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# Methodology for Landscape of Climate Finance in Africa

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# 1. DEFINITIONS AND SCOPE

The *Landscape of Climate Finance in Africa 2022* (*Africa Landscape*) captures available data on primary financing supporting climate resilience activities and greenhouse gas emissions reductions in Africa for the period of 2019 and 2020.

This document outlines the methodology as used in the 2022 *Africa Landscape* report, in terms of definitions, principles, accounting scope, data assumptions, and data limitations. This study is based on publicly available data and proprietary data sources, and it is based on the best effort to ensure the analysis is representative of the state of climate finance in the continent. It is not to be taken as a replacement or substitute for conducting more comprehensive national climate finance tracking exercises (for example, [South Africa](#), [Kenya](#), [Cote d'Ivoire](#), [India](#).) that help address data gaps (see Section 3 for more information).

The *Africa Landscape* closely follows the [methodology](#) developed by Climate Policy Initiative (CPI) to build the the [Global Landscape of Climate Finance series](#) (*Global Landscape*). The *Africa Landscape* mainly uses consolidated data from the 2021 *Global Landscape* report (Buchner et al., 2021) complemented by additional data collection. It aims to capture climate finance flows along their lifecycles, from the original source of financing, through financial intermediaries, their deployment in the form of financial instruments, and the recipients of finance, to how finance is ultimately used on the ground.

## 1.1 KEY TERMINOLOGY

**Climate finance:** Finance aimed at reducing emissions and enhancing sinks of greenhouse gases. It also aims to reduce the vulnerability of, and maintain and increase the resilience of, human and ecological systems to negative climate change impacts (see UNFCCC SCF, 2020).

**Commitments:** Refers to firm obligations on investment programs, closure of financing contracts, or similar actions backed by the necessary funds.

**Mitigation finance:** Finance directed to activities that a) contribute to reducing or avoiding GHG emissions, including gases regulated by the Montreal Protocol; or b) maintain or enhance GHG sinks and reservoirs.

**Adaptation finance:** Finance directed to activities that reduce the vulnerability of humans or natural systems to the impacts of climate change and climate-related risks, by maintaining or increasing adaptive capacity and resilience.

**Dual benefits finance:** Finance directed to activities contributing to both “climate change mitigation” and “climate change adaptation” and meeting the respective criteria for each category.

**Multilateral and regional Development Finance Institutions (DFIs):** Institutions that have multiple shareholder countries and direct finance flows internationally.

**Bilateral DFIs:** Institutions owned by a single country that direct finance flows internationally.

**National DFIs:** Institutions owned by a single country that direct finance to their own country.

**Government and their agencies:** These includes a) bilateral climate-related development finance reported to the OECD-DAC Creditor Reporting System (OECD, 2022b) to track Official Development Assistance (ODA) and Other Official Flows (OOF) in 2022,<sup>1</sup> and, b) domestic financing through public budgets carried out by central, state, or local governments and their agencies.

**Multilateral climate funds (MCFs).** We include commitments only from DFIs' own resources and exclude the following: external resources that DFIs manage on behalf of third parties; governments' contributions to DFIs or climate funds; bilateral climate funds' commitments; DFIs' contributions to projects reported in BNEF (2021a) to avoid double counting.

**State-owned enterprises (SOEs) and financial institutions (SOFIs).** Institutions where at least a majority of ownership is held by a government or government agency.

**Corporations:** Organizations that have commercial activities in sectors, including project developers.

**Households:** These refer to family-level economic entities which includes high-net-worth individuals and their intermediaries (e.g. family offices investing on their behalf).

**Commercial financial institutions,** Refer to providers of private debt capital (and occasionally other instruments), including commercial and investment banks.

**Institutional investors:** Includes insurance companies, asset management firms, pension funds, foundations, and endowments.

**Grants:** Transfers made in cash, services, or goods for which repayment is not required.

**Low-cost debt project-level debt:** Refers to loans extended at terms preferable to those prevailing in the market.

**Market-rate debt project-level debt:** Refers to loans extended at regular market conditions.

**Project-level equity:** Equity investment relying on the project's cash flow for repayment.

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<sup>1</sup> Our estimates capture the portion of bilateral climate-related development finance reported in the OECD's DAC Creditor Reporting System (CRS) qualifying as Official Development Assistance (ODA) or Other Official Flows (OOF) in 2022. The lower bound of our figures includes finance marked as having 'climate change mitigation' or 'adaptation' as its 'principal' objective. The upper bound includes activities with a 'significant' climate change objective. In the case of activities marked both as mitigation and adaptation, we attributed related financing as 'principal.'

**Balance sheet financing:** Direct debt or equity investment by a company or financial institution.

**Domestic and international flows:** Domestic flows pertain to climate finance that was raised and spent within the same country, while international flows pertain to climate finance flows that were raised in a specific country but spent in another.

## 1.2 SECTOR CLASSIFICATION

Whether a climate finance activity renders mitigation, adaptation, or dual benefits is usually self reported by institutions. For instance, finance qualifying as Official Development Assistance and tracked in the OECD's DAC Creditor Reporting System is marked as having mitigation or adaptation as its 'principal' objective or having a 'significant' climate change objective. MDBs, meanwhile, identify components of projects that can count either fully or partially towards adaptation finance, but each bank's individual processes determine which proportions to count as mitigation or as adaptation so that the actual financing will not be double-counted (MDBs). In case this information is not provided by the institutions, the following definitions mentioned in Section 1.2 were used to categorize

Sector	Sub-sector	Mitigation or adaptation solution
<b>Agriculture, Forestry, Other Land Uses and Fisheries</b>	Agriculture	Financial services for sustainable production, commercialization, storage, and processing
		Supply chain management (commercialization, primary processing & storage)
		Sustainable crops, agro-forestry, livestock production
	Biodiversity, land & marine conservation	NA
	Disaster-risk management	NA
	Fisheries	Supply chain management (commercialization, primary processing & storage)
		Sustainable fish production
	Forestry	Afforestation, reforestation, forest conservation, sustainable management of existing forest, including extraction of non-timber products
		Supply chain management (commercialization, primary processing & storage)
Policy & national budget support & capacity building	NA	
Unspecified / multiple	Financial services for sustainable production, commercialization, storage, and processing	
<b>Buildings &amp; Infrastructure</b>	Appliances & Lighting	NA
	Biodiversity, Land & Marine Conservation	NA
	Building & infrastructure construction work	Energy efficiency - new construction
		Energy efficiency - retrofit
		Resilient infrastructure and infrastructure for resilience
	Disaster-risk management	NA
	HVAC & water heaters	Solar thermal - water heaters & HVAC
Other/unspecified	NA	
Policy & national budget support & capacity building	NA	
<b>Energy Systems</b>	Biodiversity, land & marine conservation	NA
	Fuel production	Biofuel
		Clean cooking
Other/unspecified	RE off grid	

	Policy & national budget support & capacity building	Hydro power
	Power & heat generation	Biofuel/biomass
		Geothermal
		Hydro power <sup>2</sup>
		Hydro power - large
		Hydro power - small
		RE minigrid
		RE off grid
		RE off grid solar
		Renewable - unspecified
		Solar
		Solar - CSP
		Solar - PV
		Waste-to-energy
		Wind
	Wind - onshore	
Power & heat transmission & distribution	Mini grids	
	New power grid for RE	
	Power grid - retrofit	
	Resilient infrastructure and infrastructure for resilience	
<b>Industry</b>	Industrial, extraction, and manufacturing processes	Energy-use improvements & other GHG cuts
		Non-energy and fugitive GHG reduction
	Other/unspecified	NA
Policy & national budget support & capacity building	NA	
<b>Information and Communications Technology</b>	Other/unspecified	NA

<sup>2</sup> CPI does not include large hydro projects financed by 1) the public sector and that does not demonstrate mitigation potential, and 2) the private sector.

<b>Others &amp; Cross-Sectoral</b>	Biodiversity, land & marine conservation	NA
	Disaster-risk management	NA
	Other/unspecified	NA
	Policy & national budget support & capacity building	NA
	Health	NA
	Education/research/training	NA
	Resilience	NA
	Financial service & business	NA
	Urban	NA
	Social protection	NA
	Covid-19 response	NA
	Food assistance	NA
<b>Transport</b>	Aviation	NA
	Other/unspecified	NA
	Policy & national budget support & capacity building	NA
	Private road transport	BEV
		EV chargers
	Rail & public transport	NA
	Transport-oriented urban development and infrastructure	Energy efficient infrastructure
		Resilient infrastructure and infrastructure for resilience
Waterway	NA	
<b>Waste</b>	Other/unspecified	NA
	Policy & national budget Support & capacity building	NA
	Solid waste	Infrastructure & management (incl. recycling)
<b>Water &amp; Wastewater</b>	Other/unspecified	Sustainable crops, agro-forestry, livestock production
	Policy & national budget support & capacity building	NA
	Wastewater treatment	Infrastructure & management
	Water supply & sanitation	Basic water access





**Note:** The Africa Landscape do not capture investments that have a high risk of locking in significant future greenhouse gas emissions such as financing for efficiency retrofits of coal-fired power plants or transition fuels like natural gas.

## 1.3 COUNTRIES AND REGIONAL CLASSIFICATION

CPI followed the 'UN regional groups of Member States' to identify the list of African countries (UNFCCC, 2021) and classified the countries into sub regions - North Africa, Central Africa, East Africa, West Africa, and Southern Africa. Flows are classified as 'transregional' when resources are channeled to more than one region.

### Countries classification by region

Region	Country or territory
North Africa	Algeria, Egypt, Libya, Morocco, Tunisia
Central Africa	Angola, Cameroon, Central African Republic, Chad, Congo, Democratic Republic of Congo, Equatorial Guinea, Gabon, São Tomé and Príncipe
East Africa	Burundi, Comoros, Djibouti, Eritrea, Ethiopia, Kenya, Madagascar, Malawi, Mauritius, Mozambique, Rwanda, Seychelles, Somalia, South Sudan, Sudan, United Republic of Tanzania, Uganda, Zambia, Zimbabwe
West Africa	Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone, Togo
Southern Africa	Botswana, Eswatini, Lesotho, Namibia, South Africa

Some of the surveys to Development Finance Institutions (DFIs) returned aggregated values for Middle East and North Africa (MENA). For cases in which it was not possible to find more granular data for North Africa alone, MENA values were excluded from our analysis to take a conservative approach.

## 2. DATA SOURCES AND TREATMENT

### 2.1 KEY DATA SOURCES

Source	Data granularity	International/Domestic	Public/Private	Database Coverage
Bloomberg New Energy Finance (BNEF) Renewable Energy Projects (BNEF, 2021a)	Project-level	International and domestic	Public and Private	Grid connected renewable energy
BNEF Small-scale solar (BNEF, 2021b)	Aggregated	International and domestic	Private	Residential and commercial solar PV projects with capacity less than 1MW
BNEF Storage (BNEF, 2022)	Project-level	International and domestic	Public	Battery storage systems
Climate Bonds Initiative (CBI)	Project-level	Domestic	Public and Private	Proprietary data
Climate Funds Update (ODI & HBF, 2020)	Project-level	International	Public	Multilateral Climate Funds' commitments
Climate Policy Initiative Global Landscape of Climate Finance (Buchner et al., 2021)	Project-level and aggregated data (depending on reporting institution)	International and domestic	Public	Proprietary data which includes primary survey data from more than 40 DFIs (MDBs and IDFCs members) collected. In few cases (like IFC, AFD) when only aggregate information was available from surveys, it was supplemented by project level information available from DFIs' website
Domestic Public Expenditure (Biennial Update Reports, Climate Budget Tagging Report, Climate Public Expenditure and Institutional Review etc.)	Project-level and aggregated data	Domestic	Public	Nigeria, Rwanda, Mauritius, Lesotho, South Africa, Ghana, Eswatini
Energy Policy Tracker (2022)	Project-level	Domestic	Public	Information about COVID-19 government policy responses from a climate and energy perspective

Green Climate Fund and Global Environment Facility	Project-level	International	Public and Private	Individual project reports were screened to identify private and public finance mobilized by GCF and GEF transactions, apart from their own resources
Global Off-Grid Lighting Association (GOGLA, 2022)	Project-level and aggregated	International and domestic	Public and Private	Financing raised by solar off-grid companies
International Energy Agency (IEA) Solar Heating & Cooling Programme (IEA SHC, 2021)	Aggregated	Domestic		
IEA on EV Charging Stations	Aggregated	Domestic	Public and Private	Proprietary data
IJGlobal energy and infrastructure finance database (IJGlobal, 2021)	Project-level	International and domestic	Public and Private	Non energy projects like water, waste, municipal infrastructure, power T&D, and low-carbon transport
Organisation for Economic Co-Operation and Development (OECD) DAC Creditor Reporting System (CRS) (OECD, 2022a; 2022b)	Project-level	International	Public and Private	Overseas development assistance data from bilateral and multilateral donors
OECD private finance mobilized (OECD, 2022c)	Project-level	International	Private	Amounts mobilized from the private sector from bilateral providers and multilateral organizations
REN21 solar water heater data (REN21, 2015)	Aggregated	International and domestic	Public and Private	Aggregated solar water heater country and regional capital costs

Note: It is important to acknowledge that for reporting climate finance from these different sources we rely on the tracking methodologies and reporting followed by reporting institutions. While we make every effort to ensure the consistency of the data reported in the Africa Landscape, we do not audit or verify data providers' application of climate finance definitions.

## 2.2 DATA TREATMENT

Following an extensive data scoping exercise, datasets are intensively cleaned and processed. Where financing flows are detailed at the project level, data are checked manually for the consistency of information about actors, geographies, instruments, and sectors. Desk research complements the cleaning process where the datasets are incomplete. In certain instances in which complete investment information is unavailable, assumptions are made to fill gaps. These assumptions are in line with the principles outlined earlier in Section 1.

**Climate Bonds:** The *Africa Landscape* uses a dataset of green bond issuances from Climate Bond Initiative (CBI). The finance raised through green bond issuance is included in the Landscape mainly when climate projects are disclosed in post-issuance reporting. First, we screen issuance data for double counting with other data sources or data providers. From the remaining dataset, we check post-issuance documentation for project-level data. To be included in the *Africa Landscape*'s finance totals, information must be available on the value of investment, the date of financing, the (climate-related) nature of the project, the instrument used, and the recipient of finance. We assume that projects with completion dates after the date of issuance receive primary financing unless otherwise specified. Where this information is not available, flows are excluded to avoid capturing refinancing and other non-primary transactions.

**Development Financial Institutions:** CPI uses project-level data wherever possible. Extensive surveys completed by MDBs and IDFC members were returned to CPI during the 2021 *Global Landscape of Climate Finance* research process. Many of these same institutions are also present in the OECD-DAC Creditor Reporting System (OECD, 2022b) - which tracks Official Development Assistance (ODA) and Other Official Flows (OOF) - and reported in BNEF (2021a).

CPI prioritizes granular data reported directly from the development institutions themselves. When surveys are returned at an aggregated level of detail, OECD and BNEF project-level datasets are used instead, as long as the general aggregated data is similar to the survey numbers. In case project level information for some institutions (like the IFC, AFD, KfW) was not available from either surveys or OECD, where possible we screened individual transactions for climate relevance using the principles mentioned in Section 1.

Another alternative applied was to assume that the allocated proportion of total resources to each sector/country is the same proportion for climate finance. Through the surveys we usually only know what percentage of resources went to Sub-Saharan Africa (SSA) and Middle East & Northern Africa (MENA), and whether it was used for mitigation, adaptation, or for dual objectives. In this case, we proceed to use a sector/country split for the total investments of the DFI, which can usually be found on the institutions' website. While this assumption is a good proxy to expand the granularity of data, DFIs are encouraged to provide detailed project-level climate tagged information

**Electric vehicles charging infrastructure:** For the 2021 *Global Landscape*, the IEA provided the split between public and private directly to CPI. The same is used for the 2022 *Africa Landscape*. Data is not available for all African countries. But where country-level information is available, we use it while remaining investment is allocated to 'transregional flows.'

**GOGLA:** Since 2017, GOGLA's Deal Investment Database captures financial transactions of companies selling pico-solar products, solar home systems and off-grid solar appliances. In order to allocate transaction amount to countries, amounts

are split by country and implementing partner, as relevant, if implementation occurs in multiple locations. For instance, for Azuri technologies transactions, with limited country information, the amount will be split into Kenya, Nigeria, Tanzania, Zambia, and Uganda (their main markets). While we understand this may not be an ideal approach, but a fairly good proxy to allocate finance to countries than provide regional estimates.

**Large-scale renewable energy projects:** Direct primary financing data on large-scale renewable energy projects<sup>3</sup> from the Bloomberg New Energy Finance (BNEF) renewable energy and asset finance databases (BNEF, 2021a) is treated to identify its financing structure and the entities providing financing. Please see the 2021 *Global Landscape* [methodology](#) for more details (CPI, 2021).

**Private Finance Mobilized:** The 2021 *Global Landscape* (Buchner et al., 2021) database contains different sources of mobilized private data. The *Africa Landscape* team worked to expand the database to include more private climate finance. OECD statistics on the amounts mobilized by the private sector via official development finance interventions (OECD, 2022c) was included after factoring in private investments from other data sources. A country and sector level analysis was done to ensure only residual investment, not already in the existing database, is included to avoid double counting.

**Small-scale renewable energy investment** information was obtained from BNEF market size generation capacity and finance databases (BNEF, 2021b). This refers to mainly residential and commercial solar PV projects with capacity less than 1MW. Please see the 2021 *Global Landscape* [methodology](#) for more details (CPI, 2021).

**Solar water heating systems:** Households, corporates, and governments' investments in solar water heating systems are estimated based on cost data from IEA SHC (2018), country-level inflation rates from World Bank (2021), and capacity additions data from IEA SHC (2021). Please see the 2021 *Global Landscape* [methodology](#) for more details (CPI, 2021).

**AFOLU Investment by Commercial Banks and Fund Managers:** To better understand the characteristics and amount of private climate finance in Africa's AFOLU sector, additional analysis and interviews were conducted for two categories - fund managers portfolios and African commercial banks. Due to potential double counting issues, different timeframes, and lack of project-level data, these estimates are not included in the data analyzed but presented the findings in the AFOLU section. In addition, while *The Landscape* data reflects annual financial flows, the figures emerging from this analysis mirror the stock of financial assets at a point in time. The following methodologies were applied to estimate climate investments (stock) from **Agri-Fund Managers:**

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<sup>3</sup> We consider investments in wind, solar, biofuels, biomass & waste, geothermal, marine, and small hydro projects that reached financial closure in 2019 and 2020.

- **Sources:** The pool of fund managers analysed is based on the [Impactassets 50 \(IA 50\)](#)<sup>4</sup> database of impact investment fund managers from 2011 to 2022. A total of 43 asset/fund managers were screened to have: (1) a geographic focus on Africa; (2) a sectoral focus on AFOLU and (3) climate relevance. Research on each one of these fund managers further refined the list to 10 fund managers.
- **Definition:** A wide definition of climate relevance was adopted, given the limited information publicly available and in order to capture as many private financial assets as possible. Interventions were assumed to have climate relevance based on the typology and activities of agriculture climate finance from CPI's 2020 [Examining Climate Finance Gap](#) report. For instance, financial flows were determined either on the basis of (1) a general commitment of the asset manager to mainstream climate in their investments (example MCE Social Capital, Finance in Motion), (2) specific fund or series of funds that focus on sustainable agriculture, forestry or other land uses (Mirova's Natural Capital Funds) or (3) workstreams/ thematic portfolios crosscutting several specific funds without characterizing one entire fund, but which state a common climate-related objective. Global Partnerships has several initiatives that aim to improve climate resilience, including Smallholder Farmer Market Access, Smallholder Farmer Inputs w/TA; Improved inputs; TA that incorporates climate-resilient practices.
- **Estimation:** The estimation of amounts for each fund manager is based on the following formula:

**Total CF investments (both public and private)** = Total portfolio \* % of portfolio targeting Africa \* % portfolio targeting AFOLU \* % portfolio having climate/sustainability relevance

Total portfolio was sized based on figures reported by the fund managers as: portfolio, active portfolio, assets under management, assets under advisory/management, direct investments, total payments, outstanding portfolio. The range of privately funded finance is based on the assumption that 30-70% of the assets managed by these asset managers could originate from private sources. Only five of the asset managers analysed disclose a breakdown of their financial resources by type of investor/source of finance ranging from 23% (Finance in Motion) to 100% (Shared Interest, Oikocredit), with Root Capital having 91% of private capital and Acumen 78%.

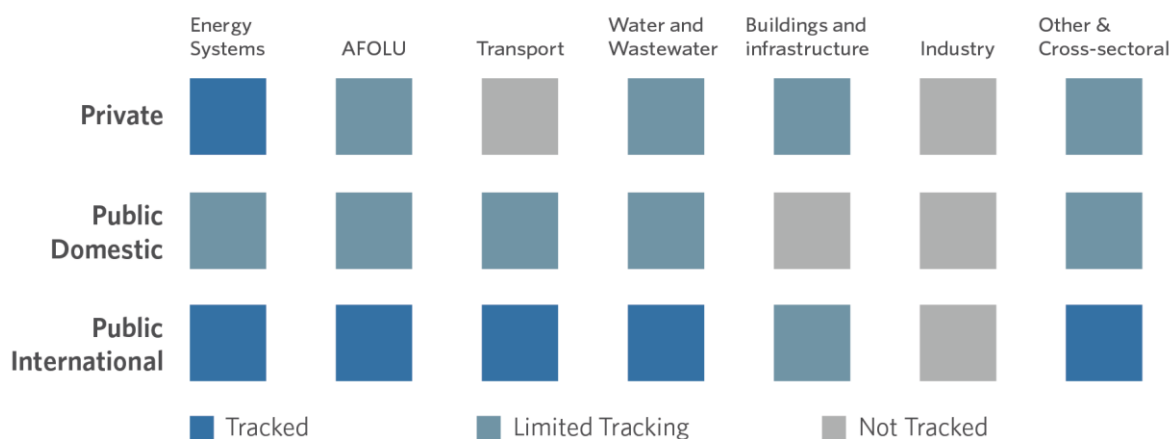
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<sup>4</sup> Accessible here: <https://impactassets.org/ia50/?filters=>

### 3. DATA LIMITATIONS AND GAPS

Figure 1 highlight some of the key gaps in the *Africa Landscape* data by actor type and sectors.

**Figure 1: Tracked and untracked climate finance by actors and sectors (annual average for 2019/2020, billion)**



**Challenges tracking climate-relevant budget expenditures:** Even though domestic budgetary allocations are a critical source of financing for climate projects, tracking of domestic climate expenditure is fraught with challenges. There is a clear lack of a widely accepted definition, methodology, and guidance for what counts as climate finance at national levels. There are also no unified nor standardized databases which integrate information in a systematic manner from various ministries, departments, and agencies at the national and sub-national level. Additionally, limited information on budget codes and expenditure is available in the public domain for research and analysis.

**Challenges of tracking and reporting private sector investments:** Measuring climate investments in water, agriculture, transport, and other sectors is limited by the lack of standardized methods widely accepted by private sector and lack of internal resources and capacity for tracking and reporting. For instance, private adaptation investments are difficult to track due to challenges associated with context dependency, the uncertain causality of investments made, a lack of impact metrics, and confidentiality and reporting requirements. Often, adaptation investments are part of a larger investment, requiring detailed project information in order to single out the adaptation component (CPI, 2019). Climate resilient activities are also often integrated into development interventions or business activities, and



therefore rarely stand alone. Some market incentives and regulatory pressures are emerging to be the driving forces behind private investors creating internal mandates and dedicating talent towards non-financial disclosures to manage transition and physical risk in countries like South Africa and Morocco where financial markets are more advanced (WWF, 2021). However, comprehensive and consistent information on private climate investments at country and regional level is unavailable.

**Challenges of tracking private finance mobilized:** While public financial institutions are making efforts to demonstrate the impact of the investments in mobilizing private finance, challenges persist. Definitional challenges arise when terms like 'mobilization,' 'leverage,' and 'catalyzing' are used interchangeably by organizations. The measurement of private investment 'mobilized' also depends on setting the organizational and transactional boundaries (e.g. decisions around determining whether transactions directly or indirectly linked should be counted, or whether all past or future transactions after project delivery should be counted, etc.) significantly affect the measurement of the private finance mobilized by individual investments.

**Chinese investments /South-South Flows:** Chinese Investments in Africa are estimated at USD 5 billion per annum between 2015 and 2020 (AEI, 2022) under the Belt and Road Initiative. This spreads across various sector like energy (34%), metals (43%), construction (10%), transport (7%), and others (6%). China is not a member of the OECD's Development Assistance Committee, and therefore there is limited or no official reporting of its development assistance data. Also, the breadth of Chinese investment actors (policy banks like China Exim Bank and China Development Bank, SOEs, government agencies, privately-owned Chinese companies) makes it difficult to a) track the Chinese investment and b) understand the climate relevance of these investments. More rigorous studies are needed to comprehensively understand the economic, social, and environmental impact of Chinese investment (Cooper, 2019).

**Lack of data on actual disbursements:** Data on disbursement is critical to understand the on-the-ground impact and progress of committed projects. However, it is difficult to gather information on actual disbursements of finance as large, committed amounts are often disbursed over several years. Consistent data on disbursements is often lacking across international public finance actors though some initiatives such are emerging such as the OECD- CRS which contains data on commitments and disbursements for development assistance projects. Data on actual disbursement is usually available through national budget and expenditure systems, but the lack of climate budget-tagging adds a layer of complexity when measuring and tracking climate-relevant disbursements. While the *Africa Landscape* tracks mostly commitments, some of CPI's country-specific Landscapes (to date, covering Brazil, China, Cote d'Ivoire, Germany, India, Indonesia, Kenya, and South

Africa) also capture disbursement data, as it is more readily available through national budget and expenditure systems.

**Gender-responsive climate finance is still emerging:** Incorporating a gender lens to public and private climate expenditure can help understand the extent to which climate change-related gender inequalities are addressed (UNDP, 2019). Many lessons can be drawn from the experience of gender budget tagging for accounting climate change expenditure as challenges of designing them are often overlapping. Rwanda has a history of gender-responsive budgeting, which goes back to 2008. While this also influences its climate-tagging process, a dual themed gender-responsive climate budget tagging framework for public expenditures in Africa is yet to emerge. Though reporting on gender-sensitive climate finance is an emerging activity among several public actors and institutions, data is scarce.

**Risk management instruments:** We acknowledge the importance of guarantees and insurance in enabling increased private climate flows, in particular to areas and sectors with low risk appetites for private investment. However, following the principle of conservatism, we exclude these instruments from the total climate finance figure because actual disbursements from these instruments are contingent upon uncertain future events. Guarantees are only exercised in particular circumstances, and there is a chance of there never being any financial outflow from the guarantor.

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