

Morocco

Macroeconomic and policy context

Key statistics	
GDP growth (annual) (2007-2017)	3.9%
GDP growth (annual, per capita) (2007-2017)	2.5%
CO ₂ emissions growth (annual) (2007-2017)	2.4%
CO ₂ emissions growth (annual, per capita) (2007-2017)	1.0%
Main combustible energy source; corresponding share of CO ₂ emissions (2017)	Coal, 33.3%
Non-combustible energy sources; share of primary energy use (2017)	4.9%
Total energy self-sufficiency (%) (2017)	9.0%
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)	27.6%

Sources as specified in TEU-SD brochure.

Between 2007 and 2017, Morocco's GDP grew by an average of 3.9% per year in total, and 2.5% per capita. Over the same period, energy-related CO₂ emissions increased by 2.4% per year in total, and 1.0% per capita. Coal and other solid fossil fuels, the main category of fossil fuels used in Morocco, account for 33.3% of CO₂ emissions from energy use in 2017, up from 30.7% in 2007. Non-combustible energy sources, like wind and solar in Morocco, account for 4.9% of primary energy use in 2017, up from 2.7% in 2007. Morocco is a net energy importer. The electrification rate is complete and 95.0% of the population has access to clean cooking.

The government of Morocco has committed to pursuing sustainable economic development policies focused on addressing Morocco's vulnerability to climate change and expanding domestic renewable energy production in its First Nationally Determined Contribution. In this NDC, Morocco set an unconditional GHG emissions reduction target of 17% by 2030, relative to the BAU scenario. Morocco's tax-to-GDP ratio of 27.6% is lower than the OECD average¹ 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

Morocco does not have an explicit carbon tax, nor a CO₂ emissions trading system. However, it does collect energy taxes, including:

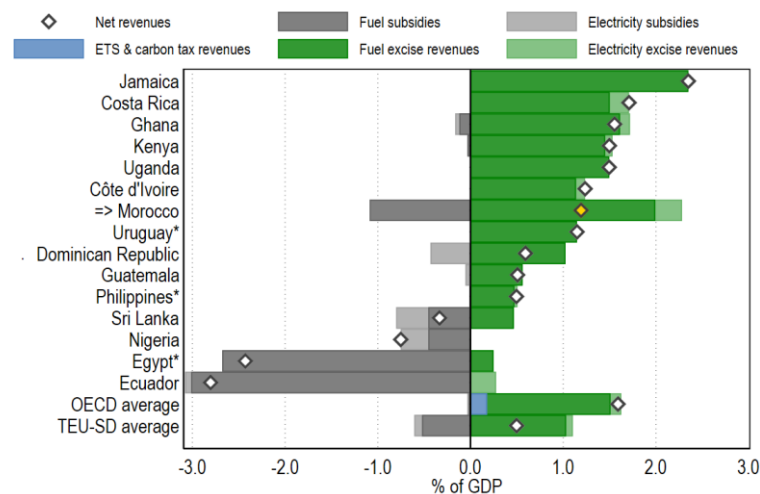
- ◆ Excise taxes on coal and petroleum coke, fuel oil, diesel, gasoline, LPG and natural gas.
- ◆ An electricity excise tax on residential, commercial and public electricity consumption.

TEU-SD classified one measure as a subsidy on energy use in Morocco in 2018. The state compensates LPG importers and filling centres an amount equivalent to the difference between the import price and the state regulated price, in addition to reimbursing transport 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 Morocco represent 1.2% 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.

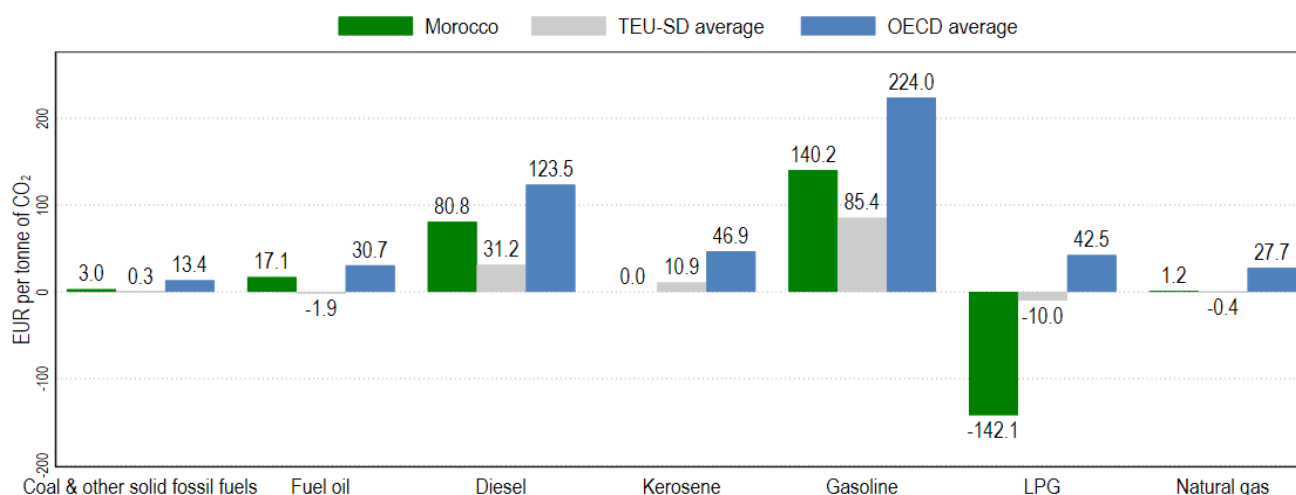
- ◆ Revenues from fuel and electricity excise taxes as a share of GDP are relatively high.
- ◆ Fuel subsidies make up 1% of GDP, which is high relative to the OECD and TEU-SD average.
- ◆ The lack of electricity subsidies is similar to the OECD average and most TEU-SD countries.

Recent developments: In January 2018, the Head of Government committed to reforming Morocco's LPG subsidies so that they only benefit the poor and vulnerable. However, a concrete remains to be approved.

Average effective carbon rates by fuel, 2018

The Effective Carbon Rate (ECR) is the total price that applies to CO₂ 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 CO₂ emissions and local pollution, while taxes and permit auctioning raise revenue.

- ◆ Coal, fuel oil, kerosene, LPG and natural gas, mainly used in the residential & commercial, electricity and industrial sectors, face the lowest ECRs. The residential & commercial, electricity and industrial sectors represent 19.9%, 35.2%, and 13.2% of Morocco's CO₂ emissions from energy use, respectively.
- ◆ Diesel and gasoline, the dominant fuels in road transport, face the highest ECRs. The road sector represents 27.4% of Morocco's CO₂ emissions from energy use.



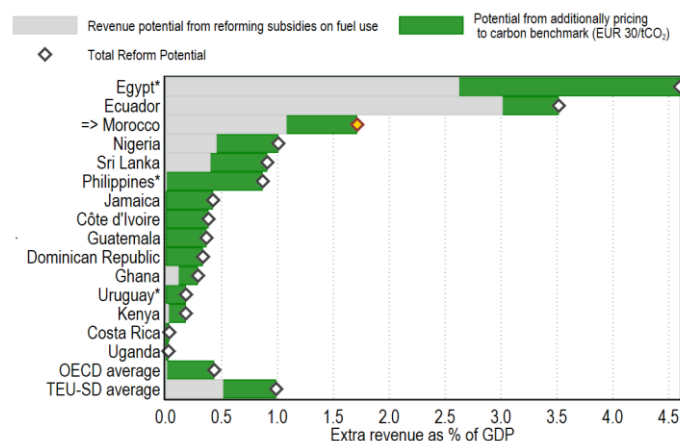
Morocco has low effective carbon rates relative to the OECD average. Compared to other TEU-SD countries:

- ◆ The ECR is high for coal, fuel oil, diesel, gasoline and natural gas relative to the TEU-SD average.
- ◆ The ECR is negative for LPG (implying that its use is subsidised) and is lower than the TEU-SD average.
- ◆ The ECR is also lower than the TEU-SD average for kerosene.

Revenue potential from carbon price reform

By how much would tax revenues increase if ECRs were raised to reach EUR 30/tCO₂ for all fossil fuels? The benchmark of EUR 30 is a low-end estimate of the climate damage caused by each tonne of CO₂ 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 an amount equivalent to 0.6% of GDP if ECRs were raised to reach the benchmark rate of EUR 30/tCO₂ for all fossil fuels, an increase that is above the TEU-SD and OECD average. Morocco could also benefit from an estimated increase in the magnitude of 1.1% of GDP in tax revenues by reforming subsidies on fuel use, which is higher than the OECD and TEU-SD averages. Thus, Morocco's total tax revenue potential from a carbon price reform corresponds to an amount equivalent to 1.7% of GDP.



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