

A GUIDE TO CARBON PRICING AND FOSSIL FUEL SUBSIDY REFORM:



A SUMMARY FOR POLICYMAKERS

Reducing fossil fuel dependency in the energy sector — around 65 percent of total global greenhouse gas emissions — is essential to implementing the Paris Agreement objective of limiting climate change to well below 2°C (IPCC, 2018).

There is a growing consensus that carbon pricing measures will be essential to achieving climate outcomes and will therefore play an important part in any mitigation policy package that governments implement.

The current carbon market covers only 20 percent of global GHG emissions, and majority of emissions (85 percent) are priced at less than US\$10 per tonne of CO₂. This price must increase at least ten-fold this decade to deliver sustainable transformational change and meet the targets of the Paris Agreement.

The IMF is calling for a \$75 dollar floor on the price of carbon¹ and the Carbon Pricing Leadership Coalition, co-chaired by Joseph Stiglitz and Lord Nicholas Stern suggests a price of \$50–100/tCO₂ by 2030. Mark Carney's Taskforce on Voluntary Carbon Markets has suggested the voluntary carbon market needs to be 160 times bigger in 2050 than it was in 2020².

Adequately pricing carbon has the added benefit of raising additional fiscal revenues that could support broader socio-economic development and help governments meet their Sustainable Development Goals.

Despite today's low price of carbon, the global market is already worth \$272bn³ and is projected to reach \$2 trillion by 2040⁴. However, these estimates still pale in comparison to the trillions of dollars lost annually due to fossil fuel subsidies.

While carbon pricing aids the transition to a low-carbon economy, fossil fuel subsidies can undermine and even reverse the impacts of carbon pricing.

UNDP's Guide to Carbon Pricing and Fossil Fuel Subsidy Reform provides a holistic view of possible policy frameworks and quantification of net positive impacts of combining carbon pricing mechanisms with fossil fuel subsidy reform.

It explores and compares different types of policy instruments that can support countries in designing integrated approaches to achieve emissions reductions and national development targets (see table below).

The Guide further provides an overarching policy strategy to help policymakers overcome political obstacles and ensure equitable outcomes from carbon pricing reforms. This includes understanding the distributional impacts; options for targeted compensation of adversely impacted and vulnerable stakeholders; gradual and sequenced approach to price reform; and how to develop a well communicated and coordinated policy implementation.

Table: Summary features of different mitigation policy instruments

Policy instrument	Pros	Cons
Carbon price/energy subsidy reform	<ul style="list-style-type: none"> • Low-cost abatement • Revenue opportunities 	<ul style="list-style-type: none"> • Increases energy costs to consumers • Potentially politically unpopular
"Feebate"⁵	<ul style="list-style-type: none"> • Avoids energy price increases • Creates incentives for mitigation by inefficient consumers or producers 	<ul style="list-style-type: none"> • No fiscal revenue • Not fully efficient
Regulations e.g. energy efficiency standards	<ul style="list-style-type: none"> • Overcome some market failures and barriers (e.g. hidden energy costs) • Create scale markets 	<ul style="list-style-type: none"> • Technically challenging to set/measure performance standards • Risk of regulatory capture • No fiscal revenue
Feed-in tariffs	<ul style="list-style-type: none"> • Effective at stimulating investment • Can be directed at specific technologies 	<ul style="list-style-type: none"> • High cost • Increase energy costs to consumers • Inflexible long-term payments • Negative impact on ETS prices • No fiscal revenue
Capital subsidies	<ul style="list-style-type: none"> • Effective at stimulating investment • Can be directed at specific technologies 	<ul style="list-style-type: none"> • Fiscally expensive • Risk of free-riding • Negative impact on ETS prices

¹IMF, Proposal for an International Carbon Price Floor Among Large Emitters, 2021

²Terraformation and Frontier Economics, The Value of Restoration, 2021

³S&P Global, Platts, 2021

⁴ExxonMobil, 2021

⁵A "feebate" is a hybrid fiscal instrument which combines subsidies/rebates for households or firms that are below a given emissions intensity threshold with taxes on those above this.