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The Paris Agreement 5 Years Later: The Challenges of Climate Finance and Multilateral Development Banks

Abstract: In all matters regarding climate change, the modern world presents complex challenges which highlight how investments in infrastructure have as of yet been inconclusive. The emission percentages calculated by relevant studies demonstrate the need for long-term investments in infrastructures, to ultimately reduce the impact on the environment and our health. To this end, in alignment with the principles expressed in the Paris Agreement – reducing global warming and incentivising a zero-emission transportation system – and the Sustainable Development Goals (SDGs), these new infrastructures will require a structural change that can be guaranteed by multilateral development banks (MDBs), given their nature, especially within developing countries. MDBs play an important role in supporting local governments, on the one hand creating a prosperous environment for sustainable infrastructures and, on the other, providing innovative financial instruments that could increase the financial sector's participation. In this paper, after a brief excursus on the Paris Agreement's role in the global climatic crisis, there will be an evaluation of the relations between MDBs and climate finance, with a focus on green bonds.

Keywords: climate finance, green bond, multilateral development bank, Paris Agreement

Introduction

“In December 2015, more than 195 countries and several international organizations attended the UN's 21st Conference of Parties (also known as COP 21) held in Paris. As a result of the COP 21, the Paris Agreement represents both a milestone in the international environmental law and a landmark in the multilateral climate change process outlining the most important aspects of the global environmental crisis. In fact, COP 21 led the actors of the *Framework convention on*

climate change to co-sign the Paris Agreement with the aim of regulating greenhouse gas emissions more effectively and decisively. The aforementioned emissions are believed to be one of the root causes of global temperatures rising¹.

The Agreement - which took effect in November 2016 following the approval of 55% of the contracting party² - is an international, legally binding treaty, though not all of its provisions are compulsory in nature³.

The notion of ‘sustainable development’⁴ contained in the Rio Declaration on Environment and Development⁵ claims that the environment is a ‘global public resource’ and that the main threats to its stability are climate-altering gas emissions. This highlighted the social aspect of the emergency as well, and the need to increase the equity of resource distribution between various geographical locations, since – as

1 Around 70% of man-made polluting gas emissions is due to emissions of CO₂ from fossil fuels. Emissions of different climate-altering gases, like methane and nitrous oxide, and deforestation account for the remaining 30%. Cf. UNEP, *The Emissions Gap Report 2018*, Nairobi 2018, available here: <https://www.unep.org/resources/emissions-gap-report-2018> (28.10.2021).

2 A determining factor in reaching the threshold for enforcement (art. 21) was the approval of the EU Environment Council on 4 October 2016. In Italy, the Agreement was approved by law no. 204 on 24 November 2016. Out of the 197 participating countries, those who didn’t approve the agreement were Angola, Eritrea, Iran, Lebanon, Libya, Iraq, South Sudan, Turkey and Yemen.

3 Some of its provisions, in fact, only have an authorising function (art. 6), not a prescriptive one, or simply of mere recommendation (art. 7). Surrounding the legal nature of the Agreement, the precedent that can be used as reference is the Durban COP 17 from 2011, when the Durban Platform for Enhanced Action was adopted. On the occasion of the COP 21, this established the adoption of ‘a protocol, another legal instrument or an agreed outcome with legal force under the Convention applicable to all parties’. However, as far as the Agreement and especially the reduction of emissions are concerned, a proactive approach has been favoured, along with encouraging individual responsibility from the participating countries, instead of raising the level of commitment. For a more in-depth analysis: cf. D. Bodansky, *The Legal Character of the Paris Agreement*, “RECIEL” 2016, vol. 25, no. 2. Cf. also S. Nespors, *La lunga marcia per un accordo globale sul clima, dal Protocollo di Kyoto all’Accordo di Parigi*, “Rivista trimestrale di diritto pubblico” 2016, vol. 1, pp. 120–121.

4 A key tenant of international and national law in many countries, sustainable development is a development model ‘that can satisfy the necessities of the present without compromising the ability of future generations to satisfy their own needs’. This principle, however, presents a high level of ambiguity. Undoubtedly, it does point out the necessity of finding a balance between growth and global environmental preservation, but presents no clear way to establish that middle ground. Cf. L. Kramer, *Manuale di diritto comunitario per l’ambiente*, Milan 2002, pp. 71ff.

5 This Declaration is one of three important documents adopted at the United Nations Conference on Environment and Development (UNCED) held from 3 to 14 June 1992 in Rio de Janeiro with the aim of discussing – among others – new means for combating climate change, depletion of the ozone layer and transboundary air pollution. The other two documents are: Agenda 21 and Statement of Principles on Forests. See F. K. Boon, *The Rio Declaration and its influence on International Environmental Law*, “Singapore Journal of Legal Studies” 1992, pp. 347–364. From the wide selection of literature that explains what led to the Paris Agreement, cf. S. Nespors, *La lunga marcia ...*, *op. cit.* pp. 81ff.; M. Montini, *L’accordo di Parigi sui cambiamenti climatici*, “Rivista giuridica ambiente” 2015, vol. 4, pp. 517ff.

is mentioned in principle 7 – the elimination of poverty constitutes ‘an indispensable prerequisite for sustainable development’. This approach privileges ‘global yet diversified responsibility’, which implies that, for the most part, the resources of developed countries would be counted upon to obtain a successful result. As the main cause of global pollution and major holders of financial and technological means, these developed countries have a duty to create a development model for preserving both the planet and its living species.

The aforementioned Declaration contained practically indeterminate propositions, which did not specify any form of engagement or responsibility, to the point where this document has been defined *soft law* by international scholars. The effectiveness of its instrument, for instance, relies exclusively on the governments of the individual states and their willingness to apply them as active policies.⁶

The global financial framework for the environment,⁷ as indicated by COP 21, involves a multilateral, international cooperation model. This complex structure features many different, even hybrid channels and methods of funding environmental projects. Along with the financial engagement of 100 million dollars annually till 2020, undertaken already in 2010 in Cancún by various developed countries and confirmed in Paris, there are also bi- and multilateral sources of funding and co-funding by private investors.⁸

As stated in article 2, item (c)⁹ read in combination with article 9, point 3 of the Agreement, reaching the goals set to reduce CO₂ emissions is reflected by the need to channel international financial investments, in a balanced manner, towards two complementary strategies of climate mitigation and adaptation, supported by a reinforcement of investment capabilities. In particular, as specified in article 2, mitigation and adaptation aims¹⁰ for climate involved three plans of action: first, to maintain the average global temperature to less than +2°C of pre-industrial levels, and to ultimately lower it to +1.5°C above the established threshold; secondly, ‘to increase our capacity to adaptation to the adverse impacts of climate change’, thus promoting

6 F.B. Weiss, *The Evolution of International Environmental Law*, “Japanese Yearbook of International Law” 2011, vol. 54, pp. 1–27.

7 Cf. B. Buchner, A. Falconer, M. Hervé-Mignucci, C. Trabacchi, M. Brikman, *The landscape of climate finance*, “Climate Policy Initiative” 2011, vol. 27, pp. 1–70.

8 Oxfam’s recent *Climate Finance Shadow Report 2020* featured a detailed evaluation of the progress made by public finance towards reaching the goals set by the Paris Agreement. See also note 17 in this article. Cf.: Oxfam, *Climate Finance Shadow Report 2020 – Assessing Progress towards the \$100 Billion Commitment*, Oxfam International, 2020, available here: <https://www.oxfam.org/en/research/climate-finance-shadow-report-2020> (28.10.2021).

9 Article 2, item c): ‘Making financial flows coherent with a development process with low greenhouse gas emissions and a resilience to climate change.’

10 Art. 5 indicates a series of mitigation and adaptation instruments more closely related to forests and agriculture. Some of these instruments were provided already in the 1992 Convention (REDD – Reducing Emissions from Deforestation and Forest Degradation).

resilient development¹¹ to climate and low emissions; and, finally, to channel finances in accordance with measures to cut down on emissions (mitigation) and to defend impoverished nations from climate-change-related catastrophes (adaptation).

Nevertheless, even if the Agreement lay the groundwork for a true energetic transition towards renewable sources and the dismissal of gases and minerals, the objectives contained in the Agreement are still far from being achieved.

Its framework is still loosely binding from a legal perspective – for example, no mention is made of sanctions for individual countries not fulfilling their chosen obligations (art. 28) – and it remains too modest and generic in defining precise courses of action for reducing emissions and de-incentivising carbon fuels, given the larger ambitions required by a global climate crisis of this extent. Therefore, even if no sanctions are mentioned within multilateral environmental agreements (MEAs) – or any other international agreements – for individual countries, there exists international law mechanisms of responsibility of states for internationally wrongful acts which could also be applied in the field of climate change. Indeed, concerning the legal consequences of environmental damage, the literature also suggests the theory of ‘international responsibility for a lawful act’, a theory whose general norm is, however, impossible to reconstruct. Hence, there is an objective responsibility (relative or absolute) that a state must take charge of in the event of damage produced by one of its lawful activities, which is to say compatible with international regulations, but that could potentially cause prejudicial consequences for other states or for the international community. Despite this, the theory is controversial given the consolidated principle that international responsibility can be attributed only in the event of a wrongful act being committed. Thus, independently from the action’s degree of legality, environmental damage always implicates responsibility deriving from a wrongful fact. The slow rise, on a local and global scale, of polluting agents which cause at times irreversible environmental damage, raises cogent questions about the attribution of responsibility, and highlights, within current international law, a gradual abandonment of the distinction between lawful and wrongful acts. To this end, a decisive action on the nations’ end would be the adoption and respect of the international rulings of prevention and vigilance, which impose the adoption of precautional measures to prevent environmental damage caused by lawful actions that pose potential environmental risk.¹²

11 Unlike the concept of adaptation, which accepts constant climate change as a fact, resilience indicates a viable response to extreme events, may they be sudden or gradual, which aims to restore original conditions.

12 P. Cuomo, *La responsabilità da illecito internazionale in materia di danno ambientale*, “Diritto e processo, Derecho y proceso – Right & Remedies” 2020, pp. 335–358.

1. Multilateral Development Banks and Climate Finance

International climate finance applies concrete action in favour of strategies to contain and combat climate change. This requires the synergic and coordinated commitment of all economic actors at a global level.

Multilateral development banks (MDBs) are among the main investors of the infrastructures of developing countries, financing areas like power systems, transportation and urban development – a decisive factor in creating long-term environmental resilience. They are leading investors precisely because they attract a multitude of private capital, involving other financial institutions and offering alignment models that can be replicated on a massive scale. Furthermore, they operate in the political spheres, carrying out research and assistance programmes. Thus, this allows them to orient the political plans of governments, specifically those of developing nations, to ultimately incentivise their environmental actions and the alignment of their investments. Additionally, they promote sustainable development on behalf of their government shareholders, as they manoeuvre in a mostly international sphere, one of the few able to contrast and limit the earth's environmental issues. Finally, they constitute a fundamental link between the general goals of the Paris Agreement and the nationally determined contributions that engage each of the participants, giving them much-needed technical assistance and creating platforms, instruments and specific implementation programmes, in connection with global climate finance.¹³

These features, which define the work and status of MDBs, are essential for facing the climate crisis, especially when coordinated coherently with the initiatives by the other important actors in global finance: governments, bilateral and national development banks, private investors, commercial banks and climate funds.

The plan is to create a stable, structural alignment for multilateral financial governance for the environment with an ambitious but necessary aim: bringing the global energy supply to a zero-emission status by 2050.¹⁴ The need to act quickly in a long-term perspective has become evident. This can be achieved by harnessing validation tools to examine individual programmes funded in all investment areas. The examination is based on criteria aligned with the objective of the Paris Agreement, to mitigate and adapt to climate change.¹⁵

13 S. Bartosch et al., *Toward Paris Alignment. How the Multilateral Development Banks Can Better Support the Paris Agreement*, World Resources Institute, 2018, pp. 21–26.

14 An impressive operation which entails shifting investments from fossil fuels to renewable energy, inputting resources into the market in favour of infrastructures and technologies with a low environmental impact and, more generally, including climate needs in decision-making in an organic way.

15 S. Bartosch et al., *Aligning Investments with the Paris Agreement Temperature Goal. Challenges and opportunities for multilateral development banks*, Germanwatch & NewClimate Institute, 2018.

Another important feature of MDBs is their transparency, and their management of climate risks, on the basis that, as financial institutions, they must adopt high standards of transparency in their criteria for allocating funds, their environmental impact and the financial risks connected to climate change.

Since 2011, MDBs have jointly reported on funding for the environment on the basis of nine common principles¹⁶ of financial monitoring for the mitigation of and adaptation to climate change, developed by MDBs themselves and by the International Development Finance Club (IDFC). This monitoring system employs well-harmonised mitigation categories and components that are relevant to the environment, as well as the high level of standardisation. In general, guiding the accounting model of investment alignment of MDBs are a) their positive value in terms of mitigation, and b) their categorisation of environmental adaptation objectives, which involves an evaluation of the context's vulnerability to climate change.¹⁷

Before COP 21 in December 2015, six of the main MDBs – African Development Bank (AfDB), Asian Development Bank (ADB), European Bank for Reconstruction and Development (EBRD), European Investment Bank (EIB), Inter-American Development Bank Group (IDBG), World Bank Group (WBG) – co-signed a Joint Statement on 28 November 2015, where they vowed to implement concrete actions aimed at solving the environmental crisis, taking into account all risks and advantages this entailed.

Therefore, there was a desire to take on larger responsibilities in view of reaching a common goal, and to support the results of the Paris Conference, in conformity with the MDBs' mandates. Each bank aimed at increasing its investments towards climate finance in developing countries, with the ultimate goal of reaching 100 billion dollars

16 1. Additionality: tracking is activity-based, and is not focused on the project's purpose or results, nor the origin of the financial resources (i.e. MDBs' own resources or external ones from dedicated climate finance facilities); 2. Timeline: project reporting depends on the timeframes afforded by board approval or commitments; 3. Conservativeness: climate finance should be under-reported rather than over-reported; 4. Granularity: the tracking of mitigation activities should be distinguished from non-mitigation activities within a single project. 5. Scope: mitigation activities or projects can exist on multiple levels: standalone projects, various standalone projects under a larger programme, a component of a standalone project, or a programme financed through a financial intermediary; 6. Results: reporting on the mitigation finance of a project or activity does not imply evidence of climate-change mitigation impacts; 7. Eligibility: not all activities that reduce GHGs in the short term are eligible to be counted towards MDB mitigation finance; 8. Exclusions: activities shall be excluded if unique attributes cause them to not be supportive of climate-related efforts, even if they are on the positive list of qualified activities (examples include hydropower or geothermal plants that release high levels of GHG emissions); 9. Avoiding double counting: reporting should not account for the same funding being devolved to both mitigation and adaptation finance. Cf. Joint Report on Multilateral Development Banks 2018, Climate Finance, 2019, p. 30.

17 R. Weikmans, J. Timmons Roberts, *The International Climate Finance Accounting Muddle: Is There Hope on the Horizon?*, "Climate and Development" 2017, vol. 11, pp. 97–111.

annually.¹⁸ Notably, AfDB announced it would reach 5 billion dollars annually, tripling its investments; ADB set its goal at 6 billion dollars a year; EBRD declared they would increase their funding quota for the environment from 25% to 40%, thus allocating 20 billion dollars during the following five years, contrasted with the 20 billion dollars invested in the past ten years, reaching a total of 100 billion dollars; EIB set themselves the same goal, and further reinforced the impact of its investments in fragile economies by increasing its financial intervention actions to 35% of total loans; IDBG aimed to double its volume of investments; and, finally, WBG pledged to invest up to 29 billion dollars annually, utilising their multiple levels of co-financing.

In 2019, nine MDBs¹⁹ signed a new Joint Statement on Climate Finance²⁰ claiming a more decisive engagement on the part of multilateral financial institutions towards climate finance. As shown in Figure 1 (see the following page), between 2011 and 2019 there has been an increase in global finance commitments. Namely, there was a relatively constant trend in the years preceding the Paris Agreement and a steady incline from 2015 onwards.

Indeed, when it comes to the work of MDBs and other actors in global climate finance, not only is it important to evaluate the implementation of financial flows towards positive actions for the environment, but it is also relevant to consider which strategies they adopt to de-incentivise funds from projects that do not respond to the ever-more urgent need to align with the Paris Agreement, especially as far as energy and decarbonisation are concerned.

Each project should thus be examined on the basis of positive or negative environmental instruments (exclusion lists and incentivisation lists), to ultimately judge the project's suitability to their funding plans, and this judgement must be known.²¹

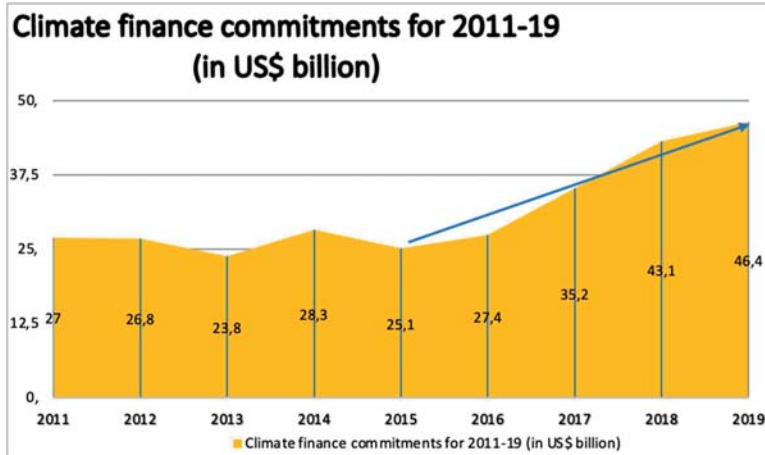
18 Unfortunately, this target has not been achieved by MDBs. Moreover, it is important to stress that in the report of 2019, MDBs changed their reporting approach, creating confusion. For the first time, the report included figures on climate finance to all countries and not, as in the past, to developing countries only. This made it more complicated to understand how MDB climate finance contributes towards the UNFCCC goal of mobilising \$100 billion annually for developing countries. See R. D'souza, Can multilateral development banks deliver on promise of US\$ 100 billion in climate finance?, Observer Research Foundation, 2020; J. Thwaites, The Good, the Bad and the Urgent: MDB Climate Finance in 2019, World Resources Institute, 2020, available here: <https://www.wri.org/insights/good-bad-and-urgent-mdb-climate-finance-2019> (28.10.2021).

19 African Development Bank (AfDB), Asian Development Bank (ADB), Asian Infrastructure Investment Bank (AIIB), European Bank for Reconstruction and Development (EBRD), European Investment Bank (EIB), Inter-American Development Bank Group (IDBG), Islamic Development Bank (IsDB), World Bank Group (WBG).

20 Joint Report on Multilateral Development Banks, 2018, *op. cit.*

21 Cf. J. Stiglitz, Failure of the Fund: Rethinking the IMF Response, "Harvard International Review" 2001, vol. 23, no. 2, pp. 14–18; D. Nieldon, M. Tierney, Delegation of International Organizations: Agency Theory and World Bank Environmental Reform. "International Organization" 2003, vol. 57, no. 2, pp. 241–276; T. Gunter, World Bank Environmental Reform: Revising Lessons from

Figure 1. For the sake of data uniformity, since in reports before 2020 multilateral development banks provided the numbers regarding their involvement in climate finance for developing and emerging economies, all data by 2019 has been adapted



Both ADB and AfDB, since 2009 and 2012, respectively, no longer fund projects related to the exploration of new oil or gas fields, due to associated risks. They will, however, provide assistance for the development of wells, and the transportation and distribution of gas. It is notable that, while the Asian Bank does not directly finance coal projects, it does not explicitly present a policy to exclude coal. The 2009 energy policy states that coal-based projects may only be supported through cleaner technologies and adequate equipment.²² Furthermore, as stated during the One Planet Summit held in Paris on 12 December 2017, the World Bank Group was to exclude all projects for the exploration, drilling and management of gas or oil wells from 2019 onwards.²³ For instance, the World Bank and EBRD have altogether redefined their investment policies in the coal sector, limiting funding to cases where no other valid energy sources are available.²⁴ There have been other environmental policies adopted,

Agency Theory, "International Organization" 2005, vol. 59, no. 3, pp. 773–783; A. Dreher, *The Development and Implementation of IMF and World Bank Conditionality*, Hamburg Institute of International Economics (HWWA) Discussion Paper no. 165, Hamburg 2002; World Bank, *Adjustment Lending Retrospective Final Report*, Washington D.C. 2001; AA.VV., *Aligning Investments with the Paris Agreement Temperature Goal. Challenges and opportunities for multilateral development Banks*, Germanwatch & NewClimate Institute, 2018, pp. 22ff.

22 E3G, *Asian Development Bank fossil fuel exclusion policies*, November 2020, available here: <https://www.e3g.org/bank-metrics/fossil-fuel-exclusion-policies-adb/> (28.10.2021).

23 World Bank Group, *World Bank Group Announcements at One Planet Summit*, 12 December 2017, available here: <https://www.worldbank.org/en/news/press-release/2017/12/12/world-bank-group-announcements-at-one-planet-summit> (28.10.2021).

24 EBRD, *Energy Sector*, 2013; World Bank Group, *Energy Sector Strategy*, 2013.

like the non-eligibility of projects that require the purchase of machinery used for the commercial deforestation of tropical areas.²⁵

In 2017, in view of the imminent Climate Change Conference of Parties in Katowice, ten MDBs signed a new Joint Statement.²⁶ This time, beyond the six MDBs of the 2015 Statement, new parties were included, such as the New Development Bank (NDB), created through interstate agreements during the sixth BRICS Summit in 2014, the Asian Infrastructure Investment Bank (AIIB), the Islamic Development Bank (IsDB) and the Investment Operations Department of IDB Invest, a new body of the Inter-American Development Bank Group (IDBG), which operates in the private sector investing mostly in South America and the Caribbean region.

In this document, the MDBs announced new increases of economic resources without truly specifying the entity of their planned implementation of financial flows for the environment. In addition, they aimed to harmonise in a more forceful manner their individual approaches (thus substantiating alignment plans through interventions on their own internal politics and activities), to begin new collaborations with private investors, and to develop more intense forms of exchange with research institutions, civil society and NGOs.

A new instrument for alignment adopted during COP 24, after three years of preparation, is the so-called Rulebook.²⁷ This instrument contains technical indications addressed to all those involved in the governance of global climate finance on how to fully execute the dispositions of the Paris Agreement, specifically within the parameters of mitigation and adaptation, transparency in monitoring and accounting for environmental financial flows, and, finally, implementation and compliance. A central theme of the Rulebook is the global stocktake, which is the mechanism through which there could be a 'possible increase in ambition' of the Paris Agreement objectives and a change in the ways that this process is regulated.

This introduces, quite evidently, a broader and more concrete vision of alignment, one which takes into account the speed at which global climate change is evolving, and aims to create more instructive aims and a comprehensive global strategy which can function in the long term.

Scientific evidence suggests that to reach the containment objective for global warming, emissions should reach between 40 and 70% before 2050, to be able to

25 Cf. World Bank Group, *Environmental and Social Framework*, 2016.

26 EIB, *EIB Group Climate Bank Roadmap 2021–2025*, 2020, available here: https://www.eib.org/attachments/thematic/eib_group_climate_bank_roadmap_en.pdf (28.10.2021).

27 COP 24 Katowice 2018, *Katowice Rulebook, Getting ready for the implementation era*, Ministry of the Environment of the Republic of Poland, Bureau of the COP 24 Presidency, Warsaw 2019, available here: https://cop24.gov.pl/fileadmin/DEKLARACJE/Katowice_Ruleboo_E-BOOK_mini.pdf (28.10.2021).

achieve the process of decarbonisation by 2100.²⁸ According to the report²⁹ of the Intergovernmental Panel on Climate Change (IPCC) of 2018, human activity is estimated to have caused the earth's temperature to rise by 1.0°C compared to pre-industrial levels, with an interval set between 0.8 and 1.2°C. According to this scenario, there is a high probability of global temperatures rising by 1.5°C between 2030 and 2052, if it keeps rising at its current rate.

The net amount of global CO₂ emissions caused by humans would have to reduce by 45% before 2030, reaching a 'net zero' around 2050. The report – which offered a significant scientific contribution during the negotiations of COP 24 in Katowice – also highlighted the fact that the most recent projections obtained by climate models paint a far more catastrophic picture than what had been theorised even five years earlier. This would mean vast and irreparable damage to the ecosystem, to biodiversity, and to the socioeconomic conditions of large amounts of the world's population.

Starting from the first Joint Report, published in 2011, MDBs decided to outline all the sectors in which they operate in order to improve the transparency and coherence of financial flows. This produces more complete insights, and is based on a shared tracing methodology which appraises not only the direct investments in the sustainable development of emerging economies, but also the financial commitments to the environment taken by each MDB. In 2019, the various MDBs invested a total of 63 billion dollars in climate finance, 16 billion towards adaptation projects and 48 billion on mitigation projects (Table 1).

Table 1. Total MDB climate finance in 2019 (in US\$ million)

MDBs	TOTAL CLIMATE FINANCE		
	Adaptation finance	Mitigation finance	MDB climate finance (sum)
AfDB	2,016	1,584	3,600
ADB	1,536	5,537	7,073

28 Of the ample literature, cf. for example S. Barrett, C. Carraro, J. De Melo, *Towards a Workable and Effective Climate Regime*, London 2015; S. Pavoni, *Will climate changes cause the next crisis?*, "The Banker" 1 September 2017, available here: <https://www.thebanker.com/Markets/Commodities-Energy/Will-climate-change-cause-the-next-financial-crisis?ct=true> (28.10.2021).

29 V. Masson-Delmotte, P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P. R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J. B. R. Matthews, Y. Chen, X. Zhou, M. I. Gomis, E. Lonnoy, T. Maycock, M. Tignor and T. Waterfield (eds.), IPCC, 2018: *Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty*, Intergovernmental Panel on Climate Change, 2019, available here: https://www.ipcc.ch/site/assets/uploads/sites/2/2019/06/SR15_Full_Report_Low_Res.pdf (28.10.2021).

AIIB*	661	1,081	1,742
EBRD*	582	4,420	5,002
EIB	971	20,687	21,658
IDBG*	1,918	3,040	4,958
IsDB	218	248	466
WBG	7,697	11,109	18,806
Total	15,599	47,706	63,305

**Some of these projects have dual purposes, both applicable to adaptation and mitigation. In the case of AIIB and IDBG, these projects were included in both the mitigation and the adaptation categories – 549 million dollars for AIIB and 942 million dollars for IDBG. EBRD decided to allocate all dual-benefit projects to adaptation finance.*

During the UN's Climate Action Summit, which took place in New York on 22 September 2019, MDBs signed a further Joint Statement³⁰ where they committed to taking 'urgent actions' and increasing 'substantially environmental investments in both the public and private sectors'. The common goals stated by MDBs for increasing investments by 2025 amount to a total sum of 65 billion dollars annually, of which 50 billion dollars a year is earmarked for weaker economies. For environmental adaptation, the reported goal is 18 billion dollars a year. These collective endeavours would amount to 40 billion dollars annually deployed by private investors, thanks to the introduction of more efficient climate risk strategies and higher transparency. Ultimately, to discourage the use of fossil fuel, and thus help breach the gap between the engagement of various countries to reduce their polluting gas emissions and their concrete implementation, MDBs promise to offer technical assistance to nations and plan on collaborating with other financial institutions to guarantee a quicker transition towards more sustainable and inclusive development models.

The true innovation presented by 2020 in the sphere of global climate finance, in view of a true breakthrough towards a green economy, are the so-called green bonds: debt instruments associated with the funding of environmentally friendly projects, and that require the alignment of investments to the Green Bond Principles³¹ established by the International Capital Market Association (ICMA). This is a market estimated on a global level at nearly 650 billion dollars, constantly expanding, and which aims to help guide post-pandemic financial recovery. As shall be explored in

30 High Level MDB Statement for publication at the UNSG Climate Action Summit, 22 September 2019, available here: <https://www.adb.org/sites/default/files/page/41117/climate-change-finance-joint-mdb-statement-2019-09-23.pdf> (28.10.2021).

31 ICMA, Green Bond Principles Voluntary Process Guidelines for Issuing Green Bonds, June 2018, available here: <https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/Green-Bonds-Principles-June-2018-270520.pdf> (28.10.2021).

the next section, this new financial instrument in favour of the environment and sustainable development is consolidating and amplifying itself in Europe. Even though most MDBs launch new green bond emission plans every year, EIB has earned a prominent place. Recognised in 2020 as the biggest issuer of green bonds in the past ten years, EIB was one of the winners of the fifth edition of the *Green Bond Pioneer Awards 2020* (GBPA).³²

2. The Instruments of MDBs: Focus on Green Bonds

The climate finance gap is an obstacle that the international community must overcome in order to address the future challenges posed by climate change. In fact, it poses a growing threat to economies around the world, along with global warming. Climatic events of great impact and extreme meteorological conditions are ever more frequent, posing greater risks to the development of the affected regions. Thus, an effective response to climate-friendly investments is urgently needed. According to the International Finance Corporation,³³ the necessary amount to allocate in climate-smart investments is equal to 23 trillion dollars from 2016 to 2030. Unfortunately, the public sector is able to finance only part of this amount. This has prompted a search for alternative funding.

Since around 2008, alternative mechanisms have been developed to direct private financial resources towards climate change mitigation and adaptation activities. Within this framework, one can see the development of *green bonds*. They arose from the conceit that certain investors could be interested in paying a premium to invest in environmentally friendly activities. MDBs play a key role in this respect; they have been pioneers in the green/climate bond market. The first to issue a green bond was the European Investment Bank (EIB) in 2007, under the name Climate Awareness Bond (CAB). The market has been growing ever since. To date, EIB remains the world leader in green bonds, with more than 33.7 billion euros raised in over 17 currencies, 6.8 billion of which were raised in 2020 alone.

In fact, green bonds are ultimately debt instruments used to finance global action projects which aim at protecting the climate in the fields of renewable energy and energetic efficiency. Notably, they concern wind, hydroelectric, solar and geothermal energy production projects, as well as district heating, cogeneration and building insulation. In addition, as of June 2020, EIB has extended the eligibility of green bonds for the research, development and dissemination of innovative low-carbon

32 EticaNews, Gbpa, BEI prima banca di sviluppo per emissioni di green bond, 10 July 2020, available here: <https://www.eticanews.it/in-breve/gbpa-bei-prima-banca-di-sviluppo-per-emissioni-di-green-bond/> (28.10.2021).

33 IFC, *Climate Investment Opportunities in Emerging Markets. An IFC Analysis*, Washington D.C. 2016.

technologies, as well as electric railway and electric bus infrastructure. In recent years, CAB revenue has contributed to 266 projects in 57 different countries.³⁴

Subsequently, other multilateral financial institutions also started to issue their own green bonds: the International Bank for Reconstruction and Development (IBRD) in 2008; the International Finance Corporation and the European Bank for Reconstruction and Development in 2010; the African Bank in 2013; the Asian Bank in 2015; the New Development Bank in 2016; the AIIB in 2019 launched the Asian Climate Bond Portfolio in partnership with Amundi, Europe's largest asset manager; and finally, the Islamic Development Bank also started issuing its own green bond, the *Green Sukuk*, in November 2019.

EIB has considerably boosted the green bond market. While so far this financial instrument has mainly concerned the energy sector, the 'green debt' offer is expected to increase in the future, and aims to cover an increasingly large range of sectors. This will have a notable impact on the global financial market for climate, and increase the spread of a more responsible and dynamic approach by investors.

The current state of the fight against climate change appears to be emerging in Europe with positive prospects for growth and implementation. To analyse in detail the potential of green bonds, it is essential to contextualise them as a financial mechanism and, as such, to focus on their similarities to investment-grade bonds, the only difference being the c.d. clause of 'use of proceeds', which mandates green investments.

One should stress the importance of the Green Bond Principles (GBP) of the International Capital Market Association (ICMA) in determining whether a bond finances environmental projects and/or activities. To this effect, some countries (including China and India) regulate the requirements for a bond to be recognised as 'green', while others, such as the European Commission, are moving towards a proposal for considering the Green Bond Principles as standard.

Furthermore, there is a need for global adaptation efforts, especially in developing countries. Indeed, the number of green bonds currently issued which contribute to potential adaptation activities is very low, representing only sectors such as forestry, water, energy, transport and real estate. In fact, despite the growth of the green market, the size of green bonds represents less than 1% of the total bond market.³⁵

In conclusion, the new green market has developed in an uneven, heterogeneous manner; the European Union, the United States and China are the main players in this

34 EIB, EIB Climate Awareness Bonds, Allocations by project for H1 2020, available here: https://www.eib.org/en/investor_relations/documents/eib-cab-projects.htm (28.10.2021).

35 J.A. Ketterer, G. Andrade, M. Netto, M.I. Haro, Transforming green bond markets: using financial innovation and technology to expand green bond issuance in Latin America and the Caribbean, Inter-American Development Bank, 2019.

market, while other countries, such as those in South America and the Caribbean, are lagging behind, and there is even less potential for expansion in the Middle East, Africa and South Asia.³⁶

Green bonds are limited in their potential to channel private funding towards climate adaptation projects. Currently, this issue is exacerbated by the low levels of climate risk awareness, as well as geographical misalignments, project sizes and types of activities. This does not mean that green bonds should be abandoned as a mechanism for adapting investments. Rather, they should continue to be issued far more, given the urgent need for investment in climate adaptation.

Conclusion

The outlined scenario, related to the current global financial strategy to contrast climate change, brings about conclusive considerations that are far from comforting. Whilst scientific knowledge unequivocally states that the alarming rate of global warming depends chiefly on man-made polluting emissions, as well as current practices for economic development, international agreements supposed to provide concrete solutions to this phenomenon are left unheeded. The Paris Agreement and the 2030 Agenda aimed to contain, adapt and mitigate climate change in ways far too modest compared to the predictions that experts have made on the phenomenon. The transition towards clean energy sources was delayed considerably by the investments that MDBs continue to allocate to the traditional sectors of petrol, gas and coal, and to infrastructures connected to these energy sources.

Throughout this analysis, it has become apparent that the international judicial system does not enforce enough emission-reduction measures, and lacks an appropriate sanctioning system. Observing the investment policies of the main MDBs operating on the forefront of global climate finance, MDBs that guide significantly the allocation of public and private resources, offering consultancy and assistance for climate risks, the delays on alignment goals seem far more blatant. Despite their Joint Statements, the funds amassed and intended for the future, declarations of efficiency and collaboration, the green investments of MDBs are still just a part of the total financial flow they inject into strategic sectors of global climate finance, like energy sources and resilient infrastructures.

The term *climate finance* is now firmly rooted in the vocabulary of the international political agenda. It is necessary, however, to consider which practices effectively substantiate it. It should indicate a new method of international interaction with the climate-environment issue: shared means of development cooperation, unified approaches to financial policies that include a serious, constant evaluation of

36 H. Tuhkanen, Green bonds: a mechanism for bridging the adaptation gap?, SEI working paper, Stockholm 2020, pp. 19ff.

the environmental impact of all investment sectors, brief and long-term strategies, and a multi-scale planning action that stretches beyond the local or regional context to a national and global one.

If the Paris Agreement has long been acclaimed as a game-changing event capable of opening a new course of action and a renewed momentum for global economic policies, redefining and restarting commitments and obligations in terms of investment and emissions reduction, the event that will be capable of stirring hopes and expectations is actually COP 26, to be held in Glasgow in November. During the conference, presided by the United Kingdom and Italy, all progress aligned to the Paris Agreement will be presented, but the hope is that far more ambitious climate projects will be discussed, as well as new international agreements and engagements. In the meantime, the British government has declared 2020 'the year of climate action', while the United Nations Secretary General, Antonio Guterres, has requested that 'every single country, city, financial institution and company' adopt plans for transitioning to net zero emissions by 2050 and has urged G20 countries to give clear indications of commitment in that direction.

According to an analysis³⁷ published in December 2020, carried out by Climate, a scientific organisation born of the collaboration between Climate Analytics and New Climate Institute, the increase in average global temperature could be 2.3 degrees Celsius by 2100. This is a value that would just touch on the minimum objective indicated by the Paris Agreement. However, besides being an optimistic forecast compared to other climate scenarios recently developed,³⁸ it is clear that this could be an attainable goal only if some crucial issues are resolved in Glasgow and be promptly implemented to prevent that new delays and non-compliance will result in this being seen as a missed opportunity (the issues referred to here are the demise of coal and gas markets; the renewal of the nationally determined contributions with more stringent and ambitious reductions; and the implementation of mitigation and adaptation resources in developing countries).

COP 26 will begin its work in a completely different world to the one that negotiated the Paris Agreement, despite little more than five years having passed.

37 Climate Action Tracker, Paris Agreement turning point, Wave of net zero targets reduces warming estimate to 2.1°C in 2100, All eyes on 2030 targets, 2020, available here: https://climateactiontracker.org/documents/829/CAT_2020-12-01_Briefing_GlobalUpdate_Paris5Years_Dec2020.pdf (28.10.2021).

38 Cf. for example this report published by the Met Office, the UK's national meteorology service: Grahame Madge, New global record 'likely' within five years, 30 Jan 2020, available here: <https://www.metoffice.gov.uk/about-us/press-office/news/weather-and-climate/2020/decadal-forecast-2020> (accessed 28 October 2021); Veronika Henze, Emissions and Coal Have Peaked as Covid-19 Saves 2.5 Years of Emissions, Accelerates Energy Transition, "New Energy Outlook" 27 October 2020, available here: <https://about.bnef.com/blog/emissions-and-coal-have-peaked-as-covid-19-saves-2-5-years-of-emissions-accelerates-energy-transition/> (28.10.2021).

The consequences of climate change have become more evident – record heatwaves, droughts and hydric scarcity, ice caps melting, floods, and violent, sudden atmospheric phenomena – the public is more interested than ever before in finding concrete and efficient solutions. This interest is not limited to pointing out the mistakes that have been made thus far, but also demands pragmatic solutions, resolute decisions, and sustainable recovery instruments, challenging directly both government leaders and the heads of international organisations and multilateral investment banks.

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