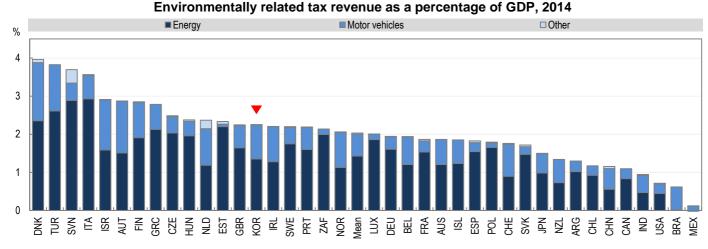


#### BETTER POLICIES FOR BETTER LIVES

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

As a share of GDP, Korea has the 14th highest environmentally related tax revenue among 34 OECD and 5 partner economies. In 2014, environmentally related tax revenues were at 2.25% of GDP, compared to 2.0% on average among the 39 countries.

In Korea, taxes on energy represented 60% of total environmentally related tax revenue, compared to 70% on average among the 39 countries.



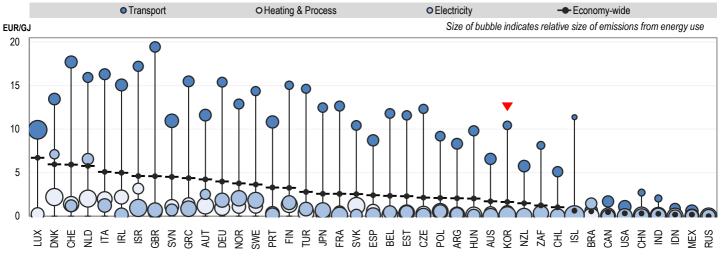
<sup>1</sup>Data from OECD.Stat include all OECD countries (except Latvia) and Argentina, Brazil, China, India and South Africa. Please see OECD.Stat for country specific notes.

#### Taxes on energy use in Korea<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.

- Korea has higher average tax rates on transport fuels (10.43 EUR/GJ) than on fuels used for heating and process purposes (0.46 EUR/GJ) or electricity generation (0.12 EUR/GJ);
- Korea has the 29th highest tax rate on energy on an economy-wide basis, at EUR 1.63 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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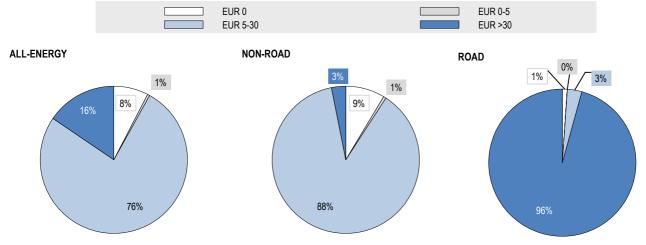
### Effective carbon rates in Korea

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 Korea, 8% of carbon emissions from energy use face no price signal at all; 92% face a price at or above EUR 5 per tonne of CO<sub>2</sub>; and 16% 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, 9% of carbon emissions from energy use in Korea face no price signal at all; 91% face a price at or above EUR
5 per tonne of CO<sub>2</sub>; and 3% 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 Korea



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 Korea

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

» Korea is subject to the Korean ETS, which had an average permit price of EUR 11 per tonne of CO<sub>2</sub> in 2015.

In total, taxes in Korea price 37% of CO<sub>2</sub> emissions from energy use; and the Korean ETS covers 77%. The sectors with the highest tax coverage are road transport (99%) and residential and commercial (85%). The sectors with the highest price coverage by the

ETS are industry (91%) and electricity (90%).

»

### Share of emissions priced and average price signals from tax & ETS, Korea

	CO <sub>2</sub> emissions by sector (in t CO <sub>2</sub> )	Ta Average price (in EUR/tCO <sub>2</sub> )	ax Share of emissions priced	E Average price (in EUR/tCO <sub>2</sub> )	TS Share of emissions priced	Overlap of tax and ETS <sup>5</sup>	Emissions not priced by tax or ETS
Agriculture & Fishing	6 033	22.4	16%	0.0	0%	0%	84%
Electricity	255 685	9.9	23%	6.7	90%	21%	8%
Industry	227 906	14.2	20%	6.7	91%	19%	8%
Offroad transport	3 691	100.6	34%	6.7	32%	11%	45%
<b>Residential &amp; Commercial</b>	56 218	15.7	85%	6.7	87%	77%	5%
Road transport	84 796	154.9	99%	0.0	0%	0%	1%
Total <sup>4</sup>	634 329	23.8	37%	5.1	77%	22%	8%

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

<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.