

# Costa Rica

#### Macroeconomic and policy context

Key statistics	
GDP growth (annual) (2007-2017)	3.5%
GDP growth (annual, per capita) (2007-2017)	2.3%
CO <sub>2</sub> emissions growth (annual) (2007-2017)	0.0%
CO <sub>2</sub> emissions growth (annual, per capita) (2007-2017)	-1.1%
Main combustible energy source; corresponding share of CO2 emissions (2017)	Diesel, 32.2%
Non-combustible energy sources; share of primary energy use (2017)	37.7%
Total energy self-sufficiency (%) (2017)	48.0%
Share of population with access to electricity (2018) SDG 7.1.1	100.0%
Share of population with access to clean cooking (2018) SDG 7.1.2	95.0%
Tax-to-GDP ratio (2017)	23.9%

Sources as specified in TEU-SD brochure.

Between 2007 and 2017, Costa Rica's GDP grew by an average of 3.5% per year in total, and 2.3% per capita. Over the period. energy-related  $CO_2$ same emissions remained the same, which translates into a 1.1% decrease per capita due to population growth. Diesel accounted for 32.2% of CO<sub>2</sub> emissions from energy use in 2017, down from 32.4% in 2007. Non-combustible energy sources, mainly hydropower and geothermal energy in Costa Rica, accounted for 37.7% of primary energy use in 2017, up from 33.1% in 2007. Costa Rica is a net energy and oil importer with complete electricity access at 100%.

The government of Costa Rica has committed to pursuing sustainable economic development policies focused on addressing Costa Rica's vulnerability to climate change and expanding domestic renewable energy production in its First Nationally Determined Contribution. In this NDC, Costa Rica set a maximum budget of

net emissions in the 2021-2030 period of 106.53 million tonnes of CO<sub>2</sub> equivalent (CO<sub>2e</sub>) and an absolute maximum of net emissions in 2030 of 9.11 million tCO<sub>2e</sub>. Costa Rica's tax-to-GDP ratio of 23.9% is lower than the OECD average<sup>1</sup> of 33.9%, but higher than the LAC and Africa averages of 22.8% and 17.2%, respectively.

## Taxes and subsidies on energy use, 2018

Costa Rica does not have an explicit carbon tax, nor a CO<sub>2</sub> emissions trading system. However, it does collect energy taxes, including:

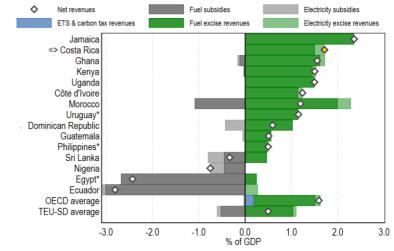
- Excise taxes on fuel and petroleum products.
- A public lighting charge on electricity consumption.

## Net energy tax revenues, 2018

Net energy tax revenues are a bottom-up estimate of the net revenues resulting from taxes and subsidies on energy use.

Net energy tax revenues in Costa Rica represent 1.7% of GDP in 2018, contributing positively to domestic resource mobilisation as taxes exceed subsidies. Compared to the other countries considered in TEU-SD and OECD countries:

 Revenues from fuel and electricity excise taxes as a share of GDP are relatively high.



\* Since 2018, Egypt has phased out most subsidies on energy use and the Philippines have implemented a major tax reform. In Uruguay, certain fuels like diesel attract VAT but not an excise.

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<sup>&</sup>lt;sup>1</sup> Averages across countries refer to the simple, unweighted average.

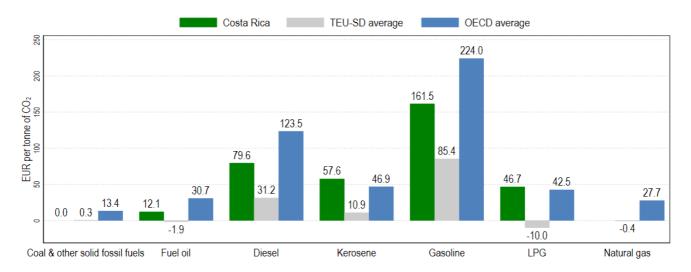
 There are no fuel or electricity subsidies, which is similar to the OECD average, and comparable to most TEU-SD countries.

Recent developments: In 2018, Costa Rica outlined the first stage of its plan to decarbonise the country by 2050, including a planned green tax reform. The plan's first stage highlights the need for a decoupling of the state's gasoline sales revenue from its state-owned oil refinery to be able to implement an explicit price on carbon.

#### Average effective carbon rates by fuel, 2018

The Effective Carbon Rate (ECR) is the total price that applies to CO<sub>2</sub> emissions from energy use as a result of taxes and emissions trading, net of fuel subsidies. A higher ECR encourages consumers and producers to use cleaner energy sources or reduce energy use, avoiding CO<sub>2</sub> emissions and local pollution, while taxes and permit auctioning raise public revenue.

- Coal, fuel oil and LPG face the lowest ECRs. The use of these fuels causes the bulk of fossil fuel emissions in the residential & commercial and industrial sectors, which account for 13.4% and 28.7% of Costa Rica's overall emissions from energy use, respectively. Costa Rica does not use natural gas and the ECR is therefore not defined.
- Diesel and gasoline, the dominant fuels in road transport, face the highest ECRs. The road sector accounts for 55.8% of Costa Rica's emissions from energy use.



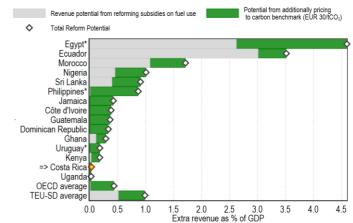
Costa Rica has low effective carbon rates relative to the OECD average, apart from on kerosene and LPG. Compared to other TEU-SD countries:

- The ECR is high for fuel oil, diesel, kerosene, gasoline and LPG relative to the TEU-SD average.
- The ECR on coal is similarly low as the TEU-SD average; Costa Rica does not use natural gas.

#### Revenue potential from carbon price reform

By how much would tax revenues increase if ECRs were raised to reach EUR 30/tCO<sub>2</sub> for all fossil fuels? The benchmark of EUR 30 is a low-end estimate of the climate damage caused by each tonne of CO<sub>2</sub> emitted. An equitable reform package is critical to ensuring that vulnerable groups, which also tend to be those that are disproportionately affected by climate change, will be able to access clean energy.

The majority of Costa Rica's emissions are already taxed higher than the benchmark rate of EUR 30/tCO<sub>2</sub>. Raising revenues from carbon price reform would thus require raising effective carbon prices above the levels of the low-end benchmark.



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