

# Missing Links: How climate change remains peripheral to IMF economic surveillance activities



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About the Cover : Vietnamese farmers gathering crops before a strong typhoon hits landfall.

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## INTRODUCTION

The ground is shifting at the International Monetary Fund (IMF). Despite accepting that the challenges posed by climate change are ‘macro-critical’—and therefore within the mandate of the institution—over six years ago (Lagarde 2015), only recently have environmental challenges been articulated as top priorities to be directly considered in its activities. This is a major step forward for the organization that has both been welcomed by some of its major shareholders—like Germany (Scholz 2021)—and global civil society, but also resisted by other constituencies who are sceptical about the merits of IMF involvement in climate change issues (Stiglitz 2021). While these debates are still ongoing, the IMF has issued a range of policy pronouncements on how it will mainstream sustainable development and the green transition in two consequential activities: technical assistance, which receives extensive treatment in a separate Recourse report, and economic surveillance.

IMF Managing Director Kristalina Georgieva recently spelled out the central role of bilateral economic surveillance in the reorientation of the Fund as a key actor in facilitating the green transition. As she explained at a press conference, “we agreed to increase climate coverage in Article IV and Financial Sector Assessment Programs. We will now cover mitigation policies in the 20 largest emitters and other cases, adaptation in countries that are especially vulnerable to climate shocks, and transition in economies heavily dependent on fossil fuel production. Our FSAPs will examine physical risks due to climate change, and transition risks as we move to a low-carbon economy” (Georgieva 2021).

Given such high-level commitments, it is important to take stock of the most recent developments within the organization and generate early evidence from its emerging practices. The present report takes on this task by exploring the experience with economic surveillance of three countries—

Indonesia (2019 and 2020), Philippines (2019 and 2020) and Vietnam (2019 and 2021)—selected due to the major vulnerabilities to climate change that they face and/or their role as contributors to greenhouse gas emissions, as we discuss below. We collected a range of publicly available information on each country: Article IV reports and, where available, FSAP reports; country-prepared Nationally Determined Contributions (NDCs) setting out the means to reduce greenhouse gas emissions and meet the aims of the Paris Agreement, as well as additional evidence on country climate priorities; and any secondary or grey literature on these cases. We complemented this data with (anonymized) interviews with six IMF officials and several representatives from domestic civil society.

Analytically, each case study proceeds in three steps. First, we examine whether the country ambitions described in NDC reports are reflected in the analysis and recommendations of IMF staff, and—if so—what exactly is proposed. Second, we investigate whether the range of policy recommendations in Article IV reports have potential consequences—positive or negative—on the country’s climate vulnerabilities. Finally, we consider core country climate priorities that are not considered in IMF surveillance, and whether they have potential implications for economic and financial policy that should warrant analysis in the IMF’s work.

Before proceeding with our analysis, we note some limitations of this work. Even though climate change issues have been long-recognized by IMF management as a priority due to their major macro-economic implications, the IMF’s more active engagement with climate change issues is relatively recent, and it coincided with the onset of the Covid-19 pandemic and the severe economic dislocations it brought about. Inevitably, this posed organizational challenges for the institution: at the same time as IMF staff was beginning to build up

climate knowledge and advisory capacity, deep economic contractions occurred in many low- and middle-income countries, necessitating extensive IMF engagement (e.g., through emergency lending) and the transformation of staff work routines (e.g., many 2020 consultations with domestic stakeholders took place online). According to our interviewees in the IMF, these issues impacted the scope of engagement with climate issues since the onset of the pandemic.

There are also limits in the strength of inferences that can be drawn from an analysis of three cases, and we do not claim that these cases are necessarily representative of broader IMF surveillance work. In addition, although we only cover very recent surveillance reports, even these were conducted just before IMF management

committed to the formal inclusion of climate change issues in surveillance reports. Nonetheless, the macroeconomic significance of climate issues had already been repeatedly emphasized by senior IMF officials and accepted by countries themselves in the context of their NDC documents. This makes it both relevant and important to document recent experiences in light of the IMF's broad climate ambitions. The policy priorities at the IMF are evolving rapidly and this report can only provide a snapshot as a point of departure for further debate rather than a definitive assessment of the IMF's practices. The IMF itself presents its recent climate pivot as part of a multi-year process, which has only just started. Further monitoring will be essential to ensure that the IMF is living up to its promises on meaningfully integrating climate change into its economic surveillance.

### **Box 1. IMF bilateral surveillance: functions and audiences**

The IMF's bilateral surveillance of its members' economic and financial policies is mandated by its founding treaty, and performed annually or biennially for most countries. Following data analyses and consultations with domestic policymakers—primarily from ministries of finance and central banks—IMF staff publish their assessments of countries' policy environments and challenges, as well as recommendations on the types of reforms to pursue. This advice is highly influential, as it shapes policy debates in evaluated countries as well as informing the decisions of international investors. This is especially the case for low- and middle-income countries, which—unlike high-income countries—often lack extensive economic policy research capacity and therefore rely more on external opinion, and are also where investors tend to be less informed about economic developments. Consequently, Article IV reports have an important role in shaping the parameters of many economic policy discussions in developing countries.

## **BACKGROUND TO IMF ECONOMIC SURVEILLANCE**

The IMF's surveillance of countries economic and financial policies is a highly consequential activity. The idea underpinning IMF staff monitoring the policy environments of member-states is that this can help with "identifying stability and growth risks that may require remedial policy adjustments" (IMF 2021h). Such monitoring takes place annually or biennially through IMF staff missions to the country under evaluation, the collection of a range of data and indicators,

consultations with economic policymakers and other stakeholders, and—ultimately—the drafting of a hefty 'Article IV report,' named after the corresponding Article in the IMF's founding treaty. Subsequently, the IMF's own Executive Board—where all member-states are represented—discusses these reports and normally issues a summary of these discussions in the form of a press release.

This entire exercise has three target audiences. First, domestic policymakers

are informed of the IMF's assessment of their country's economic outlook and the range of policy advice that the IMF staff offer. To be sure, this advice doesn't come with any enforcement capacity, but nonetheless it is highly consequential for countries—especially those at lower levels of economic development. Indeed, the latter group of countries forms the majority of IMF borrowers and would-be borrowers, and the analyses and advice contained in the Article IV report commonly inform the kinds of reforms mandated in the context of IMF lending programmes. In contrast, high-income countries often disregard the advice offered in these reports, as they are seen as incompatible with the practical and political constraints that these countries face (Momani 2006; Edwards and Senger 2015).

Second, as the Article IV reports are made public and IMF Board members are invited to discuss their findings, this process also serves to transmit important information between countries (Schäfer 2006). For example, critical Article IV reports can yield peer pressure for countries to pursue reforms that will contribute to regional or global financial stability. Or donor countries might rely on these reports to learn more about the policy environments and challenges of potential aid recipients. Such information-sharing via the IMF forms a key source of knowledge on the economic conditions of other countries around the world.

Third, the IMF's economic surveillance impacts financial markets and investor decisions. The Article IV reports are consulted by private actors whether to make decisions on where to direct investments or to inform their own forecasts of economic performance

of countries around the world (Frenkel, Rülke, and Zimmermann 2013). This also means that countries under assessment have powerful incentives to shape the content of these reports in order to be cast in a highly favourable light. Indeed, politically-powerful IMF member states can successfully exert influence over the content of Article IV reports, and financial markets have been shown to react positively to the publication of positive press releases on surveillance findings (Fratzscher and Reynaud 2011).

For these reasons, the types of policy measures contained in Article IV reports are important for shaping the policy trajectories of low- and middle-income countries, and the IMF's intention to include green transition issues in its surveillance activities is therefore highly welcome. But how much has this intention translated into actual policy changes in operations? The subsequent section synthesizes the findings from our four case studies.

## SYNTHESIS OF FINDINGS

The coverage of climate change was uneven across the Article IV and FSAP reports we analysed but appeared to be progressing in the pro-climate direction set out by IMF leadership. At its best, as was the case in the Philippines, engagement with climate change adaptation and mitigation issues was well-integrated in the reports, including discussions of economic and financial risks and possible policy remedies. Table 1 summarizes the comparative findings. In most of the cases, there was limited coverage of physical or transition risks, and the energy-related proposals tended to centre on carbon taxes and some investments in renewable energy or environmental protection.

**Table 1. Comparative findings of IMF engagement with climate change issues in Article IV reports and FSAPs**

	INDONESIA	PHILIPPINES	VIETNAM
<b>Engagement with climate change</b>	Limited	Extensive and well-integrated	Limited
<b>Discussion of physical risks</b>	Yes, but limited	Substantial	Yes
<b>Discussion of transition risks</b>	Yes, but limited	Yes, spread across Article IV Annex and FSAP	Yes
<b>Energy-related proposals</b>	Energy subsidy reform; carbon tax; incentives / penalties for farmers vis-à-vis carbon storage	Carbon tax; emission trading	Renewable energy investments; carbon tax; reduction of aviation fuel subsidies; adaptive infrastructure investments

IMF staff we interviewed considered climate change to be within the remit of economic surveillance, in line with views reflected in the IMF's Comprehensive Surveillance Review (IMF 2021i), even though its full integration was a "gradual process [that also has to do with] building up internal capacity to do this" (Interview #4). The mainstreaming of climate change was guided by influential reports both from the Fiscal Affairs Department and the Research Department. In the case of the former, a newly-formed climate change unit supports surveillance missions, examines environmentally-relevant tax issues, and is called on give presentations on carbon taxes and trade-offs to national-level policymakers (Interviews #1 and #3). In the case of the latter, policy analysis templates on carbon pricing and the distributional impacts of climate change (e.g., Shang 2021) supported the research underpinning Article IV recommendations (Interviews #1 and #2).

Notwithstanding the climate ambitions of the IMF, our analysis revealed some limitations in the actual practices of recent surveillance missions. First, only one of the surveillance reports analysed contained a discussion of potential trade-offs between economic policies and climate protection. This was the case of Vietnam, where staff sought to quantify the benefits of investing in adaptive

infrastructure and examined the trade-offs in terms of growth and debt dynamics. Such an approach was absent from other surveillance missions, but could also be much expanded to cover other policy areas as there are commonly different policy mixes that can help countries address their economic challenges, including policies that may help or hinder climate change adaptation and mitigation. What are the expected fiscal benefits from carbon taxes? How can energy subsidies be targeted so that they do not have adverse distributional implications and even incentivize use or renewable energies? Or what tax incentives are more likely to catalyse green investment? These questions allude to the possibility of sound economic policies that simultaneously prioritize climate goals. Nonetheless, such issues received only limited conceptual coverage in surveillance reports, even though IMF staff explained that they were interested in covering trade-offs at greater length in future work (Interviews #2 and #5).

Second, in relation to the coverage of climate change risks, while physical risks received more extensive attention, transition risks were insufficiently analysed in all reports. This is important as all countries analysed had extensive ambitions for transitioning towards greener energy generation and

consumption. Transition risks stem from economies' move towards decarbonization and create carbon stranded assets which have cascading effects on public finances, the banking sector and the macro-economy. An analysis of these risks directly relates to the core topics covered in Article IV reports—such as the financial system or institutional issues—and could have been present in the staff assessments.

Third, there was no discussion of climate change issues through an international-economic lens. As an increasing number of countries commit to decarbonization, this has implications for the economic and financial policies of both energy exporters and importers. These issues are known as 'spillover transition risks,' where policy decisions on the green transition in major economies affect the economic environment in third countries (TCDIMF 2021). For instance, as a major energy producer, Indonesia will likely be affected by decisions of its trading partners to decarbonize or impose carbon border taxes, impacting earnings from such exports and—by extension—the availability of resources for a range of domestic policies. Placing country-specific analysis and recommendations in a regional or global context would have enriched the Article IV reports.

Finally, the presentation of quantitative data and indicators also represented an area where climate change could have been considered but was absent. Article IV reports display economic data in key tables that are meant to provide a quick overview of the economic situation in a country. However, the 'Common Indicators Required for Surveillance' or 'Financial Soundness Indicators' did not contain any data that conveyed economic and financial risks related to climate change or that otherwise signalled the magnitude of climate challenges. This shortcoming would be easy to remedy, as the IMF itself has created its own data webpage "linking climate considerations and global economic indicators" (IMF 2021b). Embedding such

data—for example, risk indicators or data on government spending on environmental protection—into Article IV reports would increase their prominence. In turn, this would contribute to signalling to the multiple audiences of these reports that climate change is a key macro-critical issue that can threaten macro-economic stability and warrants comprehensive engagement in the IMF's evaluations.

## DISCUSSION AND CONCLUSIONS

Overall, we find evidence of promising but incomplete steps towards treatment of climate change issues within the IMF's economic surveillance. This should come as no surprise given how recently these issues have risen to prominence within the organization. Consequently, challenges remain in having an appropriate mix of staff to perform this work, as well as better data to underpin it—both issues that already emerged in the IMF's recent review of surveillance activities (IMF 2021a). But if the IMF's membership is to truly benefit from the organization's 'mainstreaming' of climate change issues in economic and financial analyses, then more energy needs to be devoted into appropriately integrating such work into the multiple elements of surveillance: consultations with domestic stakeholders, collection of appropriate data, and increasing the prominence of these issues in the published report.

Importantly, this could also include a careful consideration of trade-offs, as IMF advice that may be economically beneficial might also have inadvertent environmental consequences. For example, the general advocacy of tax incentive schemes to boost economic activity failed to consider how these could also benefit fossil fuel industries or other environmentally harmful activities (Mainhardt 2020). Comprehensive coverage of such trade-offs would anticipate the risks to environmental sustainability in policy proposals geared toward achieving narrower economic goals. Indeed, there may well be instances where no such trade-offs exist:

policies to mitigate and adapt to climate change can also be good economic policies, as they put countries on more sustainable and resilient policy trajectories. For example, carbon taxes can generate new revenues for the state, thereby contributing to much-needed domestic resource mobilization to meet the climate targets laid out by governments.

The IMF's role in policy advice on mitigating or adapting to climate change is likely to increase. The organization's new climate strategy intends to systematize this engagement (IMF 2021a), rather than maintaining the more ad hoc approach that we have traced in some recent surveillance missions. In this context, developing better templates and guidance for IMF staff will aid the more seamless integration of the macro-economic aspects of climate change issues into the analysis. Such tools would facilitate IMF staff's consultations with governments too: it is within the IMF's mandate to consider domestic authorities' climate commitments—including but not restricted to the NDCs—and this would bring to the table more stakeholders than just the standard interlocutors at the ministry of finance and the central bank. Indeed, the case of Philippines' surveillance mission stands out for how to engage with these broader constituencies that are centrally involved in environmental policy.

As part of the broader rethink over surveillance, the time horizon of staff analyses can be fruitfully expanded. One constraint of surveillance missions is that they tend to be focused on the medium term, even though many of the climate-related risks will materialize over the coming decades. This suggests the need for a fundamental rethink on how these surveillance analyses are structured, so that they substantively engage with the ways in which climate issues need to be treated as economic policy priorities in the present to avoid irreparable damage in the future.

Of course, instituting many of these processes and foregrounding climate considerations in surveillance missions also depends on the receptiveness of the evaluated governments. It is possible that some finance ministries are not fully on board with providing financing to meet NDC targets, and therefore—as the main contacts of the IMF—may be hesitant to see these issues covered in an Article IV report. While it is not the role of IMF staff to force unwilling interlocutors, it is well within the remit to point out how climate vulnerabilities interact with economic performance.

Finally, surveillance missions often interact and intersect with the IMF's lending programs, that carry mandated policy reforms and entail much closer scrutiny of country policies. None of the cases covered in this report has had an IMF loan in the last decade, but this is not the case for many other countries—especially low-income ones—that enter into consecutive lending agreements, thereby opening up their domestic policy environments to greater influence by the IMF. According to IMF staff contacts, there is an informal distinction between 'program countries' and 'surveillance countries.' The latter are seen as prime candidates for incorporation of climate concerns into analyses, while the former are considered to be more preoccupied with combating immediate economic crises rather than longer-term structural issues like the green transition.

Even though addressing how lending programs and economic surveillance interact is beyond the scope of this report, we briefly examined the experience of Papua New Guinea—a member of the 'Vulnerable 20 Group' of economies systemically vulnerable to climate change. The findings of this analysis are presented in Box 2, and reveal that climate considerations were not addressed—the words 'climate' and 'environment' did not appear even once. In explaining this neglect of climate considerations, IMF staff noted that their engagement in the country



reflected the government's prioritization of the pressing challenges of the pandemic and its economic aftermath. At minimum, this points to the need for additional resources to country teams to be able to advise governments both with urgent short-term issues, as well as more medium-term climate change mitigation and adaptation efforts as

this situation will be increasingly common. Indeed, such dual engagement could offer countries in crisis the credible policy pathways for reshaping their economic development models to achieve sustainable development and pre-empt the negative socio-economic effects of climate change.

### **Box 1. Papua New Guinea's experience with economic surveillance**

While Papua New Guinea is a very minor contributor to greenhouse gas emissions, its emissions have significantly increased in the past two decades, driven primarily by the energy sector. Deforestation and extractive industries are important for the country as most of its export earnings derive from liquefied natural gas, gold and copper. The country's NDC reports of 2016 and 2020 made important commitments to reform its energy sector by increasing reliance on renewables, reducing energy demand, and establishing a framework for fossil fuel emission offsetting. The two most recent Article IV reports (from 2018 and 2019) did not consider climate change issues. Nonetheless, IMF staff did consider the role of extractive industries in contributing to export earnings and GDP growth. At the time of the analysis, Papua New Guinea had been recently hit by a large earthquake, which adversely impacted production in the gas, oil and mining industries, with knock-on effects for growth. In this context, staff assessed that "liquefied natural gas (LNG) and mining projects, which could begin in 2020, would boost investment inflows and growth, easing the fiscal crunch and the shortage of FX" (IMF 2019b). This approach is in line with treatment of LNG as a 'transition fuel,' a topic of sustained debate (Gürsan and de Gooyert 2021).

To ensure sufficient policy accountability to civil society and other national stakeholders outside of the country's government and administration, it will be necessary to ensure that IMF practices measure up to the Fund's ongoing climate rhetoric, particularly its recent commitments to cover climate change mitigation issues in the surveillance of the twenty largest emitters of greenhouse gases. This may even be increased to sixty Article IV reports per year that will expand their remit to discuss a broader range of issues—like adaptation or transition risks (IMF 2021c)—but are conditional on the IMF membership approving additional resources to finance these activities.

The IMF's broad acceptance of the centrality of climate to the economy is an important and welcome step, and one that places climate change well within the IMF mandate. However, engagement with these issues in its surveillance should neither be simply bolted on to its more traditional analyses, nor relegated to secondary status. It should receive full coverage in the Article IV reports and provide cogent and realistic policy advice to countries. This would involve tackling structural questions about the economic development models to be pursued in a decarbonizing world.

## CASE STUDY I: INDONESIA

### Indonesia's climate commitments

Indonesia is highly vulnerable to climate change, ranking sixth globally in INFORM's Natural Hazard Risk Index (IMF 2021e). Rising sea levels present an acute problem, and have contributed to a growing number of floods in recent years. This threat—compounded by a large number of illegal wells—has prompted the decision to move the capital from Jakarta in Java to Borneo (Van de Vuurst and Escobar 2020). Given such vulnerabilities, the country has already prepared periodic national action plans for climate change adaptation, starting in 2007 and gradually fine-tuning them (Indonesia 2012).

The government submitted its initial NDC in 2016, where it pledged to reduce emissions by 29% using its own resources and up to 41% with international support, against the business-as-usual scenario by 2030. The update to this plan—submitted in July 2021—did not substantively alter the climate ambitions. The emission-reduction targets remained identical and there was no commitment on a net-zero target (Indonesia 2021b), although the government reported exploring ways to reach this target by 2060 (Indonesia 2021a). Two key areas where the country intends to make progress is in mainstreaming climate in its development strategy (including through increased budget allocations for climate change adaptation) and changing its energy use policy. In line

with targets developed in 2014 already, the ambition is for the country to rely on new and renewable energy by at least 23% in 2025 and at least 31% in 2050, while reducing oil reliance to less than 25% in 2025 and less than 20% in 2050; natural gas is seen as a transition fuel, and reliance on coal is expected to still be at minimum 25-30% of the energy supply mix.

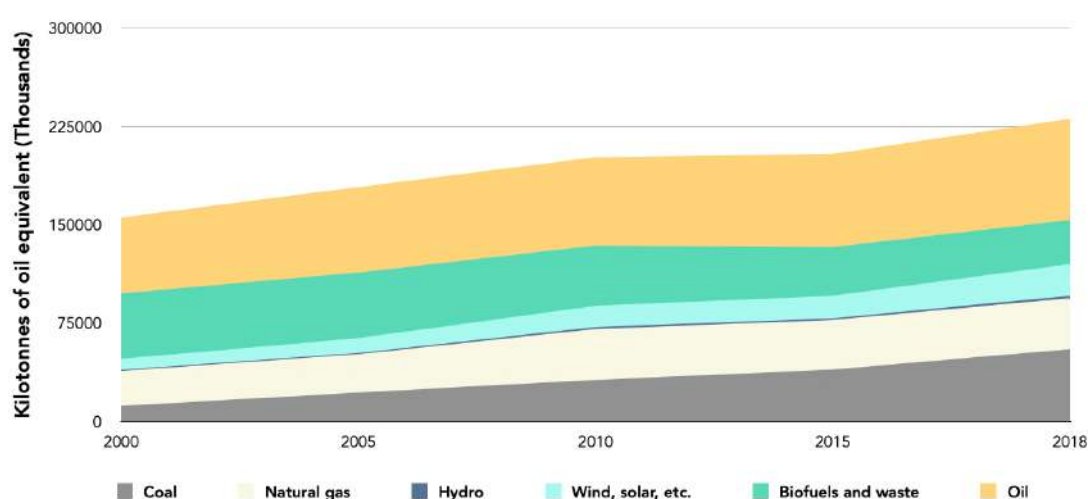
Supporting these targets is also the recent Sustainable Finance Roadmap, prepared by Indonesia's financial services authority (OJK 2021). This plan includes the development of a green taxonomy to classify sustainable investments, changes to financial sector risk management in order to factor in and mitigate environmental risks, and innovation in financial products with the aim of increasing sustainability.

In 2021, the government announced a moratorium of building new coal plants from 2023 onwards, although critics point out that this commitment does not include early decommissioning of existing plants and more than 40 new plants will be constructed before this policy comes into effect (Jong 2021b). Similarly, according to domestic civil society, additional strategies to reduce emissions also raise concerns about their sustainability implications, like the reliance on woodchips without appropriate monitoring of where the wood is harvested or controversial biodiesel plans which contribute to deforestation (Jong 2021a).

## Box 2. Background to Indonesia's energy sector

Indonesia's high growth rates over the past two decades are underpinned by its a large export sector, with coal (13.3% of 2018 exports), oil and gas (9.6%) and palm oil (9.2%) providing the highest trade value for the country (IMF 2019a). Since 1990, the country increased energy production by 167% to become a major global energy producer, and its electricity consumption has risen by 793%. In particular, as shown in Figure 1, while the share of oil and natural gas consumption in the total energy supply has remained broadly stable, the country has rapidly scaled up reliance on coal and reduced use of biofuels and waste (IEA 2021a). As of 2019, the country was the fifth-largest emitter of greenhouse gases—primarily stemming from deforestation, peatland fires and energy consumption—and its CO<sub>2</sub> emissions amounted to 0.82% of the global total.

Fig. 1: Total energy supply in Indonesia, by source



### IMF surveillance and recommendations

We rely on Indonesia's 2016 NDC and the 2019 and 2020 Article IV reports, as well as underlying documentation. The timing of these documents means that IMF staff had access to the country's climate commitments when undertaking their evaluations.

### Direct consideration of climate change and green transition issues

The 2019 Article IV report did not directly consider any climate change issues, and references to energy subsidies related to their fiscal implications rather than viewing them through a green transition lens (IMF 2019a). The same was true for the 2018 FSAP (IMF 2018)—another IMF surveillance instrument, which has potential relevance for developing policy recommendations to combat climate change: as the FSAP

is focused on questions of stability of the financial sector and as the latter has a multi-pronged role in facilitating or financing adaptation and mitigation measures, these reports provide IMF staff with key opportunity to examine how physical and transition risks (as well as transition spillover risks) link up to the financial system and the broader economy (Ramos et al. 2021). In the case of Indonesia, the FSAP report did not reference environmental goals, even though it discussed asset valuation issues in relation to banks (IMF 2018, 74). We return to FSAP issues in subsequent studies, below.

In contrast, the 2020 Article IV report made some initial steps in the direction of engaging with environmental issues, albeit in a limited way. A single paragraph mentions that further progress on climate change can be pursued

by Indonesia, encouraging the adoption of “a comprehensive transition plan toward a greener economy [...that] could include reforestation incentives, greater support for building renewable energy generation capacity and reducing reliance on coal, and reforms of energy subsidy schemes” (IMF 2021d, 22). While such plans are codified in the NDC and a range of underlying policies that the government has put in place in recent years (like the energy supply targets noted above), IMF advice did not attempt to link up their analyses to these government-defined priorities.

Despite lack of serious engagement with climate change issues in the Article IV reports, IMF staff did directly consider these issues in a chapter of a separate publication—called “Indonesia: Selected Issues” (IMF 2019a)—which was briefly referenced in the 2020 Article IV. There, an IMF staff member from the Asia-Pacific Department outlined the major environmental challenges facing the country, and elaborated on their economic implications. To be sure, Selected Issues reports are intended to accompany the main Article IV reports and are considered during discussions at the IMF’s Executive Board. Nonetheless, better integration of these considerations into the main report could further increase the prominence of climate change issues for the broader audiences of Article IV reports.

In its analysis, the IMF explains that Indonesia’s economy might face an early transition risk due to accelerated decarbonization initiatives. In particular, as multilateral and private banks and investment managers commit to coal divestment, this major export of Indonesia may face lower demand, which would impact the viability of coal companies, the domestic energy mix, and—by extension—the broader economy.

To address these challenges, the IMF considers a range of options for climate change mitigation and adaptation. In the case of mitigation, the key measures

proposed address energy sector issues. First, energy subsidy reforms are seen as having high potential for further reform, as they can help meet energy reduction objectives by ensuring consumers face the true cost of electricity, and fiscal consolidation goals as such subsidies amount to 10% of government expenditure. The report also considers distributional issues, arguing that energy subsidies are regressive as richer households tend to consume more energy than poorer households. Instead, the government is encouraged to put in place means-tested social assistance programmes that are deemed more effective. Second, a carbon tax is proposed as another measure with positive environmental and fiscal impact, and with limited risks for jobs over the medium term. The IMF claims that labour dislocations in the mining and electricity sectors can be absorbed in green technologies or other industries, with the aid of retraining and job reallocation programmes that can be financed through the resources raised by the carbon tax. However, according to national civil society, these proposals are not appropriately tailored to the specificities of the country, as the regions that currently host many industrial activities do not fully overlap with those that are home to mining operations. This suggests that job reallocation is unlikely to be a smooth process insofar as it carries regional distributional implications. Finally, to facilitate reforestation, the IMF proposes levies for landowners reducing carbon storage, subsidies to those who increase it, and taxation of commodities from plantations.

Turning to adaptation proposals, the staff analysis only points to two limitations of the government’s National Action Plan for Climate Change Adaptation: this is seen as lacking a stable financing base and being inadequately monitored and reviewed. Unlike the fiscal options discussed for financing adaptation, the report does not elaborate on which mix of revenue and spending policies might aid the government in meeting the objectives of its plan.



Finally, while the analysis recognizes as risks the deterioration of bank assets and the likelihood of natural disasters, it links neither to a green transition agenda. For example, an ongoing debate considers how bank assets are linked to climate change through the valuation of their different assets. The road to decarbonization will yield so-called “stranded assets” which will have implications for the stability of some financial institutions—and more broadly the financial sector. These issues do not receive any discussion.

IMF recommendations that indirectly relate to climate change mitigation and adaptation. Several IMF recommendations on economic policy may impact Indonesia’s climate change mitigation and adaptation efforts, even if these links are not made clear in its Article IV report. First, key measures proposed aim to reform taxes, especially the “very long number of VAT-exempt activities [...and the] exceptionally high registration threshold” (IMF 2021d). While such reforms might raise revenues, they also have the potential to adversely affect low- or middle-income individuals by increasing the costs of goods or requiring their VAT registration for activities formerly excluded from such a requirement. This can directly hamper the ability of these individuals to finance investments that would help them adapt to climate change. Further, IMF staff include a generic reference to “tax policy incentives to improve the business climate”—what this precisely means is left unspecified, but this could have been an opportunity to spell out how environment-friendly investments could be catalysed.

Second, the IMF welcomes broader government plans to facilitate institutional and corporate investment towards infrastructure, citing possible fiscal and governance risks. However, the organization makes no reference to possible adverse effects of such investment on the environment. Third, the Article IV report recommends sustained spending on meeting the Sustainable

Development Goals, although there is limited follow-up with specific revenue mobilization measures to that end.

### **Key country priorities that are not considered by the IMF**

In its 2016 NDC, Indonesia outlined two key priorities that touch upon the mandate and expertise of the IMF. First, the country noted its goal of “mainstreaming [the] climate agenda into development planning [...] including in the budgeting process” (Indonesia 2016). However, while the IMF did indeed call for additional revenue mobilization and for spending on infrastructure and environmental protection, it did not embed its analysis of budget issues into an agenda that placed the green transition at the centre of the development planning process, in line with Indonesia’s stated priorities. Further, the priorities set out in the Sustainable Finance Roadmap were not followed up by the IMF with a discussion of their implications for financial regulation and financial stability in Indonesia’s path towards a green transition.

Second, Indonesia emphasized the promotion of climate resilience in energy, while still considering the growing needs of its population for energy consumption. While the Article IV reports do support a carbon tax and energy subsidy reform, they could have drawn further links between the projected energy needs of the country and its underlying energy infrastructures and policies, including the consideration of alternative and detailed scenarios for scaling up renewable energy production.

Finally, the report did not include a discussion of the international-economic dimensions of decarbonization. As an increasing number of countries seek to decarbonize and shift consumption away from carbon-intensive commodities like coal and palm oil, this will impact Indonesia’s export earnings and—by extension—available financing for domestic policies as well as its likely energy consumption mix. Further, the emerging issue of carbon border taxes—that is, taxes

on the imports of carbon-intensive goods—is likely to compound the impact of third-country economic policies on Indonesia’s main exports. Already, the European Union has announced that such taxes will be introduced starting in 2026 and the US is considering similar proposals, which Indonesian Trade Minister Muhammad Lutfi identified as disruptive to world trade (Jakarta Post 2021). While it is too soon to quantify the impact of such measures, the likely impact of these policies on the country’s development model could be fleshed out in IMF staff assessments (e.g., on export earnings and associated fiscal implications) and remedial measures discussed.

## Discussion

The economic surveillance of Indonesia reveals an initial attempt at considering climate issues and the green transition. Yet, it is still provisional and lacking appropriate integration into the Article IV report. The relegation of the climate change discussion into a short chapter in a separate publication suggests that at best climate change issues are considered add-ons to the main analysis, rather than macro-critical issues that should be prioritized and integrated into the main report. Further, the analysis presented completely neglects the priorities stated in Indonesia’s NDC, and how they interact with the country’s economic policy and related transition risks.

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## CASE STUDY II: PHILIPPINES

### Philippines’ climate commitments

The Philippine government developed a series of institutional arrangements to address climate risks, foremost of which is the Climate Change Act of 2009. The Act established the Climate Change Commission, which serves as the lead policymaking body tasked with coordinating, monitoring, and evaluating policies and programmes related to climate change. Additional strategy documents include the National Framework Strategy on Climate Change 2010-2022 and the National Climate Change Action Plan 2011-2028, which maps out a national adaptation strategy based on food security, water sufficiency, ecological and environmental stability, human security, climate-friendly industries and services, sustainable energy, and knowledge and capacity development.

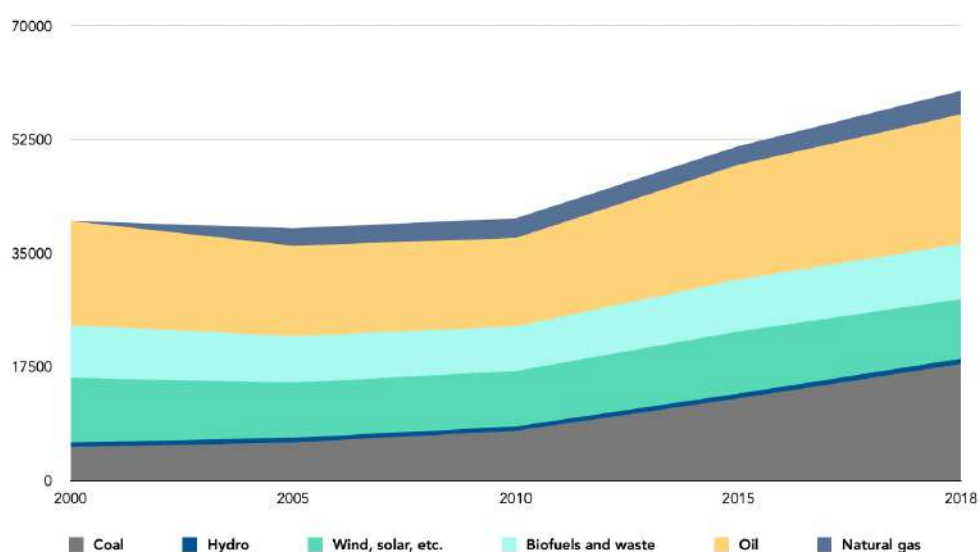
The Philippine Energy Plan 2018-2040 also set as a main objective to increase production of clean sources of energy. The government demonstrated commitment to the plan when it announced a moratorium on new coal-fired power plants in 2020.

The Philippines’ NDC reflects these priorities. The 2021 NDC sets a greenhouse gas emissions reduction target of 75% below the business-as-usual scenario by 2030, of which 2.71% is unconditional and 72.29% is conditional on financial, technological, and capacity-building external support. The country also pledges to undertake adaptation measures in agriculture, forestry, coastal and marine ecosystems and biodiversity, health, and human security. It commits to do so in the context of accelerating a just transition and the delivery of green jobs and other benefits to its people.

### Box 3. Background to the Philippines' energy sector

As one of Asia's fastest growing economies, energy consumption in the Philippines has increased rapidly over the past two decades. Correspondingly, the country's greenhouse gas emissions surged by 114% between 1990 and 2017 (Climate Transparency 2020), driven by energy and industrial process sectors. As of 2019, its CO<sub>2</sub> emissions amount to 0.2% of the global total. As shown in Figure 2, the Philippines has become more reliant on coal and natural gas over the last two decades from both imported and domestic sources (IEA 2021b), with fossil fuels currently making up 70% of the energy mix. Greenhouse gas emissions are dominated by the energy sector at 54%, followed by agriculture (33%), industrial processes (8%), and waste (7%) (USAID 2016).

Fig. 2: Total energy supply in the Philippines, by source



#### IMF surveillance and recommendations

Although the Philippines published their NDC in 2021, the intended NDC was available in 2015 (Philippines 2015), and was followed up by a range policy measures: (a) the Development Plan passed in 2017 that aimed at advancing sustainability, environmental protection, and adaptation and mitigation to climate change; (b) the Enhanced National Greening Program of 2019 and the Master Plan For Climate Resilient Forestry Development of 2016 which sought to protect forests and rehabilitate damaged forestlands; and (c) the Energy Plan of 2016 that advanced renewable energy generation, promoted alternative fuel utilization, and fostered energy savings across economic sectors. These nationally-developed strategies were available to the IMF when conducting its 2019 and 2021

Article IV evaluations, as well as the 2020 and 2021 FSAP reports (i.e., additional instruments of economic surveillance).

#### Direct consideration of climate change and green transition issues

Climate change has received consistent coverage in economic surveillance missions to the Philippines, and informants at the IMF linked it to the government prioritizing this: "we had broad access to the government, so we were in touch with the Ministry of Energy and the Ministry of the Environment. It helped that climate change issues have been elevated to the cabinet level, and that way we secure more involvement on these issues from our counterparts" (Interview #3). Initially, the 2019 Article IV report contained a discussion of the threat of environmental degradation and the importance of resource

mobilization to mitigate and adapt to it. In particular, IMF staff welcomed actions by the government to combat climate change, but called for scaling up efforts, as “more resources and incentives for climate change adaptation and mitigation are needed to induce investment and changes in emission patterns” (IMF 2020a, 36). These issues were then followed through in a six-page chapter in a ‘Selected Issues’ document, published shortly after the Article IV report. There, a staff member from the Asia Pacific Department outlined the multiple effects of climate change on the economy: from imperilling agriculture, to threatening fiscal stability, to risking debt sustainability.

However, despite the discussion of such risks, actual policy proposals remained limited. IMF staff welcomed the policies on financial resilience taken by the government and the broader incorporation of climate risks in macroeconomic planning. And moving forward, the government was invited to spend more on adaptation and mitigation, by “using greenhouse gas emissions pricing in this regard—using instruments such as carbon taxes or emissions trading systems” (IMF 2020b). Beyond this statement, such policies were not further followed through—for example, with estimates of their expected fiscal payoffs or analyses of how they would fit within the broader revenue and tax architecture of the Philippines.

Second, the FSAP report of 2021 contained extensive engagement with climate issues, as it was recognized that the financial system faced significant physical risks related to natural disasters, as well as transition risks related to coal-based energy generation. The IMF team conducted an in depth ‘Climate Change Risk Analysis’ which estimated the likely impact of typhoons—a common threat to the Philippines—on banks’ solvency, and reported moderate risks overall, but high risks in the case of extreme events that occur only rarely. The analysis noted that physical risk from natural disasters has a systemic impact on banks related to credit risk from ensuing

macroeconomic shocks and operational risk, while the transition away from coal usage would affect banks with exposure to the energy sector. These findings were based on the IMF team—in collaboration with World Bank staff—considering alternative scenarios for their ‘climate change stress tests.’ Further, the FSAP included a clear recommendation to the Central Bank of the Philippines to invest in building capacity on environmental risk management, including issuing “granular regulations and guidance on risk management, stress testing, and reporting and disclosure,” as well as supervisory capacity (IMF 2021f, 074).

Finally, the 2021 Article IV report also commented on climate change issues and explicitly referred to the Philippines’ NDC targets. Indeed, IMF staff welcomed the government’s scaled up spending on climate change adaptation and mitigation, as well as the range of measures designed to incentivize renewable energy generation and limit single-use plastics. More broadly, the remainder of the report’s engagement with climate issues was limited to referring to the analyses and advice reviewed above. The case of the Philippines also stands out for the direct engagement of its Executive Director in commenting on climate change issues, unlike the other countries studied here. In both the FSAP and Article IV Board discussions, the Director outlined the government’s views and priorities on climate change, and how they fit with the recommendations by IMF staff. This suggests that there may be synergies between country and Board member interest in climate change issues, providing opportunity for IMF staff to expand their coverage of these topics in their assessments, compared to countries that do not exhibit a similar degree of interest.

IMF recommendations that indirectly relate to climate change mitigation and adaptation Overall, the 2021 Article IV report contained no clear recommendations that would affect the Philippines’ climate plans. The government’s fiscal stance was seen as



broadly appropriate and having buffers for additional spending, if required to respond to the ongoing pandemic. Lowering budget deficits was only advised over the medium term.

The Article IV report also considered favourably a new legal framework passed since the onset of the pandemic to reduce corporate income tax rates and incentivize investment. In addition, the government was urged to move ahead with easing restrictions on foreign investment. While the analysis did not specify which economic sectors should be prioritised, an explicit discussion of how these policies could be linked to shifting the economy away from fossil fuel consumption could have been a further step in the direction of decarbonization.

### **Key country priorities that are not considered by the IMF**

A recurring theme in both 2015 and 2021 NDCs was the country's objective to pursue a clean energy transition. Yet, energy issues

were not substantially followed through in the IMF reports, despite the obvious macro-critical relevance of changing the country's energy production and consumption models.

### **Discussion**

The IMF economic surveillance of Philippines had the most extensive coverage of climate change issues among the countries reviewed in this report. The staff analysis engaged with the government's own priorities and included in depth discussions of climate change. In particular, the risks from natural disasters were comprehensively covered, and their macroeconomic impact as well as their financial sector implications were outlined. However, while these physical risks were considered, the analysis did not include substantial coverage of transition risks. Indeed, given that the Philippines had plans for a transition towards renewable energy, the IMF analysis could have engaged with the economic dimensions of such an energy shift.

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## **CASE STUDY III: VIETNAM**

### **Vietnam's climate commitments**

Vietnam is highly vulnerable to climate change—both in relation to natural hazards and climate change—with rising temperatures particularly affecting the two largest cities, Hanoi and Ho Chi Minh City (World Bank 2021). The country's long coastline makes it extremely vulnerable to flooding, a risk accentuated by frequent exposure to tropical cyclones. Further, the country has high levels of air and water pollution (World Bank 2021). Recent ranking attempts have placed Vietnam in the top 50 countries according to its overall climate risks (Eckstein, Künzel, and Schäfer 2021), and in the top 10 considering its natural hazard risks (IMF 2021g).

Reflecting these vulnerabilities, the Vietnamese government has devoted considerable efforts over the past decade developing policies to mitigate or adapt to

climate change, coordinated by its National Climate Change Committee, which is headed by the prime-minister and where several ministers (including the ministries of finance, planning and investment, and industry and trade) also participate. The country approved its first National Climate Change Strategy in 2011 and its National Green Growth Strategy and National Strategy on Environment Protection in 2012, quickly followed by national action plans for delivering on these strategies (Nhat n.d.; LSE Grantham Research Institute 2015).

These priorities have been mirrored in the plans and commitments that Vietnam reported in its two NDCs (Viet Nam 2016; 2020). The country's intentions are to cut greenhouse gas emissions by at least 9% between 2021 and 2030 compared to a business-as-usual scenario, by changing its policies on energy, agriculture, land use, and waste (Viet Nam 2020). In addition, the

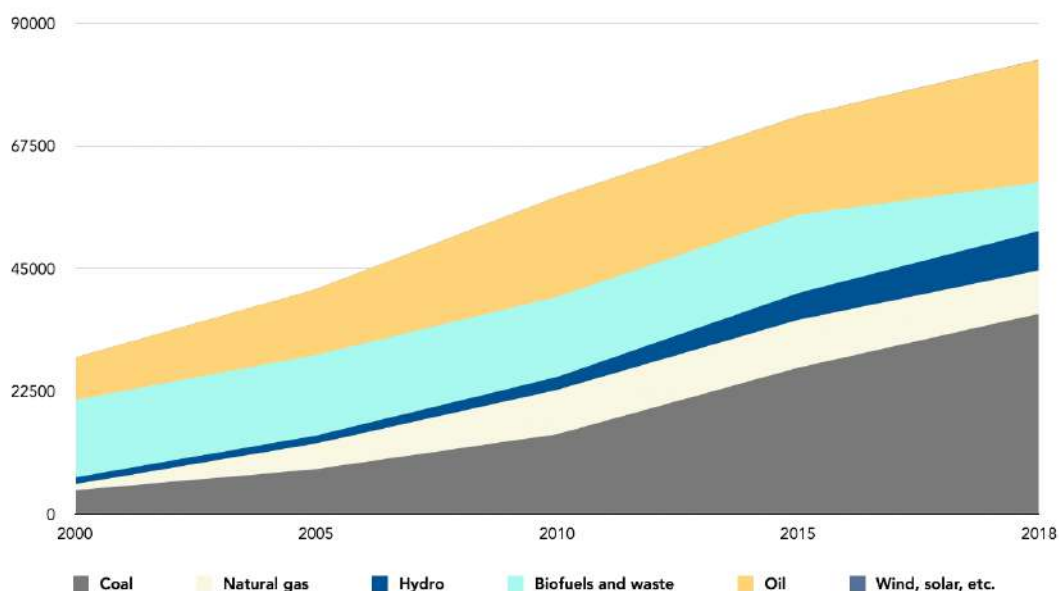
country announced its commitment to put in place extensive climate change adaptation measures, like strengthening social protection and insurance against climate risks, scaling up monitoring, and responding to sea level rises. Vietnam’s updated NDC of 2020 increased ambitions with the

approval of new strategies for national and renewable energy development, for climate change response and green growth, and for implementing the Sustainable Development Goals. Most recently, at COP26 in Glasgow, the country committed to achieve net-zero emissions by 2050 (Hanoi Times 2021).

### Box 5. Background to Vietnam’s energy sector

Following the last decades of manufacturing-led economic modernization, Vietnam’s electricity and water consumption has speedily increased, and exploitation of natural assets—like fisheries and timber—has become less sustainable (World Bank 2021). In particular, the energy sector has undergone profound transformation, and the country’s CO<sub>2</sub> emissions now amount to 0.22% of the global total. In part, this is a function of rapid changes in the energy supply mix: as shown in Figure 3, approximately half the energy generated in 2000 was from biofuels and waste, and this has dropped to nearly 11% in 2018, the year with the latest available data (IEA 2021c). In contrast, as demands for energy increased following rapid growth and industrialization, oil and especially coal have become central for meeting the country’s energy needs. The last two years have also seen a significant increase in renewable energy: the country’s solar power capacity increased from only 86 MW in 2018 to 4,750 MW in 2019, and—by end-2020, its installed capacity reached about 16,500MW. In 2020, about 4% of all energy generation stemmed from solar power systems, approximately half of which came from rooftop solar installations (Do and Burke 2021).

**Fig. 3: Total energy supply in Vietnam, by source**



### IMF surveillance and recommendations

We rely on Vietnam’s 2016 and 2020 NDC reports, and the 2019 and 2021 Article IV reports. The timing of these reports suggests

that IMF staff had access to both initial and updated climate agenda of the Vietnamese government.

### **Direct consideration of climate change and green transition issues**

Vietnam's 2019 Article IV report included only scant reference to climate change and environmental protection (IMF 2019c). The only substantive engagement was in a table outlining domestic risks for the country, where the government was encouraged to invest in renewable energy, increase taxes on fossil fuels (without specific guidance as to particular aspects of such taxation), and reduce pollution. These recommendations were not underpinned by meaningful analysis of implementation modalities, likely fiscal impact, or potential trade-offs.

By the 2021 Article IV report, the IMF moved towards a fuller discussion of climate change issues (IMF 2021g). The headline recommendations were similar to those of 2019 (e.g., incentivizing green growth through higher taxation of fossil fuels). However, in an attempt for more clarity, staff prepared an annex reporting the results of a simulation model assessing the macroeconomic effects of different types of investment programmes. The findings of this exercise reiterated the same general advice that the organization's leadership offers to countries; i.e., that adaptation investment needs to be prioritized as it can limit the macro-economic impact of future shocks (Georgieva 2021; Zhang 2021; 2018). IMF staff reported in an interview that this simulation was useful in the context of consultations with the Vietnamese authorities—both at the Ministry of Finance and the Ministry of Natural Resources—as the policymakers appreciated the quantitative demonstration of the feedback from investment in resilient infrastructure to the macroeconomy (IMF Interview #2). Further, the most concrete set of advice pertained to 'greening' the recovery from Covid-19. In particular, the organization advocated against the government's reduction of aviation fuel taxes, promoted the full carbon pricing of fossil fuels, and noted the challenge of generating financing for reducing greenhouse gas emissions.

In short, while the IMF's climate-related advice expanded compared to the 2019 surveillance report, it was still inadequately integrated into the analysis and mostly followed the general arguments repeated by organizational leadership in major international forums. The short shrift on climate becomes apparent when compared to the extensive engagement of IMF staff with more traditional areas of economic policy, like fiscal and monetary policy, which were thoroughly analysed in the bulk of the report. The analyses in these policy areas offered missed opportunities for substantive engagement with climate issues. For example, even though risks in the banking sector were seen as highly important, there was no consideration of how environmental degradation or natural disasters—key vulnerabilities of Vietnam—might affect those risks. In addition, calls for better integration of Vietnam into global value chains were not coupled with commentary on how this could be achieved in a way that enhances sustainability and environmental protection—something that is not always a given in the activities of powerful firms within such chains.

### **IMF recommendations that indirectly relate to climate change mitigation and adaptation**

A range of policy recommendations included in Vietnam's 2021 Article IV report have the potential for directly or indirectly impacting the country's climate change mitigation and adaptation efforts. First, tax policy—a key focus of the IMF's advice—was seen as a core area for reform, with a broadening of value-added taxes (VAT) proposed to boost public revenues as well as tax incentives to support firm activity. In the case of the former, IMF staff view tax exemptions in Vietnam as key impediments to sound public finances, and broadening the VAT base was seen as a core corrective measure. As a staff member explained, "despite Vietnam's overarching success story, revenue mobilization has not necessarily caught up and this has to do with a revenue basis riddled with

exemptions, which the authorities should revisit” (Interview #1). However, domestic civil society has raised important concerns over the potential regressive implications of broadening the VAT base, especially if this is not done with a focus on retaining a number of essential goods and services in the reduced VAT category (VEPR and Oxfam 2018). Further, while IMF staff recommended “taxation of fossil fuels that fully prices environmental externalities,” they did not offer any specificity into how these measures could be implemented in practice or what the expected public revenues would be. For instance, such revenues could have been earmarked for specified mitigation measures, but these issues are not explored.

Second, the report promoted measures to encourage business activity—most notably, the provision of tax incentives and the scaling up of public investment. While the report contained a few broad references to the importance of adaptive infrastructure, there were no explicit recommendations to focus these measures on specific industries or activities that would facilitate the green transition. There was scope for more fine-tuned proposals, as tax incentives have often been used to promote fossil fuel businesses (Mainhardt 2020). Further, the tax incentive system in Vietnam has attracted considerable criticism by organizations like the OECD (2018) and Oxfam (2020) for having regressive implications and impeded the mobilization of new revenue streams to protect people from climate, economic and social risks.

Finally, IMF staff proposed increased investments in health and social protection which not only hold potential for generating inclusive development and increasing living standards, but are also indirectly linked with reducing climate vulnerabilities. For example, social protection policies may contribute to limiting the spread of climate-induced diseases or improving overall sanitation (Kling et al. 2021). Any links between these two policy areas are not directly considered

in the report, which advances ‘social safety nets’ as a way forward even though Vietnam has long been committed to advancing universal health coverage.

### **Key country priorities that are not considered by the IMF**

Comparing Vietnam’s NDC to the Article IV recommendations, we did not find evidence of substantial engagement with the economically-relevant climate targets set by the country. For example, the NDC sets out in great detail the government’s intentions on reforming the energy sector, agriculture, land use, industrial processes and waste management—in short, intended overhauls of the Vietnamese economy. However, these plans are not recognized by IMF staff, and the underlying economic policies are not discernibly factored into the overall recommendations of the Article IV reports.

The energy sector provides a case in point. The Vietnamese government has recognized the challenges in its energy market, including domestic supply constraints, problems with the functioning of competition, inadequate technology, and low energy exploitation and use efficiency. However, sole reference to energy in the Article IV report came in the form of a general call to ‘lower the intensity of fossil fuels by raising the contribution of renewable energy’ (p. 67). Indeed, areas such as the functioning of competitive markets are core competencies of the IMF, yet they are not delivered on in Vietnam’s surveillance report.

Similarly, the issue of revenue mobilization presents another missed opportunity. Vietnam’s latest NDC sets a 2030 target of 9% reduction in greenhouse gas emissions using its own resources, which could increase up to 27% through bilateral and multilateral support. While the IMF recognizes the importance of domestic revenue mobilization, it is primarily regarded as a crucial step toward a swift return to fiscal soundness, rather than being embedded in a framework of broad structural transformation



of the Vietnamese economy in line with the government's own targets. In other words, the Article IV recommendations could have considered a broader set of policy options to facilitate domestic revenue mobilization other than its standard advice of increasing the VAT and some excise taxes. Further, IMF staff did not offer any opinions on how the country could mobilize international support—whether bilateral or multilateral.

Finally, while the Article IV report analysed the conditions in the financial sector, it did not include an analysis of how environmental degradation or natural disasters—key vulnerabilities of Vietnam—might interact with financial sector risks, thereby impeding both financial stability and efforts to combat climate change. According to IMF staff, this omission was linked to a still-nascent methodology for stress testing and information on bank-by-bank exposure

which was unavailable or confidential (IMF Interview #1).

### Discussion

Given the major climate vulnerabilities of Vietnam, the country presents a 'hard case' to examine whether the IMF's advertised focus on climate change issues in Article IV reports has translated into substantial change in analyses and recommendations. Our analysis suggests that climate issues are generally only treated as an afterthought to the main analysis, rather than integrated into a broader slew of policy proposals to simultaneously foster macroeconomic stability and climate change adaptation and mitigation. Finally, key policies and priorities stated in Vietnam's NDC were not analysed, even though they would have clear implications for the macro-economy and the financial system.

## REFERENCES

- Climate Transparency. 2020. "Philippines: Climate Transparency Report." 2020. <https://www.climate-transparency.org/wp-content/uploads/2021/01/Philippines-CT-2020.pdf>.
- Do, Thang Nam, and Paul J. Burke. 2021. "Vietnam's Solar Power Boom: Policy Implications for Other ASEAN Member States." ISEAS-Yusof Ishak Institute. March 11, 2021. <https://www.iseas.edu.sg/articles-commentaries/iseas-perspective/2021-28-vietnams-solar-power-boom-policy-implications-for-other-asean-member-states-by-thang-nam-do-and-paul-j-burke/>.
- Eckstein, David, Vera Künzel, and Laura Schäfer. 2021. "Global Climate Risk Index." 2021. <https://germanwatch.org/en/19777>.
- Edwards, Martin S., and Stephanie Senger. 2015. "Listening to Advice: Assessing the External Impact of IMF Article IV Consultations of the United States, 2010-2011." *International Studies Perspectives* 16 (3): 312–26. <https://doi.org/10.1111/insp.12059>.
- Fratzcher, Marcel, and Julien Reynaud. 2011. "IMF Surveillance and Financial Markets—A Political Economy Analysis." *European Journal of Political Economy* 27 (3): 405–22. <https://doi.org/10.1016/j.ejpoleco.2011.01.002>.
- Frenkel, Michael, Jan-Christoph Rülke, and Lilli Zimmermann. 2013. "Do Private Sector Forecasters Chase after IMF or OECD Forecasts?" *Journal of Macroeconomics* 37 (September): 217–29. <https://doi.org/10.1016/j.jmacro.2013.03.002>.
- Georgieva, Kristalina. 2021. "Remarks by IMF Managing Director on Global Policies and Climate Change." IMF. July 11, 2021. <https://www.imf.org/en/News/Articles/2021/07/11/sp071121-md-on-global-policies-and-climate-change>.
- Gürsan, C., and V. de Gooyert. 2021. "The Systemic Impact of a Transition Fuel: Does Natural Gas Help or Hinder the Energy Transition?" *Renewable and Sustainable Energy Reviews* 138 (March): 110552. <https://doi.org/10.1016/j.rser.2020.110552>.
- Hanoi Times. 2021. "Vietnam Pledges Net Zero Emissions by 2050 at COP26." November 2, 2021. <https://hanoitimes.vn/vietnam-pledges-net-zero-emissions-by-2050-at-cop26-319148.html>.
- IEA. 2021a. "Indonesia." International Energy Agency. 2021. <https://www.iea.org/countries/indonesia>.
- . 2021b. "Philippines." International Energy Agency. 2021. <https://www.iea.org/countries/philippines>.
- . 2021c. "Viet Nam." International Energy Agency. 2021. <https://www.iea.org/countries/vietnam>.
- IMF. 2018. "Indonesia: Financial Sector Assessment Program-Detailed Assessment of Observance—Insurance Core Principles." IMF Country Report No. 18/74. 2018. <https://www.imf.org/en/Publications/CR/Issues/2018/03/12/Indonesia-Financial-Sector-Assessment-Program-Detailed-Assessment-of-Observance-Insurance-45712>.
- . 2019a. "Indonesia: 2019 Article IV Consultation-Press Release; Staff Report; and Statement by the Executive Director for Indonesia." IMF Country Report No. 2019/250. 2019. <https://www.imf.org/en/Publications/CR/Issues/2019/07/30/Indonesia-2019-Article-IV-Consultation-Press-Release-Staff-Report-and-Statement-by-the-48535>.
- . 2019b. "Papua New Guinea: 2018 Article IV Consultation-Press Release; Staff Report; and Statement by the Executive Director for Papua New Guinea." IMF Country Report No. 2018/352. 2019. <https://www.imf.org/en/Publications/CR/Issues/2018/12/03/Papua-New-Guinea-2018-Article-IV-Consultation-Press-Release-Staff-Report-and-Statement-by-the-46432>.
- . 2019c. "Vietnam: 2019 Article IV Consultation; Press Release; Staff Report; and Statement by the Executive Director for Vietnam." IMF Country Report 19/235. <https://www.imf.org/en/Publications/CR/Issues/2019/07/16/Vietnam-2019-Article-IV-Consultation-Press-Release-Staff-Report-and-Statement-by-the-47124>.

———. 2020a. "Philippines: 2019 Article IV Consultation-Press Release; and Staff Report." IMF Country Report No. 20/36. 2020. <https://www.imf.org/en/Publications/CR/Issues/2020/02/05/Philippines-2019-Article-IV-Consultation-Press-Release-and-Staff-Report-49021>.

———. 2020b. "Philippines: Selected Issues." IMF Country Report No. 20/37. 2020. <https://www.imf.org/en/Publications/CR/Issues/2020/02/05/Philippines-Selected-Issues-49022>.

———. 2021a. "2021 Comprehensive Surveillance Review — Overview Paper." IMF Policy Paper 2021/027. <https://www.imf.org/en/Publications/Policy-Papers/Issues/2021/05/18/2021-Comprehensive-Surveillance-Review-Overview-Paper-460270>.

———. 2021b. "Climate Change Indicators Dashboard." International Monetary Fund. 2021. <https://climatedata.imf.org/>.

———. 2021c. "IMF Strategy to Help Members Address Climate Change Related Policy Challenges—Priorities, Modes of Delivery, and Budget Implications." IMF Policy Paper 2021/057. <https://www.imf.org/en/Publications/Policy-Papers/Issues/2021/07/30/IMF-Strategy-to-Help-Members-Address-Climate-Change-Related-Policy-Challenges-Priorities-463093>.

———. 2021d. "Indonesia: 2020 Article IV Consultation-Press Release; Staff Report; and Statement by the Executive Director for Indonesia." IMF Country Report No. 2021/046. 2021. <https://www.imf.org/en/Publications/CR/Issues/2021/03/01/Indonesia-2020-Article-IV-Consultation-Press-Release-Staff-Report-and-Statement-by-the-50131>.

———. 2021e. "Indonesia: Selected Issues." IMF Country Report 2021/047. 2021. <https://www.imf.org/en/Publications/CR/Issues/2021/03/01/Indonesia-Selected-Issues-50132>.

———. 2021f. "Philippines: Financial System Stability Assessment-Press Release and Statement by the Executive Director for the Philippines." IMF Country Report No. 2021/074. 2021. <https://www.imf.org/en/Publications/CR/Issues/2021/04/08/Philippines-Financial-System-Stability-Assessment-Press-Release-and-Statement-by-the-50347>.

———. 2021g. "Vietnam: 2020 Article IV Consultation-Press Release; Staff Report; and Statement by the Executive Director for Vietnam." IMF Country Report 2021/042. <https://www.imf.org/en/Publications/CR/Issues/2021/02/24/Vietnam-2020-Article-IV-Consultation-Press-Release-Staff-Report-and-Statement-by-the-50121>.

———. 2021h. "IMF Surveillance." International Monetary Fund. March 1, 2021. <https://www.imf.org/en/About/Factsheets/IMF-Surveillance>.

———. 2021i. "2021 Comprehensive Surveillance Review—Background Paper on Integrating Climate Change into Article IV Consultations." IMF Policy Paper, May. <https://www.imf.org/en/Publications/Policy-Papers/Issues/2021/05/18/2021-Comprehensive-Surveillance-Review-Background-Paper-on-Integrating-Climate-Change-into-460303>.

Indonesia. 2012. "National Action Plan for Climate Change Adaptation." Ministry of National Development Planning. 2012. [https://www.bappenas.go.id/files/2913/4985/2794/national-action-plan-for-climate-change-adaptation-ran-api-synthesis-report\\_20121226163242\\_0.pdf](https://www.bappenas.go.id/files/2913/4985/2794/national-action-plan-for-climate-change-adaptation-ran-api-synthesis-report_20121226163242_0.pdf).

———. 2016. "First Nationally Determined Contribution." 2016. [https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Indonesia%20First/First%20NDC%20Indonesia\\_submitted%20to%20UNFCCC%20Set\\_November%20%202016.pdf](https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Indonesia%20First/First%20NDC%20Indonesia_submitted%20to%20UNFCCC%20Set_November%20%202016.pdf).

———. 2021a. "Long-Term Strategy for Low Carbon and Climate Resilience 2050." 2021. [https://unfccc.int/sites/default/files/resource/Indonesia\\_LTS-LCCR\\_2021.pdf](https://unfccc.int/sites/default/files/resource/Indonesia_LTS-LCCR_2021.pdf).

———. 2021b. "Updated Nationally Determined Contribution." 2021. <https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Indonesia%20First/Updated%20NDC%20Indonesia%202021%20-%20corrected%20version.pdf>.

Jakarta Post. 2021. "Minister Says Planned EU Carbon Tax Could 'Disrupt World Trade.'" July 27, 2021. <https://www.thejakartapost.com/news/2021/07/27/minister-says-planned-eu-carbon-tax-could-disrupt-world-trade.html>.

Jong, Hans Nicholas. 2021a. "Indonesia's Biodiesel Program Fuels Deforestation Threat, Report Warns." *Mongabay Environmental News*. June 9, 2021. <https://news.mongabay.com/2021/06/indonesias-biodiesel-program-fuels-deforestation-threat-report-warns/>.

———. 2021b. "Indonesia's Coal Phaseout Is Just More Business as Usual, Report Says." *Mongabay Environmental News*. August 5, 2021. <https://news.mongabay.com/2021/08/indonesias-coal-phaseout-is-just-more-business-as-usual-report-says/>.

Kling, Gerhard, Ulrich Volz, Victor Murinde, and Sibel Ayas. 2021. "The Impact of Climate Vulnerability on Firms' Cost of Capital and Access to Finance." *World Development* 137 (January): 105131. <https://doi.org/10.1016/j.worlddev.2020.105131>.

Lagarde, Christine. 2015. "'Lifting the Small Boats,' Speech by IMF Managing Director." IMF. June 17, 2015. <https://www.imf.org/en/News/Articles/2015/09/28/04/53/sp061715>.

LSE Grantham Research Institute. 2015. "Climate Change Legislation in Vietnam." 2015. <https://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2015/05/VIETNAM.pdf>.

Mainhardt, Heike. 2020. *Build Back Better? IMF's Policy Advice Hampers Green COVID19 Recovery*. Amsterdam: Recourse, Greenpeace, Earthlife Africa, Centre for Financial Accountability.

Momani, Bessma. 2006. "Assessing the Utility of, and Measuring Learning from, Canada's IMF Article IV Consultations." *Canadian Journal of Political Science / Revue Canadienne de Science Politique* 39 (2): 249–69.

Nhat, Le Minh. n.d. "Climate Change Impacts and Adaptation Efforts in Vietnam." Accessed July 29, 2021. [https://unfccc.int/files/adaptation/application/pdf/viet\\_nam\\_summary\\_cca.pdf](https://unfccc.int/files/adaptation/application/pdf/viet_nam_summary_cca.pdf).

OECD. 2018. "Harmful Tax Practices - 2018 Progress Report on Preferential Regimes: Inclusive Framework on BEPS: Action 5." 2018. <https://www.oecd.org/ctp/harmful-tax-practices-2018-progress-report-on-preferential-regimes-9789264311480-en.htm>.

OJK. 2021. "Sustainable Finance Roadmap Phase II (2021 - 2025)." Indonesian Financial Services Authority. 2021. <https://ojk.go.id/id/berita-dan-kegiatan/publikasi/Documents/Pages/Roadmap-Kuangan-Berkelanjutan-Tahap-II-%282021-2025%29/Roadmap%20Kuangan%20Berkelanjutan%20Tahap%20II%20%282021%20-%202025%29.pdf>.

Oxfam. 2020. "Towards Sustainable Tax Policies in ASEAN." 2020. <https://asia.oxfam.org/latest/policy-paper/towards-sustainable-tax-policies-asean>.

Philippines. 2015. "Intended Nationally Determined Contributions." 2015. <https://www4.unfccc.int/sites/submissions/INDC/Published%20Documents/Philippines/1/Philippines%20-%20Final%20INDC%20submission.pdf>.

Ramos, Luma, Corinne Stephenson, Irene Monasterolo, and Kevin P Gallagher. 2021. "Climate Risk and IMF Surveillance Policy: A Baseline Analysis." GEGI Working Paper 47.

Schäfer, Armin. 2006. "A New Form of Governance? Comparing the Open Method of Co-Ordination to Multilateral Surveillance by the IMF and the OECD." *Journal of European Public Policy* 13 (1): 70–88. <https://doi.org/10.1080/13501760500380742>.

Scholz, Olaf. 2021. "IMFC Statement by Minister of Finance of Germany." IMF. 2021. <https://meetings.imf.org/en/2021/Spring/Statements>.

Shang, Baoping. 2021. "The Poverty and Distributional Impacts of Carbon Pricing: Channels and Policy Implications." IMF Working Paper 2021/172. <https://www.imf.org/en/Publications/WP/Issues/2021/06/25/The-Poverty-and-Distributional-Impacts-of-Carbon-Pricing-Channels-and-Policy-Implications-50222>.

Stiglitz, Joseph E. 2021. "A Coup Attempt at the IMF." Project Syndicate. September 27, 2021. <https://www.project-syndicate.org/commentary/coup-attempt-against-imf-managing-director-georgieva-by-joseph-e-stiglitz-2021-09>.



TCDIMF. 2021. "Toward Development-Centered Climate Change Policy at the International Monetary Fund." Task Force on Climate, Development and the International Monetary Fund. 2021. [https://www.bu.edu/gdp/files/2021/10/TF\\_Strategy-Report\\_FIN.pdf](https://www.bu.edu/gdp/files/2021/10/TF_Strategy-Report_FIN.pdf).

USAID. 2016. "Greenhouse Gas Emissions in the Philippines." 2016. [https://www.climatelinks.org/sites/default/files/asset/document/2016\\_USAID\\_Philippines%20GHG%20Emissions%20Fact%20Sheet.pdf](https://www.climatelinks.org/sites/default/files/asset/document/2016_USAID_Philippines%20GHG%20Emissions%20Fact%20Sheet.pdf).

Van de Vuurst, Paige, and Luis E. Escobar. 2020. "Perspective: Climate Change and the Relocation of Indonesia's Capital to Borneo." *Frontiers in Earth Science* 8: 5. <https://doi.org/10.3389/feart.2020.00005>.  
VEPR, and Oxfam. 2018. *Evaluation of the Impacts of VAT Increase*. Hanoi.

Viet Nam. 2016. "Intended Nationally Determined Contribution." 2016. <https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Viet%20Nam%20First/VIETNAM%27S%20INDC.pdf>.

———. 2020. "Updated Nationally Determined Contribution." [https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Viet%20Nam%20First/Viet%20Nam\\_NDC\\_2020\\_Eng.pdf](https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Viet%20Nam%20First/Viet%20Nam_NDC_2020_Eng.pdf).

World Bank. 2021. "Vietnam Climate Risk Country Profile." 2021. <https://climateknowledgeportal.worldbank.org/sites/default/files/2021-04/15077-Vietnam%20Country%20Profile-WEB.pdf>.

Zhang, Tao. 2018. "Adapting to Climate Change: Pricing Right, Taxing Smart, and Acting Now." IMF. January 31, 2018. <https://www.imf.org/en/News/Articles/2018/01/31/sp013118-adapting-to-climate-change-pricing-right-taxing-smart-and-acting-now>.

———. 2021. "Climate Change—Our Most Global Challenge." IMF. June 2, 2021. <https://www.imf.org/en/News/Articles/2021/06/02/sp060221-dmd-zhang-green-swan-conference>.

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