



Task Force 9  
**International Finance**

**Policy brief**

# THE NEED FOR A DEVELOPMENT-CENTERED CLIMATE CHANGE POLICY AT THE INTERNATIONAL MONETARY FUND

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# ABSTRACT

Climate change and climate change policy pose significant risks to financial and fiscal stability. They also pose risks and offer opportunities for growth and development prospects. As the only multilateral, rules-based institution charged with maintaining the stability of the international financial and monetary system, the International Monetary Fund (IMF) should put in place an overarching climate strategy that is then mainstreamed across the IMF's toolkit. The three pillars of such a strategy should be: identifying the global and national-level macroeconomic implications of climate risks; and advance the necessary financing and policy frameworks for climate action through IMF multilateral and bilateral surveillance activity; aligning IMF lending for climate resilience and just transitions; and ramping up global climate ambition through global leadership on coordinated policies and finance. To do this, significant reform is needed within the IMF – involving surveillance and advisory functions as well as the IMF's lending toolkit. The COVID-19 economic crisis provides an opportunity and an impetus for this reform. Whereas numerous other international institutions focus on climate risks, what is missing is a global actor focused on the macro-economic implications of climate risk and climate policy. The IMF has a central role to play in ensuring that a rapid just transition occurs in a manner that generates sustainable global growth in a manner that is fiscally sound and financially stable.



## CHALLENGE

There is growing recognition that climate change is a macro-critical phenomenon that needs to be mainstreamed at the IMF. Climate change poses physical risks that can threaten the financial stability of nation-states and the global economy. Moreover, transition risks within and across borders can have similar impacts as nations engage in policies to transform their economies to adapt to and mitigate climate change. It is imperative that IMF strategies incorporate climate change into its operations in a manner that enables economic growth, stability, equity and development of emerging market and developing countries and promotes the necessary collective action to deliver a just transition globally. Consequently, it is imperative that the IMF should consider playing a more active role in pushing advanced and major economies to deliver climate finance as part of their “fair share”, consistent with the equity principles contained in the United Nations Framework Convention on Climate Change (UNFCCC) and Paris Agreement. The COVID-19 economic crisis has made the challenge of building more resilient and carbon neutral economies much more urgent.



# PROPOSAL

The newly established G20 Working Group on Sustainable Finance should add a workstream on the macro-critical aspects of climate risks and the necessary financing and policy frameworks of a just transition to its Sustainable Roadmap. The IMF should play a key role in filling gap. The IMF should improve on its overarching climate strategy and mainstream climate action throughout the Fund's lending toolkit. The climate strategy and subsequent implementation should be the result of a collaborative process with the full membership of the IMF, as well as with relevant stakeholders and experts outside of the IMF. The policy brief outlines three key pillars that should form the core of an overarching climate strategy at the IMF and illustrates how surveillance efforts can incorporate physical and transition climate risks; how IMF advice efforts can help nations design fiscal systems and financial rules that align with climate goals; and how IMF can mobilize domestic and international finance to support climate goals and action. In so doing the IMF should integrate climate objectives with achieving the Sustainable Development Goals and strengthen its work with other international organizations on approaches to increase productivity, diversify economies and foster inclusive growth.

## ***DEVELOPING AN OVERARCHING CLIMATE STRATEGY***

The overarching goal of the IMF climate strategy should be to enable transitions to climate resilient, carbon neutral economies, pursuant to its mission and consistent with its Articles of Agreement. The strategy should have three pillars, and three guiding principles.

Three pillars should form the core of an IMF climate strategy.

### **Identify the macroeconomic implications of climate risks and policy frameworks at global, cross-border, and national levels through IMF surveillance at multilateral and bilateral levels**

IMF surveillance functions will need to chart progress toward global carbon neutrality. According to the IMF's mission, the Fund should take leadership in aiding in the design and surveillance of fiscal and financial systems that enable carbon neutrality and climate resilient economies. In addition to financial and fiscal policy, the Fund will need to examine the extent to which country growth strategies are aligned with achieving net zero by 2050 and monitor progress toward the structural changes that will be needed to achieve such ends. The Fund should also assess the investment requirements for climate mitigation and adaptation and the implications for climate finance. Physical and transition risks pose critical challenges to financial and fiscal stability across the IMF's membership. The IMF will need to develop a framework and toolkit to incorporate functions that will allow the Fund to help nations identify sources of physical and transition risk into its surveillance and advice and identify policies and strategies to prevent and mitigate such risk.



Moreover, the IMF may need to develop new lending facilities for countries that suffer balance of payments difficulties due to climate risk.

## **Strengthening IMF lending for Climate Resilience and Just Transitions**

The IMF is the most appropriate multilateral institution to serve as the front-line response to climate shocks, especially where those shocks impact the balance of payments, fiscal stability, and growth trajectories. Existing IMF lending programs will need to be adjusted to align with climate and development goals. What is more, given that climate change and climate change policy is macro-critical, new lending products may need to be devised for countries particularly vulnerable to physical and transition risk, as well as large emitters.

### **Provide global leadership on the necessary international policy frameworks and financing to prevent and mitigate climate risk and maximize the benefits of a just transition**

Climate action will take an ambitious mix of policy reforms as well as a stepwise increase in public and private investment. The IMF has conducted groundbreaking work on the need for and benefits of carbon pricing and subsidies reduction, which it should continue to lead on. However, the need for massive investments and a just transition are of equal importance and this will need increased attention at the IMF. The key to a transition to resilient and sustainable growth will be the stepwise mobilization of domestic and international resources to adapt to climate change and trigger rapid structural transformation to carbon neutral, climate resilient and high growth economies over the next few decades. It is paramount that the transformation of the world economy should be a just one – both within and across countries. The IMF, along with other international financial institutions, will have an essential role to play in providing advice, financing, and monitoring progress and action toward carbon transitions that are consistent with the principles of equity and fair burden sharing.

These three pillars of an IMF climate strategy should be guided by a set of principles aimed at maximizing the benefits of climate action and minimizing the risks. Firstly, differentiation and flexibility: the nature of climate change and the wide variety of structural differences among the economies of IMF members means that the IMF should avoid a “one size fits all” approach to climate change. It is paramount that the IMF should recognize different country circumstances. Fossil fuel producers and exporters, vulnerable Small Island Development States, and large emitters of greenhouse gases face different challenges. Secondly, national ownership and stakeholder participation: the IMF should partner with its member states and relevant stakeholders to work toward achieving climate transitions and avoiding “green conditionality”. Thirdly, and perhaps most importantly, the principles of equity and fair burden sharing should form the centerpiece of climate action at the IMF.



## **MAINSTREAMING CLIMATE POLICY FOR DEVELOPMENT AT THE IMF**

### **Identify the macroeconomic implications of climate risks and policy frameworks at global, cross-border, and national levels through IMF surveillance at multilateral and bilateral levels**

Climate change itself, and policies to address climate change, pose macro-critical risks to the financial and fiscal systems and ultimately the development prospects of IMF member countries. In recognition of this, in 2021 the IMF pledged to incorporate climate risks into its surveillance efforts. The climate risks that can be faced by member states fall into three categories – physical risk, national transition risk, and cross-border “spillover” transition risk. Climate-related financial risks include both “physical risks” and “transition risks.” Physical risks arise from immediate weather events as well as long-term changes in the climate. The former are characterized by increasing severity, volatility, and frequency; the latter by an erosion of fundamental links in food chains and lifelines. Physical risks are financial risks because they impact the value of financial assets such as property, infrastructure, and more. Banks in turn face higher credit and underwriting risks (Batten et al. 2016; Campiglio et al. 2018; Dikau and Volz 2019; Monasterolo 2020a). IMF surveillance has not focused on these issues to date (Ramos and Gallagher 2021).

Moving forward, surveillance efforts and IMF advice will need to better identify these risks while maintaining focus on the need for a stepwise increase in the financing needed for emerging market and developing countries to adapt to climate change and to transition to carbon neutral and inclusive economies. Surveillance and advice should take into account the unique attributes of many emerging market and developing countries that are particularly vulnerable to climate change and climate change policy. Small Island Developing States (SIDS), for example, can be highly vulnerable to physical climate risks. Single fossil fuel-based commodity exporters and countries with energy systems that rely on fossil fuels will be highly vulnerable to transition risks.

Small Island Developing States (SIDS) in the Caribbean that are highly dependent on tourism for foreign exchange, growth, and employment are a case in point. Climate vulnerable countries, such as SIDS, pay a higher cost of capital for climate vulnerabilities, which creates problems for fiscal space and debt sustainability (Kling et al. 2021). In this regard, Battiston and Monasterolo (2020) developed the concept of “climate spread”, a climate sovereign risk metric that incorporates countries’ exposure to climate physical and transition risks in their creditworthiness and financial stability profile. Hence unanticipated increases in the incidence of natural hazards such as hurricanes translate into acute supply shocks through the destruction of infrastructure that supports tourism such as hotels, roadways, and air transportation. Such destruction of the capital stock can have negative and cascading impacts on countries’ growth, employment, and balance of payments. The level of production and profitability decreases in impacted firms, which can have negative impacts on the financial system and lead to losses in tax revenues, bond spreads, and longer-term impacts. In 2017, global economic damages from extreme weather events were US\$ 320 billion, with a country such as Dominica losing 226% of GDP (Persaud 2021).



Transition risks at national level are risks emanating from a country's own transition policies to a low carbon economy. Transition risks materialize when changes in regulation, taxation, technological innovations, and other policies that take into account social costs or emissions, or shifts in consumer preferences and social norms alter expected future cash flows from productive assets, which can turn carbon-intensive assets into stranded assets (Pointner and Ritzberger-Grünwald 2019). In a widely cited paper, McGlade and Ekins (2015) estimate that by keeping global temperatures within the Paris target range, approximately one third of the current oil reserves, half the gas reserves, and almost 90% of the coal reserves will become stranded assets. There could also be an additional liability risk, determined by risks of legal action being taken by parties adversely affected by climate change (Ackerman 2017; Battiston et al. 2017; Dikau and Volz 2019; Monasterolo 2020a).

Transitioning away from coal is seen as one of the most important first steps in carbon transitions. As an illustration, we can consider a country such as Poland or South Africa – whose share of electricity production from coal is over 60% – imposing a high carbon tax or phasing out coal-fired power plants. Such actions pose risks to the real economy and to fiscal and financial systems. By definition a carbon tax raises production costs and the prices of coal-fired power plants, lowering their profitability to the extent that they would be deemed carbon stranded assets – a trend that is already underway (Caldecott 2018; Sen and Schickfus 2020).

In most countries, transition risks are perhaps the most macro-critical in their potential impacts on a country's real economy and livelihoods, financial systems, and public finance. While exposure to all types of fossil fuels is becoming increasingly risky, a number of central banks see transition risks related to coal extraction and coal-fired power plant closures as well as the consensus that coal should be the first energy source to diversify away from as the most macro-critical form of climate risk given the depth of such exposure (Mercure et al. 2018; Vermuelen et al. 2019; Allen et al. 2020). The Bank of England estimates that a rapid carbon transition could result in equity write-downs of 40 to 65% in coal extraction and generation respectively (Bullard 2019).

The early work on climate risk and financial stability was national in nature, given its origins in the central banking community. As a global institution the IMF is charged with monitoring cross-border spillovers as well. To that end, in addition to national level transition risks, we are developing the concept of “cross-border transition risks” whereby the transition policies of one country or region have macro-critical impacts on the financial and fiscal systems of another country or region (Gallagher et al. 2021; Monasterolo and Gallagher 2021).

One example of this would be the EU putting in place a large carbon tax with a border adjustment mechanism. From the perspective of a developing country that is highly dependent on oil or gas as a source of exports (either in crude form or indirectly through tourism) such as Angola, Azerbaijan, Congo, Ecuador, Mexico, Timor Leste, and developing states in the Persian Gulf, this could constitute a shock that lowers exports and has an immediate impact on the balance of payments. Indeed, this type of unexpected shock triggered instability and led to many of the financial crises of the 1980s (Baumeister et al. 2016). Cross-border



transition spillovers will not only trigger balance of payments shocks but can also cascade to the real economy, private finance, and of course to public finance – especially for fossil fuel-dependent economies.

## Strengthen IMF lending for Climate Resilience and Just Transitions

Through its advice and lending toolkit, the IMF can integrate climate objectives with the achievement of the sustainable development goals while strengthening collaboration with other international organizations on approaches to increase productivity, diversify economies and foster job-creating inclusive growth.

The global community has long recognized the magnitude of financing needed for emerging markets and developing countries to transition to resilient, low carbon economies. Emerging markets and developing countries needed to mobilize at least an additional 2.2% of annual GDP through 2030 in order to finance a transition to resilient, low carbon economies in accordance with the Paris Agreement, but were already falling behind even before the onset of the COVID-19 crisis (Bhattacharya et al. 2019; 2021).

The COVID-19 crisis has likely exacerbated transition financing requirements but also presents an opportunity for countries to put economic and environmental resilience, in other words climate transitions, at the heart of their recovery efforts. In the October 2020 *World Economic Outlook* the IMF estimated that if countries put climate change at the core of recovery efforts, the recovery will be significantly stronger than if countries reverted to simply restarting existing economic structures. If nations phased out fossil fuel subsidies, ramped up renewable energy subsidies, and invested in sustainable infrastructure and social adjustment for those workers and entrepreneurs in incumbent fossil industries the global economy would grow by an additional 0.7% (IMF 2020). A more recent IMF paper also found that “green” stimulus measures such as renewable energy and sustainable infrastructure have 2 to 7 times the multiplier effect of “brown” stimulus measures in coal, gas, oil, and beyond (Batini et al. 2021).

IMF advice and programming has to be reformed in order to be relevant to member states as they strive to identify climate resilient development pathways post COVID-19 and avenues to finance those pathways. While the aggregate benefits of a global transition may be positive, there will be numerous winners and losers in such a transition. Many fossil fuel commodity exporters rely on fossil fuel-based exports as core sources of foreign exchange. These exports are central to banking systems and form the bulk of government revenue. Behind every asset stranded due to climate change or climate policy, there will be stranded entrepreneurs, stranded contracts, stranded workers, and stranded communities. For some countries that rely on a handful of fossil fuel-based commodities or whose industrialization depends on fossil energy and electricity, transition risks will jeopardize the engine of growth and foreign exchange for the entire economy and development trajectory.





It is imperative that the IMF recognize this broader context, especially for emerging market and developing countries, and help member states identify the full magnitude of climate risks and mobilize the resources necessary to pursue a stable, sustainable and socio-economically optimal transition. The IMF will need to work with countries to diversify their economies and financial systems away from fossil fuel exports and from those types of economic activity most vulnerable to risks associated with climate change. In addition to stress testing fiscal and financial systems and helping countries design better systems as warranted, this will also entail reform of the IMF's lending toolkit.

Traditionally, the IMF's flagship lending programs have tended to impose conditions forcing countries to engage in contractionary monetary and fiscal policies. This has often led to a decrease in public investments in alignment with climate change and development and resulted in worsening social and environmental outcomes (Kentikelenis et al. 2019). At times, the IMF has made it a condition that countries should reduce or eliminate fossil fuel subsidies. Though such policies may be optimal in the medium term, the IMF and host countries often failed to combine the elimination of fossil fuel with financial support and alternative means of energy access for those most affected from the subsidies (Joos 2018; Monahan 2019). Recent fossil fuel subsidy reductions in Haiti and Ecuador squeezed the poor to such a point of desperation that massive riots occurred in the capital cities of each country. In Ecuador, rioting was so heightened that the capital city had to be temporarily moved to another location (Monahan 2019). As the IMF modeling in the WEO 2020 indicates, the most optimal response to crises are investments in transitions that also provide ample social protections to those most affected.

### **Provide global leadership on the necessary international policy frameworks and financing to prevent and mitigate climate risk and maximize the benefits of a just transition**

It is clear that financing adaptation measures and climate transitions has not been enough. Highly vulnerable economies (such as developing countries) are simply financially constrained – they cannot borrow, their financial situation is highly volatile, they need to allocate more money to respond to immediate needs, major disasters, etc. As long as national governments cannot raise the resources necessary to build resilient economies and undertake adaptation and decarbonization, they will need to accept difficult trade-offs, including a slower transition. Their own fiscal resources will simply not be enough, and options such as raising energy prices or prices for using infrastructure will be politically difficult. The IMF's advice will be challenged when defining a pathway. Major trade-offs will be required, and this is a very important consideration. IMF programs should be aligned with climate goals, for example through state contingent instruments, and the IMF and MDBs should work with member states to increase the flow of international climate financing to emerging market and developing countries to finance effective and just transitions.



## **ELEMENTS OF REFORM: TOWARDS A DEVELOPMENT ORIENTED CLIMATE STRATEGY AT THE IMF**

It is essential for the IMF to incorporate climate change and climate policy making into its surveillance, advisory, and emergency financing instruments. This should be done by integrating climate objectives with achieving the Sustainable Development Goals. This policy brief has outlined three pillars that such a strategy should be built around: identifying climate risks, and opportunities for climate action through IMF surveillance activity; strengthening IMF lending for climate resilience and green transitions; and ramping up global climate ambitions through coordinated policies and finance.

Mainstreaming these pillars across the IMF will be essential to success. For the IMF surveillance function, all three of the climate risks discussed earlier – physical risk, national transition risk, and cross-border transition risk – will need to be incorporated in the major surveillance activities of the IMF. Key among those are the bilateral Article IV reports and the Financial Sector Assessment Programs (FSAPs). It will also be of paramount importance to incorporate physical and transition risks and the need for a stepwise increase in resource mobilization into Debt Sustainability Analysis (DSAs) for lower income and market access countries. High quality, country-specific data will be crucial to gain an accurate understanding of risks to support the IMF's surveillance activities. Moreover, the IMF needs to take a stronger line when highlighting the need to deliver on climate finance to advanced and other major economies in order to foster a faster transition in developing economies.

For the IMF's advisory role, the Fund will need to strengthen its work on approaches to increasing productivity, diversifying economies and fostering job-creating inclusive growth, and aligning fiscal and financial systems with those goals as well. Moreover, IMF will need to play a stronger role in highlighting to advanced and other major economies the need to deliver on climate finance if a faster transition is expected.

For IMF lending programs, the IMF will have to align its lending programs with climate resilient and carbon neutral economies rather than put those transitions on hold. The IMF needs a new financing window through which balance of payments and even fiscal support for climate efforts can also be channeled, complementing financing from bilaterals and MDBs. Special attention and financing should be channeled into protecting those most adversely affected by adaptation and low carbon transitions. This includes vulnerable groups experiencing increasingly serious economic and non-economic loss and damage due to inadequate emission reduction measures and international finance and related implementation support frameworks. Upscaled action to avert, minimize and address impacts and loss and damage requires finance and dedicated financing mechanisms and allocations.

Such a strategy will entail partnerships within the IMF and its member states as well as with public development finance institutions and international organizations, and other key stakeholders.



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