Policy Brief

THE ROLE OF THE IMF IN FACILITATING GREEN ENERGY TRANSITIONS

Task Force 7

International Finance and Economic Recovery

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Abstract

The imperative for transitioning to a green energy-based, climate-resilient economy is clear. The Intergovernmental Panel on Climate Change (IPCC) has underscored the need to reach net-zero emissions globally by mid-century to preserve a credible pathway to limit warming to 1.5 degrees Celsius. The energy transition will impact the fiscal and financial health of economies if it is done in a disorderly manner. Economies that are significantly dependent on coal, oil and gas have the dual challenge of reducing the carbon intensity of their economies while investing in clean energy and climate resilience. More broadly, this brief argues that the International Monetary Fund (IMF) needs to pay attention not only to declining fossil fuel-based revenue streams but also needs to help equip countries to reap the opportunities created by a clean energy economy. The Group of 20 (G20) has the opportunity to help reposition the IMF in how the Fund addresses climate change in its work, the nature of policy advice it provides and the role it can play in helping countries mobilise finance to ensure an orderly transition to a clean energy economy.

Challenge

There is a growing consensus on the need to steer economies away from fossil fuel-intensive sectors in the long run. One hundred and thirty-five countries have pledged carbon neutrality thus far. These net-zero growth trajectories will entail a fundamental shift in the composition of the economy, especially the energy sector.

As net-zero strategies will have major fiscal and financial implications, there is a clear need for the International Monetary Fund (IMF) to be engaged on this topic. The IMF undertook a review of its surveillance functions through the Comprehensive Surveillance Review (CSR). Shortly thereafter, in August 2021, the IMF also released its draft climate change strategy. Furthermore, the Group of 20 (G20) also called on the IMF to establish a new resilience and sustainability trust to help countries recover from the pandemic in a clean, climate-resilient manner. In other words, climate change is now firmly a part of the IMF's mandate.

This policy brief is squarely aimed at the role of the IMF in supporting economies that are carbon intensive and reliant on fossil fuels for domestic revenue. As carbon-intensive economies have the dual challenge of winding down fossil fuel-intensive sectors while scaling up clean energy, mobilising resources for an orderly transition will be critical.

Proposal

This policy brief examines the role of the IMF, the only rules-based, global institution charged with maintaining financial and economic stability, in moving towards low-carbon development. The IMF has three major tools at its disposal that it needs to deploy to address the fiscal impacts of the energy transition. These tools are surveillance activities, lending and analytics. With growing global consensus on the need to accelerate decarbonisation efforts to achieve net-zero emissions by mid-century, the IMF will need to integrate climate change considerations into its tools and instruments to support an orderly transition to a climate resilient, low-carbon world.

The IMF released its draft climate change strategy in August 2021. With the culmination of the Comprehensive Surveillance Review earlier in the year, climate change is firmly on the IMF's agenda. In the CSR, the IMF charted out a plan on how it will incorporate climate change into its surveillance activities every year. Climate change will feature in both bilateral Article IV reports, which are macroeconomic health reports, as well as multilateral surveillance where the IMF monitors systemic risks. The G20 has an important opportunity to help shape the policy discussion on the role the IMF needs to play in helping to foster a green energy transition in line with its mandate.

In this brief, we will discuss the fiscal ramifications of pricing carbon in India and Latin America and the Caribbean. The policy recommendations are based on studies that examine how fiscal balances of countries change as they adopt net-zero strategies. We will identify the role of the IMF in identifying transition risks, incorporating those risks into bilateral and multilateral surveillance activities, and facilitating resource mobilisation towards clean energy and climate-resilient development.

First, examining the implication of net-zero strategies on the fiscal and financial health of member states needs to be a core part of surveillance functions.

The transition to net-zero will have a profound impact on public revenue as countries shift to renewable energy. Using International Energy Agency (IEA) scenarios for India, Bhandari and Dwivedi (2022) found that the absolute volume of revenue from fossil fuels will continue to grow until 2040. However, fossil fuel revenue, as a share of total public revenue, will fall significantly. This trend is valid for both the central and local governments in India. As a result, moving away from fossil fuels will create fiscal challenges for the central and local governments in the next two decades.

Analytical work that examined the fiscal implications of net-zero for hydrocarbon exporters in Latin America and the Caribbean have found consistent results. Also using IEA scenarios, Titelman et al. (2022) examined the fiscal implications of the net-zero transition on Bolivia, Brazil, Colombia, Ecuador, Mexico, and Trinidad and Tobago. The authors found that falling hydrocarbon revenues combined with efforts to achieve social and investment objectives would result in a major growth of public debt relative to the corresponding business-as-usual scenario in all countries except Brazil and Colombia. The results also show that the revenue generated from carbon taxes do not raise adequate revenue to help meet the investment needs in Bolivia, Ecuador, Mexico, and Trinidad and Tobago.

Given these findings, it will be critical for the IMF to integrate the impact of climate policy commitments into its surveillance functions. Likewise, countries are already facing the impacts of climate change. The IMF should also pay close attention to how physical climate risks impact the fiscal and financial situation of countries.

Second, the IMF will need to actively help countries mobilise the resources necessary for a just transition to a low-carbon economy in the context of declining revenue from fossil-intensive sources.

In particular, identifying the opportunities to expand and diversify the revenue base during the transition will be vital. Findings from analytic work undertaken in the context of major hydrocarbon exporters and countries with economies reliant on coal-based power are particularly illustrative of the challenges faced by these countries in transitioning away from fossil fuels.

Bhandari and Dwivedi (2022) examined the revenue from fossil fuels in India and found that more than a fifth of central government revenues was from fossil fuels as of 2019. This estimate includes both tax (direct and indirect) and non-tax revenues (including royalties, dividends, etc.) paid by public sector undertakings. For local governments, the total revenue generated from fossil fuels was lower at about 8 percent of total revenue. The combined revenue from both the central and local governments was 13 percent of the total revenue collected, which translates into 3.2 percent of India's gross domestic product (GDP). To put the fossil fuel revenues in context, total fossil fuel-related revenues are higher than India's defence expenditure and comparable to the combined education, culture and sports expenditures of both the central and local government.

The IMF has advocated for the use of carbon pricing as a policy instrument to help reduce greenhouse gas emissions. The IMF has also encouraged countries to use carbon pricing as

a method to raise revenue to help finance the transition to a low-carbon economy. Findings from the studies mentioned above suggest that carbon pricing alone will not be sufficient to help meet the investment needs required for a transition to net-zero. Therefore, the IMF will need to help countries mobilise resources from sources beyond carbon pricing as well.

To support the mobilisation of domestic resources, the IMF should also assist countries in implementing reforms that help to increase tax revenue and improve the tax structure. The need to ensure a just transition implies that the tax instruments should be progressive and should be further bolstered by multilateral lenders to enable countries to put in place policy frameworks that help achieve their development and climate aspirations.

Existing research indicates that investments in "green" activities are likely to have greater multiplier effects than business-as-usual activities. The IMF should build on some of its own work on green multipliers to increase the evidence base of the impact of green spending and encourage the integration of green fiscal multipliers in analytical tools and models.

Countries will need to put in place pro-growth and development-centred fiscal policies to achieve climate, economic and social objectives. A combination of domestic resource mobilis ation and international support will be required to help countries finance the transition away from fossil fuels.

Third, the IMF's analytic work will be crucial to understanding how net-zero strategies will shape the external position of an economy, including foreign exchange flows, resources available for decarbonisation and fiscal space more generally.

The IMF's support for analytical work on diversifying economies will also be particularly instructive. As India starts pursuing its net-zero ambition, the associated reduction in fossil-fuel use will lead to a major decline in government revenue. As India undergoes this energy transition, it will need to find other ways to generate resources. In other words, India will need to identify how it can maintain high growth and a stable economy while seizing on opportunities that the low-carbon transition creates for countries like it.

The IMF's analytical work on debt sustainability analyses will also require re thinking in the context of the vast scale of resources required to address climate change. The IMF needs to help produce country-specific data and estimates of the fiscal impacts of climate shocks. Papers that incorporate physical climate shocks into debt sustainability analyses already show how climate risks lead to a public debt trajectory where debt levels converge to high levels that even lead to debt distress.

Much of the attention has focused on identifying carbon price levels and associated revenue-generation volumes. Given the findings of the papers discussed above, it is clear that the mobilisation of resources will require a more comprehensive view of the economy in terms of how developing countries can generate the necessary resources to steer their economies towards low-carbon paths.

The IMF has also advocated for an international carbon price floor for a globally coordinated approach to reducing carbon emissions. The IMF will need to carry out analytic work to understand the implications of international carbon price-floor options to identify the impact on carbon emissions, the cross-border impacts of carbon pricing (spillover transition risks) and the impact of carbon pricing on fiscal balances.

RECOMMENDATIONS TO THE G20

First, the fiscal consequences of pursuing net-zero strategies are of interest to the G20 membership. Many of the G20 members are major oil and gas exporters and consumers. There is a need to firmly connect net-zero strategies with policy attention to fiscal balances.

Second, as the largest shareholders of the IMF, G20 members have a special opportunity to help define and craft how the IMF addresses green transitions in its work. For example, the IMF will be undertaking work to its climate change strategy and outcomes of the Comprehensive Surveillance Review into staff guidance notes and other operational documents. The G20’s input will be vital.

Third, as major shareholders of multilateral development banks (MDBs), the G20 has an important opportunity to increase the capital base of these institutions to increase the scale of financing available to developing countries. The mobilisation of domestic resources needs to be accompanied with a step-wise increase in financing from international institutions.