BRIEFING NOTE 02/2016

SUPPORTING THE TRANSITION TO A LOW-CARBON AND CLIMATE-RESILIENT ECONOMY: THE ROLE OF CLIMATE FINANCE

The Paris agreement on climate change

The **Paris agreement** adopted by **COP 21 in December 2015** constitutes a significant milestone. All the Parties committed to maintain the rise of global temperatures below 2°C relative to pre-industrial levels by 2100. To reach this objective, they made "intended nationally determined contributions" (INDCs) which are to be improved every five years. 40 CEB members published their INDCs, with quantified targets for reducing greenhouse gas (GHG) emissions. The **USD 100 bn objective** has become a minimum threshold to be reassessed in 2025. 2018 is mentioned as an important year during which the financial commitments of states as well as the guidelines relative to finance tracking and national contributions will be updated and improved. After ratification, the Paris Agreement will enter into force on 4 November 2016.

Introduction

Finance is determinant in the emergence of a low-carbon and climate-resilient economy as it enables the implementation of "green" projects and involves a diversity of actors (banks, insurers, asset managers, financial markets and regulators) that have a transversal role in society. Indeed, such crosswise commitment is particularly useful for inducing the "transformational change" in production, consumption and societal patterns implied by climate change. In relation to public policies ranging from energy to transport, housing, agriculture and research and development, climate finance can thus strongly support the long-haul transition at stake.

The scope of climate finance spans developed and developing countries alike. The constitution of a full-fledged green financial ecosystem is important to both. It is key to reaching the commitment made in Copenhagen, in 2009, to see developed countries transfer USD 100 bn per year to developing countries by 2020. It is also instrumental to leveraging climate finance in developed countries. **This briefing note analyses the progress made on the climate finance agenda and the contribution of multilateral development banks (MDBs)**. First it takes stock of the current financial ecosystem. It then assesses the contribution of MDBs. Finally, it sets forth the CEB's contribution.

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1. The transition to a low carbon, climate-resilient economy relies on a robust green financial system

1.1 The characteristics of the current climate finance ecosystem

Financial institutions are one of the many actors that were associated to the COP 21 negotiations within the so-called "Paris Alliance"[1]. Their involvement is crucial for the development of a low carbon and climate-resilient economy. According to a report prepared by the Climate Policy Initiative (CPI) for the German presidency of the G7 in 2015, global green investment needs are estimated at an average of USD 6 tn per year over the next 15 years[2]. Climate financial flows aim to contain greenhouse gas emissions (mitigation finance) and to protect infrastructure against climate change risks (adaptation finance). This requires that financial institutions further improve their risk assessment frameworks and the way they mobilise and allocate capital

More specifically, green finance refers to three different involvements from the financial sector. Assessing the carbon footprint of investment portfolios before decarbonisation can be engaged is a first step. Second, green investments can be made across different sectors, from energy efficiency in buildings to flood protection works. They can also include local infrastructure such as clean transport networks. In the process of building capacities, financial institutions are invited to integrate climate change as a normal component of their investment strategy. Thirdly, financial institutions must mainstream climate risks across their activities (be it through a carbon market, a carbon tax, or an emission ceiling).

A robust financial ecosystem involves a host of entities taking action in these three different but complementary roles, in the private and public sectors alike.

In the private sector, banks and asset managers are primarily responsible for channelling savings and financing green investments with debt, equity or carbon offset products[3]. Insurance companies underwrite (extreme) climate risks as well as risks associated with the transition to a low carbon economy, which entrusts them with the responsibility of defining the cost of a climate positive project. Insurers also play a role in managing a long-term horizon for household and company savings. Finally, personal investors (i.e. households or philanthropies) may provide financing resources either directly or through climate-friendly instruments.

In the public sector, states can channel green finance by providing grants (in the form of contributions to multilateral climate funds or technical assistance) or equity (contributions to sovereign wealth funds, green investment banks or direct equity investments). They also contribute to reallocating financial resources by mobilising national promotional banks, bilateral development agencies or export credit agencies which all have a long-term financing role and the ability to catalyse private investments. These two missions are shared with multilateral development banks (MDBs), which nonetheless have a wider geographic focus spanning different countries or continents and some other specificities (see part 2).

Green investments mostly take the form of infrastructure projects that financiers are used to. However, as is recalled in a recent report by the G 20 Green Finance Study Group[4], the development of green finance typically faces five challenges:

- **the internalisation of externalities**, i.e. it is difficult for investors to appropriately and cost-effectively internalise environmental externalities;
- a **"maturity mismatch"**, i.e. there is an inadequate supply of long-term funding relative to demand, which is an issue that is also generic to other long-term projects;
- **the lack of clarity as to what constitutes green finance or products** (e.g. green loans and bonds) which can hamper green investing;
- **"asymmetric information"**, i.e. the lack of disclosure of environmental information increases "search costs" for green assets and thereby reduces their attractiveness;

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1 The COP 21 was conceived as an inclusive conference, involving local governments, businesses and financial institutions.

2 See *Background report on long term climate finance* prepared for the German G7 Presidency 2015 by the Centre for International Climate and Environmental Research (CICERO) and CPI, available on: http://climatepolicyinitiative.org/publication/background-report-for-g7-on-long-term-climate-finance/

3 For their part, investment recipients have to present robust climate strategies and reporting. They may benefit from the work of the Task Force on Financial Disclosure (TFCD), which helps them present climate strategies to investors.

4 See *G 20 Green Finance Synthesis Report* (pp.9-13), July 2016, available on: http://www.g20.org/English/Documents/Current/201608/P020160815359441639994.pdf

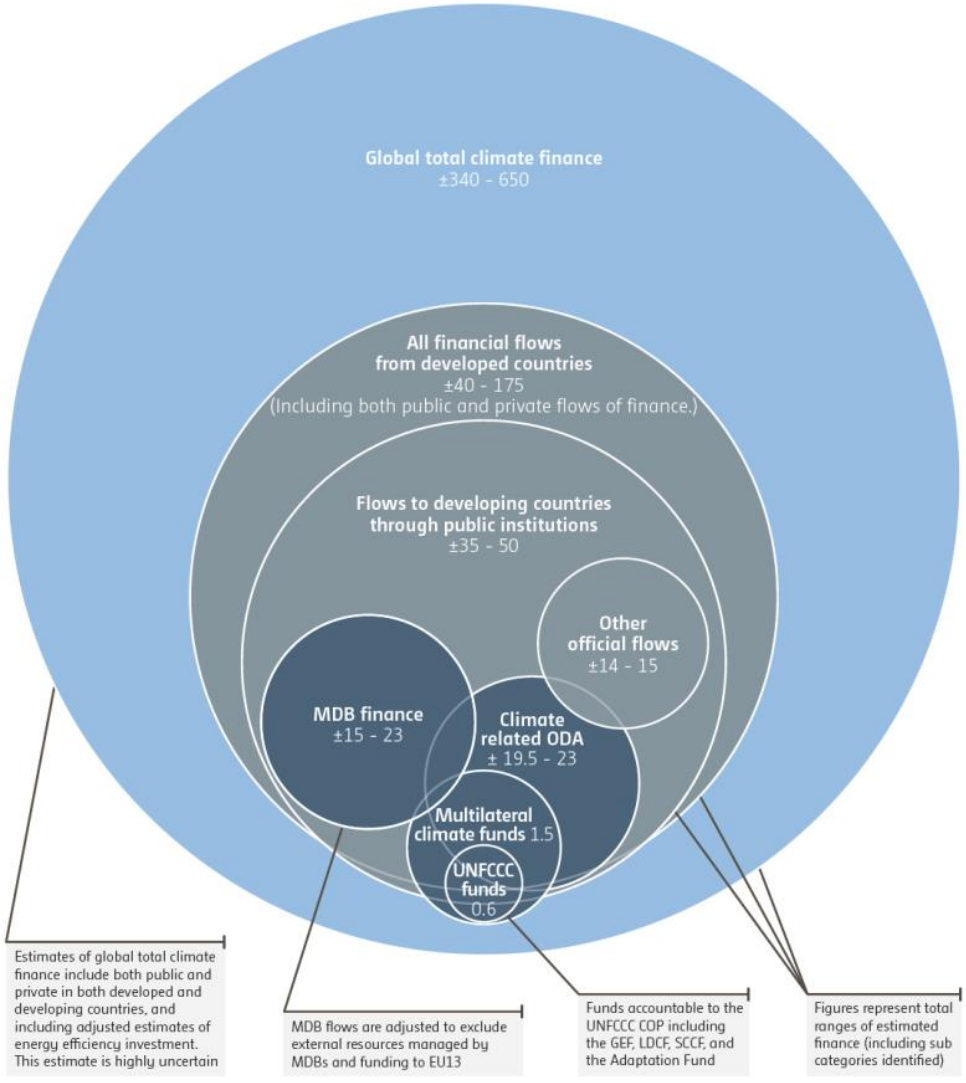
- **inadequate analytical capabilities** to identify and quantify the credit and market risks that may arise from environmental exposure, leading investors to over-estimate the "risk profile" of green investment opportunities.

Notwithstanding these difficulties, both public and private actors financing green investments commonly use classic financing instruments (long-term loans, subordinated debt, equity or quasi-equity, traditional or multi-layered[5] investment funds) mixed with sectoral incentives, such as guarantees, subsidies, or technical assistance. The latter is important in helping with project implementation or climate policy definition, particularly in developing countries.

1.2 "Shifting the trillions": a process well underway

In 2014, global private and public climate finance flows were estimated by the United Nations to range between USD 340 and 650 bn (see figure 1). Public budgets have been a growing provider of finance, particularly in Europe since the end of the 2000s, despite sometimes adverse political pressures. Public institutions (bilateral institutions, MDBs) have played a pivotal role in channelling and mobilising resources since the mid-2000s. MDBs, in particular, are increasing their climate action commitments (see part 2). But in global terms, private capital has been the largest source of climate flows, especially since 2014-15.

Figure 1: Estimated global climate finance flows in 2014 (in USD bn)



Source: Original design from Canfin & Grandjean Report, 2015[6], using data from the UNFCCC, 2014

[5] Multi-layered funds provide diverse financial solutions, offering different financial products (equity, debt guarantees) and targeting different sectors (energy, transport, waste and water management, SMEs, green R&D).

[6] See Canfin & Grandjean, 2015, *Mobilizing climate finance, a roadmap to finance a low carbon economy* (p. 26), available on the French presidency website: http://www.elysee.fr/assets/Report-Commission-Canfin-Grandjean-ENG.pdf

Banking and financial sector involvement has made significant progress in view of COP 21[7].

Assessment of the carbon footprint of portfolios (i.e. the direct or indirect emissions of investments) has been promoted by the *Montreal Pledge* platform spanning different continents since September 2014. By December 2015, this platform had attracted commitments from some 120 investors with over USD 10 tn in assets under management[8]. Investors (asset owners and investment managers) have also committed to the goals of the *Portfolio Decarbonization Coalition (PDC)*, which promotes the reduction in their portfolio carbon footprints. Over USD 100 bn was committed to this initiative by COP 21.

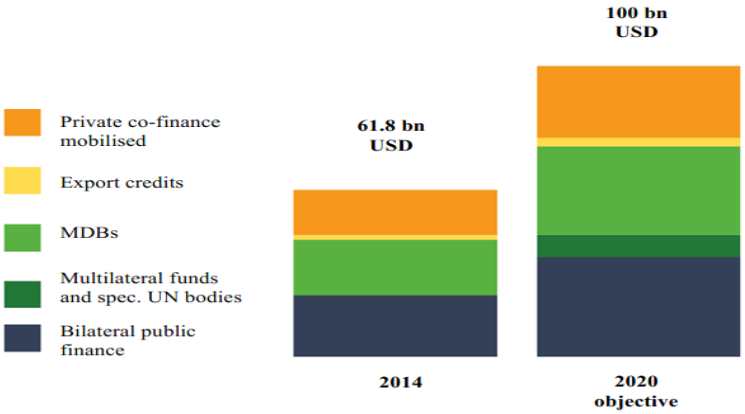
Signs of a new momentum have also emerged with respect to green investments. For example, the *Institutional Investors Group on Climate Change (IIGCC)* now forms a network of more than 120 members, representing nearly EUR 13 tn in assets. Moreover, private investors of different types and from across the globe have started to disclose the carbon prices that they incorporate into their decisions. According to the *Carbon Disclosure Project (CDP)*, the number of companies using such prices tripled in 2014[9]. Emissions of "Green bonds" have also rocketed since 2012 (see part 2). By the end of 2014, the cumulative amount of issues outstanding had reached USD 53.2 bn, according to Climate Bonds Initiative (CBI)[10] .

Finally, insurance companies are increasingly covering risks related to climate change in both developed and developing countries. They do so via more sophisticated risk measurement tools and a broader range of products such as sovereign risk pooling, micro-insurance, catastrophe bonds ("cat bonds") and index-based insurance.

1.3 Insufficient financial commitments call for public support

Nevertheless, financial commitments still fall short of expected levels. First, in a global perspective, there is a discrepancy between the 188 INDCs prepared in view of COP 21 and the 2°C reduction objective to be reached by 2100. This stands out as the main limit to the Paris agreement[11]. What is more, the geographic breadth of the commitments is biased in favour of developed countries and **adaptation finance remains low in developing countries**[12]. Finally, even though significant progress in volumes and accounting standards has been noted, the USD 100 bn objective has not yet been reached (see figure 2), is not subject to contribution cycles, and may be overvalued. By all accounts, renewed and more ambitious commitments for 2020 are expected at or after COP 22, to be held in Marrakech in November 2016[13].

Figure 2: The USD 100 bn objective: 2014 results and 2020 objective



Source: French Treasury[14] based on OECD-CPI report (2014).

[7] For more details, see the UN document, *Trends in private sector climate finance*: http://www.un.org/climatechange/wp-content/uploads/2015/10/SG-TRENDS-PRIVATE-SECTOR-CLIMATE-FINANCE-AW-HI-RES-WEB1.pdf
[8] See the Pledge's website: http://montrealpledge.org/
[9] See CDP Report, Putting a price on risk: carbon pricing in the corporate world, available on: https://www.cdp.net/cdpresults/carbon-pricing-in-the-corporate-world.pdf
[10] See CBI: http://www.climatebonds.net/files/files/Media%20release%20-%202014%20green%20bonds%20figures(1).pdf
[11] According to the UNFCCC, the level of emissions that would be reached in 2030 would exceed in a range of 11 to 22 Gt CO2 the level then deemed necessary to reach the 2°C goal by the end of the century.
[12] According to the 2015 Joint Report on MDBs climate finance, the six main MDBs provided USD 5 bn for adaptation finance in developing or emerging countries in 2015 (on a USD 25 bn total), leveraging USD 11 bn in climate co-finance flows (See Joint Report on ADB's webpage: https://www.adb.org/documents/joint-report-mdbs-climate-finance-2015). According to the OECD-CPI (http://www.oecd.org/fr/env/cc/oecd-cpi-climate-finance-report.htm), only 16% of these flows were for adaptation measures in 2014. 77% were for mitigation (and 7% for both).
[13] COP 22 will also see to the organisation of a second Climate Finance Day on November 4th (the first was held in Paris on 22 May, 2015), which is likely to mobilise the local and international financial community and foster discussions on green products and standards.
[14] See the French Treasury's webpage on the USD 100 bn objective: http://www.economie.gouv.fr/cop21/mobiliser-100-milliards-dollars-par-an-dici-2020

This calls for a set of public policy actions. One important policy action is to have the Paris agreement swiftly ratified, as is demanded by many institutional investors and countries. Another is to spread the introduction of a carbon price signal (see Box 2), possibly together with broader fiscal reforms[15]. This would help endogenise the negative externalities associated to climate change and ameliorate the risk-return analysis of businesses and investors. Integrating climate change risks in financial regulation, promoting climate-related disclosures, and changing accounting rules and prudential regulations so that they foster long-term, green investments are also welcome actions. In the short run, the phasing out of fossil fuel subsidies appears to be a very timely measure in a context of low oil prices[16]. This was mentioned in the last G20 Finance *communiqué*[17].

Carbon pricing

According to the ***Carbon Pricing Leadership Coalition***, 40 countries and more than 20 cities, states and provinces already use carbon pricing mechanisms or are planning to implement them. These jurisdictions are responsible for more than 22% of global emissions. Even though some other countries and companies are committed to adopt some such mechanisms, further efforts are needed. These efforts are promoted by academia, the UN or bodies such as the ***Carbon Pricing Panel,*** which was convened by the World Bank and the IMF. Instead of introducing a single global carbon price, some experts suggest flexible mechanisms that would be suitable for diverse sectors and countries. Grandjean & Canfin, for instance, favour a carbon price corridor from 2020 to 2030/35. Guesnerie calls for the connection of regional ETS (emissions trading system) markets. Tirole (Nobel Laureate in 2014), on the other hand, considers such flexible systems inefficient.

2. The action of multilateral development banks (MDBs): critical leverage

2.1 MDBs have four generic missions regarding climate finance

Multilateral development banks are essential actors of climate finance in both the developed and developing world. As is recalled in the 2015 Joint Report on MDB climate finance, all are working to integrate climate change considerations more systematically across their organisations' processes and operations. MDBs are also working to increase climate investments by coordinating and scaling up activities to strengthen policies, build institutional capacity, provide access to finance, and deliver technical support to client countries and their private sectors. Taken together, these missions enable MDBs to help "shift the trillions" and to converge towards the USD 100 bn objective in 2020.

In sum, MDBs share four generic missions with respect to climate change:

- **to catalyse private sector money**;
- **to instil trust between project promoters and investors** in the context of evolving technologies;
- **to define common operational standards**, be they project definition and assessment criteria and/or climate finance tracking and reporting standards;
- **to act as "market makers" or "players"** to help specific markets or instruments reach critical size.

a) catalyse private sector money

In addition to their own climate funding, MDBs enable private sector funds, stemming from asset managers, public funds, pension funds or insurance companies, to be channelled towards green sectors, be it in developed or developing economies[18]. This is typically enabled by climate bonds, a market to which they make a significant contribution. MDBs can also crowd in private investments with the help of financing instruments bridging market failures and reducing the risks of projects that are barely bankable. The catalysis

[15] Some experts argue that the regressive character of ecological taxes calls for a large overhaul of the income tax or pensions systems. See i.a. Chiroleu-Assouline & Fodha (Paris School of Economics), *Lutter contre le changement climatique sans "creuser les inégalités"*, available on: http://www.parisschoolofeconomics.eu/fr/economie-pour-tous/articles-et-interviews/2015-selection/

[16] According to the Canfin *et al, op cit,* fossil fuels or energies represent 80% of greenhouse gas emissions. And for the IMF, post-tax support to fossil energies amounted to USD 5.3 tn in 2015 globally.

[17] See G20 *communiqué*, Chengdu, 24 July 2016, available on: http://www.g20.org/English/Documents/Current/201607/t20160728_3091.html

[18] In 2015, the six most important MDBs committed USD 25 bn in climate finance in developing or emerging economies (20 bn for mitigation, 5 bn for adaptation) and mobilised of climate co-finance flows worth USD 56 bn. See 2015 Joint Report, *op cit.*

of private funding is generally facilitated by the readability and coherence of the institutions' climate strategies (see Box 3). Thus, the more targeted the activity of an MDB is with respect to climate finance, the easier private finance can be catalysed and co-financing opportunities with other MDBs determined.

b) instil trust among investors and promoters in a context of moving technologies

This mission is typically served with risk-sharing financing instruments. Multi-layered funds or credit-enhancement measures can secure the returns accruing to private investors. On the other hand, technical assistance schemes for projects or thorough climate policies can help promoters and authorities prepare their projects and climate plans. The European Investment Advisory Hub (EIAH) associated with the Investment Plan for Europe, for example, aims to provide promoters with the expertise and/or financing they need and public authorities with up-to-date policy advice. The ELENA programme offered via the Hub is a case in point[19].

In least developed and emerging countries, this trust-building exercise tends to be devolved to MDBs or bilateral agencies rather than to national promotional banks (NPBs). The Agence Française de Développement's (AFD) budget aids, helping a developing country set up a climate policy or present an INDC, are a good example. In the European Union, however, the ambitious climate objectives that have been set usually require the EIB and NPBs to coordinate on technical assistance. Indeed, NPBs often have technical assistance schemes or subsidiaries that may be mobilised together with or as a complement to those of the EIB[20]. In other cases, refinancing by the EIB enables NPBs to offer technical assistance more easily.

c) define common operational standards

MDBs also have a key role to play in defining climate projects and assessment criteria as well as climate finance tracking standards. The eligibility of investments, the labelling of financing instruments or assets, the performance indicators and the criteria used to report on climate investments all have to be defined. Recently, MDBs agreed on principles for adaptation finance and the accounting of their own climate co-investments. They also agreed on climate co-finance, which enabled them to publish the first joint report including this kind of flows in 2015. MDBs have also been working to harmonise reporting on greenhouse gas (GHG) emissions or the use of proceeds from their green bond issuances. The contribution of the *International Development Finance Club* (IDFC) to ensure that the standardisation momentum keeps pace among national and subregional development institutions is also important[21].

d) act as "market makers" or "players" to help specific markets reach critical size

Finally, MDBs play a role of "market makers" and, subsequently of "players", to help specific markets grow in size and diversify. The green bonds market is a case in point: the EIB was the first multilateral bank to issue "climate awareness bonds" (CAB) in 2007, which gave a first impetus to a market now weighing around USD 50 bn. Green bond principles (GBP), defining the criteria of the issues, the investments made and a reporting system, are now widely accepted among issuers, investors, and intermediaries[22]. Another example is the joint definition, by the EIB, KfW and AFD, of solar renewable energy projects (project evaluation, distribution between climate and infrastructure investment)[23].

2.2 MDBs have their own specificities

The **European Investment Bank (EIB)** is the most important MDB active in climate finance. It operates in the region of the globe where climate change policies are the most ambitious and integrated as a political goal backed by a comprehensive set of legislation. It also stands out as the MDB that has had the most diverse set of financing instruments[24] and the largest climate finance volume (EUR 19.1 bn in 2014) for a

[19] A joint European Commission-EIB initiative, the ELENA programme provides investment preparation support related to energy efficiency and renewable energy programmes across the EU with the aim of generating bankable investments that can attract financing from banks or other financial institutions.
[20] This was observed in France with the Caisse des Dépôts Egis subsidiary that is dedicated to urban planning services, or in Germany with the KfW, both acting in coordination with the EIB.
[21] See the IDFC's work programme on: https://www.idfc.org/Our-Program/our-program.aspx
[22] See a description of the GBP's on ICMA's website: http://www.icmagroup.org/Regulatory-Policy-and-Market-Practice/green-bonds/
[23] This work was carried out in the context of the "Mediterranean Solar Initiative" launched by the Union for the Mediterranean (2010), but also served as a reference for solar investment financing in the EU. It helped markets to step in.
[24] The EIB has developed a whole range of products such as layered risk funds, equity funds or dedicated initiatives that offer flexible investment solutions. See EIB, 2015, *Innovative climate finance products*, available on: http://www.eib.org/attachments/thematic/innovative_climate_finance_products_en.pdf

long time. From 2010 to 2014, EIB climate action lending totalled EUR 90 bn, primarily for sustainable transport and renewable energies[25].In addition, a significant part of its R&D investments are beneficial to climate (energy efficiency, energy). The EIB was also the first issuer of green bonds among supranationals, in 2007[26].

Looking ahead, the EIB is committed to following three strategic goals[27]. The first consists in reinforcing the impact of climate financing, not only by maintaining the current Group target of 25% of climate finance (35% in developing countries) and developing financing solutions but, more importantly, by focusing on activities with the highest impact. The second objective is to enhance adaptation finance and measures, up from a mere USD 365 M recorded in 2015, by providing *ad hoc* support to promoters and facilitating access to finance. Thirdly, the EIB is willing to further improve its mainstreaming tools and to harmonise related standards among its IFI peers, as it has started to do with the group of six main MDBs since July 2015[28].

The **European Bank for Reconstruction and Development (EBRD)** is one of the largest European MDBs that is only active in developing regions (the EU Eastern and Southern periphery) and distinctly applying its experience of the transitional process to climate change. The EBRD is also primarily active in private sector financing. It has stepped up environmental financing since 2006 and now combines policy, investments and technical assistance. EBRD climate finance volumes remain low, however: from 2006 to 2015, the EBRD provided financing worth EUR 17.2 bn for related projects[29]. To boost this trend, the EBRD is seeking to increase the volume of its green financing from an average of 24% in the last 10 years up to 2016 to 40% by 2020[30].

The **World Bank Group (WBG)** was an early advocate of climate change. It actively promotes the widespread use of a carbon pricing mechanism. It provides the bulk of adaptation finance to developing countries, with a 68% share (i.e. around USD 3.4 bn) of the total USD 5 bn recorded by the six MDBs in 2015, followed by the EIB, ADB and AfDB (7% each)[31]. Since 2011, the World Bank Group has committed USD 52 bn to more than 900 climate-related projects, an average of USD 10.3 bn per year. By 2020, the Group is officially committed to increasing its climate-related activity from 21 to 28%, with total financing (including leveraged co-financing) potentially reaching USD 29 bn per year by 2020[32].

Selected MDBs' climate action targets

- The **European Investment Bank (EIB)** aims to devote 25% of its total lending volume to climate (35% in developing countries) while i) reinforcing the impact of related financing; ii) developing adaptation finance and iii) improving mainstreaming
- The **World Bank Group (WBG)** is committed to a 1/3 increase in the share of its climate activity from 21 to 28% by 2020 (i.e. USD 16 bn in 2020, ceteris paribus) while developing technical assistance and adaptation financing in developing countries;
- The **European Bank for Reconstruction and Development (EBRD)** will increase its green finance commitment from 24% to 40% by 2020 (EUR 4 bn) while targeting a broader range of projects and supporting innovation and the public sector;
- The **Asian Development Bank (ADB)** is willing to double its climate finance to EUR 6 bn by 2020 while the **African Development Bank (AfDB**) wishes to triple its climate finance to reach 40% by 2020. Both MDBs seek to enhance their adaptation finance

[25] See EIB, 2015, *Finance for climate action*, available here: http://www.eib.org/attachments/thematic/climate_action_en.pdf
[26] Since 2007, funds raised via green bonds have amounted to EUR 8 bn in ten currencies for maturities as long as 12 years. In 2014, the EIB issued a record EUR 4.3 bn. See EIB, 2015, *Innovative climate finance products, op cit.*
[27] See EIB, *Climate strategy, Mobilising finance for the transition to a low carbon and climate-resilient economy,* available on: http://www.eib.org/infocentre/publications/all/eib-climate-strategy.htm?lang=en
[28] See EBRD: http://www.ebrd.com/news/2015/development-banks-agree-common-approach-to-measure-climate-finance.html
[29] See the EBRD's Green Economy Transition (GET) webpage document on: http://www.ebrd.com/what-we-do/get.html
[30] The EBRD's Green Economy Transition (GET) also aims to encompass a wider range of projects (e.g. the prevention of pollution) and to emphasise innovation with the help of technology transfers. The EBRD is also willing to support innovative public ventures as part of its climate strategy.
[31] See *2015 Joint report, op cit.*
[32] For more information, see World Bank Group Climate change Action plan 2016-2020, available on: https://openknowledge.worldbank.org/handle/10986/24451

The **Nordic Investment Bank (NIB)** is the only regional development bank active in both developed and developing countries. Its mandate to improve competitiveness and the environment in the Nordic and Baltic region as well as the coherent industrial policies implemented by member countries naturally inclined the NIB to support climate finance, which totalled EUR 4.5 bn from 2010 to 2014[33]. In addition, the NIB has been issuing NIB Environmental Bonds (NEB) since 2011 and is a member of the Green Bond Principles Executive Committee[34]. Finally, the NIB also mainstreams the environmental impact of each project it finances and is active with the CEB in integrating adaptation into projects[35].

Two MDBs are particularly active in **adaptation finance** where the needs of developing member countries are important. The **Asian Development Bank** (ADB) provided USD 2.8 bn for climate-resilient projects in 2014, representing around 25% of its climate action[36]. Total climate finance provided by the ADB is limited, however: from 2011 to 2014, the ADB approved USD 13 bn in loans for such projects37. In the future, the ADB is committed to doubling its action and to further promoting adaptation investments. For its part, the **African Development Bank (AfDB)** is committed to tripling the current USD 2 bn (around 26% of activity) over the same period while focusing on adaptation, too. In 2014, it granted USD 760 M for adaptation[38].

Among bilateral agencies, the **Agence Française de Développement (AFD)** has shown very strong involvement in climate finance, which is linked to the French presidency of COP 21. The AFD has made investments worth EUR 18 bn in climate projects since 2005. The Group (excl. Proparco) has a yearly objective of 50% in climate finance, which it exceeded in 2015 for the second consecutive year with EUR 2.6 bn approved[39]. Proparco reached 26% (out of a 30% target) in private finance, mostly for renewable energies. The focus of the Group is now on adaptation, which represents around 20% of total climate activity, and is rising (+ 40% in 2015). Mitigation projects (60% of climate finance) are decreasing by 30%. Budgetary aids (around 20%) are on the rise.

3. The CEB also provides an original contribution to climate finance

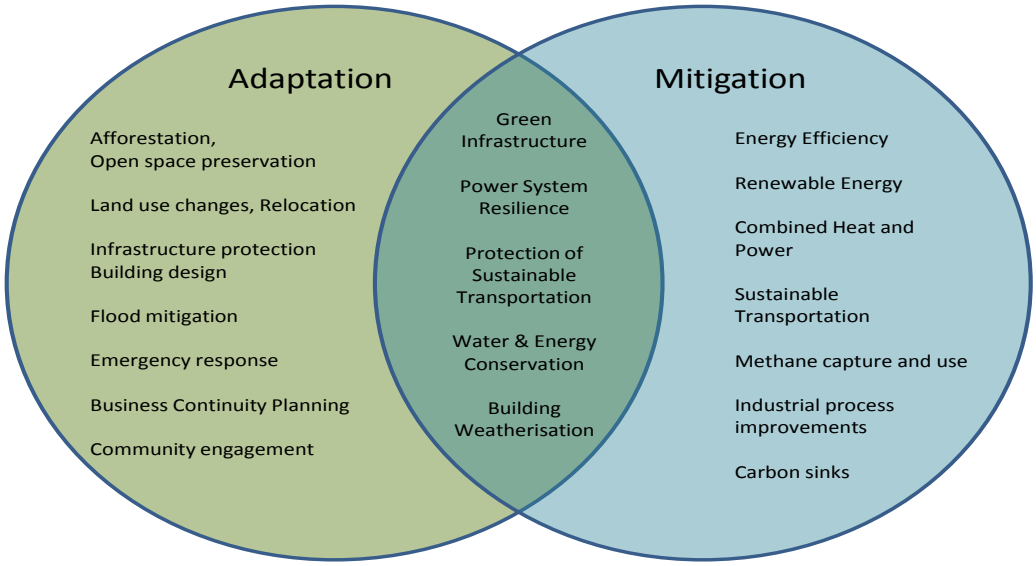
3.1 The CEB has long-standing experience in green financing

In line with its distinctive social mandate, the CEB has been tackling environmental challenges both through its sectoral line of action, "Managing the Environment" (from its creation to end 2015, the Bank approved close to EUR 12.5 bn in this sector), and via the environmental screening and impact assessment carried out on all its projects. The focus of the Bank's projects in this sector has gradually evolved over time[40]. While "aid to victims of natural or ecological disasters" constitutes one of the CEB's two statutory priorities, the scope of these and other environmental projects financed by the Bank has widened to cover the following themes, shifting the operational focus from immediate emergency response to long-term prevention action:

- **environmental protection**: **upgrading** infrastructure (solid waste, water and wastewater management);
- **climate change mitigation**: "**greening**" the built environment (energy efficiency in buildings, cleaner and renewable energy, and sustainable public transport);
- **climate change adaptation**: **strengthening** resilience to (extreme) climate events (urban and rural adaptation, and disaster risk management).

[33] See NIB, *Financing for climate action* factsheet, available on: www.nib.int
[34] Other IFIs sitting at the Executive committee (Issuers) are: the EIB, EBRD, World Bank, and IFC.
[35] Just like the CEB, the NIB has contributed to the work of the European Financing Institutions Working Group on Adaptation to Climate Change (EUFIWACC), see: http://www.coebank.org/fr/news-and-publications/news/integrating-climate-change-adaptation-project-development-emerging-experience/
[36] See *2015 Joint report* and ADB's website.
[37] See Asian Development Bank, *Focused action: priorities for addressing climate change in Asia and the Pacific*, available here: http://www.adb.org/themes/environment/climate-change ADB's own resources provided USD 11.18 bn while external resources contributed a little over USD 2 bn.
[38] See AfDB, *Climate finance*, available on: http://www.afdb.org/en/cop21/climate-finance/
[39] See AFD, *Activité climat du groupe AFD en 2015,* available on: http://www.afd.fr/webdav/site/afd/shared/PORTAILS/SECTEURS/CLIMAT/pdf/AFD_bilan_climat_2015.pdf.This target excludes the Group's private sector arm, Proparco. It is nearly equaled by the **KfW Group**, which committed EUR 29.5 bn, i.e. around 37% of its total business volume, to climate finance in 2015, in Germany and in developing countries.
[40] For more figures and details on the Bank's operations in environmental management, see a previous CEB technical study published in April 2015, *Addressing environmental challenges and their social implications in Europe,* available on: http://www.coebank.org/fr/news-and-publications/ceb-publications/

Figure 3: Adaptation and mitigation synergies



Source: http://ccap.org/connecting-the-dots-adaptation-mitigation-synergies/

Hence, in addition to its sectoral contribution to protection of the environment, the CEB has long been supporting other projects in the field of climate change mitigation and adaptation. For example, the CEB has financed energy efficiency improvement measures both in programmes involving new social housing construction, such as in Belgium, or old panel housing in Central and Eastern European target countries such as the Czech Republic or Bulgaria. Another telling example is the EUR 100 M loan to the Autonomous Community of Madrid for the partial financing of the construction, renovation and extension of pre-university schools and related infrastructure. On the other hand, flood-protection projects financed by the CEB provide a good example of integrating adaptation measures. An illustration is a EUR 75 M loan made by the CEB to support the development and updating of water and waste water infrastructure in Croatia.

3.2 The CEB is committed to developing climate action with a double focus on mitigation and adaptation

In its 2017-19 development plan, in line with the Sustainable Development Goals, the CEB has made "climate action" one of its three lines of action, thereby crystallising the existing classification (i.e. protection of the environment; projects contributing to climate change mitigation and adaptation). Hence, the CEB will continue to address environmental and climate pressures with renewed impetus. It will maintain its focus on the social effects of environmental and climate changes, which are now well documented and proven to be exacerbated among vulnerable population groups[41].

The Bank will also seek **to further mainstream environment and climate change considerations across all projects registered in the Bank's pipeline,** providing additional assurance that the CEB's Environmental Policy is respected during appraisal and implementation[42].The CEB will also strive to strengthen cooperation and mobilise additional funding through blending to incentivise the borrower to undertake environmental measures that may be neglected because of related costs or complexity. EU structural funds or EU multilateral funding mechanisms, such as the Neighbourhood Investment Facility (NIF) and the Western Balkans Investment Framework (WBIF) are useful in this respect[43].

[41] For example, degrading health conditions, increased malnutrition, or more frequent floods occurring as a result of global warming typically hit the most fragile groups the hardest. Likewise, more numerous and frequent flows of climate refugees underscore how climate change and social development are closely intertwined. For a more detailed analysis of the social effects of climate change, see a UN discussion draft report, *The social dimensions of climate change,* available on: http://www.who.int/globalchange/mediacentre/events/2011/social-dimensions-of-climate-change.pdf

[42] By the same token, the CEB will be actively involved in tightening its screening of the environmental standards of partner financial institutions, both for public investments and for MSME financing.

[43] The CEB-ELENA facility that has been set up with the European Commission to subsidise technical assistance to public entities developing energy projects is also worth noting.

The CEB supports climate change mitigation and adaptation projects in Poland and Georgia

In March 2016, the CEB approved a loan worth EUR 150 M to Bank PEKAO S.A, a leading bank in public sector financing with a regional network of almost 1000 branches in Poland. The funds will co-finance investments for the modernisation and improvement of the **energy efficiency of urban and rural infrastructure**, including public transport, schools, medical centres, and historic and cultural heritage sites. Projects in the area of adaptation will also benefit from CEB funds (i.a. local water treatment and waste management).

In March 2016, the CEB approved a EUR 14 M loan to the government of the Republic of Georgia for the **comprehensive rehabilitation of 25 state schools, with emphasis on energy efficiency measures**. In addition to CEB funds, the project will benefit from a EUR 6 M grant from the Eastern Europe Energy Efficiency and Environment Partnership (E5P), which will cover energy efficiency investments and related technical assistance. The E5P unites the EU Eastern Partnership countries, the European Commission, other bilateral donors, and the main IFIs active in the region, including the EIB and EBRD.

Finally, together with other EU bodies and IFIs, and in line with the EU action and policy framework on climate and energy, the CEB can finance climate-related projects and raise awareness on environment and climate co-benefits among its stakeholders.

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The climate action system that was constituted by the United Nations and particularly reinforced in certain regions such as the European Union has two main advantages: on the one hand, it fosters the combination of market instruments with public incentives; on the other hand, it enables the mobilisation and cooperation of public and private actors that have complementary means. As such, this system is well adapted to the financing of large volumes and to the interplay of numerous, large actors active in long-haul societal change.

However, in order to promote their initiatives and to gather international support, public authorities (i.e. states, project promoters, ODA countries) as well as public and private financiers and companies need to invest in capacity building. This often excludes the smallest countries and private actors, which then risk being marginalised. In this context, the contribution of a small multilateral development bank like the CEB, which officially focuses on climate action, is all the more relevant in target countries.

Appendix 1: INDCs of CEB target countries

	Mitigation targets	Adaptation
Albania *	Yes in the industry and energy sectors: reduce emissions by 11.5% by 2030 compared to 2016.	The INDC describes Albania as highly vulnerable to climate change.
Bosnia and Herzegovina *	Yes in industry, energy, agriculture and waste: reduce emissions by 3% by 2030 compared to 1990.	Not mentioned
Bulgaria	Yes (EU INDC : target of reducing emissions by 40% by 2030 compared to 1990 in industry, energy, agriculture, forestry and waste).	EU INDC
Croatia	EU INDC	EU INDC
Cyprus	EU INDC	EU INDC
Czech Republic	EU INDC	EU INDC
Estonia	EU INDC	EU INDC
Georgia	Yes in industry, energy, agriculture and waste: reduce emissions by 15% compared to Business as Usual levels in 2030; conditionally to international support, this target is raised to 25% .	The INDC insists on several adaptation concerns, from rising sea levels on the Black Sea coast to floods in highlands and desertification risks in the East.
Hungary	EU INDC	EU INDC
Latvia	EU INDC	EU INDC
Lithuania	EU INDC	EU INDC
Malta	EU INDC	EU INDC
Montenegro	Yes in industry, energy, agriculture and waste: reduce emissions by 30 % by 2030 compared to 1990.	
Poland	EU INDC	EU INDC
Republic of Moldova	Yes in industry, energy, agriculture, forestry and waste: reduce emissions by 64% by 2030 compared to 1990.	The INDC insists on the adaptation challenge, pointing to the 1°C raise in temperatures already witnesses in the last 127 years, and to the vast drought and flood crises know in the last 10 years.
Romania	EU INDC	EU INDC
Serbia	Yes : reduce emissions by 9,8% by 2030 compared to 1990.	The INDC emphasizes adaptation challenges, mostly linked to droughts and floods. The cost of adaptation measure

		which have been necessary between 2000 and 2015 is estimated at 68M USD.
Slovak Republic	EU INDC	EU INDC
Slovenia	EU INDC	EU INDC
FYROM		
Turkey	Yes in industry, energy, agriculture, forestry and waste: reduce emissions by 21% by 2030 compared to the BAU level.	

Source: UNFCCC INDC portal, available on: http://www4.unfccc.int/submissions/indc/Submission%20Pages/submissions.aspx

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