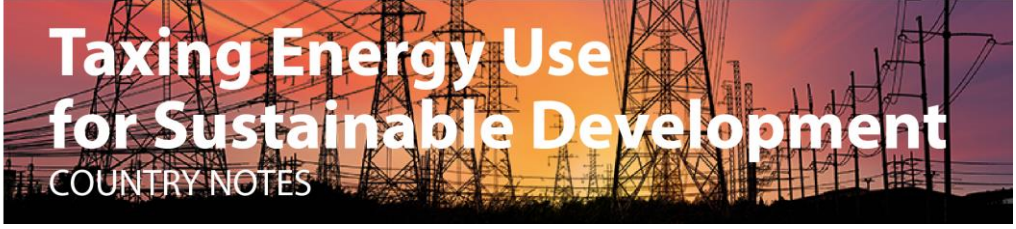



# Egypt

## Macroeconomic and policy context

| Key statistics | |
|---|---|
| GDP growth (annual) (2007-2017) | 4.0% |
| GDP growth (annual, per capita) (2007-2017) | 1.8% |
| $CO_2$ emissions growth (annual) (2007-2017) | 2.8% |
| $CO_2$ emissions growth (annual, per capita) (2007-2017) | 0.7% |
| Main combustible energy source; corresponding share of CO2 emissions (2017) | Natural gas, 41.4% |
| Non-combustible energy sources; share of primary energy use (2017) | 1.7% |
| Total energy self-sufficiency (%) (2017) | 84.0% |
| 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) | 17.1% |

*Sources as specified in TEU-SD brochure.*

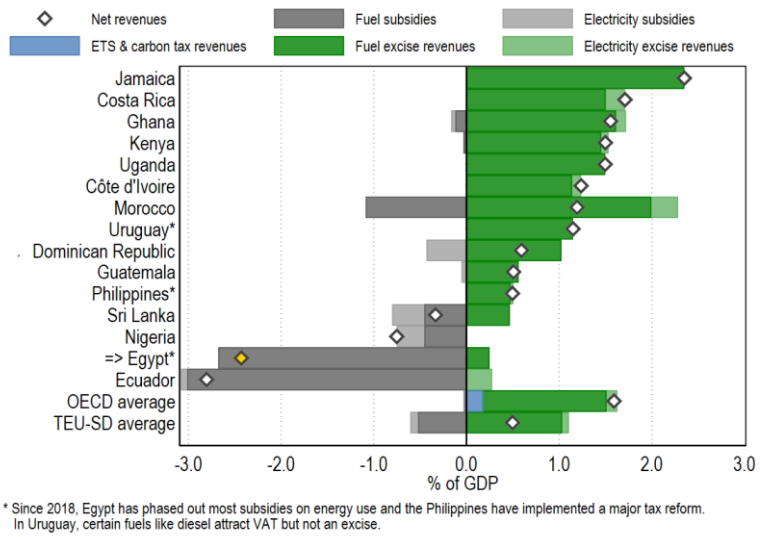
Between 2007 and 2017, Egypt's GDP grew by an average of 4.0% per year in total, and 1.8% per capita. Over the same period, energy-related $CO_2$ emissions increased by 2.8% per year in total, and 0.7% per capita. Natural gas, the fossil fuel in Egypt, accounted for 41.4% of $CO_2$ emissions from energy use in 2017, down from 42.6% in 2007. Non-combustible energy sources, mainly hydropower in Egypt, accounted for 1.7% of primary energy use in 2017, down from 2.2% in 2007. Egypt is a net energy and oil products importer and crude oil exporter. The whole of the population has access to electricity and 95.0% to clean cooking.

The government of Egypt has committed to pursuing fossil fuel subsidy reforms to promote the use of cleaner energy sources in its First Nationally Determined Contribution. In this NDC, Egypt did not make a specific emissions reduction target. Egypt's tax-to-GDP ratio of 17.1% 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

Egypt does not have an explicit carbon tax, nor a $CO_2$ emissions trading system. However, it does collect energy taxes, including excise taxes on coal and petroleum coke, fuel oil, diesel, gasoline, LPG and natural gas, and a tax on residential, commercial and public electricity consumption. TEU-SD classified two measures as subsidies on energy use in Egypt in 2018; subsidies have been reformed since (see recent developments section below).

- Diesel, fuel oil, kerosene and gasoline prices are regulated and result in pre-tax subsidies.
- Residential electricity consumption is subsidised by the Ministry of Electricity and Renewable Energy.




* 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.

## 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 Egypt are negative in 2018 and correspond to 2.4% of GDP, putting a strain on domestic resource mobilisation as subsidies exceed taxes. 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 low.

[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

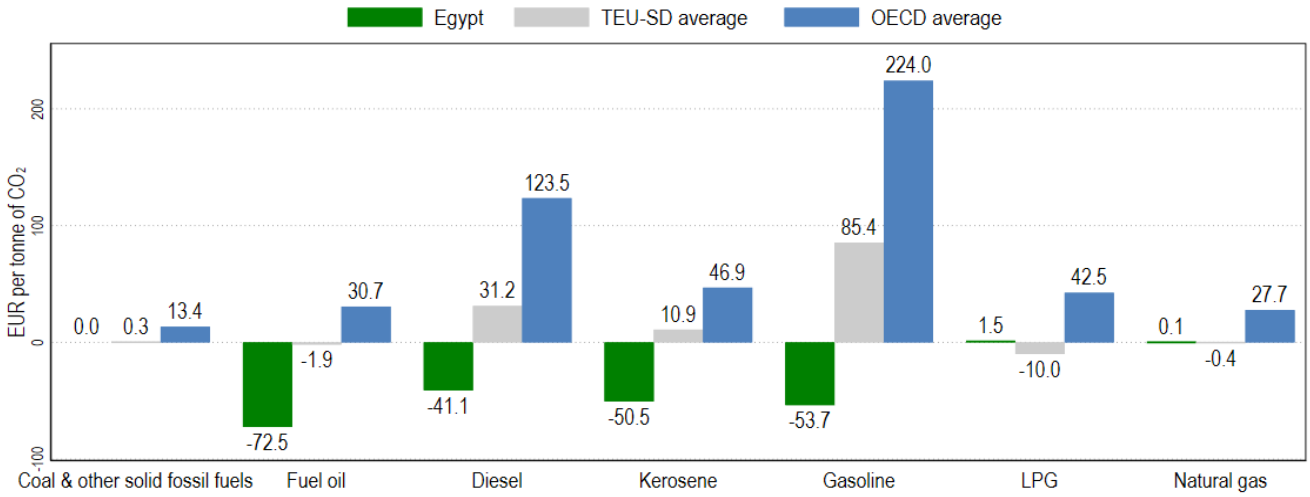
- Fuel subsidies are in the magnitude of 2.7% of GDP, which is high relative to the OECD and TEU-SD average.

Recent developments: Egypt has substantially reduced its fossil fuel subsidies over the past three years. In December 2018, an automatic price indexation mechanism for 95-octane gasoline was approved by the Prime Minister. In April 2019, the price mechanism was implemented and that June an additional price mechanism for other fuel products was approved. As a result, spending on fuel subsidies dropped by approximately 65% from July 2019 to March 2020. In addition, Egypt has introduced new taxes on petroleum products in May 2020, with rates ranging between 0.25 EGP to 0.30 EGP per litre (approximately 1.5 eurocents per litre), depending on the final product.

**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.*

- Fuel oil, diesel, kerosene and gasoline face the lowest, negative ECRs. The road sector, where the bulk of diesel and gasoline is consumed, and the off-road sector, where kerosene is the main source of energy consumed, represent 24.5% and 1.2% of Egypt's $CO_2$ emissions, respectively.
- Coal, LPG and natural gas, mainly used in the electricity, residential & commercial and industrial sectors face the highest ECRs. The former sectors represent 36.6%, 11.3% and 25.2% of Egypt's $CO_2$ emissions, respectively.

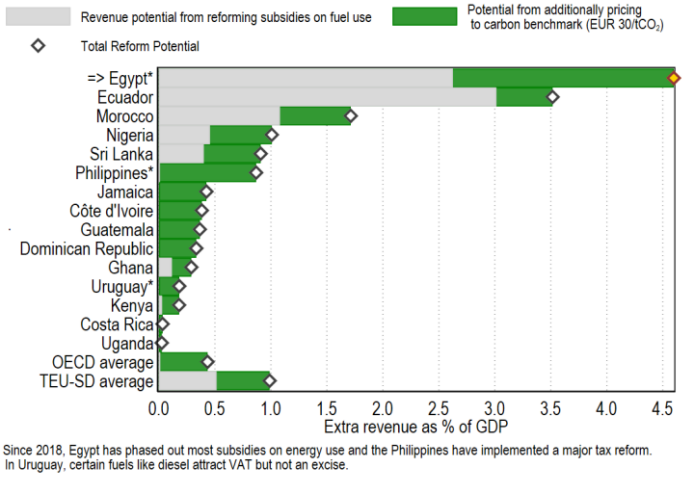



In 2018 (before the subsidy reform) Egypt has low effective carbon rates relative to the OECD and TEU-SD averages, other than for LPG and natural gas.

- The ECR is negative for diesel, kerosene and gasoline, implying that carbon use is de facto subsidised for these energy sources.
- There are no substantially positive ECRs in Egypt.

**Revenue potential from carbon price reform**

*By how much would tax revenues increase if ECRs were raised to reach EUR 30/t$CO_2$ 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.*




Tax revenues could increase by 2.0% worth of GDP if ECRs were raised to reach the benchmark rate of EUR 30/t$CO_2$ for all fossil fuels, an increase that is above the TEU-SD and OECD average. As of 2018, Egypt could also benefit from an estimated increase of tax revenues worth 2.6% of GDP with reforming subsidies on fuel use, but a large part of this revenue potential has already been reaped by recent subsidy reforms.