INTRODUCTION

Governments and public international organizations are making a concerted effort to provide large amounts of money to reduce emissions of greenhouse gases (climate mitigation) or adapt to the effects of climate change (climate adaptation). But there is a significant risk that the infrastructure projects where much of this climate financing will need to be targeted will be undermined by corruption—from bribery and kickbacks to fraud and embezzlement. The threat is increased by the scale of the climate financing being provided and the speed with which the required projects need to be completed. Corruption concerns could also deter responsible private sector investors from providing much-needed financing.

Since there is only “one shot” at getting this right, the stakes are very high. Accordingly, public international organizations that lead on climate finance and anticorruption efforts, including the International Monetary Fund (IMF), multilateral development banks, the Organization for Economic Cooperation and Development (OECD), and the United Nations, need to make preventing corruption in climate finance a much higher priority and take urgent steps, working with governments and the private sector, to address this threat before the bulk of the financing is committed. Climate activists and civil society anticorruption movements should strongly encourage and support these efforts.

This Policy Brief identifies key corruption risks that threaten climate infrastructure financing and the best practices that can alleviate these risks. As a means of putting these best practices in place, this Policy Brief advocates that the IMF’s Resilience and Sustainability Trust should provide a mechanism to help coordinate reform in this area. This new trust complements the IMF’s existing lending toolkit by providing financing to vulnerable low- and middle-income countries—about three-quarters of the IMF’s membership—to address longer-term challenges, including climate change and pandemic preparedness.
THE URGENCY—AND THE ASSOCIATED RISKS

Climate scientists warn that if carbon emissions are not substantially reduced in the coming decades, global temperatures could rise to catastrophic levels, leaving parts of our planet uninhabitable (IPCC 2022). But to avoid this outcome, and sustain global growth and prosperity, the world will need to invest vast sums of money in new low-carbon or zero-carbon infrastructure in a very short space of time. Indeed, the faster the investments are made, the lower will be the overall cost of making the transition, and the smaller the risk that the world’s climate will surpass irreversible tipping points.

Existing investment flows need to be redirected toward low-carbon assets, and total investment needs to be increased sharply: According to one estimate, the world needs total additional investment of $1 trillion to $3.5 trillion per year, or between 1 and 3.6 percent of 2021 global GDP (McKinsey 2022).

Experience demonstrates, however, that the push to spend enormous amounts of money in a relatively short period to reach critical goals creates another risk: corruption. Recent examples include the corruption that arose from the large flow of US financing directed at “nation building” in Afghanistan to support the Karzai government (well chronicled in Whitlock 2021) and the fraud in COVID-19 loans and relief schemes during the pandemic.¹

The risk of corruption in climate change financing is significant because massive investments need to be deployed on public infrastructure, an economic activity that—as discussed below—has traditionally been plagued by large-scale bribery and theft. The countries that will receive a great deal of the financing also raise red flags. While much of the spending is currently taking place in advanced economies (plus China) and is domestically financed, a substantial portion of future spending will take place in emerging-market and low-income countries through cross-border financial flows. Nest, Mullard, and Wathne (2020) note the three largest recipients of development finance for climate mitigation and adaptation—India, Bangladesh, and Indonesia—also rank low on Transparency International’s Corruption Perceptions Index.² In India, for example, Rathore et al. (2018) found that more than one-quarter of solar power utility projects are forced to pay bribes at the contracting or construction stage. A 2020 report by Transparency International Bangladesh stated that over half of the funds meant for seven climate mitigation measures were lost to irregularities and corruption in the country. In Nest, Mullard, and Wathne (2020), case studies reveal bribery in forest carbon capture projects and adaptation infrastructure in Indonesia.

The problem is not just one of waste. Systemic corruption would undermine the ability of the international community to achieve its climate objectives. Due to conflicts of interest, the wrong type of mitigation or adaptation project may be selected. Because of bribery or embezzlement, even a well-designed project may be developed in a manner that fails to deliver the promised mitigation or adaptation benefits. The fear of systemic corruption is also likely to undermine


² For an excellent discussion of the corruption risks in the construction of mitigation and adaptation projects in both emerging-market and low-income countries, see Nest, Mullard, and Wathne (2020).
the willingness or the ability of the private sector to provide the large amounts of financing that will be needed, since reputational concerns and internal compliance requirements may deter them from investing in countries known to have major governance problems.

National anticorruption legislation, such as the 1977 US Foreign Corrupt Practices Act and the 2010 UK Corruption Act, can hold senior executives personally liable if their company is implicated in bribing or other corrupt activity. These laws have improved some aspects of corporate behavior in recent years—with some well-publicized exceptions—but they have probably made some boards and leadership teams more risk averse. Paradoxically, a failure to put in place strong anticorruption measures could deter more responsible companies from investing, leaving the field to less scrupulous corporates, thus increasing the corruption risk.

Lastly, accumulating evidence of significant waste and fraud would erode political support in advanced economies for providing development finance for climate change and mitigation in developing economies.

Many of the public international financial institutions that are critical in delivering public finance to tackle climate change and leveraging much larger flows of private finance also have a long-standing role in combating corruption, both directly via financing activities and through their broader policy advice. These include the IMF, World Bank, regional multilateral development banks (MDBs), and some bilateral development finance institutions (DFIs). An overlapping group of international institutions is also fighting global corruption, including the United Nations Office on Drugs and Crime (UNODC), the OECD, and the Financial Action Task Force (FATF). Given what is at stake, it is now imperative that these two groups work together, and with governments, the private sector, regulators and auditors to design and implement the measures required to address the challenge of corruption in climate finance. If this opportunity is missed, the international community will not get a second chance.

So far, the climate change movement has paid relatively little attention to the threat of corruption to climate finance. This may reflect the fear that focusing on corruption would lessen the needed political support for providing financial resources, or, even worse, that it would be used as a convenient excuse for not providing the promised resources. But it may also reflect a long-standing perspective among some policymakers and opinion formers that corruption is a “second order” issue in development finance, rather than a major threat to achieving carbon neutrality within the required time frame. Either way, it is critical to change this approach and work together to encourage and support the efforts of public international financial institutions to tackle corruption.

Putting in place meaningful safeguards will be difficult, particularly in countries where corruption is pervasive. The existence of multiple international providers of climate finance further complicates the problem, since the identification and application of common standards will require considerable coordination. The Climate Policy Initiative’s analysis of climate finance in 2021 indicates 12 different sources or intermediaries of capital for climate finance (CPI 2021a).

The war in Ukraine, and the West’s unprecedented economic and financial sanctions against Russia, could also complicate the task of protecting international green finance from corruption. Russia and possibly other
authoritarian governments are likely to step up state-led efforts to undermine international mechanisms to control illicit financial flows.

A range of other challenges will also need to be addressed when designing and implementing an effective climate policy, including, for example, the politically complicated task of eliminating carbon subsidies. These challenges are beyond the scope of this Policy Brief. Rather, we focus on the risk of pervasive corruption in the financing of green infrastructure and articulate key reforms and how to put them in place.

UNDERSTANDING CORRUPTION RISKS

While climate projects vary, they tend to be concentrated in specific sectors. Climate mitigation projects primarily focus on renewable energy, energy efficiency, and low-carbon transport. Climate adaptation projects, by contrast, typically involve water and wastewater management, disaster risk management, and natural resource management. A large number of projects in both categories will involve the development of new infrastructure.

The Lake Turkana Wind Power Project in Kenya illustrates the scale of infrastructure projects that will be required to achieve global net zero emissions. It is the largest private investment project in Kenya’s history ($694 million) and the biggest single wind farm in Africa, with 365 wind turbines installed, generating some 300 megawatts of power. The project employed 2,500 people during its construction and is expected to generate $150 million a year in foreign-currency savings for Kenya.

A considerable amount of analysis has been devoted to identifying the reasons why infrastructure projects, whether located in developed or developing countries, generate considerable corruption risks. A 2021 study from the Coalition for Integrity identifies the corruption risks arising from the implementation of the $1 trillion US infrastructure package that President Joseph R. Biden Jr. signed in November 2021, which includes some important climate mitigation provisions. While some of these are general risks, others are specific to particular stages of the infrastructure projects. The package contains about $550 billion of new federal investments in America’s infrastructure over five years—from bridges and roads to broadband, water, and energy systems. The report issues a stark warning: “Without oversight, infrastructure projects at the federal, state and local level risk falling victim to waste, fraud and other abuses. Numerous infrastructure projects across the country within the past several decades illustrate this risk, and make clear that any meaningful legislation concerning infrastructure must allocate resources and consideration for oversight measures, preferably by multiple actors and agencies” (Coalition for Integrity 2021, p. 1).

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3 “Climate mitigation” refers to efforts to reduce or prevent the emission of greenhouse gases.
4 “Climate adaptation” refers to the process of adjusting to current or expected effects of climate change.
5 For a further discussion on the types of projects needed, see Nest, Mullard and Wathne (2020).
The Salerno Reggio-Calabria highway in southern Italy provides a powerful example of the extraordinary losses and delays that corruption can cause in infrastructure projects. This project, which has cost more than 10 billion euros to complete, started in the 1960s but was not finished until 2016 due to pervasive corruption. The European Anti-Fraud Office (OLAF) has found that over 381 million euros have been lost due to fraud, irregular contracts, and “ghost” roadworks—i.e., financing of work that never actually took place.

In terms of general risks, the capital-intensive nature of large infrastructure projects creates multiple incentives for corruption, both for public officials and the private sector, including bribery (often in the form of kickbacks), theft of funds by public officials, and conflicts of interest (e.g., where a public official has an ownership interest in a contractor). Moreover, large infrastructure projects, often involving several subcontractors, can be complex and opaque, making corruption more difficult to detect. Every infrastructure project has unique features, which makes cost comparisons with other projects more difficult. Where a number of parties are involved, effectively monitoring all transactions becomes onerous, particularly when the monitoring agency does not have enough staff.

Specific stages of a project’s development are prone to specific corruption risks:

- **Project Selection and Appraisal**: The most significant risk here is private interests unduly influencing the project selection decisions of public officials. Private interests that stand to gain from the decisions “capture” government officials through lobbying or other efforts, which, although not illegal, may nevertheless distort the decision-making process.

- **Project Design**: To generate greater illicit profits, the project may be designed to be larger and/or more complex than is necessary. Also, it may have deliberate design gaps so costs can be increased at a later stage.

- **Tendering Process**: Bidders can rig a competitive bidding process to undermine its integrity: For example, contractors can collude to increase the value of the winning bid; a contractor may bribe a public official to give it confidential information, thereby obtaining a competitive advantage during the bidding process; or one of the bidding contractors may be financially connected to relevant public officials.

- **Project Implementation**: A contractor that received the project through the competitive bidding process may engage in a scheme that enables it to renegotiate the price during the implementation of the project. A contractor might also offer bribes and kickbacks to revise the contract’s terms in a manner that enables it to cut corners, including using lower-quality materials.

- **Project Audit and Assessment**: The integrity of the post-project assessment and auditing process may be undermined by either denying the auditor access to critical information or by bribing him or her to ignore irregularities.

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Green infrastructure projects, whether for adaptation or mitigation, are more likely to involve innovative and unfamiliar technologies. Some of the essential building contractors and service providers may also be different from those that project sponsors are used to working with. Evaluating whether a project has done what was intended will be more complex because of the additional climate-related criteria that need to be met. All these factors could increase the risk of corruption. At the same time, however, these very differences could be used to build stronger anticorruption protections into the projects from the outset.

Another risk, which is beyond the scope of this Policy Brief, relates to the complex systems of subsidies and other government incentives deployed across the world to incentivize the shift from fossil fuels towards renewable energies. While these national policies are certainly needed to deliver the net zero emissions goal, it is important they also be designed to minimize corruption risks.

The public sector—both domestic and international—should take the initiative to address the vulnerabilities that arise with respect to the financing of green infrastructure, both to ensure proper use of its own investments and to catalyze financing from the private sector. Doing so will require two steps, as discussed in detail below. First, a set of standards that address corruption risks through the project cycle should be identified and agreed upon. Second, a credible process should be developed to ensure that these standards are actually implemented. Strong local ownership and participation with respect to each of these steps is critical, without which important climate adaptation and mitigation measures could lose popular support. Green energy crucially depends on the extraction of critical minerals, which poses additional risks not addressed in this Policy Brief.8

**DESIGNING THE NECESSARY SAFEGUARDS**

A number of initiatives provide different levels of guidance on how to address governance vulnerabilities in public infrastructure. For example, the IMF’s Public Infrastructure Management Assessment (PIMA) is a diagnostic tool that identifies governance weaknesses in the three stages of the project cycle: planning, allocation (including project selection), and implementation. Although it does not establish detailed best practices, the governance weaknesses identified by the PIMA are designed to provide a roadmap for reform. In fact, the IMF recently developed a Climate-PIMA (C-PIMA) tailored to climate change infrastructure. Among other things, the C-PIMA assesses the extent to which proposed fiscal expenditures are aligned with a country’s international commitments (Gonquet et al. 2021). Box 1 highlights some of the initiatives promoting best practices in contract transparency and integrity in public procurement developed by international organizations, nongovernmental organizations, the private sector, and their coalitions. The Inter-American Development Bank is also well advanced in producing a set of principles that will cover all of the stages of the infrastructure project cycle.

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8 For an extensive discussion of corruption risks in the extraction of natural resources, see OECD (2016a).
Box 1 Public procurement best practices

This box highlights some of the initiatives promoting best practices in contract transparency and integrity in public procurement.

**Clean Contracting Manifesto (Transparency International):** An agenda set forth by a cohort of nonprofit organizations laying out five general pillars to guide clean contracting practices, end corruption in public procurement and infrastructure, and support sustainable development.

**Construction Sector Transparency Initiative (CoST):** A collaborative initiative working to provide guidance and standards on increasing accountability and transparency in public infrastructure projects, focusing on multistakeholder involvement, disclosure, assurance, and social accountability particularly in the project selection and evaluation phases.

**EITI Principles:** A set of principles to promote government accountability and good management of extractive industries, information disclosure on revenues, public benefits, and other key areas throughout the extractive cycle.

**Global Infrastructure Anti-Corruption Centre:** An independent nonprofit organization helping to combat and prevent corruption in the construction industry by producing guidelines and templates for industry participants addressing transparency, compliance, auditing, and other related areas.

**OECD Principles for Private Sector Participation in Infrastructure:** A collection of twenty general principles designed by the OECD to guide private sector participation in infrastructure and help governments better work with private sector participants.

**OECD Principles for Integrity in Public Procurement:** A collection of ten general principles produced by the OECD to enhance integrity throughout every stage of the public procurement process, addressing transparency, compliance, accountability, and other related areas.

**Open Contracting Partnership Global Principles:** A set of best practices and standards for participation and data disclosure on projects, contracts, and the tendering process for public procurement.

**Recommendations on Open Contracting for Open Government Partnership National Action Plans (Transparency International):** A set of good practices identified to promote open government partnership by addressing areas such as transparency, civic participation, and integrity and accountability in public contracting.

EITI = Extractive Industries Transparency Initiative; OECD = Organization for Economic Cooperation and Development

A common feature of these initiatives is that they are not narrowly focused on addressing corruption. Experience demonstrates that the most effective anticorruption strategies are those that take a broader approach—and have broader efficiency benefits. For example, while a credible threat of prosecution can enhance accountability, other mechanisms can also help achieve this objective, including robust transparency and oversight requirements. This is of particular importance in societies where the institutions charged with criminal enforcement—the police, the prosecutors, and the courts—are themselves vulnerable to corruption. Of course, in the medium term, it will
be essential to reform these institutions to put in place an effective criminal enforcement framework.

Based on the considerable work that has been done to date on developing standards, including the above initiatives, existing best practices would appear to include, at a minimum, the establishment of a legal, procedural, and institutional framework that contains the following components:

**Institutional Oversight and Monitoring.** This would include two distinct elements. First, a transparent governmental project approval process would be established to ensure that project selection is aligned with both the country’s fiscal constraints and its national climate mitigation and adaptation priorities, as informed by its international commitments under the UN-led process. Second, once a project is selected, an agency that is sufficiently insulated from public interference and private influence, effectively resourced with well-trained staff, would have the mandate to monitor in real time (i.e., not just ex post) the project’s development to ensure that the legal and procedural framework, described below, is being adhered to during the different stages of the project’s development.

**Rules Governing Procurement and Project Development.** The legal and procedural framework guiding the procurement process must be designed to ensure a competitive and transparent process and should include, among others, the following elements: (a) the requirement of open, competitive procurement (noncompetitive bids would be limited to exceptions specified in the law with clear criteria),

9 (b) the establishment of prequalification criteria that would be assessed based on supporting evidence,

10 (c) mandatory reliance on an e-procurement system with standardized documentation,

11 (d) disclosure of “beneficial ownership” (i.e., the real—rather than nominal—owner) of all entities submitting bids,

12 (e) the use of a selection committee of experts composed of individuals with demonstrated expertise who have been subject to conflicts of interest vetting,

13 (f) adequate publication of the invitation to bid and the final award (including the bid details and the beneficial owners of the successful bidder),

14 (g) the publication of all finalized contracts,

15 and (h) with respect to contract renegotiation, the requirement that a competitive process be used if cost overruns exceed a specified threshold.

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10 See OECD (2016b).

11 Ibid.


13 See World Bank (2013).

14 Ibid.

Stakeholder Engagement and Whistleblower Protection.\textsuperscript{16} It is best practice to allow citizens to engage in public infrastructure development, with public hearings where they can express concerns regarding design, cost, and timeline. Where corruption vulnerabilities are high, civil society organizations can play an important role in promoting accountability, particularly where the transparency requirements in the legal and procedural framework, described above, give them the information needed to scrutinize the process. Relatedly, the legal framework should protect whistleblowers. Whistleblowing is a very effective means of uncovering illegal conduct: According to one study, it is responsible for 50 percent of fraud detection in the public sector (European Commission 2017). The law should allow for whistleblowers to file anonymous complaints, prohibit the leaking of the whistleblower’s name, and institute stiff penalties for retaliation.

The above best practices cannot operate effectively in a policy vacuum. Ensuring that a country has a project selection process that is aligned with its fiscal space requires the adoption and implementation of general standards of fiscal transparency. Ensuring that there is an independent agency that has the capacity to effectively oversee the project’s development—whether by adding to or reshaping the role of an existing institution\textsuperscript{17} or developing an entirely new one—will normally require broader civil service reforms that prioritize adequate remuneration and robust performance management. Finally, as noted above, while criminal enforcement cannot normally be relied upon as the primary accountability mechanism when corruption is systemic, meaningful progress in this area will be essential.

PUTTING THE FRAMEWORK IN PLACE

Given the critical role of governance in climate mitigation and adaptation projects, international financing by the public sector (both individual country donors and international financial institutions) should to the maximum extent possible be delivered in conjunction with the safeguards described above. Implementing this second step will not be straightforward—for at least three reasons. First, any form of conditionality will need to be sensitive to the fraught question of who is ultimately responsible for climate change.\textsuperscript{18} Second, where corruption is systemic, meaningful reform will often face political resistance. While most citizens ultimately suffer the economic and social consequences

\textsuperscript{16} A whistleblower is someone, typically an employee or business partner, who informs on a person or organization engaging in corruption.

\textsuperscript{17} For example, as central banks in a number of developing countries take on a more forceful role in ensuring transparency around climate risks in the financial sector, it may also be appropriate, where they have the necessary staff capabilities and independence, for them to take on a broader role to ensure that major mitigation and adaptation linked investment projects meet good governance and transparency standards.

\textsuperscript{18} To achieve this, it will be important that advanced economies show they are prepared to lead the way in implementing transparency and other anticorruption measures (i.e., “do as I do,” not just “do as I say”). There may also be scope to use new international architectures, such as the “Climate Club” endorsed by G7 leaders in June 2022, to ensure that the necessary information sources and policy tools to combat corruption are developed collaboratively among countries at all income levels.
of corruption, a few benefit. These vested interests will seek to maintain the status quo. Accordingly, conditionality will be effective only if there is adequate domestic support for reform.

The Resilience and Sustainability Trust (RST), recently established by the IMF, may provide an effective mechanism to catalyze reform. The RST has been established to reduce risks to balance of payments stability, including those relating to climate change. The RST will be made available to both low- and middle-income members and, among other things, will help finance the cost of climate mitigation and adaptation investments. Importantly, the conditionality associated with RST loans—which will have a long (20-year) repayment period—will consist of two components or, using IMF terminology, two “programs.” The “Traditional Program” will focus on broader economic adjustment measures traditionally supported by IMF financing and would be designed to address macroeconomic stability. The “RST-Specific Program” will focus on specific structural measures designed, among other things, to address climate change risks, including measures that enhance the effectiveness of climate mitigation and adaptation investments. The IMF recognizes that, with respect to the RST-Specific Program, it will need to leverage the expertise of the World Bank and the regional development banks. The overall goal is to catalyze support for reforms from the international community, including the private sector.

The governance reforms identified in this Policy Brief would easily fit within this two-tier RST framework.

With respect to the Traditional Program, the IMF adopted a policy in 2018 requiring that all IMF financial support take into account governance vulnerabilities (including corruption) and that, in circumstances where the problems are sufficiently severe, IMF financing should be made conditional upon appropriate reforms. The focus is on the broader, higher-level reforms identified in this Policy Brief—for example, fiscal transparency and the rule of law, including the effectiveness of anticorruption efforts.

Specific legal and institutional measures to safeguard against corruption in climate mitigation and adaptation projects (i.e., procurement rules and institutional oversight of the design and development process) would be covered in the RST-Specific Program, to be designed in conjunction with the multilateral development banks. To be clear, the IMF would not be earmarking its financing for specific climate projects and would not oversee their development. Rather, it would make financing under the RST conditional upon the adoption and effective implementation of the specific legal and institutional framework identified above. The scope of the conditionality would be developed in close coordination with the multilateral development banks. The detailed principles being developed by the Inter-American Development Bank described earlier would be a valuable input.

19 The RST is described in detail in IMF (2022).
Translating this conditionality into meaningful reform will, of course, not be easy. Corrupt actors will continue to circumvent even the most rigorous safeguards. Moreover, it cannot be assumed that these reforms, even if effectively implemented, will catalyze the necessary private sector financing. From a private investor’s perspective, the ideal solution would be for the public sector to provide some guarantee that a project will not be tainted by corruption. This solution, however, is neither feasible nor appropriate. But the IMF and relevant multilateral development banks should engage with the private sector to explain the RST approach to address corruption vulnerabilities. It will be important to embed this issue in the “Environmental, Social, and Governance (ESG)” agenda—i.e., emphasize that the “E” cannot be achieved without reforms of “G.”

Lastly, it is also important to recall that for every bribe that is accepted, there is also an offering party, and the latter is all too often a foreign company based in an advanced or emerging economy. Similarly, banks in international financial centers can still conceal the proceeds of corruption. Any concerted effort to address the threat of corruption in climate change financing will therefore necessarily require countries such as the United States and the United Kingdom to rigorously enforce their antibribery and anti-money laundering laws.

CONCLUSION

Past efforts to finance infrastructure—which have often been undermined or even negated by corruption—have had tragic consequences for the poor and vulnerable communities that did not receive the benefits that were intended. But society as a whole always had the opportunity to try again. This is not the case with climate change financing: Getting it right the first time is essential. These high stakes will no doubt complicate the process of reform. Because there is no way to walk away from the existential crisis we face, the perceived leverage of donors to ensure that the necessary reforms are actually carried out may be reduced. But that does not mean the push for reforms should be diluted or delayed. In fact, the opposite. Governments and public international institutions, working in partnership with the private sector and local civil society, should instead redouble their efforts to put the right safeguards in place. Key policy summits in 2022-23, including the IMF/World Bank Annual Meetings, the G20, COP27, and G7 should place addressing corruption in climate finance at the top of their agendas and rapidly begin developing an adequate response. The IMF’s Resilience and Sustainability Trust can be the place to start.

REFERENCES


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