

Adaptation Briefings

## Financing adaptation to climate change – an introduction

Helen Burmeister, Annica Cochu, Tobias Hausotter, and Cosima Stahr

The Adaptation Briefings under the NDC Support Cluster are a series of papers that provide concise and easy to digest information on various key topics relevant to projects working on climate change adaptation. The Briefings – besides short thematic introductions – offer insights into the often complex debate under the UNFCCC and help translating negotiation results into practical implementation of the Paris Agreement at country level. Well-selected references provide a rich source of further knowledge and information on practical solutions and can help projects navigate adaptation process in their respective countries.

# State of play of finance for adaptation

**Paris** Agreement underlined the global importance of adaptation. For the first time in Nations Framework Convention on Climate Change (UNFCCC) negotiations, it established a global goal on adaptation, which provides a collective vision for the direction of global adaptation action

#### **Adaptation Briefing information**

#### For questions on this issue, please contact:

- Tobias Hausotter hausotter@adelphi.de (adelphi)
- Nicole Wegner-Fezakov <u>nicole.wegner@giz.de</u> (GIZ SPA Project)

#### For information on related networks, please visit:

- NDC Support Cluster: <a href="https://www.ndc-cluster.net/">https://www.ndc-cluster.net/</a>
- Adapt. Community: <a href="https://www.adaptationcommunity.net/">https://www.adaptationcommunity.net/</a>

#### **Published Adaptation Briefings:**

- Alignment to Advance Climate-Resilient Development

### Upcoming Adaptation Briefings will be on:

- Monitoring and Evaluation of Adaptation
- Gender and Adaptation

underscores the linkages between adaptation, mitigation and sustainable development (UNEP,



facilitated by:

giz

supported by:



<u>2016</u>). The Agreement also contains provisions related to adaptation finance, i.e. by stating that scaled-up financial resources should aim to achieve a balance between adaptation and mitigation in Article 9.4 (United Nations, 2015; CICERO, 2017).

The nationally determined contributions (NDCs), which set out individual countries' efforts to help meet the goals of the Agreement, clearly reiterate the importance of adaptation. The Tool for Assessing Adaptation in NDCs (TAAN) provides concrete numbers in that regard: In 2018, 131 NDCs (75% of all countries who submitted NDCs) referred to adaptation. Besides the NDCs, national adaptation plans (NAPs) constitute another key mechanism under the UNFCCC that enables countries to identify medium- and long-term adaptation needs and to develop and implement strategies or programmes to that end. Moreover, national adaptation programmes of action (NAPAs) provide an instrument for least developed countries (LDCs) to identify priority activities that respond to their urgent and immediate needs with regard to adaptation to climate change.

Successful implementation of adaptation activities for example in the context of NDCs, NAPs and NAPAs necessitates finance from various sources, including the private sector (IISD and GIZ, 2017). Especially developing countries require significant amounts of finance to help them adapt to the changing climate and follow a path of low-carbon and climate resilient development. According to UN Environment's Adaptation Finance Gap Report (UNEP, 2016), USD 140 billion to USD 300 billion annually may be required for adaptation in developing countries alone by 2030. These finance needs could reach USD 280 billion and USD 500 billion by 2050 (UNEP, 2016).

Yet, finance for adaptation constitutes only a fraction of overall global climate finance according to current estimates. The UNFCCC Standing Committee on Finance's 2018 Biennial Assessment states that climate finance flows in 2015–2016 increased by 17 per cent since 2013–2014, reaching totals of USD 680 billion in 2015 and USD 681 billion in 2016. However, finance for adaptation still falls short of mitigation finance, as seen for example when looking at the public funding provided by developed countries to developing countries through bilateral, regional and other channels. While approx. USD 24 billion have been dedicated to mitigation in 2016, adaptation finance from these sources only amounted to approx. USD 5.15 billion. Another source of information regarding the measurement of global climate finance flows are the Climate Policy Initiative's (CPI) Finance Landscape Reports (CPI, 2018 b) — notably, they indicate slightly different numbers than the UNFCCC 2018 Biennial Assessment due to differences in measurement methods. According to CPI, the annual average over the 2015-2016 period is estimated at USD 463 billion, with adaptation flows accounting for only USD 22 billion per year in the 2015-2016 period (CPI, 2018 b).

While the aforementioned numbers give an initial overview of the finance needs and actual flows for adaptation, they can only have indicative character. Conceptual and practical difficulties¹ currently still impede the accurate tracking of financial flows, especially where action to reduce vulnerability to climate change is mainstreamed across regular spending and investments for development. The general notion of adaptation as "development in a hostile climate" (Stern, 2009) makes it very difficult to distinguish between adaptation and 'business as usual' development. At the same time, this preoccupation with differentiating adaptation from development may actually prevent adaptation from being truly integrated into standard development practice (IISD, 2019). To address inconsistencies in measurement, multilateral development banks (MDBs) and the

more work is needed to estimate climate-resilient investments (<u>UNFCCC</u>, <u>2018</u>).

\_\_\_

<sup>&</sup>lt;sup>1</sup> Little agreement on the definition of adaptation and adaptation finance, and gaps in quality and consistency of available global adaptation finance data make it difficult to assess whether adaptation finance has increased or decreased from previous years (CPI, 2018 b). Furthermore, adaptation finance estimates are difficult to compare with mitigation finance estimates since the former is context-specific and incremental, and hence,

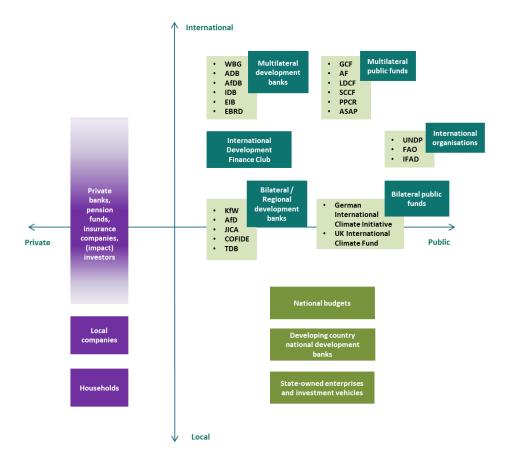
International Development Finance Club (IDFC) have developed agreed-upon tracking methodologies in the form of Common Principles for Climate Change Adaptation Finance Tracking (MDB-IDFC, 2018). Overall, an increasing number of key actors are dealing with questions surrounding the measurement and tracking of climate finance, including how to define and measure adaptation and how to track financial flows to adaptation (and mitigation) in a more differentiated manner.

## 2 Understanding the landscape of adaptation finance

The international landscape of climate finance and therewith adaptation finance is extremely complex for potential recipients of climate finance who seek for sources of funding for individual projects. Navigating it can be particularly challenging as different funding sources and options have different characteristics and requirements.

Numerous actors play a role in providing finance for adaptation, ranging from national and international to public and private institutions. Public climate finance providers include donor governments and agencies, multilateral climate funds and development finance institutions (DFIs). The latter essentially comprise the MDBs, further national and regional development banks (e.g. the members of IDFC) and other financial institutions. National governments can themselves raise and provide financing for adaptation, both on the national and the subnational levels, e.g. through legislative action or through allocating budget to specific instruments such as national climate funds. The private sector includes project developers, corporate actors, households, commercial financial institutions and more. Figure 1 provides an overview of this complex landscape.

Figure 1: Overview of most relevant adaptation finance sources (figure developed by authors)



Finance for adaptation can come in very different forms. The challenge in this context is to find out which of the many potential funding sources are relevant for a specific adaptation project or activity (see Figure 1 for an illustration of the most relevant ones for adaptation projects). To this end, it is essential to find the most suitable financing sources and integrate financing approaches into the various stages of project or activity development. Oftentimes, a mix of instruments is used to finance adaptation-related activities and projects. The main financing instruments for adaptation are summarised in Table 1 (see GIZ, 2018a for further details).

Table 1: Overview of financing instruments (based on GIZ, 2018a and authors' expertise)

Financing instrument	Description	Interesting aspects
Grant	Financial transfer typically made by the public sector or by charitable organisations. Money does not have to be repaid and is usually exempted from tax. Grant providers closely monitor the impact of the funding provided.	Grants are often provided for project preparation and technical assistance.
Loan	Debt with a fixed time period for repayment, and fixed or variable interest rate payable periodically. Usually, the repayment starts immediately after loan is taken out by a recipient.	Many donors have different degrees of concessionality, depending on the recipient.
Equity	Financing provided by an investor in exchange for partial or full ownership of a (often for-profit) company by acquiring its shares.	Often provided by private rather than public financiers; also available for (PPP-) projects.

In the context of climate finance, the three classical financing instruments as described in Table 1-grants, loans, equity – are often merged with blended finance mechanisms for risk mitigation such as guarantees or insurance. These transfer certain defined risks from finance providers to other parties (e.g., guarantors or insurers) that have a better capacity to accept such risks. Such mechanisms increase the chances that projects will obtain commercial financing.

#### Different financiers typically make use of different kinds of financial instruments:

- International public finance typically comes in the form of loans (long-term, at concessional rates) or grants the latter mostly for technical assistance, advisory services, project preparation; guarantees can be provided to reduce risk for commercial investors / banks.
- Domestic public finance can range from dedicated grants for climate action to general public budgets.
- **Private finance instruments** can typically be summarised as debt, equity or mixed, and can be provided through loans, bonds, equity capital, venture capital, etc.

## 3 What you need to know about the current debate on adaptation finance

Current discussions on finance for adaptation evolve around three broad areas, which are discussed in more detail below: Accessing international public climate finance for adaptation, leveraging domestic adaptation finance, and mobilising private sector adaptation finance.

## 3.1 Accessing international public climate finance for adaptation

Many countries face significant obstacles with regards to planning for, accessing and delivering climate finance, including when engaging with multilateral climate funds. They require a level of capacity to prepare national mechanisms to take these steps, and they need to integrate these institutional mechanisms with their national plans, policies and sustainable development priorities. In short, they need to "get ready" for financing. GIZ's Climate Finance Readiness Programme (CF Ready) is one programme that has been working since 2012 to that effect. It assists partner countries to create the conditions for the effective, transformative and efficient use of funds from international climate financing, particularly the GCF. Tools such as the Climate Finance Readiness Training "CliFiT" also assist professional staff in ministries for environment, finance and planning, and line ministries in navigating the complexities of the climate finance landscape. Another significant challenge lies in preparing and writing proposals for multilateral funds. Climate and Development Knowledge Network (CDKN) together with Acclimatise have established a toolkit on how to develop a project proposal for the GCF (see CDKN and Acclimatise, 2017).

A wide range of multilateral and bilateral public funds as well as DFIs is available and ready to finance national adaptation action. Notably, all of these institutions and funds differ in nature and purpose (e.g. aspects such as target group, country focus or available funding). In order to navigate this complex climate finance architecture, dedicated tools and guidance have been developed. For example, weADAPT provides a Quick Guide to Climate Change Adaptation Funds (weADAPT, 2017).

Table 2: Overview of multilateral funds supporting adaptation (2003-2017, USD millions (ODI, 2017)

Fund	Pledged	Deposited	Approved	Projects approved
Least Developed Countries Fund (LDCF)	1251.05	1199.52	1001.5	242
Pilot Program for Climate Resilience (PPCR)	1152.81	1126.02	1000.1	75
Green Climate Fund (GCF)	100009.72	6412.6	828.8	26
Adaptation Fund (AF)	649.27	649.27	460.9	95
Adaptation for Smallholer Agriculture Programme (ASAP)	307.52	290.13	322.0	45
Special Climate Change Fund (SCCF)	367.79	362.79	292.8	70

Among bilateral public funds, two are particularly worth mentioning due to their size. The German International Climate Initiative's (IKI) total project volume from 2008 to the end of 2017 amounts to EUR 2.7 billion. It supports projects across four topic areas, including mitigating greenhouse gas emissions, adapting to the impacts of climate change, conserving natural carbon sinks with a focus on

Reducing Emissions from Deforestation and Forest Degradation (REDD+), and conserving biological diversity. The UK International Climate Finance (ICF) has a budget of £5.8 billion (approx. EUR 6.7 billion) between 2016 and 2021 and supports adaptation to climate change, low carbon development, energy access, and forest protection.

Amongst the DFIs, the MDBs are particularly important with regards to financing adaptation. The World Bank Group (WBG)<sup>2</sup> has recently set a new ambitious target of providing USD 200 billion for climate action between 2021 and 2025. The Asian Development Bank (ADB) aims to scale up its support for climate change adaptation and mitigation, ensuring that climate finance from ADB's own resources will reach USD 80 billion for the period 2019–2030. Recognising the importance of adaptation for the African continent, the African Development Bank (AfDB) aims to scale up adaptation finance from 29% in 2015 of its portfolio spending, to reach parity with mitigation finance, and has furthermore committed to allocate 40% of approvals per year as climate finance by 2020. The Inter-American Development Bank (IDB) has devoted a yearly average of 14% of its financing to climate-related projects over the period 2012-2014, and aims at doubling the volume of its climate-related financing by 2020. The European Investment Bank (EIB) is committing at least 25% of its investments to climate change mitigation and adaptation. Lastly, the European Bank for Reconstruction and Development (EBRD) supports adaptation and resilience projects through technical and financial assistance. The Joint Reports on MDBs' Climate Finance offer further insights on the MDB's role for adaptation finance.

There are different ways and requirements to access these different international public financing sources. Multilateral funds can usually only be accessed through accredited bodies such as the Accredited Entities under the Green Climate Fund (GCF) or the Implementing Entities under the Adaptation Fund (AF). The accreditation process seeks to verify that the respective organisations are capable of strong financial management and have procedures in place to adhere to a set of social and environmental safeguards. Each fund has its own funding focus, eligibility criteria, access requirements and funding processes that need to be considered on a case by case basis. Funding from MDBs and other DFIs can typically only be accessed through assistance strategies or other arrangements. Access to bilateral funds can be obtained through existing relationships with the donor countries or through application to centralised funds, depending on the requirements of the donor country and its respective fund(s) (WRI, 2016; NDC Partnership). A more in-depth overview of the different funds and financing entities as well as information on how to access finance from them can be found in chapter 5 below.

The specific requirements of the various multi- and bilateral climate funds can be quite demanding and have to be taken into account when preparing project proposals and concept notes. These should also touch upon adaptation-specific issues. For example, the GCF expects a full climate risk and vulnerability assessment, a link of all programme components to a climate hazard within a climate impact chain, and proof that all programme components either reduce exposure or vulnerability to the identified climate hazards. Ideally, countries also need to show the incremental cost of adaptation vs. 'baseline development' in an economic financial model to justify funding. Box 1 offers further considerations for accessing financing for adaptation.

\_

<sup>&</sup>lt;sup>2</sup> Comprising the International Bank for Reconstruction and Development (IBRD), the International Development Association (IDA), the International Finance Corporation (IFC), the Multilateral Investment Guarantee Agency (MIGA), and the International Centre for Settlement of Investment Disputes (ICSID).

### 3.2 Leveraging domestic adaptation finance

Domestic financing sources for adaptation include national, sub-national and local governments, state-owned enterprises or national development banks. Dedicated resources for adaptation could be raised in various ways, e.g. through specific taxes or carbon pricing instruments such as an emissions trading scheme. At the same time, effective adaptation and resilience-building need to be integrated in different governmental areas – ranging from energy and housing to transport – through public investment and spending to ensure a whole-of-government approach (UNDP, 2015).

Compared to multilateral adaptation finance, domestic finance for adaptation remains relatively unknown and unexplored to this date. The 2017 CPI report on the Global Landscape of Climate Finance does not capture domestic government expenditure on climate finance due to methodological issues related to data coverage and data limitations (CPI, 2017a). However, tools are available that aim to support domestic adaptation finance tracking. For example, UNDP and other partners have developed a Climate Public Expenditures and Institutional Review (CPEIR) tool, which allows for a systematic qualitative and quantitative analysis of a country's public expenditures and how they relate to climate change (see UNDP, 2015). Another approach available is budgetary analysis, which is a government-level analysis covering allocation and available actual expenditures. Budget tagging - a third promising tool - is based on tagging budget codes that are relevant for adaptation and mitigation on the government's electronic financial management system. This allows for quick assessments and potentially captures transactions across planning-disbursement-auditing cycles (CPI, 2018 a). Developing countries should track their financial needs and finance received in order to improve planning, measurement of received climate finance and identification of finance gaps. More resources can flow if countries provide such information and, hence, better metrics and a more harmonised understanding are needed across reporting institutions to enable more accuracy in tracking adaptation finance flows (CPI, 2017a).

As part of an overall strategy on how to best invest in adaptation at the country level, project implementers should consider pursuing multi-beneficial approaches. One notable example for such an approach is ecosystem-based adaptation (EbA). Due to its important co-benefits (inter alia correlation with risk reduction and health options or species diversity), it should be prioritised among potential courses of action. Long-term financing for EbA from public and private sources is necessary to ensure a successful implementation in the context of NDCs (UNDP, 2016, GIZ, 2018b).

## 3.3 Mobilising private sector adaptation finance

The private sector needs to play a vital role in financing adaptation. Firstly, it should invest in its own adaptation. Climate change poses risks for businesses, both physically and through climate-related changes in regulation, technology and market dynamics. At the same time, it can open up new opportunities for companies, e.g. by stimulating demand for adaptation products and services. What is more, societies and economies depend on the private sector for employment, infrastructure and products or services. Companies should thus invest in their own resilience to ensure their survival and growth and to protect their stakeholders (Frei-Oldenburg et al., 2018). Secondly, private financial institutions and investors – such as banks, pension funds, insurance companies or impact investors – can invest in or provide funding for adaptation of others, e.g. through (micro) loans, bonds or venture capital. Finally, private entities can also support adaptation and adaptation finance

of others by providing specific products and services, e.g. credit ratings that take climate risk into account (<u>UNEP FI et al</u>, 2016, <u>GIZ</u>, 2018a; adelphi, forthcoming).

For a variety of reasons, the private sector does so far not provide sufficient funding to implement urgent adaptation measures. Lack of awareness for the risks of climate change, lack of short-term profits from adaptation and therefore limited motivation to engage in it, and limited knowledge on how to assess risks and costs of adaptation actions constitute just some of the barriers to action. Overall, barriers to private investment in and for adaptation mainly evolve around five broad areas: Data and information, institutional arrangements, policies, economic incentives, and communication, technology and knowledge (IFC, 2013). Lack of transparency on how much the private sector invests in adaptation activities constitutes another significant challenge, as it hampers action to increase private adaptation investment. Challenges for tracking private finance emanate from the fact that the private sector does not always frame its engagement in the context of adaptation. The sector's common aversion to disclose climate related financial risks and the resulting lack of tracking impedes concrete measurements and identification of finance gaps. The lack of understanding and trust between private and other entities (as a result of, for example, diverging interests and work cultures) can seriously obstruct cooperation in the matter.

Multiple analyses exist that outline actions to address the aforementioned barriers. CPI (2018 a) puts forward three types of actions to drive investment in climate adaptation and resilience: (1) addressing barriers related to awareness of climate risks and knowledge of potential solutions, in order to increase the demand for risk assessment and management tools and practices; (2) addressing barriers related to the ability of companies to offer adaptation products and services; and (3) addressing barriers related to the cost and uncertainty of deploying new technologies by derisking adaptation investment with financial instruments. The IKI NDC Support Cluster has also identified specific levers for mobilising private finance for NDC implementation, which range from improved communication, help to identify the business model and addressing perceived risks to building capacity (NDC Support Cluster, 2018).

Efforts are underway to develop concrete solutions for specific target groups within the private sector. For example, the Task Force on Climate Related Financial Disclosures (TCFD) has developed a framework that helps companies disclose information on the financial impacts of climate change. Financial actors such as banks are advised to evaluate credit and loan portfolios of borrowers by assessing physical impacts and risks in extreme weather and climate events, thereby assessing risks and opportunities in lending (see UNEP FI and Acclimatise, 2018). The EBRD together with the Global Centre of Excellence on Climate Adaptation has developed guidelines for firms on how to integrate climate change considerations into their investment decisions. The Practitioner Labs Climate Finance of the SEED Initiative bring together organisations, businesses and stakeholders to jointly address the significant financing challenges that Small Medium Enterprises – a particularly vulnerable segment of the private sector – face in many developing and emerging economies.

## Box 1: Developing a strategy for accessing financing for adaptation

Devising a financing strategy can be an important means for adaptation project developers to quantify the funding needs of the project's activities, determine which financing instruments and potential funders are most suitable for the project, and tailor their pitches to the financing institution(s) in question. Ideally, financing considerations are already integrated in the project development process. The following set of practical steps may be considered in such a strategy for all of the different financing sources mentioned above (international public, domestic, private):

#### Step 1: Analyse funding and investment needs

Quantifying the financing needs of a project is quintessential for devising a financing strategy. Planning for the needed budget should start as early as possible during project development. Considerations include: Which project activities require funding? What is the required funding amount (e.g. for human resources, costs of materials, logistics)? When and for how long is funding needed (timeframe)?

#### • Step 2: Select funding instruments

Once financing needs have been determined, the next step comprises selecting suitable financing instruments (e.g. grants, loans, equity) for the project, e.g. on the level of activities. Key considerations include: Can funding be repaid after a certain time? Is there a possibility for annual payments (e.g. repayments, interest, dividends)? What is the timeframe for which financing is need? How important is it to be independent and flexible regarding the use of financing? Is the investor welcome to participate in managing and steering the project? Are there any assets such as buildings, machines or vehicles that could be used as collateral? Frequently, adaptation projects need to combine different funding sources and instruments. Given the nature of adaptation projects, e.g. a regular lack of an underlying business model to generate revenue streams, adaptation projects are oftentimes financed through grants.

#### • Step 3: Map financing sources and select actor(s)

A mapping of (potentially) available climate finance sources for the project will help in determining possible financing actors. Adaptation finance can be provided by both public and private institutions and can be of international or national origin. It may also be concessional or commercial in nature. Figure 1 above may provide an entry point into the actor landscape. Online resources such as the NDC Partnership Climate Finance Explorer can help identify some of the available financing options. It may also be worthwhile exploring whether there are any untapped national or sub-national financing sources available or whether new financing mechanisms could be introduced at the country level.

#### Step 4: Prepare tailored pitches for approaching selected financing actor(s)

A project can be co-financed by multiple actors, both from public and private financing and from national and international institutions. The specific sources, and whether a project is eligible, depend on a variety of factors, including location, project volume, and project design. By reviewing potential financing actors for the respective financing instruments needed for a project, it should be possible to allocate the amount of financing and timeframe planned to mobilise from each actor. It is important to determine and consider the specific requirements, formats and procedures of each actor to acquire funding (see Chapter 5 for initial information). Tailored concept notes or proposals should take these into account and also outline project objectives and impacts, argue the fit of the project for each actor, underline key strengths of the project, and support financing needs with hard facts.

## 4 Sources of information and practical solutions

The following table presents an annotated and prioritised list of knowledge resources on climate and adaptation finance.

## 4.1 State of play of finance for adaptation

The following resources provide more information on the state of global climate finance flows, including multi- and bilateral as well as private sources.

Resource	Focus	Author	Purpose	Key messages
UNFCCC Standing Committee on Finance 2018 Biennial Assessment and Overview of Climate Finance Flows	Updated overview of climate finance flows in 2015 and 2016	United Nations Framework Convention on Climate Change (UNFCCC) (2018)	To present a comprehensive picture of climate finance to the extent possible	The UNFCCC's 2018 Biennial Assessment provides an updated overview of climate finance flows in 2015 and 2016 from provider to beneficiary countries, available information on domestic climate finance and cooperation among Parties, and the other climate-related flows that constitute global total climate finance flows. It also explores insights into the effectiveness, finance access, and ownership and alignment of climate finance with beneficiary country needs and priorities related to climate change.  Specifically, the report assesses:  • Methodological issues relating to measurement, reporting and verification of public and private climate finance  • Climate finance flows in the period 2015–2016  • The data underlying the overview of climate finance flows  • Concrete recommendations to the Conference of the Parties (COP)
Global Climate Finance: An Updated View 2018	Updated global climate finance estimates in 2015 and 2016	Climate Policy Initiative (CPI) (2018b)	To condense a set of updated findings from the 2017 report	CPI reviewed estimates on climate finance flows for the years 2015 and 2016, as previously reported in the Global Landscape of Climate Finance 2017, and incorporated new data released during the year. New estimates were included in the UNFCCC 2018 Biennial Assessment and Overview of Climate Finance.  Key findings are:  • Climate finance has been steadily increasing, but more is needed

Resource	Focus	Author	Purpose	Key messages
				<ul> <li>Adaptation finance is estimated at just USD 22 billion per year, with challenges to comparability over the years due to variations in reporting</li> <li>The vast majority of investment continues to be spent domestically.</li> <li>Developing countries continue to be the dominant destination of climate investment</li> </ul>
Global Landscape of Climate Finance 2017	Climate finance architecture	Climate Policy Initiative (CPI) (2017a)	To increase global climate finance (public and private) in order to stay within the 2 degrees Celsius pathway	Climate Policy Initiative's 2017 edition of the Global Landscape of Climate Finance updates the most comprehensive assessment of annual climate finance flows with data from 2015 and 2016, providing, for the first time, a five-year trend analysis on the how, where, and from whom finance is flowing toward low-carbon and climate-resilient actions globally in order to identify trends, gaps, and opportunities to scale up investment. As with previous reports, the figures identified in this landscape represent overall global finance flows and should be compared with estimates of total investment needed consistent with the goal of limiting global temperature rise to below 2 degrees Celsius.  Specifically, the report examines:  • The sources and intermediaries of public and private finance  • The instruments channelling climate finance flows  • Financing recipients in order to understand if public finance is leveraging private investment  • Sectors investments  • Geographical preferences for investment (domestic / international)  • The outlook on scaling up climate finance.
The Adaptation Finance Gap Report	Adaptation Finance Gap	UN Environment (UNEP) (2016)	To identify the true trends and challenges of adaptation costs	The report assesses the difference between the financial costs of adapting to climate change in developing countries and the amount of money actually available to meet these costs – a difference known as the "adaptation finance gap". The report, the second in UNEP's series of Adaptation Gap

Resource	Focus	Author	Purpose	Key messages
			in order to overcome the financial adaptation gap globally	reports, finds that total bilateral and multilateral funding for climate change adaptation in developing countries has risen substantially in the five years leading up to 2014, reaching \$22.5 billion. But the report warns that, despite this increase, there will be a significant funding gap by 2050 unless new and additional finance for adaptation is made available.
				Specifically, the report examines:
				<ul> <li>Global level estimates of the costs of adaptation in developing countries</li> </ul>
				Reasons why estimates differ
				Adaptation finance: Key sources, key instruments, monitoring
				Private sector finance for adaptation
				The adaptation finance gap and prospects for bridging it
Lessons Learned from Three Years of Implementing the MDB-IDFC Common Principles for Climate Change Adaptation Finance Tracking,	MDB-IDFC Common Principles for Climate Change Adaptation Finance Tracking	Multilateral Development Banks Climate Finance Tracking Working Group and the International Development Finance Club Climate Finance Working Group MDB-IDFC (2018)	To share experiences on the application of the Common Principles with stakeholders in the field of climate change adaptation finance	<ul> <li>The report synthesises the experiences of the major climate finance providers in defining, tracking and reporting climate adaptation finance by means of the MDB-IDFC Common Principles over the past three years. The findings may be of interest to a range of public and private organisations working on adaptation finance, climate finance and sustainable finance.</li> <li>The lessons include the following:         <ul> <li>A process-based approach is appropriate for preparing adaptation related interventions, and for tracking and reporting adaptation finance</li> <li>A range of approaches is being used to determine shares of project costs that can be counted as adaptation finance</li> <li>The application of the Common Principles has generated valuable experience of how to determine the project-specific context of climate vulnerability.</li> </ul> </li> </ul>
Monitoring and evaluation of adaptation - an	M&E of adaptation	International Institute for Environment	To equip the reader with a broad overview	The Briefing gives an easy-to-digest and concise overview of M&E for adaptation. It goes into detail about the benefits of investing in M&E and explore what diverse set of variables is needed to i) Assess institutional

Resource	Focus	Author	Purpose	Key messages
Introduction (forthcoming)		and Development (IIED) and International Center for Climate Change and Development (ICCCAD) (forth- coming)	of the relevance of and challenges associated with M&E of adaptation	capacity for climate adaptation; ii) Capture key factors influencing vulnerability and resilience; iii) Measure changes to human and environmental wellbeing, and iv) Track evolving climatic conditions and hazards. The Briefing also uncovers the technical and operational challenges in assessing adaptations. It also shows the relevance of M&E and transparency in the context of the Paris Agreement and Katowice.

## 4.2 Understanding the landscape of adaptation finance

Resource	Focus	Author	Purpose	Key messages
Climate Finance	Adaptation	Overseas	To provide an	This briefing gives an overview of the broader climate finance architecture
Thematic Briefing:	finance-current	Development	overview of	as well as the multilateral funds supporting adaptation.
Adaptation Finance	landscape	Institute (ODI)	climate finance	Specifically, the paper provides an overview of:
		(2017)	funding	Climate funds supporting adaptation
			supporting	Sources and amounts of funding
			adaptation	The regional distribution of funding
Understanding and	Adaptation	Climate Policy	To propose	This paper explores what it will take to increase investment in climate
<b>Increasing Finance</b>	finance in	Initiative (CPI)	practical, near	resilience and adaptation, particularly in developing countries and for
for Climate	developing	(2018a)	term solutions to	consideration among national governments and stakeholders, such as DFIs,
Adaptation in	countries		both fill in	local governments and civil societies including academic institutions. The
Developing			knowledge gaps	paper first identifies trends in and barriers to investment, and then discusses
Countries			and to increase	two aspects of driving investment in adaptation: first, the role of increased
			investment for	measurement and disclosure, and second, effective use of public policy and
			climate change	finance to leverage investment.
			adaptation	Specifically, the paper examines:
				The current state of adaptation finance – flows, trends, and gaps

Resource	Focus	Author	Purpose	Key messages
GIZ Finance Guide 2018	Introduction to the basics of commercial finance and investment in the context of development cooperation	Gesellschaft für Internationale Zusammenarbei t (GIZ) (2018a)	To provide a clear understanding and deeper knowledge of the financing landscape for financial sectors and private investors	<ul> <li>Barriers to investment in climate adaptation and resilience</li> <li>Improving the measurement and disclosure of adaptation finance and risks</li> <li>Approaches and mechanisms to drive investment in climate adaptation</li> <li>Key takeaways for developing countries</li> <li>The guide's objective is to enable readers with limited or no prior exposure to finance topics to understand key aspects in the public and private sector. It provides an overview of important finance providers and financial mechanisms, and offers a variety of project examples containing good practices.</li> <li>Specifically, the guide provides:         <ul> <li>An understanding of the finance landscape including the role of financial services and sector challenges</li> <li>An understanding of the needs of finance recipients, the purpose and amount of finance</li> <li>An analysis of finance providers and the possible risk consideration</li> <li>An explanation of financial mechanisms</li> <li>An overview of GIZ services in the world of finance</li> </ul> </li> </ul>
Financing National Adaptation Plan (NAP) Processes: Contributing to the achievement of nationally determined contribution (NDC) adaptation goals	NDC and NAP alignment	International Institute for Sustainable Development (IISD) and Gesellschaft für Internationale Zusammenarbei t (GIZ) (2017)	To enhance support for the NAP financing process in developing countries	Financing is needed throughout the entire NAP process to enable its potential to be reached—from its initiation to the implementation, monitoring and evaluation of prioritised adaptation actions. The amount of financing needed by countries will vary depending on their circumstances, but is expected to be significant. This guidance note aims to assist countries with the development of strategies for securing this funding.  Specifically, it has the following objectives:  Provide a clear understanding of the NAP process from a financing perspective  Present the range of potential sources of finance and identify which sources may be more appropriate for different phases of the NAP process

Resource	Focus	Author	Purpose	Key messages
				Suggest practical steps that countries might take throughout the
				NAP process to increase their likelihood of securing finance from
				different sources

## 4.3 Accessing international public climate finance for adaptation

To help countries in obtaining finance for their adaptation actions, the following resources inter alia provide insights on the range of international public sources of finance available and how to access them as well as on the requirements that need to be addressed to that end.

Resource	Focus	Author	Purpose	Key messages
Quick Guide to	Guide to	WeADAPT	To provide an	This Quick Guide features the following 10 funds (five multilateral and five
Climate Change	Adaptation	(2017)	overview of	bilateral funds) that, combined, have provided the largest volume of
Adaptation Funds	Funds		multi- and	adaptation financing to date:
			bilateral climate	Adaptation Fund
			funds and	Global Climate Change Alliance
			initiatives to date	Green Climate Fund
				International Climate Fund
				International Climate Initiative
				Least Developed Countries Fund
				Nordic Climate Facility
				Nordic Development Fund
				Pilot Program for Climate Resilience
				Special Climate Change Fund
Green Climate Fund	GCF proposal	Climate and	To provide	The toolkit provides project proponents with 10 key steps, which will guide
Proposal Toolkit	toolkit	Development	guidance to	them through the preparation and submission of a fully-fledged GCF funding
2017: Toolkit to		Knowledge	project	proposal. Alongside practical examples, each of these steps present useful
develop a project		Network (CDKN)	proponents on	information on the tools and methods needed to put together a funding
proposal for the GCF		and Acclimatise	the preparation	proposal and to fill in the GCF proposal template.
		(2017)	and submission of	Specifically, the toolkit provides guidance on:
			a GCF proposal	Background information on key financing actors
				Key project design elements

Resource	Focus	Author	Purpose	Key messages
				<ul> <li>On the GCF proposal template</li> <li>The GCF project cycle</li> </ul>
Direct Access To Climate Finance: Lessons Learned By National Institutions	Direct Access	World Resources Institute (WRI) (2016)	To assess the direct access funding process and provide lessons learned	The paper explores the experiences to date of national institutions that have been accredited by either the Adaptation Fund or the Green Climate Fund through direct access.  Specifically, the paper examines early lessons learned in the areas of:  Planning for engagement with the climate funds Applying for accreditation Designing and implementing projects and programmes
WBG Action Plan Climate Change Adaptation and Resilience	Boost the WBG's efforts on adaptation and resilience	World Bank Group (2019)	To make adaptation and resilience a key priority of the 2025 Climate Change Targets, elevating adaptation to an equal footing with mitigation actions	The Action Plan is part of the WBG 2025 Climate Change Targets that expand the commitments made under the WBG 2016 Climate Change Action Plan and increase the emphasis on adaptation and resilience. The WBG will help countries identify key areas of action to achieve more systemic climate resilience. Special attention will be given to vulnerable populations, including the poor, those affected by fragility, conflict, and violence, and small island states. At the same time, to reduce the negative impacts of climate change worldwide, the WBG will also encourage countries to deliver on their commitments to reduce emissions.
The Climate Finance Readiness Programme	Climate Finance Readiness tools	Gesellschaft für Internationale Zusammen- arbeit (GIZ) (2017)	To provide support to developing countries with climate finance activities in order to achieve results-orientated transformational and efficient use of funds	Climate Finance Readiness can be understood as the capacity of developing countries to effectively plan for, access and monitor climate finance, and to implement effective activities, which in the long run leads to clear adaptation and mitigation results.  • As part of the programme, a number of tools and trainings have been developed to support developing countries, inter alia on: Capacity-building, developing projects, and needs assessment.

Resource	Focus	Author	Purpose	Key messages
Supporting Access to Finance for Climate Action	Climate funds in place	Swedish International Development Cooperation Agency (SIDA) (2017)	To provide specific guidelines relating NDCs and climate finance to development issues and to the role of bilateral donors	While there are many guides, tools and initiatives out there on NDCs and climate finance, there was a need for guidelines relating NDCs and climate finance more closely to the development agenda in countries, and to the role of bilateral donors.  Specifically, the paper provides guidelines on:  Supporting access to finance for climate action  How to move towards green climate fund accreditation and support  The integration of climate action into national development planning coherent to the Paris Climate Agreement and the Agenda 2030
2017 Joint Report on Multilateral Development Bank's Climate Finance	Joint report on climate finance tracking by MDBs	African Development Bank, Asian Development Bank, European Bank for Reconstruction and Development, European Investment Bank, Inter- American Development Bank, Islamic Development Bank, World Bank Group (2018)	To provide an overview of the financing committed by Multilateral Development Banks to mitigation and adaptation projects and activities in 2017	The Joint Report on Multilateral Development Bank's Climate Finance is an annual collaborative effort to establish MDB climate finance figures for developing and emerging economies, together with a clear explanation of the methodologies for tracking this finance. In 2015, the MDBs and the International Development Finance Club (IDFC) agreed on a set of Common Principles for finance to mitigate climate change and an initial set of Common Principles for finance to support adaptation to climate change. The attention of the group has been to find a common approach to tracking and — in the future — reporting climate change.  The AfDB, ADB, EBRD, EIB, IDBG and WBG have reported jointly on climate change since 2011. Together, they have committed almost USD 194 billion in climate finance during the past seven years in developing and emerging economies (AfDB et al., 2018).

## 4.4 Leveraging domestic adaptation finance

The knowledge resources included here provide important entry points for countries and project implementers to understand how to integrate and mainstream climate change adaptation into national budget planning, and how to leverage domestic investment in adaptation. Some resources address EbA as a valuable approach to receive long-term (national) financial resources.

Resource	Focus	Author	Purpose	Key messages
A Methodological	Public climate	United Nations	To equip	A CPEIR is a diagnostic tool to assess opportunities and constraints for
<b>Guidebook: Climate</b>	expenditure	Development	stakeholders with	integrating climate change concerns within the national and sub-national
Public Expenditure	tool	Programme	information on a	budget allocation and expenditure process. The guidebook aims to provide
and Institutional		(UNDP) (2015)	step-to-step	the basic components of a CPEIR, guidance on best practices and other
Review (CPEIR)			process,	practical advice for those who face the task of implementing a CPEIR.
			methodologies	Specifically, its analytical framework has three key pillars:
			and tools to	Policy analysis
			conduct CPEIR	Institutional analysis
				Climate public expenditure analysis
Mainstreaming,	Mainstreaming	Action on	To provide	This learning paper reviews the current state of practice and debates related
accessing and	climate	Climate Today	guidelines on the	to the mainstreaming of adaptation finance and synthesises experience and
institutionalising	adaptation	(ACT) (2017)	mainstreaming of	key lessons from the ACT programme that may be of relevance to
finance for climate	finance in		adaptation	practitioners and governments working to mobilise financing for climate-
change adaptation	national		finance for	resilient growth and development.
	budgets		governments	In particular, this paper reviews:
				<ul> <li>Methods for estimating the climate change relevance of budgets or expenditure</li> </ul>
				Approaches to budget tracking and expenditure review
				Estimations of economic loss and damage
				Calculation of the adaptation financing gap
				The development of financing scenarios
				Approaches to closing the adaptation gap
				Key entry points for mainstreaming climate adaptation finance
				Necessary institutional mechanisms and capacity development

Resource	Focus	Author	Purpose	Key messages
				required for effective climate finance mainstreaming
				Key lessons for practitioners and government agencies planning to
				undertake similar work
Finance options and	10 different EbA	Gesellschaft für	To provide an	The report provides a comprehensive outlook on available financing sources
instruments for	financing	Internationale	overview of	and stipulates ten examples for project developers and practitioners who
Ecosystem-based	options	Zusammenarbei	different ways to	might be keen to learn from different finance approaches to implement and
Adaptation		t (GIZ) (2018b)	access resources and engagement	maintain EbA measures. It offers the opportunity to showcase possibilities for EbA to be considered within National Adaptation Plan (NAP) processes
			models for EbA	and Nationally Determined Contribution (NDC) strategies.
			financing	Within these ten areas, an outlook on the following topics is given:
				Incentives, Colombia
				Blend of public funding with revenue generation, Morocco
				Green Climate Fund, Gambia
				National fund, Philippines
				Credit system, Germany
				Insurance Schemes
				Microfinance Scheme, Colombia and Peru
				Market-rate loans, Latin America
				Carbon Insetting
				Debt-for-nature swaps
Making the case for	Policy change	United Nations	To enhance	The learning brief is a summary from the Programme's legacy report,
policy change and	and financing	Development	support for the	Making the Case for Ecosystem-based Adaptation: The Global Mountain EbA
financing for	for EbA	Programme	NAP	Programme in Nepal, Peru and Uganda. It argues that climate change
Ecosystem-based		(UNDP) (2016)		policies need to be translated into budget allocations and expenditures,
adaptation				thereby making climate change part of the national budgeting process. Funding for adaptation, however, remains one of the main gaps in
				transferring societally set goals into actual implemented adaptation
				measures. It is therefore critical to identify public financing options and
				other sources of funds to secure long-term/continuous EbA interventions.
				This learning brief explains how:
				The Programme has made the case for long-term EbA

Resource	Focus	Author	Purpose	Key messages
				Sustained financing for EbA through public finance, incentive schemes and Payments for Ecosystem Services.
Steering International Adaptation Finance towards the Local Level	Channelling money for adaptation from the international to the local level	adelphi (forthcoming)	To provide a good understanding of the most effective use of the resources provided for climate change	The paper analyses financial instruments of public climate finance received at the national level and identifies suitable mechanisms which ensure that international funding reaches the local level – so-called "elevator mechanisms". It further recommends elements in funding structures that could be strengthened or revised, and methodologies that have the greatest potential for effectively reaching specific target groups at the local level. Specifically, the paper recommends: <ul> <li>Direct investments and direct access channels</li> <li>Locally administered funds</li> <li>Participatory funding structures</li> <li>Funding instruments that allocate funds according to competitive elements</li> <li>Performance-based funding</li> </ul>

## 4.5 Mobilising private sector adaptation finance

With regards to mobilising adaptation finance from the private sector, the following resources can give practical insights on how to address barriers as well as recommendations for creating an enabling environment.

Resource	Focus	Author	Purpose	Key messages
Mobilizing	Mobilising	Center for	To facilitate and	This report examines barriers to stimulating adaptation finance within the
Adaptation Finance	adaptation	International	drive private	context of different policies, instruments and approaches currently being
in Developing	finance in	Climate	sector investment	implemented. Innovations related to adaptation finance have been
Countries	developing	Research	in adaptation in	produced, foremost creating a business case for adaptation in the
	countries	(CICERO) (2017)	developing	agriculture and water sectors, which are considered to be more sensitive to
			countries through	the effects of climate variability. Examples of innovations are disaster risk
			an innovative	management for adaptation, climate insurance arrangements, credit
			regulatory	mechanisms, micro-finance, green bonds, climate resilience bonds, and
			framework	catastrophe swaps.

Resource	Focus	Author	Purpose	Key messages
				Specifically, the paper examines:
				The history of adaptation
				The adaptation finance landscape
				<ul> <li>Current and projected adaptation finance flows and needs</li> </ul>
				Barriers to adaptation finance
				Policies, instruments and approaches to mobilise adaptation finance
Demystifying	Adaptation	Un Environment	To analyse the	The paper provides an overview of private adaptation finance and measures.
Adaptation Finance	finance for	Finance	investment	Besides available financing instruments for private adaptation, this report
for the Private	Private Sector	Initiative (UNEP	decision-making	also sheds light on how private sector investment occurs. Finally, it outlines
<u>Sector</u>		FI) et al. (2016)	process of	practical policy solutions to remove barriers and scale-up the volume of
			enterprises and	financial flows.
			how investments	Specifically, the paper examines:
			are financed	Barriers to private adaptation finance
				<ul> <li>Tools for addressing barriers</li> </ul>
				Recommendations for policy makers
<u>Insights on</u>	Private finance	NDC Support	To identify	The document summarises findings from the NDC Cluster workshop that
Mobilising Private	for NDC	Cluster (2018)	experiences,	discussed the following themes in order to overcome barriers and find
Finance for NDC	implementation		challenges and	solutions:
<u>Implementation -</u>			innovation to	<ul> <li>Mobilising private finance for NDC implementation in the energy</li> </ul>
from Challenges to			mobilise private	sector
Innovations			financing for NDC implementation	<ul> <li>Engaging the private sector and private financial actors in the financing of adaptation measures</li> </ul>
				<ul> <li>Climate-proofing private investments and the role of climate risks for the mobilisation of private finance</li> </ul>
Enabling	Creation of an	International	To define	The report reviews practical and implementable interventions that have
<b>Environment for</b>	enabling	Finance	important	significant potential for the creation of an enabling environment for private
Private Sector	environment for	Cooperation	country	sector adaptation and the promotion of climate resilient development
<u>Adaptation</u>	private sector	(IFC) (2013)	conditions	paths. It discusses country conditions that enable private sector adaptation
	adaptation		needed to	to climate change, including:
			promote climate	Data and information
			change	Institutional arrangements

Resource	Focus	Author	Purpose	Key messages
			adaptation in the private sector	<ul> <li>Policies</li> <li>Economic incentives and communication</li> <li>Technology and knowledge</li> </ul>
Recommendations of the Task Force on Climate-related Financial Disclosures	Recommendatio ns for Climate- related Financial Disclosures	Task Force on Climate-Related Financial Disclosures(TCF D) (2017)	To produce recommendation s for the disclosure of climate-related financial risks and opportunities	The industry-led Task Force on Climate-related Financial Disclosures (Task Force) developed voluntary, consistent climate-related financial disclosures that would be useful to investors, lenders, and insurance underwriters in understanding material risks. The four widely adoptable recommendations on climate-related financial disclosures are applicable to organisations across financial sectors and jurisdictions.  The recommendations are structured around these thematic areas:  • Governance  • Strategy  • Risk management  • Metrics and targets
The Roles of the Private Sector in Climate Change Adaptation – an Introduction (forthcoming)	Roles of the private sector in climate change adaptation, challenges for private sector adaptation, and entry points for cooperation	adelphi (forthcoming)	To give insights into the different roles and activities that the private sector can take in adaptation as well as entry points to further cooperation with the private sector	This brief gives a concise introduction to private sector involvement in climate change adaptation.  It shows that the private sector can play three different roles in and for adaptation. It can:  1. adapt to climate change;  2. finance adaptation of others; and  3. support others through products and services for resilience.  Different types of private entities can and should have different stakes in implementing, financing and supporting adaptation. These different groups include small-scale, local companies, entrepreneurs and farmers; larger companies, especially if active in multiple countries; private associations, cooperatives and multipliers; Banks and investors; and insurance companies. The brief delivers an overview of the adaptation roles and activities of each of these private sector groups.

## 5 Overview of important financiers (multi- and bilateral funds, MDBs)

A range of different organisations is ready and available to finance adaptation actions. Chapter 5 goes into detail about some of the most important financiers in that respect, broken down in multilateral and bilateral public funds and development finance institutions. It complements the introductory explanations provided in chapter 3.1 of this Briefing.

## 5.1 Multilateral public climate funds

Multilateral climate funds play a vital role in using international public finance to stimulate investments shifts of other public and private finance institutions that are necessary to drive a broader economic and societal transformation. During the past two decades, the number of international funds providing climate finance has been constantly grown, with each new fund responding to needs that emerged at different times (WRI, 2017). The table on some of the largest multilateral funds below gives information on their main target group, the volume of financing provided, as well as additional information – inter alia on the modalities of accessing these funds.

Fund	Target group	Volume	Further information and access to financing
Green Climate Fund (GCF)	Country-driven projects in developing countries that create a 'paradigm shift' in both adaptation and mitigation projects, and to achieve a balance between the two (GCF).	USD 10.3 billion in pledged resources and USD 4.6 billion allocated to projects as approved by the GCF board. Total amount of approved projects, including GCF financing and cofinancing: USD 16.4 billion (GCF, 2019)	<ul> <li>Further information:         <ul> <li>Half of adaptation resources are reserved for Least Developed Countries (LDCs) and small island developing states (SIDS), and there has to be a specific focus on private sector financing (IIED, 2017).</li> <li>The GCF also provides support for national adaptation plan (NAP) formulation: At the 13th meeting of the GCF Board, the decision was made to support the formulation of NAPs through the GCF Readiness and Preparatory Support Programme.</li> <li>In a recently published paper, the GCF gives an overview of climate finance and insurance as well as sectoral approaches to adaptation investments (GCF, 2019).</li> </ul> </li> <li>Access to financing:         <ul> <li>All developing country Parties to the Convention are eligible to receive resources from the GCF. The GCF gives recipient countries access to funding through accredited national, sub-national and regional implementing entities and</li> </ul> </li> </ul>

Fund	Target group	Volume	Further information and access to financing
Adaptation Fund (AF)	Climate adaptation and resilience activities through 'concrete' adaptation projects within all signatory developing countries, targeted precisely at those communities that are most vulnerable to climate change. (AF, 2018)	So far, the Fund has approved over 80 projects and programmes with a total funding volume of USD 532 million. Applications have been submitted for further 45 projects with a funding volume of approximately USD 335 million. (BMU, 2018)	<ul> <li>intermediaries, but countries can also access funding through accredited international and regional entities (Climate Funds Update).</li> <li>One of the Green Climate Fund's distinctive features is the provision for developing countries to access financial resources through national entities, meaning that climate finance can be channelled to the country directly (GCF, 2018).</li> <li>More information on Direct Access at GCF can be found here.</li> <li>More information on the GCF process of approving / funding projects can be found here.</li> <li>An overview of accredited entities is available here.</li> <li>Information to assist Accredited Entities and National Designated Authority (NDAs) in developing a concept note is available here.</li> <li>Further information:         <ul> <li>Resources are allocated based on a country's vulnerability and urgency for action (AF).</li> </ul> </li> <li>Access to financing:         <ul> <li>Financing from the AF can be accessed via different channels, including through international and regional access (where implementing functions are performed by accredited international and regional entities) and direct access (where implementing functions are devolved to designated national bodies) (for more information, see here).</li> <li>The AF is one of the only funds to provide a Direct Access modality, through which designated National Implementing Entities can directly access AF financing.</li> <li>An overview of National Implementing Entities is available here.</li> </ul> </li> </ul>
Least Developed Countries Fund (LDCF)	Funding for the preparation and implementation of National Adaptation Programmes of Action (NAPAs) and National	Around US\$1.2 billion of voluntary contributions (LDCF, 2018)	<ul> <li>As part of its mandate, the LDCF helps countries prepare and implement National Adaptation Programmes of Action (NAPAs)</li> <li>LDCF projects cut across a variety of themes and geographies. Target sectors include water; agriculture and food security; health; disaster risk management and</li> </ul>

Fund	Target group	Volume	Further information and access to financing
	Adaptation Plans (NAPs) of Least Developed Countries (LDCs) under the UNFCCC		<ul> <li>prevention; infrastructure; and fragile ecosystems (LDCF, 2018).</li> <li>Access to financing: <ul> <li>The LDCF is administered by the Global Environmental Facility (GEF).</li> <li>Before a LDCF Project Proponent can access financing for an adaptation project, a country NAPA must be completed and sent to the UNFCCC Secretariat for publication.</li> <li>Once a NAPA is completed, the LDCF Project Proponent develops a concept for a project and requests assistance from an Implementing Agency of the GEF.</li> <li>The LDCF Project Proponent secures the endorsement of the national GEF Operational Focal Point.</li> <li>Projects over USD 2 million are referred to as Full-sized Projects (FSP); those of USD 2 million or below are referred to as Medium-sized Projects (MSP.) MSPs follow a further streamlined project cycle, compared to FSPs.</li> <li>For FSPs, submission to the GEF under the LDCF starts with a Project Identification Form (PIF), followed by a CEO Endorsement Form. MSPs may start with the CEO Endorsement Form. Once the GEF CEO Endorses the project, the funding is released to the Implementing Agency.</li> <li>More information on accessing resources under the LDCF: https://www.thegef.org/sites/default/files/publications/23469 LDCF 1.pdf</li> </ul> </li> </ul>
Special Climate Change Fund (SCCF)	Funding of adaptation and technology transfer activities within all developing countries to the UNFCCC	As of 2017, the SCCF has a portfolio of nearly USD 350 million in voluntary contributions, supporting 77 projects in 79 countries (SCCF, 2018).	<ul> <li>Further information:</li> <li>The SCCF complements the LDCF. Unlike the LDCF, the SCCF is open to all vulnerable developing countries. In addition, it funds a wider range of activities related to climate change.</li> <li>Adaptation is the top priority, but through separate financing windows, the SCCF also funds technology transfer, mitigation in selected sectors including energy, transport, industry, agriculture, forestry and waste management; and economic diversification (SCCF, 2018).</li> <li>The SCCF funds adaptation related to water resources management, land</li> </ul>

Fund	Target group	Volume	Further information and access to financing
			management, agriculture, health, infrastructure development, fragile ecosystems (including mountainous ecosystems) and integrated coastal zone management. It also supports monitoring of diseases and vectors affected by climate change, and related early warning systems. It builds capacity for disaster prevention related to climate change, including for droughts and floods, and also provides catastrophe risk insurance (SCCF, 2018).  Access to financing:  The LDCF is administered by the Global Environmental Facility (GEF).
			<ul> <li>Access to finance under the SCCF follows a similar procedure as the LDCF (see above).</li> <li>More information on accessing resources under the SCCF:         https://www.thegef.org/sites/default/files/publications/23470_SCCF_1.pdf     </li> </ul>
Pilot	Grant and loan	USD 1.2 billion (PPCR)	Further information:
Programme for Climate Resilience (PPCR)	financing of technical assistance and investments to support developing countries, especially small island	Support to SIDS: USD 250 million	<ul> <li>PPCR assists governments in integrating climate resilience into strategic development planning across sectors and stakeholder groups.</li> <li>It provides concessional and grant funding to put the plans into action and pilot innovative public and private sector solutions (PPCR).</li> <li>Projects place particular emphasis on NAPAs.</li> </ul>
	developing states (SIDS) (PPCR).		Access to financing:
			<ul> <li>The World Bank serves as the Trustee and Administrating Unit of the PPCR. The World Bank Group, the African Development Bank, the Asian Development Bank, the European Development Bank, and the Inter-American Development Bank are the implementing agencies for PPCR investments.</li> <li>Climate Investment Fund Administrative Units, through MDBs, inform prospective countries and invite expression of interest.</li> <li>PPCR Sub-Committee identifies and agrees upon regional or country pilots informed by expert review.</li> </ul>

Fund	Target group	Volume	Further information and access to financing
			<ul> <li>Country-led, joint MDB missions engage with the government, appropriate UN offices in the country, private sector, national civil society and other stakeholders on how the pilot programme may enhance the climate resilience of national development plans, strategies and financing.</li> <li>Recipient countries and relevant MDBs jointly prepare proposals for PPCR funding.</li> <li>PPCR Sub-Committee approves allocation of resources for programmes and other activities and costs based on the proposals submitted (PPCR).</li> </ul>
Adaptation for Smallholder Agriculture Programme (ASAP)	Grants for local smallholder farmers in countries affected by climate vulnerability (NDC Partnership, 2018).	ASAP has received USD 300 million in contributions (IFAD).	<ul> <li>ASAP is a dedicated financing window that receives climate finance from multiple donors and blends this with core resources of the International Fund for Agricultural Development (IFAD).</li> <li>It is suited for activities that focus on policy engagement, climate risk assessment, women's empowerment, private-sector engagement, climate services, natural resource management and governance, and knowledge management (IFAD).</li> <li>ASAP funds co-finance projects using selection criteria and applying a results framework, which contains 10 specific and measurable indicators of achievement (NDC Partnership, 2018).</li> <li>An important element of ASAP will be a knowledge management programme that will develop and share climate adaptation lessons and tools across IFAD's programmes and with key external partners (NDC Partnership, 2018).</li> <li>Access to financing:         <ul> <li>The fund is administered by IFAD.</li> <li>Project concept: Projects concepts are created as part of the Results-Based Country Strategic Opportunities Paper or through consultation between IFAD, governments and national stakeholders. They are reviewed by an Operational Strategy and Policy Guidance Committee (OSC).</li> <li>Detailed project design and quality enhancement: A Project Design Report (PDR) is</li> </ul> </li> </ul>
			<ul> <li>Guidance Committee (OSC).</li> <li>Detailed project design and quality enhancement: A Project Design Report (PDR) is created and improved through a Quality enhancement (QE) process, which involves</li> </ul>

Fund	Target group	Volume	Further information and access to financing
			<ul> <li>field missions and interactions with local partners and stakeholders. The QE process involves a final review by a QE panel.</li> <li>Executive Board review: Every ASAP investment design is subject to review and clearance by the IFAD Executive Board, which meets 3 times per year.</li> <li>Negotiation and approval: After the IFAD Executive Board has approved the financing, negotiations conclude between IFAD and the other parties involved in the project financing and a financing agreement is signed.</li> <li>Implementation: Once the specific conditions above set by IFAD are met, the grant is declared effective and implementation begins (ASAP).</li> </ul>

## 5.2 Bilateral public climate funds

Developed countries can provide resources to finance adaptation actions in developing countries through a multitude of channels – inter alia through bilateral climate funds. Two of the largest and most important ones are explained in more depth below.

Fund	Target Group	Volume	Additional Information
German International Climate Initiative (IKI)	IKI finances climate and biodiversity projects in developing and newly industrialising countries, as well as in countries in transition (IKI). It supports programmes carried out in partner countries by federal implementing agencies, NGOs, business enterprises,	Total project volume since 2008 amounts to 2.3 billion euro (IKI).	<ul> <li>IKI operates through Germany's Federal Ministry for Environment, Nature         Conservation and Nuclear Safety (BMU), implementing projects and programmes         across four funding areas: climate change mitigation; climate adaptation;         conservation of natural carbon sinks with a focus on reducing emissions from         deforestation and forest degradation (REED+); and conservation of biological         diversity (IKI).</li> <li>Unlike the multilateral funds, each application for funding is considered on a case-         by-case basis: BMU selects programmes for IKI funding on the basis of ideas         competitions that are announced regularly. Country specific as well as thematic         selection processes are launched (IKI).</li> <li>IKI's standard indicators are: Reduction indicator, Adaptation indicator, Ecosystem         indicator, Policy indicator, Institution indicator, Methods indicator (IKI)</li> </ul>

Fund	Target Group	Volume	Additional Information
	universities and research institutes, and by international and multinational organisations and institutions, e.g. development banks and United Nations bodies and programmes (IKI, 2018).		More information guidelines for international applicants for IKI grants: More information on IKI Programme Office trainings on implementing a project with IKI funding for international and national grant recipients: <a href="https://www.international-climate-initiative.com/en/project-funding/trainings/">https://www.international-climate-initiative.com/en/project-funding/trainings/</a>
UK International Climate Finance (UK ICF)	International Climate Finance is a UK government commitment to support developing countries to respond to the challenges and opportunities of climate change. (UK ICF).	Budget of £5.8 billion of ICF between 2016 and 2021. (UK ICF).	<ul> <li>The UK ICF operates through three UK government ministries: the Department for Energy and Climate Change (DECC), the Department for International Development (DFID), and the Department for Environment, Food and Rural Affairs (DEFRA) (UK ICF).</li> <li>Programmes include adaptation to climate change, low carbon development, and energy access, and forest protection. Adaptation receives 50 per cent of resources, with low carbon development and forestry receiving 30 and 20 per cent respectively</li> <li>Access to financing:         <ul> <li>More information on the ICF project selection process can be found here: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment data/file/48409/5539-uk-international-climate-fund-cmci.pdf</li> </ul> </li> </ul>

## 5.3 Multilateral development banks (MDBs)

MDBs provide a mix of instruments including debt, equity, quasi-equity (or mezzanine finance), Islamic finance, local-currency loans, guarantees and political-risk insurance. Most MDBs limit their participation in projects, companies and investment vehicles in order to encourage the participation of local and international co-investors and funders. On average, MDBs tend to focus on comparatively large deal sizes. Large companies in a growth phase, infrastructure projects, investment funds, financial institutions, and projects in the energy, financial-services or manufacturing sectors are attractive targets due to their ability to absorb large amounts of financing and their potential to have a positive impact on growth and development. Small-scale private-sector activities are often ineligible for MDB support (GIZ, 2018a).

DFI	Target Group	Volume	Additional Information
The World Bank Group (WBG)	WBG provides non-concessional as well as concessional lending and grants to governments in middle income countries and low-income countries. The International Finance Cooperation (IFC), the private-sector arm of the WBG, invests in companies, mobilises capital for development and provides advisory services to companies, investors and governments (GIZ, 2018a).	Since 2018, a major new set of climate targets for the 2021-2025 investment over \$200 billion for climate action; Direct adaptation finance around \$50 billion over FY21-25 (WBG, 2018 and WBG, 2019).	<ul> <li>With the FY21-25, WBG will, for the first time, give adaptation equal emphasis alongside investments that reduce emissions.</li> <li>WBG intends to help countries shift from addressing adaptation as an incremental cost and isolated investment to systematically managing and incorporating climate risks and opportunities at every phase of policy planning, investment design, implementation and evaluation.</li> <li>WBG will develop a new rating system to track and to promote public and private sector investments in adaptation. Actions will include supporting higher-quality forecasts, early warning systems and climate information services. Furthermore, the expected investments will build more climate-responsive social protection systems in 40 countries, and finance climate smart agriculture investments in 20 countries (WBG, 2018 and WBG, 2019).</li> <li>Access to financing:         <ul> <li>More information on applying for financing from IFC can be found here: https://www.ifc.org/wps/wcm/connect/corp_ext_content/ifc_external_corporate_site/solutions/how-to-apply-for-financing</li> <li>More information on general financing services of the WBG can be found here: http://www.worldbank.org/en/projects-operations/products-and-services#IPF</li> </ul> </li> </ul>

DFI	Target Group	Volume	Additional Information
Asian Developmen t Bank (ADB)	Climate Finance to member countries through partial credit guarantees, technical assistance, equity investment, grants and loans	From 2011 to 2017 ADB approved over USD 25 billion in climate financing. ADB's own resources provided USD 21.7 billion while external resources contributed almost USD 3.5 billion (ADB, 2019).	<ul> <li>Tackling climate change and building climate, as well as disaster resilience and enhancing environmental sustainability is among the seven operational priorities set out in the bank's new strategy (ADB Press Release on Strategy 2030, 2018).</li> <li>ADB intends to scale up its support for climate change adaptation, ensuring that 75% of the number of its committed operations will be supporting climate change mitigation and adaptation by 2030. Climate finance from ADB's own resources will reach USD 80 billion cumulatively from 2019 to 2030 (ADB Strategy 2030, 2018).</li> <li>Access to financing:         <ul> <li>For an overview of ADB's resources and funds, see here: <a href="https://www.adb.org/site/funds/overview">https://www.adb.org/site/funds/overview</a></li> </ul> </li></ul>
African Developmen t Bank (AfDB)	The AfDB has a private-sector arm with the rest of the organisation providing developmental loans and grants to governments and state-owned entities (GIZ, 2018a).	Under the Climate Change Action Plan 2016-2020, the Bank has committed to allocate 40% of approvals per year as climate finance by 2020. In addition, the Bank will mobilise climate finance from external sources. The Bank will also scale up adaptation finance from 29% in 2015, to reach parity with mitigation finance; and will prioritise mobilisation of adaptation finance	<ul> <li>Further information:         <ul> <li>The Africa Climate Change Fund (ACCF), a multi-donor trust fund managed by the Bank, is supporting African countries to strengthen their capacities to access international climate funds and to pilot innovative small scale climate adaptation projects.</li> <li>The AfDB's Adaptation Benefit Mechanism (ABM) is an innovative financial instrument that has the potential to leverage private investment into adaptation. It is designed to channel grant funds to private sector investors, overcome barriers to return, and leverage public funds with private investment for adaptation (AfDB, 2018). The UN Capital development Fund (UNCDF) is working with the Bank to elaborate a pilot program in one or more African countries. The scope for ABM projects is very broad and project developers are free to propose new methodologies to the ABM Methodologies Panel (AfDB).</li> <li>The AfDB established the ClimDev-Africa Special Fund ("CDSF" or the "Fund") and administers its resources for demand-led interventions. The fund supports operations in the following three main areas: Generation and wide dissemination of reliable and high quality climate information in Africa; Capacity enhancement of policy makers and policy support institutions to integrate climate change</li> </ul> </li> </ul>

DFI	Target Group	Volume	Additional Information
		from the climate funds (AfDB, 2017)	<ul> <li>information into development programmes; and Implementation of pilot adaptation practices that demonstrate the value of mainstreaming climate information into development (AfDB, 2019).</li> <li>Access to financing:         <ul> <li>More information on AfDB's project cycle, including project preparation and loan</li> </ul> </li> </ul>
			negotiation, can be accessed here: <a href="https://www.afdb.org/en/projects-and-operations/project-cycle/project-preparation/">https://www.afdb.org/en/projects-and-operations/project-cycle/project-preparation/</a>
European Investment Bank (EIB)	The EIB counts with a private-sector arm, whereas the remaining funds go to governments and state owned entities in form of developmental loans and grants (GIZ, 2018a).	EIB is committing at least 25% of its investments to climate change mitigation and adaptation. In 2018, the EIB provided EUR 16.2 billion to climate-change related projects and activities (EIB, n.n.).	<ul> <li>The EIB's 2015 Climate Strategy is structured around three strategic action areas that serve as guiding orientations for the Bank's climate action: reinforcing the impact of EIB climate financing, increasing resilience to climate change, and further integrating climate change considerations across all of the Bank's standards, methods and processes.</li> <li>EIB is committed to best practice in adaptation, which includes risk screening to enhance resilience of its projects, and to strengthen its support to investments in specific adaptation activities. (GIZ, 2018a).</li> <li>Access to financing:         <ul> <li>EIB's funding services as well as further information on how to apply for the latter: <a href="https://www.eib.org/en/products/lending/loans/index.htm">https://www.eib.org/en/products/lending/loans/index.htm</a></li> </ul> </li> </ul>
European Bank for Reconstructi on and Developmen t (EBRD)	The EBRD's work on climate change reaches many sectors of the economy, including: solar and wind energy, green	In 2018, EBRD's green financing has reached 36 % of its total business volume (EBRD, 2019).	<ul> <li>The EBRD seeks to invest 40 % of its total business volume in the green sector by 2020, and mobilise significant amounts of private sector finance to complement the bank's own investments (EBRD, 2019).</li> </ul>

DFI	Target Group	Volume	Additional Information
Inter- American Developmen t Bank (IDB)	bonds, green cities and waste (see EBRD, 2019).  The IDB funds projects for climate risks and resilience (explicit or implicit benefits for climate change mitigation or adaptation) in Latin America and the Caribbean.	IDB has devoted a yearly average of 14 percent of its financing to climate-related projects between 2012 and 2014). IDB aims at doubling the volume of its climate-related financing by 2020 (IDB, 2015)	Access to financing:  A Guide to EBRD financing is available here:     https://www.ebrd.com/downloads/research/factsheets/guidetofinancing.pdf  Further information:  From 2004-2013, the portfolio has focused more on mitigation than on adaptation. The portion of the portfolio related to adaptation (19%) is found primarily in agriculture, sustainable transport, and disaster risk reduction. (IDB, 2014)  The IDB's Integrated Climate Change Mitigation and Adaptation Strategy from 2011, outlines five courses of action: develop instruments to mainstream climate change in IDB operations, strengthen the knowledge base for clients and staff, expand lending and technical assistance in key sectors, strengthen institutional frameworks, and scale up investments, addressing financing gaps and leveraging private sector investments.  IDB is also supporting institutional capacity building for countries in the region in several areas; e.g. in Panama, it contributed to the preparation of a Climate Change Action Plan at the national level (UNFCCC)  The IDB is an accredited partner of the GCF, forming a channel through which the Fund deploys resources for projects in Latin America and the Caribbean  In 2015, the IDB announced to increase the use of instruments to leverage private sector finance, including financing for adaptation and climate resilience, and to enhance its ability to develop and offer innovative financial products, such as green bonds (IDB, 2015)
			IDB's typical project cycle, including individual steps and according key tasks and documents, can be found here:

## 6 Glossary

Adaptation	In <i>human systems</i> , the process of adjustment to actual or expected climate and its effects, in order to moderate harm or exploit beneficial opportunities. In <i>natural systems</i> , the process of adjustment to actual climate and its effects; human intervention may facilitate adjustment to expected climate and its effects. (IPCC, 2018)
Adaptation Costs	Costs of planning, preparing for, facilitating, and implementing adaptation measures, including transaction costs.  (IPCC 2007)
Adaptation	Resources directed to activities aimed at reducing the vulnerability of human or
Finance	natural systems to the impacts of climate change and climate-related risks, by maintaining or increasing adaptive capacity and resilience.  (CPI 2017b)
Adaptation Finance Gap	The adaptation finance gap can then be defined and measured as the difference between the costs of, and thus the finance required, for meeting a given adaptation target and the amount of finance available to do so (UNEP, 2016).
(Climate) Risk	In the context of the assessment of climate impacts, the term risk is often used to refer to the potential for adverse consequences of a climate-related hazard, or of adaptation or mitigation responses to such a hazard, on lives, livelihoods, health and well-being, ecosystems and species, economic, social and cultural assets, services (including ecosystem services), and infrastructure. Risk results from the interaction of vulnerability (of the affected system), its exposure over time (to the hazard), as well as the (climate-related) hazard and the likelihood of its occurrence (IPCC, 2018).
Ecosystem Based Adaptation (EbA)	Ecosystem-based adaptation uses biodiversity and ecosystem services in an overall adaptation strategy. It includes the sustainable management, conservation and restoration of ecosystems to provide services that help people adapt to the adverse effects of climate change (CBD, 2009).
National Adaptation Plan (NAP)	The national adaptation plan (NAP) process was established under the Cancun Adaptation Framework (CAF). It enables Parties to formulate and implement national adaptation plans (NAPs) as a means of identifying medium- and long-term adaptation needs and developing and implementing strategies and programmes to address those needs. It is a continuous, progressive and iterative process which follows a country-driven, gender-sensitive, participatory and fully transparent approach (UNFCCC, n.n.).
(Intended) Nationally Determined Contribution (NDC)	Submissions by Parties which identify actions each national government intends to take under the future UNFCCC climate agreement, negotiated in Paris in December 2015. (I)NDCs are, in effect, the basis of post-2020 global emission reduction commitments that will be included in the future climate agreement (UNEP, 2017)
Private Sector	The private sector ranges from micro-enterprises to cooperatives to multinationals. It includes for-profit enterprises; companies or businesses regardless of size, ownership or structure; as well as private financial institutions, businesses trade associations and organisations that represent private sector interests. It also includes corporate philanthropic foundations (UNEP, 2018).

Resilience	The ability of a social or ecological system to absorb disturbances while retaining the same basic structure and ways of functioning, the capacity for selforganisation, and the capacity to adapt to stress and change (IPCC 2007).

## 7 References<sup>3</sup>

ACT (2017). Mainstreaming, accessing and institutionalising finance for climate change adaptation. See:

https://reliefweb.int/sites/reliefweb.int/files/resources/OPM\_ACT\_LP\_finance\_for\_climate\_change\_adaptation\_FFRG.pdf

adelphi (n.n.). Climate Finance Readiness Training- CliFiT. See: https://clifit.org/

adelphi (forthcoming). The Roles of the Private Sector in Climate Change Adaptation – an Introduction. adelphi (forthcoming). Steering International Adaptation Finance towards the Local Level.

AfDB et al. (2018). 2017 Joint Report on Multilateral Development Bank's Climate Finance. See: <a href="https://www.miga.org/sites/default/files/2019-02/2017-joint-report-on-mdbs-climate-finance.pdf">https://www.miga.org/sites/default/files/2019-02/2017-joint-report-on-mdbs-climate-finance.pdf</a>

CBD (2009). Connecting Biodiversity and Climate Change Mitigation and Adaptation. See: <a href="https://www.cbd.int/doc/publications/ahteg-brochure-en.pdf">https://www.cbd.int/doc/publications/ahteg-brochure-en.pdf</a>

CDKN and Acclimatise (2017). Green Climate Fund Proposal Toolkit 2017: Toolkit to develop a project proposal for the GCF. See: <a href="https://cdkn.org/wp-content/uploads/2017/06/GCF-project-development-manual.pdf">https://cdkn.org/wp-content/uploads/2017/06/GCF-project-development-manual.pdf</a>

Center for International Climate Research (CICERO) (2017). Mobilizing Adaptation Finance in Developing Countries. See: <a href="https://pub.cicero.oslo.no/cicero-xmlui/bitstream/handle/11250/2435614/Torvanger%202017%2002%20web.pdf?sequence=1&isAllowed=y">https://pub.cicero.oslo.no/cicero-xmlui/bitstream/handle/11250/2435614/Torvanger%202017%2002%20web.pdf?sequence=1&isAllowed=y</a>

CPI (2017a). Global Landscape of Climate Finance 2017. See: <a href="https://climatepolicyinitiative.org/wp-content/uploads/2017/10/2017-Global-Landscape-of-Climate-Finance.pdf">https://climatepolicyinitiative.org/wp-content/uploads/2017/10/2017-Global-Landscape-of-Climate-Finance.pdf</a>

CPI (2017b). Global Landscape of Climate Finance 2017: Methodology. See: <a href="https://climatepolicyinitiative.org/wp-content/uploads/2017/10/GLCF-2017-Methodology-Document.pdf">https://climatepolicyinitiative.org/wp-content/uploads/2017/10/GLCF-2017-Methodology-Document.pdf</a>

CPI (2018a). Understanding and Increasing Finance for Climate Adaptation in Developing Countries. See: <a href="https://climatepolicyinitiative.org/wp-content/uploads/2018/12/Understanding-and-Increasing-Finance-for-Climate-Adaptation-in-Developing-Countries-1.pdf">https://climatepolicyinitiative.org/wp-content/uploads/2018/12/Understanding-and-Increasing-Finance-for-Climate-Adaptation-in-Developing-Countries-1.pdf</a>

CPI (2018b). Global Climate Finance: An Updated View 2018. See: <a href="https://climatepolicyinitiative.org/wp-content/uploads/2018/11/Global-Climate-Finance-An-Updated-View-2018.pdf">https://climatepolicyinitiative.org/wp-content/uploads/2018/11/Global-Climate-Finance-An-Updated-View-2018.pdf</a>

EBRD and Global Centre for Excellence on Climate Adaptation (2018). Advancing TCFD Guidance on Physical Climate Risks and Opportunities. Available at: <a href="http://427mt.com/wp-content/uploads/2018/05/EBRD-GCECA\_final\_report.pdf">http://427mt.com/wp-content/uploads/2018/05/EBRD-GCECA\_final\_report.pdf</a>

Edenhofer, O., Schmidt, C. (2018). Eckpunkte einer CO<sub>2</sub>-Preisreform Gemeinsamer Vorschlag von Ottmar Edenhofer (PIK/MCC) und Christoph M. Schmidt (RWI). See: <a href="http://www.rwi-essen.de/media/content/pages/publikationen/rwi-positionen/pos">http://www.rwi-essen.de/media/content/pages/publikationen/rwi-positionen/pos</a> 072 eckpunkte einer co2-preisreform.pdf

Frei-Oldenburg, A., Stieglitz, S. v., Stahr C., Eisinger F. (2018). Climate Expert: a bottom-up approach to SME resilience to climate change. In: Schaer and Kuruppu (Eds.). Private-sector action in

36

<sup>&</sup>lt;sup>3</sup> Please note that sources mentioned in Chapter 5 of this briefing are not included in this reference list.

adaptation: Perspectives on the role of micro, small and medium size enterprises. UNEP DTU Partnership. See: <a href="http://orbit.dtu.dk/ws/files/162053774/MSME">http://orbit.dtu.dk/ws/files/162053774/MSME</a> Adaptation updated WEB.pdf

GIZ (2017). The Climate Finance Readiness Programme. <u>Available at:</u> https://www.giz.de/de/downloads/giz2017-en-cfready-support-so-far.pdf

GIZ (2018). The GIZ Finance Guide. Navigating the world of finance. See: <a href="http://cdia.asia/wpcontent/uploads/2018/08/Finance-Guide.pdf">http://cdia.asia/wpcontent/uploads/2018/08/Finance-Guide.pdf</a>

GIZ (2018b). Finance options and instruments for Ecosystem-based Adaptation. Overview and compilation of ten examples. See: <a href="https://www.adaptationcommunity.net/wp-content/uploads/2018/06/giz2018-en-eba-finance-guidebook-low-res.pdf">https://www.adaptationcommunity.net/wp-content/uploads/2018/06/giz2018-en-eba-finance-guidebook-low-res.pdf</a>

IFC (2013). Enabling Environment for Private Sector Adaptation. An Index Assessment Framework. See: <a href="https://openknowledge.worldbank.org/bitstream/handle/10986/26121/112808-WP-Enabling-Environment-for-Private-Sector-Adaptation-PUBLIC.pdf?sequence=1&isAllowed=y">https://openknowledge.worldbank.org/bitstream/handle/10986/26121/112808-WP-Enabling-Environment-for-Private-Sector-Adaptation-PUBLIC.pdf?sequence=1&isAllowed=y</a>

IISD (2019). Defining Adaptation – and Distinguishing It From Other Development Investments. Available at: <a href="https://www.adaptationcommunity.net/wp-content/uploads/2019/05/IISD\_Defining-Adaptation\_05.2019.pdf">https://www.adaptationcommunity.net/wp-content/uploads/2019/05/IISD\_Defining-Adaptation\_05.2019.pdf</a>

IISD and GIZ (2017). Financing National Adaptation Plan (NAP) Processes: Contributing to the achievement of nationally determined contribution (NDC) adaptation goals. See: <a href="http://napglobalnetwork.org/wp-content/uploads/2017/08/napgn-en-2017-financing-nap-processes.pdf">http://napglobalnetwork.org/wp-content/uploads/2017/08/napgn-en-2017-financing-nap-processes.pdf</a>

IPCC (2007). AR4 Climate Change 2007: Impacts, Adaptation, and Vulnerability. Appendix I: Glossary. See: <a href="https://www.ipcc.ch/site/assets/uploads/2018/02/ar4-wg2-app-1.pdf">https://www.ipcc.ch/site/assets/uploads/2018/02/ar4-wg2-app-1.pdf</a>

IPCC (2018). Special Report: Global Warming of 1.5 °C. See:

https://www.ipcc.ch/site/assets/uploads/sites/2/2019/02/SR15 AnnexI Glossary.pdf

MDB-IDFC (2018). Lessons Learned from Three Years of Implementing the MDB-IDFC Common Principles for Climate Change Adaptation Finance Tracking.

NDC Support Cluster (2018). Insights on Mobilising Private Finance for NDC Implementation - from Challenges to Innovations. See: https://www.ndc-

cluster.net/system/files?file=document/180918 Insights NDC Cluster Workshop Finance final 0.p df

NDC Partnership (n.n.). Climate Finance Explorer. See: <a href="http://ndcpartnership.org/climate-finance-explorer">http://ndcpartnership.org/climate-finance-explorer</a>

NDC Partnership (n.n.). Navigating International Climate Finance. See:

http://ndcpartnership.org/about-ndc-funding-and-initiatives-navigator

ODI (2017). Climate Finance Thematic Briefing: Adaptation Finance. See:

https://www.odi.org/sites/odi.org.uk/files/resource-documents/12073.pdf

SEED (n.n.). SEED Practitioner Labs Climate Finance. See: <a href="https://seed.uno/programmes/ecosystem-building/practitioner-labs-climate-finance">https://seed.uno/programmes/ecosystem-building/practitioner-labs-climate-finance</a>

Stern, N. (2009). A Blueprint for a Safer Planet: How We Can Save the World and Create Prosperity.

Sida (2017). Supporting Access to Finance for Climate Action. See:

https://www.sida.se/contentassets/1df42ce0c6924fedb2b11325fd255ff2/supporting access to finance for climate action webb.pdf

TCFD (2017). Recommendations of the Task Force on Climate-related Financial Disclosures. See: <a href="https://www.fsb-tcfd.org/wp-content/uploads/2017/06/FINAL-2017-TCFD-Report-11052018.pdf">https://www.fsb-tcfd.org/wp-content/uploads/2017/06/FINAL-2017-TCFD-Report-11052018.pdf</a>

Tool for Assessing Adaptation in NDCs (n.n.). Available at:

https://www.adaptationcommunity.net/nap-ndc/tool-assessing-adaptation-ndcs-taan/taan/

UNDP (2015). <u>A Methodological Guidebook: Climate Public Expenditure and Institutional Review (CPEIR)</u>. See: <a href="http://www.asia-">http://www.asia-</a>

pacific.undp.org/content/rbap/en/home/library/democratic\_governance/cpeir-methodological-guidebook.html

UNDP (2016). Making the case for policy change and financing for Ecosystem-based Adaptation. See: https://www.adaptation-

undp.org/sites/default/files/downloads/undp mt eba learning brief 4 web vs 12.01.16.pdf

UNEP (2016). The Adaptation Finance Gap Report. See:

https://orbit.dtu.dk/ws/files/177810752/50313 UNEP GAP report 2016 v5 SB.pdf

UNEP (2017). The Emissions Gap Report 2017 A UN Environment Synthesis Report. See:

https://wedocs.unep.org/bitstream/handle/20.500.11822/22070/EGR 2017.pdf?sequence=1&isAllowed=y

UNEP FI et al. (2016). Demystifying Adaptation Finance for the Private Sector. See:

https://www.unepfi.org/wordpress/wp-content/uploads/2016/11/DEMYSITIFYING-ADAPTATION-FINANCE-FOR-THE-PRIVATE-SECTOR-AW-FULL-REPORT.pdf

UNEP Finance Initiative and Acclimatise (2018). Navigating a New Climate - Assessing credit risk and opportunity in a changing climate: Outputs of a working group of 16 banks piloting the TCFD Recommendations. See: https://www.unepfi.org/wordpress/wp-content/uploads/2018/07/NAVIGATING-A-NEW-CLIMATE.pdf

UNEP (2018). Report by the Secretariat on UN Environment Programme's Private Sector Engagement. See:

 $\frac{\text{https://wedocs.unep.org/bitstream/handle/20.500.11822/25384/Report\%20to\%20the\%20CPR\%20on\%20Private\%20Sector\%20Engagement\%20Revision\%2004.05.pdf?sequence=42\&isAllowed=y$ 

UNFCCC (2018). <u>UNFCCC Standing Committee on Finance 2018 Biennial Assessment and Overview of</u> Climate Finance Flows. See:

https://unfccc.int/sites/default/files/resource/2018%20BA%20Technical%20Report%20Final.pdf

UNFCCC (n.n.). National Adaptation Plans. See: <a href="https://unfccc.int/topics/adaptation-and-resilience/workstreams/national-adaptation-plans">https://unfccc.int/topics/adaptation-and-resilience/workstreams/national-adaptation-plans</a>

United Nations (2015). Paris Agreement. Available at:

https://unfccc.int/sites/default/files/english paris agreement.pdf

WeADAPT (2017). Quick Guide to Climate Change Adaptation Funds. See:

 $\underline{https://www.weadapt.org/knowledge-base/climate-finance/quick-guide-to-climate-change-adaptation-funds}\\$ 

World Bank Group (2019). Action Plan on Climate Change Adaptation and Resilience. See: <a href="http://documents.worldbank.org/curated/en/519821547481031999/The-World-Bank-Groups-Action-Plan-on-Climate-Change-Adaptation-and-Resilience-Managing-Risks-for-a-More-Resilient-Future.pdf">http://documents.worldbank.org/curated/en/519821547481031999/The-World-Bank-Groups-Action-Plan-on-Climate-Change-Adaptation-and-Resilience-Managing-Risks-for-a-More-Resilient-Future.pdf</a>

WRI (2016). <u>Direct Access To Climate Finance: Lessons Learned By National Institutions. See:</u> <u>https://wriorg.s3.amazonaws.com/s3fs-</u>

## public/22DIRECT\_ACCESS\_TO\_CLIMATE\_FINANCE\_LESSONS\_LEARNED\_BY\_NATIONAL\_INSTITUTIONS\_.pdf?\_ga=2.126555597.1739686904.1557308992-32453281.1546619114

WRI (2017). Future of the Funds: Exploring the Architecture of Multilateral Climate Finance. See: <a href="https://wriorg.s3.amazonaws.com/s3fs-public/The Future of the Funds 0.pdf">https://wriorg.s3.amazonaws.com/s3fs-public/The Future of the Funds 0.pdf</a>? ga=2.126579533.1739686904.1557308992-

32453281.1546619114

## **Imprint**

**Disclaimer:** This document has been prepared in the framework of the NDC Support Cluster of the International Climate Initiative (IKI) funded by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU). It represents the authors' personal opinions and does not necessarily reflect the positions of all implementing partners of the NDC Cluster.

## **Published by**

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Registered offices Bonn and Eschborn, Germany

Dag-Hammarskjöld-Weg 1-5 65760 Eschborn

T +49 61 96 79-0

F +49 61 96 79-11 15

E info@giz.de

I www.giz.de

Berlin, 2019

#### **Authors**

Helen Burmeister, Annica Cochu, Tobias Hausotter, and Cosima Stahr (adelphi)

GIZ is responsible for the content of this publication.

Supported by:



based on a decision of the German Bundestag