Dominican Republic

Macroeconomic and policy context

Key statistics	
GDP growth (annual) (2007-2017)	4.8%
GDP growth (annual, per capita) (2007-2017)	3.6%
CO_2 emissions growth (annual) (2007-2017)	1.1%
CO_2 emissions growth (annual, per capita) (2007-2017)	-0.1%
Main combustible energy source; corresponding share of CO2 emissions (2017)	Fuel oil, 19.5%
Non-combustible energy sources; share of primary energy use (2017)	2.9%
Total energy self-sufficiency (%) (2017)	13.0%
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	89.0%
Tax-to-GDP ratio (2017)	13.2%

Sources as specified in TEU-SD brochure.

Between 2007 and 2017, the Dominican Republic's GDP grew by an average of 4.8% per year in total, and 3.6% per capita. Over the same period, energy-related CO_2 emissions increased by 1.1% per year in total, and decreased by 0.1% per capita due to population growth. Fuel oil, the main source of CO_2 emissions from energy use, accounted for 19.5% of emissions in 2017, down from 21.7% in 2007. Non-combustible energy sources, mainly hydropower in the Dominican Republic, accounted for 2.9% of primary energy use in 2017, up from 2.1% in 2007. The Dominican Republic is a net energy importer with complete electricity access but 89.0% of the population able to access clean cooking.

The government of the Dominican Republic has committed to pursuing sustainable economic development policies focused on addressing the Dominican Republic's vulnerability to climate change and expanding domestic renewable energy production in its First Nationally Determined Contribution. In this NDC, the Dominican Republic set a conditional GHG emissions reduction target of 27% relative to Business-As-Usual (BAU) emissions by 2030 and an unconditional reduction target of 7% relative to BAU. The Dominican Republic's tax-to-GDP ratio of 13.2% is lower than the OECD, LAC and Africa averages[1] of 33.9%, 22.8% and 17.2%, respectively.

Taxes and subsidies on energy use, 2018

The Dominican Republic does not have an explicit carbon tax, nor a CO_2 emissions trading system. However, it does collect energy taxes, including:

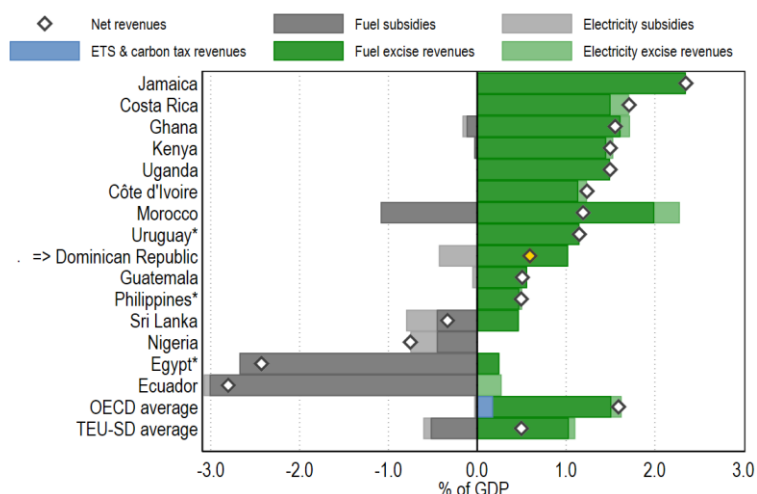♦ A tax on petroleum products, including on gasoline, diesel, fuel oil, natural gas, kerosene and aviation fuel.

TEU-SD classified one subsidy on energy use to be in effect in 2018:

♦ Electricity distribution companies are compensated the difference between the monthly-regulated tariffs and the generation costs.

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 the Dominican Republic represent 0.6% of GDP in 2018, contributing positively to

* 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.

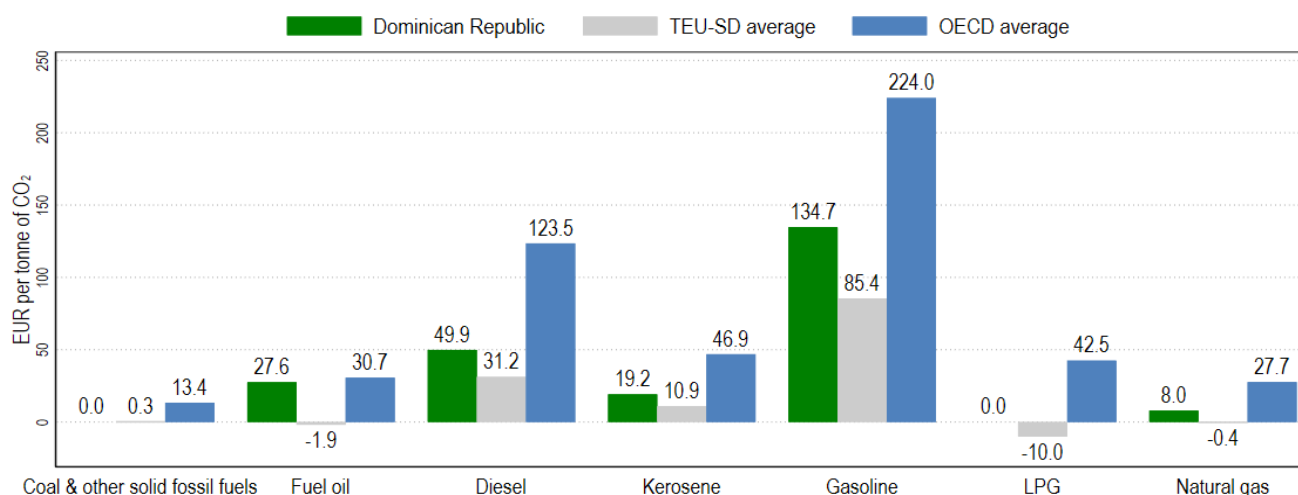[1] Averages across countries refer to the simple, unweighted average.

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 below the OECD average, and similar to the TEU-SD average.

♦ Electricity subsidies are higher than in other TEU-SD countries and the OECD average.

Average effective carbon rates by fuel, 2018

The Effective Carbon Rate (ECR) is the total price that applies to CO_2 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_2 emissions and local pollution, while taxes and permit auctioning raise public revenue.

♦ Coal, fuel oil, kerosene, LPG and natural gas, the main fossil fuels used in the residential & commercial, electricity and industrial sectors, account face the lowest ECRs. The residential & commercial, electricity and industrial sectors account for 15.1%, 30.5% and 28.9% of the Dominican Republic's CO_2 emissions from energy use, respectively.

♦ Diesel and gasoline, the dominant fuels in road transport, face the highest ECRs. The road sector represents 19.8% of the Dominican Republic's CO_2 emissions from energy use.
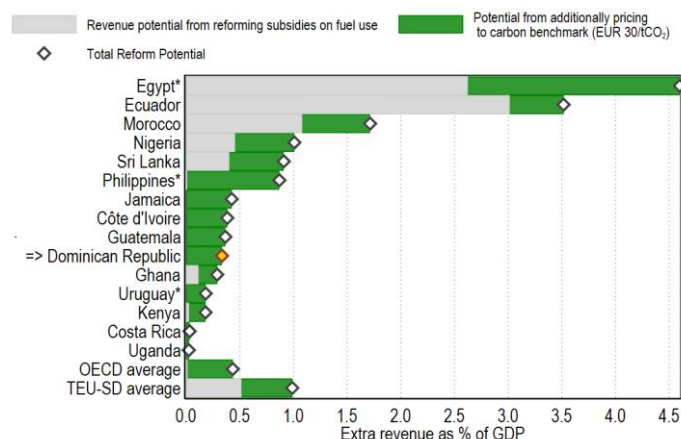

The Dominican Republic has low effective carbon rates relative to the OECD averages, apart from fuel oil. Compared to other TEU-SD countries:

♦ The ECR is high for diesel, kerosene, gasoline and LPG relative to the TEU-SD average.

♦ The ECR on coal is similar to the TEU-SD average.

♦ The ECR on natural gas higher than the TEU-SD average.

Revenue potential from carbon price reform

By how much would tax revenues increase if ECRs were raised to reach EUR 30/tCO_2 for all fossil fuels? The benchmark of EUR 30 is a low-end estimate of the climate damage caused by each tonne of CO_2 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 Dominican Republic could increase tax revenue through carbon price reform. The potential increase of 0.3% worth of GDP if ECRs were raised to reach the benchmark rate of EUR 30/tCO_2 for all fossil fuels, is below the OECD and TEU-SD averages.