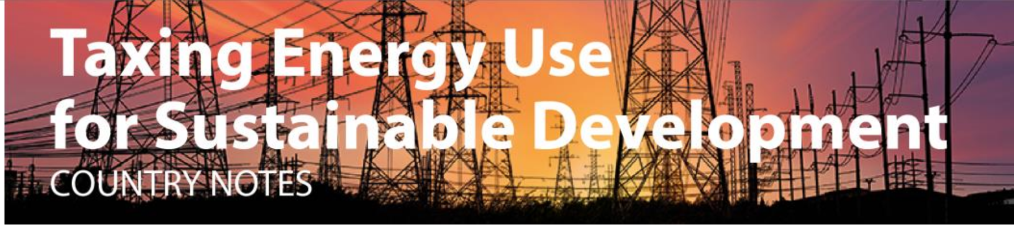


Guatemala

Macroeconomic and policy context

Key statistics	
GDP growth (annual) (2007-2017)	3.2%
GDP growth (annual, per capita) (2007-2017)	1.4%
CO_2 emissions growth (annual) (2007-2017)	5.2%
CO_2 emissions growth (annual, per capita) (2007-2017)	3.3%
Main combustible energy source; corresponding share of CO2 emissions (2017)	Biofuels, 70.6%
Non-combustible energy sources; share of primary energy use (2017)	6.3%
Total energy self-sufficiency (%) (2017)	69.0%
Share of population with access to electricity (2018) SDG 7.1.1	95.0%
Share of population with access to clean cooking (2018) SDG 7.1.2	46.0%
Tax-to-GDP ratio (2017)	12.4%

Sources as specified in TEU-SD brochure.

Between 2007 and 2017, Guatemala's GDP grew by an average of 3.2% per year in total, and 1.4% per capita. Over the same period, energy-related CO_2 emissions increased by 5.2% per year in total, and 3.3% per capita. Biofuels accounted for 70.6% of CO_2 emissions from energy use in 2017, up from 64.4% in 2007. Gasoline, the main fossil fuel used, accounted for 8.8% in 2017, up from 8.6% in 2007. Non-combustible energy sources, mainly hydropower and geothermal in Guatemala, accounted for 6.3% of primary energy use in 2017, up from 5.7% in 2007. Guatemala is a net energy and oil importer. Electricity has reached 95% of the population but 46.0% have access to clean cooking.

The government of Guatemala has committed to pursuing sustainable economic development policies focused on addressing Guatemala's vulnerability to climate change and expanding domestic renewable energy production in its First Nationally Determined Contribution. In this NDC, Guatemala set a GHG emissions reduction target of 11.2% by 2030, relative to 2005 emissions. Guatemala's tax-to-GDP ratio of 12.4% 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

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

- A tax on gasoline, diesel and gas oil, naphtha, kerosene, jet kerosene and LPG.
- Public lighting fees on electricity consumption.

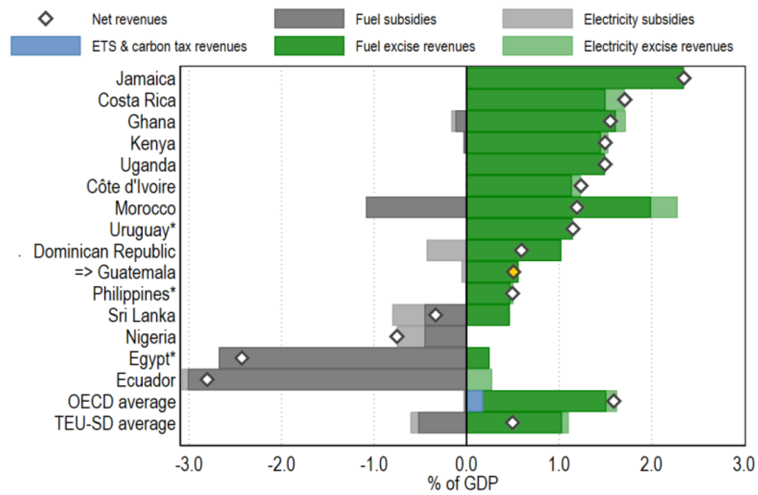
TEU-SD classified one subsidy to be in effect in 2018:

- A social tariff for residential electricity consumers below the threshold of 100kWh per month.

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 Guatemala represent 0.5% 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:



* 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.

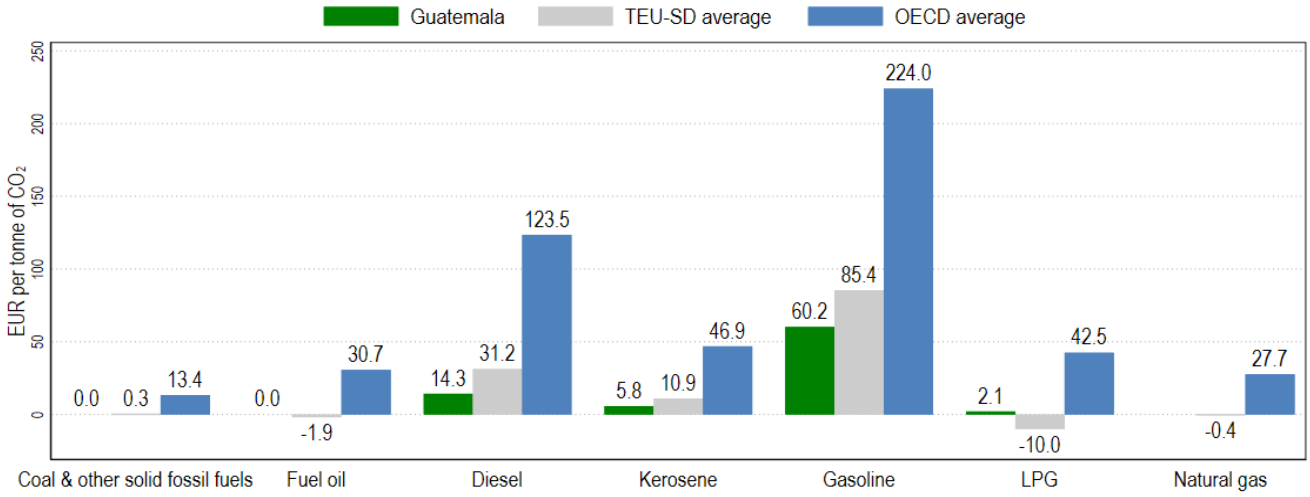
The project was carried out with the financial support from the governments of Ireland, Japan, Luxembourg, Norway, Sweden and the United Kingdom

- Revenues from fuel and electricity excise taxes as a share of GDP are below the OECD and TEU-SD average.
- There are no fuel subsidies and limited electricity subsidies, exceeding the OECD average, but similar to the majority of TEU-SD countries.

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.

- Diesel and gasoline, the dominant fuels in road transport, face the highest ECRs. The road sector represents 15.5% of Guatemala's CO_2 emissions from energy use.
- Coal, fuel oil, kerosene and LPG mainly used in the residential & commercial, industrial and electricity sectors, face no ECR, or an ECR close to zero. The residential & commercial, industrial, and electricity sectors represent 60.6%, 8.7% and 14.9% of Guatemala's CO_2 emissions from energy use, respectively.



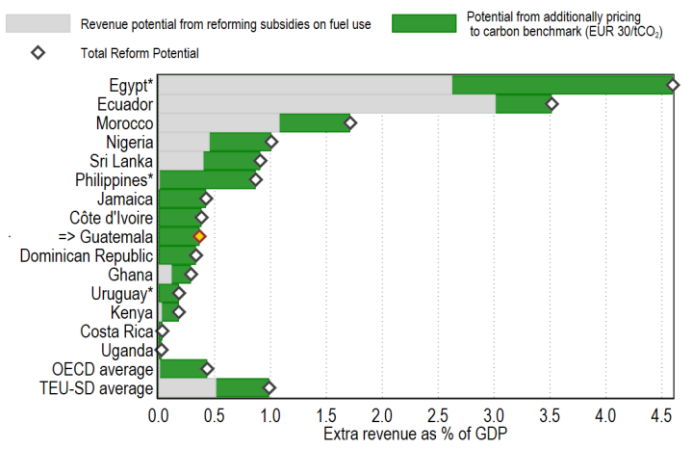
Guatemala has low effective carbon rates relative to the OECD average. Compared to other TEU-SD countries:

- The ECR is low for diesel, kerosene, and gasoline relative to the TEU-SD average.
- The ECR on coal, fuel oil, and natural gas is similar to the TEU-SD average.
- The ECR on LPG is 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.

Guatemala's tax revenue potential from carbon price reform is an increase of revenue worth 0.4% of GDP. This is similar to the OECD average, and lower than the TEU-SD average. There is no significant potential gain from reforming subsidies on fuel use as current subsidy levels are low.



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