 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.