

# Transparency and Corruption Prevention in Financing Climate Action

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**Abstract.** *The article summarises the arguments and counter-arguments within the scientific debate on enhancing the climate finance transparency. The main purpose of this study is to investigate the mechanism of climate finance and identify the key challenges that hinder the effective climate fund monitoring system. The relevance of addressing this research problem is due to the fact that the largest recipients of international climate finance are countries with high corruption risks, low standards in protection human rights, low trust in law enforcement and judicial authorities, etc. Therefore, the reporting and the quality of the reports prepared on the funds received under international assistance programmes is an important component of establishing long-term relations and trust between donor-countries or recipient-countries. The article examines the issue of climate finance transparency in the following logical sequence: analysed scientific publications on the issues of transparency and corruption in climate finance, examined the institutional mechanism of global climate finance, analysed the scale of climate finance in the world, and identified the main challenges in improving the transparency and efficiency of climate funds. The study was conducted using empirical (observation, description) and theoretical (grouping, synthesis, abstraction) research methods. The paper substantiates that the strengthening transparency of climate finance in developing countries requires a comprehensive approach - on the one hand, improving the level of justice, judiciary, enhancing the work of local regulatory authorities, developing legislation in recipient countries of international financial assistance, and on the other hand, improving the methodology of integrated accounting and reporting on the receipt and use of climate funds, as well as tracking the effects of project implementation. The study found that the key challenges that hinder the formation of an effective climate funds monitoring system are: a data collection and reporting system, an accounting and reporting system, and a coordination system.*

**Keywords:** transparency, climate finance, green gas emissions, corruption, climate changes.

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## Introduction

Over the past decade, the international community has been united around the global problem of climate change, which is causing devastating consequences for countries and loss of life. Developed countries made a commitment at the Conference of the Parties (COP) to the UNFCCC to mobilise at least US\$100 billion a year by 2025 and to invest in climate projects for developing countries. During 2020-2021, annual climate finance reached USD 758 billion, an increase of 15% compared to 2019/20 and 63.8% compared to 2015/16 (Climate Police Initiative, 2022). The countries that are most vulnerable to the effects of climate change have low levels of integrity in public administration, poor quality of justice, and high crime rates. In particular, the correlation between the Notre Dame Global Adaptation Index (ND-GAIN) and the Corruption Perceptions Index (CPI) is 0.83, which suggests a fairly close relationship between these indicators. International organisations and donor countries are constantly failing to recognise and deal with how local authorities actually work in recipient countries, especially informal authorities (Browne, 2022).

Investing large sums of money in infrastructure projects in developing and corrupted countries requires greater transparency in the use of international aid funds and accountability. The low level of institutional development and lack of proper control by financial assistance providers can undermine the efforts of the international community to reduce greenhouse gas emissions and neutralise the negative effects of climate change in the world. Therefore, the reporting procedure and the quality of the reports prepared on the accumulated funds under international assistance programmes is an important component of establishing long-term relationships and trust between donor-countries and recipient-countries.

## Literature Review

Climate change is one of the priority areas of scientific research at the global and regional levels. Scientific research in this area is complex and interdisciplinary, covering key aspects such as environmental, economic, technological and social (Vakulenko et al., 2023). Climate change affects economic activity and the social environment through numerous channels that are interconnected and create a synergistic effect of destruction and loss.

This study analyzes scientific publications concerning climate finance which are included in the scientometric database Scopus. The following keywords were used to search for scientific publications on the selected topic: "climat\* financ\*", "transparen\*". A search in the Scopus scientometric database for publications with the combination of the words "climat\* financ\*" in the title or abstract identified 962 publications during 2005-2023. Publication activity on climate finance is growing steadily. In particular, in 2022, 205 scientific publications were published in this area, which is almost twice bigger than last year (126 publications). The greatest scientific interest in this area is shown by scientists from the United States (200 publications or 21% of the total), the United Kingdom (180 publications or 19% of the total) and Germany (145 publications or 15% of the total).

The next search query was a combination of the keywords "climat\* financ\*" and "transparen\*", which allowed us to find 65 scientific publications. The most cited paper (Weikmans & Roberts, 2019) in this research cluster noted that the lack of internationally agreed methods of accounting for climate finance had led to a large number of accounting and reporting practices, which led to widely divergent statements about climate finance. Using the Rio Marker data for 1998-2010 for 180 developing countries, it is statistically proven that the determining factors for a country to receive climate finance are higher CO<sub>2</sub> intensity, larger carbon sinks, lower per capita gross domestic product and good governance (Halimanjaya, 2015).

## Methodology and research methods

The purpose of this article is to study the mechanism of climate finance and identify the key challenges that impede the formation of an effective monitoring system for using climate funds. The study was conducted using empirical (observation, description) and theoretical (grouping, synthesis, abstraction) research methods.

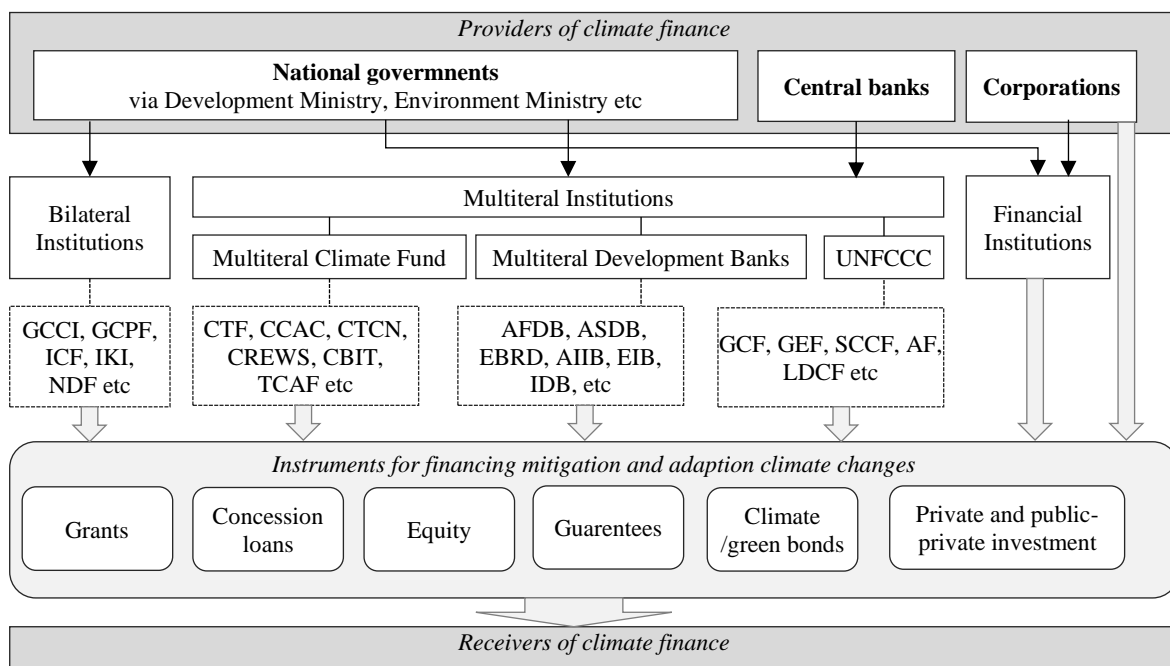
## Results

The UNFCCC defines climate change finance as "local, national or transnational financing, derived from public, private and alternative sources of finance, to support mitigation and adaptation actions to address

climate change". In other words, climate finance includes support for policies and technologies that reduce greenhouse gas emissions and/or help society adapt to the effects of climate change.

During 2011-2021, the volume of global climate finance reached USD 5.7 trillion, or USD 516 billion on average annually (Climate Police Initiative, 2022). At the same time, almost 90% of the current climate capital is used to finance measures and actions aimed at mitigating the effects of climate change (transition to renewable energy sources, reduction of fossil fuel consumption, stopping illegal deforestation, etc.) The main area of climate change mitigation financing is investments in renewable energy sources, which account for almost 70% of total climate capital. However, the fastest growing area is investment in low-carbon transport.

Despite the annual growth of climate finance at 7%, the current volume of climate finance does not meet the scenario for limiting global warming to 1.5°C. To avoid the worst impacts of climate change by 2030, financial flows will need to reach at least USD 4.4 trillion per year. The urgent need to increase the scale of climate finance commitments has become one of the reasons for the search for additional financial instruments to raise capital and stimulate the transition of businesses to a sustainable development model. In particular, in 2020, the European Union Taxonomy Regulation was adopted, which defines a "green" list of sustainable activities and establishes obligations for companies to disclose information on sustainable finance. In addition, the International Financial Reporting Standards Foundation announced the creation of the International Sustainability Standards Board, the successful development of which will require financial institutions to systematically assess the impact of their assets on climate change. Central banks are active participants in transformational changes in the field of climate investment. For example, financial regulators from 31 countries have used the climate scenario to assess the sustainability of the financial system and the macroeconomic situation in their countries (United Nations, 2023). Figure 1 shows the institutional infrastructure of global climate finance.



**Figure 1. Institutional infrastructure of global climate finance**

**Bilateral Institutions:** GCCI - Global Climate Change Initiative, GCPF - Global Climate Partnership Fund, ICF - International Climate Finance, IKI - International Climate Initiative, NDF - Nordic Development Fund.

**Multilateral Institutions:** *Multilateral Climate Fund:* CTF - Clean Technology Fund, CCAC - Climate and Clean Air Coalition Trust Fund, CTCN - Climate Technology Centre and Network, CREWS - Climate Risk Early Warning System Initiative, CBIT - Capacity Building Initiative for Transparency, TCAF - Transformative Carbon Asset Facility; *Multilateral Development Banks:* AFDB - African Development Bank, ASDB - Asian Development Bank, EBRD - European Bank for Reconstruction and Development, AIIB - Asian Infrastructure Investment Bank, EIB - European Investment Bank, IDB - Inter-American Development Bank; *UNFCCC:* GCF - Green Climate Fund, GEF - Global Environment Facility, SCCF - Special Climate Change Fund, AF - Adaptation Fund, LDCF - Least Developed Country Fund.

**Source:** Climate Funds Update (2023), OECD (2022) & Atteridge et al (2009).

The main source of climate financing is the funds of national governments. International agreements have approved national targets for reducing greenhouse gas emissions and established contributions for developed countries to finance climate change mitigation. In 2021, 58.7% of global climate finance came from just 3 countries - Japan (USD 9.7 billion or 20.7% of the total), Germany (USD 9.4 billion or 20.0% of the total) and France (USD 8.5 billion or 18.1% of the total). A country may decide to finance a project, company or country directly or indirectly through specialised institutions.

Central banks, by implementing monetary, investment, micro- and macroprudential policies, determine the vectors of development of the country's financial sector in terms of supporting sustainable financing and taking into account environmental and carbon risks by financial institutions. Established environmental risk management standards serve as the basis for bank lending, and therefore banks and other financial institutions prioritise financing environmentally and socially responsible projects. McKibbin et al (2017) have analysed the impact of changes in carbon policy instruments (carbon tax, emissions trading system, etc.) on monetary policy indicators. In particular, the introduction of a carbon tax causes a decline in aggregate output and a sharp rise in inflation. Under a strict inflation targeting regime, the central bank would be able to slow down inflation, thereby further restraining the pace of economic development.

Central banks participate in global climate finance by contributing to multilateral development banks. In line with the Paris Agreement, the multilateral development banks have set ambitious targets for the rapid and further expansion of climate finance activities. Thus, the multilateral development banks have committed to increase climate investment by coordinating and scaling up activities to strengthen policies, build institutional capacity, provide access to finance, and provide technical support to client countries and their private sectors. By 2025, multilateral development banks plan to invest at least USD 65 billion in climate action projects, with USD 50 billion of that to be directed to low- and middle-income countries (European Bank for Reconstruction and Development, 2020). Despite declaring their intention to prioritise investments in underdeveloped countries, in 2015-2020, multilateral development banks mainly invested in projects in developed countries. In particular, as of 2020, 37% of the climate funds of multilateral development banks (or USD 24 billion out of USD 66 billion) were allocated to finance climate change measures in low- and lower-middle-income countries. The table 1 shows climate project financing by bilateral development banks and the level of transparency of these institutions. To characterise the level of transparency of multilateral development banks, the DFI Transparency Index was selected, which includes data on 47 indicators from the following categories: basic information, impact management, ESG and community accountability, financial information, and financial intermediation sub-investments (Publish What You Fund, 2023).

Table 1. The volume of climate finance from multilateral development banks and their level of transparency as of 2021

Multilateral development banks	Climate Finance		DFI Transparency Index
	mln \$	% of the total volume	
African Development Bank (AfDB)	2429	4,79	73
Asian Development Bank (AsDB)	4764	9,40	75,9
Asian Infrastructure Investment Bank (AIIB)	2746	5,42	47,1
European Bank for Reconstruction and Development (EBRD)	4777	9,43	48,4
European Investment Bank (EIB)	3371	6,65	37
Inter-American Development Bank (IDB)	4819	9,51	69,9
Islamic Development Bank (IsDB)	684	1,35	7
World Bank Group (WBG)	27989	55,24	65,4

Source: European Bank for reconstruction and Development (2020), Publish What You Fund (2023)

The World Bank Group provide the largest share of climate finance, but their transparency score is 65.4. Although the World Bank has demonstrated relatively good results in disclosing information at the project level, there are still shortcomings in the policy of early disclosure and explanation of project environmental and social risk categorisation. The Asian Development Bank has the highest level of transparency among multilateral development banks.

In summary, international climate finance can flow through various bilateral, multilateral and other channels, involving a number of different public and private institutions. Therefore, a degree of coordination between

different institutions is required to monitor financial flows from different sources that are channelled to or through different end-users. Some funds may be directed to the state treasury and distributed through state or extra-budgetary funds, while others may be directed to other actors. Given the wide range of actors involved in climate finance projects and the growing volume of climate finance, transparency and efficiency in the allocation and use of climate finance is a key issue for building trust between developed and developing countries.

The issue of increasing the level of transparency of climate finance in underdeveloped countries requires a comprehensive approach to address - on the one hand, improving the level of justice, judiciary, local regulatory authorities, and legislation in recipient countries of international financial assistance (Mynenko, 2022; Levchenko et al, 2018). Vyas-Doorgapersad (2022) found that the problem of unethical behaviour in the public sector, financial mismanagement and corruption is still suffocating in African countries. On the other hand, there is an urgent need to improve the methodology for integrated accounting and reporting on the receipt and use of climate funds, as well as tracking the effects of project implementation in the long term (Ibrahimov et al., 2022; Biewendt et al., 2020). Long-term climate change mitigation can only be achieved through long-term policies (Bardy & Rubens, 2022).

The basic provisions on transparency of countries' policies in the field of climate risk management are set out in Article 13 of the Paris Agreement. The level of reporting detail depends on the type of national contributions to the global climate fund, data availability, etc. The countries participating in the Paris Agreement are required to submit transparency reports at least every two years. In terms of greenhouse gas emissions, developed country parties report annually in separate national reports. However, the existing reporting forms on climate finance for developing countries do not contain detailed information to monitor the effectiveness of the funds used and the achievement of the green targets set. In particular, the issue of accounting and reporting on non-financial support (technology transfer, capacity building) remains unresolved.

Governments are trying to develop robust national monitoring systems based on domestic policy priorities and specific institutional arrangements. If information on climate finance is integrated into targets related to climate change plans and priorities, it can potentially allow governments to understand the impact or outcomes of these funds (e.g. whether they contribute to climate goals). Countries also take different approaches to tracking the impact of climate finance according to their specific priorities, such as economic efficiency, human well-being or transformative change. The monitoring of financial resources received takes place in the context of tracking government budgets and expenditures related to climate action, as well as monitoring and evaluation systems in place for climate action itself.

While significant financial flows are channelled to such multilateral institutions, access to this funding requires successful accreditation. As a result, the majority of climate finance is allocated to international organisations that have the capacity to conduct accreditation. National societies cannot directly apply for climate finance from these funds, but they can be implementing partners for an accredited organisation.

However, there is not always strict adherence to the rules and requirements for reporting on funds received under climate finance programmes. In particular, climate experts of the United Nations Framework Convention on Climate Change (UNFCCC) point to problems in the methodological assessment of mobilised climate capital (Caruso and Ellis, 2013; Jachnik, Caruso and Srivastava, 2015), namely, determining the optimal proportion between the amount of public funding and mobilised private climate finance.

The key challenges that hinder the formation of an effective monitoring system for climate funds include (OECD, 2016):

- data collection and reporting system (climate finance can take different forms (off-budget financing, grant financing, technical and in-kind assistance, guarantees and mobilised private finance) and it is therefore advisable to use harmonised indicators and make them publicly available);
- accounting and reporting system (most countries have systems for budgeting, monitoring and reporting on financial flows and expenditures, but they are generally not designed for climate finance);

- coordination system (the distribution of responsibilities for managing climate finance is often spread across different ministries, organisations and agencies, and international institutions, leading to duplication of functions and increased operational and administrative costs).

## Conclusions

By actively and explicitly embedding integrity, transparency, accountability, inclusiveness and zero tolerance for corruption in climate finance and activities, multilateral funds can maximise the effectiveness of climate change mitigation and adaptation programmes. The highest standards in these areas reinforce anti-corruption measures such as policy dialogue and participatory learning, improved lobbying practices, better laws and policies, open data, monitoring and reporting mechanisms, and whistleblower protection. Only by increasing transparency in the use of climate finance can climate professionals and stakeholders ensure that global climate finance and adaptation programmes are as effective as possible. Countries that receive climate finance desperately need and deserve it. Our recommendations will help build confidence in climate finance opportunities, which will ultimately reduce greenhouse gas emissions.

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