

A Guide to Carbon Pricing and Fossil Fuel Subsidy Reform

A SUMMARY FOR POLICYMAKERS

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FOREWORD

The science is clear: climate change is already here. It is taking place in every corner of the globe. It is happening faster than ever and now intensifying. Our changing climate, which poses an existential threat, is primarily caused by our continued use of fossil fuels. Yet, the fossil fuel industry benefits from subsidies of \$11 million every minute which is fueling our climate crisis. Indeed, exposure to air pollution is estimated to cause seven million premature deaths every year.

At the same time, our path out of this crisis is equally clear. To limit the global temperature rise to 1.5 degrees Celsius, emissions need to fall by 7.6 per cent every year between now and 2030. This translates to an annual six per cent decrease in energy production from fossil fuels. An intrinsic part of this process is for Governments to directly address the current mispricing of fossil fuel-based energy that entire economies are built on. That starts with phasing out fossil fuel subsidies and putting a price on carbon.

Global shifts in carbon pricing and fossil fuel subsidy reform are gathering pace. Countries, including Morocco and India, have taken steps to reform these subsidies while major-emitter countries in the G7 and G20 have made commitments to phase out fossil fuel subsidies. More than 60 carbon pricing initiatives have been implemented across the world. Indeed, 96 of the 146 Nationally Determined Contributions refer to carbon pricing as a "policy option".

Yet such is the extent of our climate crisis, Governments need to rapidly accelerate their decarbonisation and drive forward a clean energy transition. Drawing on existing literature and case studies, *A Guide to Carbon Pricing and Fossil Fuel Subsidy Reform: A Summary for Policymakers* aims to provide decisionmakers with new insights and guidance on how to implement successful energy pricing reform in three steps: 1) phasing out fossil fuel subsidies; 2) putting a price on carbon; and 3) reallocating these resources towards the achievement of the Sustainable Development Goals (SDGs).

The report highlights the pros and cons of existing tools in relation to specific economic and social contexts—drawing lessons from emissions trading pilot schemes in China, for instance. Using a macroeconomic lens, the report also demonstrates how multilateralism will be pivotal to bolster global, collective action towards fair and effective carbon pricing mechanisms. Indeed, the report complements the ambitious objectives set out in the new Global Roadmap on clean energy that stemmed from the 2021 High-Level Dialogue on Energy. For instance, it calls for a shifting of fossil fuel subsidies to renewable energy investments, while creating new green, decent and healthy jobs to secure a just and inclusive transition.

As some countries start to build forward better from the COVID-19 pandemic, we cannot go back to business-as-usual as our continued dependence on fossil fuels is precipitating the decline of both people and planet.

The United Nations Development Programme (UNDP) will continue to offer support to countries and policymakers as they design and implement the energy pricing reforms that will lay the foundations of the green economies of the future. Complementing these efforts, UNDP has made an ambitious commitment to work with our partners to provide 500 million additional people with access to clean and affordable energy by 2025.

With the SDGs serving as our collective North Star, the entire UN family and our partners will be on hand to help countries and communities to plot a course out of this crisis -- towards that greener, more inclusive, and more sustainable future.



Achim Steiner Administrator, United Nations Development Programme (UNDP) Co-Chair, UN-Energy

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KEY MESSAGES

- Carbon pricing is key to reducing emissions and delivering the nationally determined contributions (NDCs) cost-effectively, and could mobilize hundreds of billions, even trillions, of dollars in additional revenues annually. This report provides a comprehensive analysis of existing carbon pricing tools, and aims to help policymakers decide which carbon pricing policies will be the most adapted to their national contexts. It shows that the effectiveness of carbon pricing mechanisms is optimal when combined with fossil fuel subsidy reform.
- Policy options for imposing an explicit carbon price include a tax, an emissions trading system (ETS) or measures combining features of both. Taxes can be levied on energy production, consumption or trade, for example. Alternatively, policy makers can control the volume of emissions under an ETS. Finally, so-called "hybrid" measures combine facets of both these policies by setting a cap on emissions but, for example, limiting the range within which prices can fluctuate.
- Carbon pricing measures aim to increase the cost of polluting fuels and technologies. But if misplanned or misdesigned, carbon taxes can lead to civil unrest. This was the case in France, where the introduction of a carbon component into the fuel tax in 2014 led to a price rise in 2018 which triggered the mass protest movement of the Gilets Jaunes (Yellow Vests), partly because the price rise incurred by the tax was going to disproportionately affect lower middle class and working class households who are heavily reliant on cars.
- Carbon pricing measures are not only effective in terms of greenhouse gas emissions reductions. They also present unique revenue raising opportunities. Unlike other policy instruments to reduce greenhouse gas emissions, such as, energy efficiency regulations or subsidies for low carbon technologies, carbon pricing has the potential to mobilize hundreds of billions, even trillions, of USD in additional fiscal revenues annually which could help support the Sustainable Development Goals (SDGs). Positive carbon pricing also presents substantial revenue opportunities. Overall, these could address often chronic funding issues faced by many developing country governments.

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