Co-funded by the European Union

SUPPORTING BUSINESSES TO DELIVER CLIMATE CHANGE ADAPTATION IN ACP COUNTRIES: PRIORITY ACTIONS AND THE ROLE OF INTERNATIONAL CAPITAL

CLIMATE SMART INVESTMENT SERIES

ICReport

August 2021

Implemented by

CONTENT

SUPPORTING BUSINESSES TO DELIVER CLIMATE CHANGE ADAPTATION IN ACP COUNTRIES: PRIORITY ACTIONS AND THE ROLE OF INTERNATIONAL CAPITAL

EXECUTIVE SUMMARY

Africa, Caribbean, and Pacific countries are some of most vulnerable to climate change. Given pressures on public resources, the need is urgent to stimulate business activity, and thus private capital, into areas highly disrupted by climate change —food production, water and the natural environment, infrastructure, and disaster risk management— to generate adaptation solutions. However, business engagement in these areas is often low, particularly in ACP countries, many of which have smaller economies, fewer players, and, in some cases, immature financial and capital markets. This paper highlights three priority actions that, if introduced, can help catalyse enterprise engagement to provide goods and services to build countries' resilience to climate change. The three actions and key elements examined in this paper are summarised in the table below.

	Action	Key elements
	1. Translate adaptation priorities into financing strategies	Engage stakeholders in adaptation planning
		Develop adaptation targets, pathways, and technologies
		Assess adaptation costs and financing required
		Identify and understand barriers to financing adaptation
	2. Develop a pipeline of high-quality, investment-ready adaptation projects	Share climate information and targeted outreach to companies
		Devise project preparation facilities to help develop the investment case
		Support incubators and accelerators to stimulate private sector engagement
	3. Offer tailored financial solutions for adaptation	Provide more risk-tolerant financial instruments
		Structure blended finance vehicles
		Use a portfolio approach (aggregation of deals)

This paper explores these key elements, highlighting in particular why they are critical to unlocking adaptation finance and how countries can put these changes into effect based on current best practices. Progress toward accomplishing these actions will need to be in tandem with efforts to strengthen the overall investment climate in ACP countries, which was examined in the first paper in this climate smart investment series (see McFarland 2021). The paper then considers how to redirect international flows of public and private finance toward these priorities, catalysing businesses to provide goods and services that build the resilience of ACP countries. The role of domestic financial and fiscal policy is further examined in the final paper in this series.

BOX 1:

Reports in this series

This paper series focuses on the need for ACP countries to mobilise private investment for climate change adaptation. It is a product of the Investment Climate Reform (ICR) Facility, which supports specific, targeted interventions at the economy-wide, sectorial, and value-chain level, with Technical Assistance for up to 90 days based on requests. The ICR Facility is co-funded by the European Union (EU) and the Organisation of African, Caribbean, and Pacific States (OACPS), under the 11th European Development Fund (EDF), together with the German Federal Ministry for Economic Cooperation and Development (BMZ) and the British Council. The ICR Facility is implemented by GIZ, the British Council, Expertise France, and SNV.

Paper one sets the scene by identifying why engaging the private sector is vital to delivering climate adaptation in the highly vulnerable ACP countries. It describes the potential business cases for private investment for adaptation and the barriers that prevent such investment from occurring at the moment. It finds that many of these barriers are related to investment climate reform and concludes that embedding adaptation in investment climate reform has the potential to stimulate private adaptation finance.

This paper two highlights three priority actions that, if introduced, can help catalyse ACP enterprises' engagement in providing goods and services that build a country's resilience to climate change. It further explores the role that international capital plays in addressing these priorities. It highlights the need for countries to translate national adaptation plans into clearer investment priorities and ultimately into potential investment cases. It recommends that development finance institutes provide more innovative blended financial products, recognising the need for early-stage support to prepare potential projects and blended financial vehicles that can better deal with the multiple risks of investing in climate adaptation projects in ACP countries.

Paper three illustrates the role of domestic financial and fiscal policy in directing and incentivising private finance toward adaptation and away from investments that could introduce greater climate change vulnerability. It concludes by considering the challenges of reexamining these incentives, including political economy; deep links between sectors; and socioeconomic objectives that support policy makers in understanding the next steps to take toward conducive domestic policy environments.

1. INTRODUCTION

The urgent need for significant scaling up of both public and private adaptation finance is clear. Tracking finance flows for climate change adaptation identified USD 30 billion a year, on average, in 2017–2018. In contrast, estimated financing needs remain in the hundreds of billions annually. United Nations Environment Programme (2021) refers to a financing need of USD 140–300 billion a year by 2030. This scale of adaptation finance cannot be met by public resources alone but will also rely on private resource mobilisation (Green Climate Fund 2020). Public finance, particularly international concessional flows through developmental finance institutes such as multilateral development banks, regional development banks, and multilateral climate funds, have a critical role to play in catalysing businesses to supply climate-resilient goods and services in the most vulnerable regions and countries.

Adapting to climate hazards has historically been considered the purview of the public sector. Yet, the private sector and its diversity of actors play multiple roles in building climate resilience. Enterprises can both consume or produce climate change adaptation activities. Consuming enterprises adopt new or existing technologies and solutions to adapt their business to manage climate risks and maintain business continuity and growth. Producing enterprises develop and distribute such adaptation technologies, products and information services, as such exploiting new business opportunities (World Bank 2017). Private actors also participate as investors and capital providers, supporting adaptation projects through providing debt and equity.

Countries of the Africa, Caribbean, and Pacific (ACP) regions are particularly vulnerable to climate change. The Global Climate Risk Index already shows them to be among the most impacted countries in the world with respect to increasingly frequent and intense climate change induced extreme weather events (Eckstein et al. 2020). Such events place an enormous pressure on public finances, resulting in revenue losses and higher expenditure needs, for example, that can set back economic growth and development prospects.

Many ACP countries also have limited capacity to respond to climate change. The Paris Agreement considers the least developed countries (LDCs) and small island developing states (SIDS) — capturing a number of ACP countries — to be particularly vulnerable to the adverse effects of climate change and having significant capacity constraints (UNFCCC 2015, Article 9.4). ACP countries have identified through their national adaptation plans (NAPs) and nationally determined contributions (NDCs), that the mobilisation of investment for adaptation is urgently needed in water and wastewater management; agriculture, forestry, and land use; disaster risk management; and coastal protection (Global Commission on Adaptation 2019).[1]

Mobilising private adaptation investment can be further complicated in ACP countries with relatively weaker investment climates. Compared to more developed economies, ACP countries' institutional, legal, regulatory, and policy frameworks are generally weaker and the local capital markets less developed. As such, it can be more difficult to do business. Private commercial finance will not flow freely to countries where the local investment climate is challenging, markets are not functioning well, and the risk-adjusted rate of return is uncompetitive (Attridge and Engen 2019). This implies that countries with the greatest need for adaptation finance also face some of the biggest challenges for mobilising private adaptation finance.

Scarce public and other concessional financial resources must be used transformatively to catalyse private sector engagement. The need is urgent to catalyse private sector expertise and innovation to provide new technologies and services for climate change adaptation. Yet, addressing the acute underinvestment in projects that build climate resilience requires overcoming a number of barriers for private actors.

Multiple reports highlight the particular challenges associated with engaging the private sector in adaptation (Climate Policy Initiative 2018; WWF 2018; Climate Investment Funds 2016). These reports demonstrate the need to increase not only the amounts of climate finance but also the quality of that finance to deliver high social and environmental impacts as well as financial returns. Three priority actions are identified in this paper to help overcome some of the major barriers businesses face in investing into and delivering high-quality climate adaptation projects in countries like those of the ACP (Sierra et al. 2013; E3G 2015).

1. **Translate adaptation priorities into financing strategies.** To finance adaptation needs, countries need a deep understanding of their adaptation targets, pathways, and necessary technologies. This understanding must be shared across stakeholders so that appropriate costings can be developed and financing can be sought that takes into account the specific national or even subnational barriers to adaptation finance or finance more broadly.

1 These sectors are highly aligned with those identified by the Global Commission on Adaptation (GCA) as sectors highly disrupted by climate change, namely food production, water and the natural environment, infrastructure, and disaster risk management.

2. **Develop a pipeline of high-quality, investment-ready adaptation projects.** With often higher risk-return profiles than conventional projects, support is needed to generate, disseminate, and use climate information; to fully develop and structure often novel adaptation projects; and to increase the supply of new technologies and financial instruments to deliver the adaptation transformation needed.

3. **Tailor financial solutions for adaptation.** More risk-tolerant financial instruments that blend public and private finance are needed to deal with the high risks of investing in climate-vulnerable ACP countries. Such instruments can allow risk-sharing, while a portfolio approach can aggregate adaptation solutions to unlock private adaptation finance.

This second paper in a series of three provides guidance on how to put these three priorities into operation. Section 2 identifies how adaptation priorities can be translated into investment strategies; Section 3 outlines various options for developing a pipeline of high-quality, investment-ready adaptation projects; and Section 4 explores options for diverse and tailored financial instruments to accelerate private finance for adaptation. The paper also notes how international finance can support ACP countries to deliver these priorities and thus catalyse the private sector to provide goods and services that enable these countries to build their resilience to climate change. Section 5 sets out an overall conclusion and call to action for governments, development banks, and private investors.

2. HOW TO TRANSLATE ADAPTATION PRIORITIES INTO FINANCING STRATEGIES

Adaptation to climate change is growing in priority and is now embedded in country policy and planning worldwide. The 2020 Adaptation Gap report indicates that almost three-quarters of 196 countries have adopted at least one national-level adaptation planning instrument (such as a plan, strategy, policy, or law, and others are in the process of developing one. It additionally finds most countries are now formulating a national adaptation plan, considered a key mechanism to strengthen adaptation focus (United Nations Environment Programme 2021). Indeed, over the last decade increasing numbers of UNFCCC channels enable countries to communicate their adaptation intentions, including national communications, national adaptation plans of action, and nationally determined contributions. The NAP is the newest process for identifying medium- and long-term adaptation needs as well as for developing and implementing strategies and programs to address those needs (UNFCCC 2021).

Many countries remain a step away from translating adaptation priorities into financing strategies. Adaptation planning has improved understanding of the nature of climate risks. The 2020 Adaptation Gap report, however, indicates that fewer than half of the 196 countries analysed met indicators of implementability in their adaptation planning. This means few had focused on the presence of a central administration body, identified direct investments, or established regulations and incentives. Only one-third of countries have set aside some financial resources to support their identified adaptation options, such as through direct funding and budgeting allocations, and even fewer have considered incentives, such as taxes and subsidies, to encourage adaptation action (United Nations Environment Programme 2021).

Adaptation financing strategies are starting to emerge. The NDC Partnership, in its assessment of country requests for support, found climate finance to be one of the most frequently requested areas of support. Within this, climate finance strategies and financial roadmaps were one of five identified categories of need (Morton and Bee 2020). While many such plans continue to be put forward under various names (e.g., investment strategies and investment plans), some with particular nuances or focuses (e.g., a broader green or sustainable finance, a narrower sectoral focus, or, combining broad and narrow elements, a mitigation and adaptation focus), the fundamentally important element is to provide a common, holistic framework for directing finance flows toward national adaptation priorities. **Box 2** illustrates how these strategies are emerging in Kenya and Mali.

Adaptation financing strategies will look very different between countries. At their core, adaptation financing strategies are long-term plans to direct finance flows toward national adaptation priorities. They can be established at different levels and locations within a country, however. For example, adaptation financing strategies must unpack the highly diverse needs and market contexts across the ACP countries. Emerging evidence in developing financing strategies toward climate and sustainability objectives (OECD 2021; UNEP and World Bank 2017; NAP Global Network 2017) shows that, to be successful, strategies needed include:

- **A strong process of stakeholder engagement in adaptation planning.** As with the development and implementation of effective adaptation plans, adaptation financing strategies will require the coordination of public and private actors across sectors and scales (from national to subnational), as well as with countries' broader economic growth and development objectives and SDG priorities. This is particularly true since adaptation to climate change will require very specific understanding of context and solutions, which local actors are often best placed to provide, and because climate change can undermine development and economic gains.

  The engagement of the diversity of the private sector, alongside public actors, in the development of a financing strategy — bringing in their expertise and potential for innovation — creates a shared vision among stakeholders and emphasises that adaptation to climate change is a national priority that governments, financial institutions, and companies alike must take seriously.

- **A deep understanding of adaptation targets, pathways and technologies.** Adaptation targets are complex to set, with significant uncertainties in direct and indirect effects, multicausal climate change vulnerability factors, and even limits to adaptation (IPCC 2018). Yet it is necessary to achieve greater clarity on the role that private actors can play in reaching adaptation targets, which is now not always clear (see McFarland 2021). Providing more available and accessible information on climate change and its associated risks can give greater clarity, but greater overlap is also needed in the language used and/or tools applied. For example, what is considered a "sector" will differ between climate stakeholders, in the real economy, and even across financial actors (e.g., disaster risk reduction).

BOX 2:

Emerging adaptation financing strategies in Kenya and Mali

Countries are working to better express their finance needs for addressing climate change. Many have done so through finance needs estimates or through project listings in their NDCs, NAPs, or other reporting processes through the UNFCCC; many are continuing to detail these plans as they relate to finance at the country level.

In 2020, Kenya published a Financing Strategy for its nationally determined contribution. Its objectives were to cost priority climate actions, to consider the funding available through government sources, and to evaluate funding gaps requiring private and international support. The strategy is guided by the 2016 National Policy on Climate Finance that creates legal, institutional, and reporting frameworks to access and manage climate finance, consistent with the institutional structures and framework set out in Kenya's Climate Change Act, 2016. It estimates a USD 40 billion financing gap between 2020 and 2030 to implement priority mitigation and adaptation actions. This includes actions across social protection and disaster risk management, agriculture and food security, water and irrigation, health and sanitation, and environment and solid waste management. Enhancing mobilisation of funding from public and private sources and accessing innovative financing mechanisms, the Financing Strategy includes recommendations to overcome barriers, including capacitating lead organisations, ensuring climate is integrated in budgeting and planning processes, and properly costing climate change, to be revised every five years.

In 2019, Mali generated a Climate Smart Agricultural Investment Plan. The sector is considered the foundation of Mali's economy, but food security is becoming threatened, with climate change already altering weather patterns and consequent weather variability impacting livelihoods, conflict, and migration. Climate-smart agriculture will contribute to both adaptation and mitigation, though Mali has made little historical contribution to climate change. The Investment Plan outlines 12 investments and actions to boost crop resilience and enhance yields to adapt to climate change and considers scenarios of climate change up to 2050 across major commodity groups. Four national-scale investments focus on remote sensing, extension, agro-climatic information systems, and soil fertility monitoring. Eight other investments focus more broadly: non-timber forest product value chains; flood recession agriculture; livestock; millet-sorghum interaction; vegetables; restoring degraded lands; rice intensification; and increased wheat productivity. While the Investment Plan stops short of publicly outlining costs of the programs it does consider financing opportunities and represents a first step toward a deep understanding of pathways and barriers.

Sources: World Bank Group 2019b; United Nations Environment Programme 2020.

Where adaptation pathways can be identified, appropriate communications can be developed to engage with private sector actors, including project developers and investors, for example. This not only speaks to appropriate use of language — they may be more likely to respond to a discussion of the materiality of climate risk rather than to the necessity of climate policy, for example — but the need for effective communication can also extend to specific campaigns to drive private sector engagement. These might involve cross-sectoral working groups or engagement with business associations, for example. The development of a national taxonomy of economic activities contributing to adaptation can also be useful in this regard. "Green taxonomies" have emerged, most recently in the EU, but also in Bangladesh, China, and Mongolia. Such taxonomies identify the activities or investments that deliver on environmental objectives, including climate change. As such, they guide banks and other financial institutions originating or structuring green banking products and investors identifying sustainable investment opportunities (World Bank 2020).

A strong understanding of adaptation targets and pathways serves to reduce uncertainties, identify and manage the perceived and real risks of private sector engagement in adaptation, and formulate public policy to support private adaptation finance flows.

- **Grounding in an assessment of adaptation costs and financing required.** Approaches to adaptation, like other policy approaches, are likely to be considered based on their costs and benefits. Chapagain et al. (2020), in an analysis of adaptation cost estimates in NDCs and NAPs, indicate that methodologies are unclear or variable. This aligns with broader findings on climate financing needs (UNFCCC 2018) and illustrates the challenging task of estimating costs of adaptation.

Financial needs become much clearer in instances where costs can be estimated. The process of costing develops an understanding of the roles of differing sources of finance — domestic, international, public, and private — and how they may interact. The NDC Partnership highlights that countries are likely to require a combination of domestic budgetary allocation, private sector finance (both domestic and international), bilateral and multilateral finance mechanisms, and development assistance to meet their climate commitments (Morton and Bee 2020). It also requires financing considerations, such as the need for short- or long-term financing, debt or equity finance, and whether revenue streams are attached to projects and programs. This will inform, in turn, the choice of financial instruments (see more in Section 4).

Grounding a financial strategy for adaptation in the required costs and financing provides an assessment of the gap between adaptation finance flows and adaptation financing needs, revealing the magnitude of the challenge.

- **Identification and understanding of barriers to financing adaptation. -** A number of barriers limit private actors' investment in climate change adaptation. These largely act to increase the risks or costs of an investment, hence reducing returns (and so commercial viability). (See, for example, World Bank 2017; NAP Global Network 2017.)

Adaptation finance also faces structural barriers, particularly in ACP countries. Underdeveloped capital markets, for example, can limit long-term funding opportunities or patterns of lending can restrict credit to certain parts of the economy (such as the agricultural sector or SMEs lacking appropriate collateral).

Where both general and climate-specific barriers are fully identified, solutions to reduce these barriers can be considered and designed. A number of countries, for example, have recognised the need to train investors and promote climate and sustainability considerations in financial institutions. Traditional investment climate reform can break down barriers linked to lack of property rights, access to market information, and/or better access to financial markets. The appropriate choice of financial instrument can work to overcome further barriers, however. (See Section 4.)

It is also necessary to ensure that any roadmaps are embedded and linked to other national priorities. These may be sectoral, or they may focus on non-traditional climate issues like social and financial inclusion (Volz et al. 2020). For example, adaptation financing strategies need to be cognisant of other financial processes and strategies. Agenda 2030 — a multilateral plan of action for sustainable development — identifies the need for integrated national financing frameworks (INFF), for example.[2]

2 See https://inff.org.

3. HOW TO DEVELOP A PIPELINE OF HIGH-QUALITY, INVESTMENT-READY ADAPTATION PROJECTS

A lack of bankable projects or a pipeline of projects is commonly mentioned by public and private investors as a constraint to making low-carbon, climate-resilient investments. Nassiry, Nakhooda, and Barnard (2016) point out that "bankability" depends on a number of factors, including the policy and regulatory environment, consultations with relevant stakeholders, the capacity of counterparts to engage with investors, the quality of project documentation, and issues such as creditworthiness and willingness to pay. Project preparation also involves a number of potentially complex stages — from upstream activities such as conceptualisation and identification through to downstream activities in financial structuring and transaction support. This is particularly true for adaptation projects, which often have higher risk-return profiles than conventional projects and so the need for longer development lead times. Financial institutions are also more reluctant to invest in adaptation and resilience solutions due to the lack of a track record of prior investments and caution in financing early-stage technologies (Climate Policy Institute 2018). Private investors thus cannot always approach climate adaptation as a "business-as-usual" investment opportunity.

The limited investable prospects for adaptation action are exacerbated by several additional factors common across ACP countries. LDCs often have smaller economies, fewer business players, and underdeveloped financial and capital markets (OECD and UNCDF 2020). Furthermore, commercial financiers often lack the risk appetite to design tailored investment solutions at large scale to overcome the traditional financing constraints of micro, small, and medium enterprises (MSMEs). MSMEs are particularly prevalent in ACP economies and tend to dominate the sectors most vulnerable to climate change, such as agriculture, water, and land use (World Bank 2017). MSMEs are sidelined from investment as a result of their relatively small size, leading to higher transaction costs, and by their risk profile, a result of a lack of financial records and information, weak governance, minimal accounting functions, and poor ability to show or provide collateral. They can have insufficient capacity to show investment readiness if they lack legal, technical, and financing expertise to produce high-quality, climate-relevant business and investment propositions and may have limited environmental and social management systems (OECD and UNCDF 2020).

Supporting prospect development has the potential to attract domestic and international private investment capital. Assigning resources to support institutions and enterprises, including MSMEs, to develop a robust pipeline of investible adaptation prospects can reduce the perceived and real risks to investment. As examined in Section 2, such a pipeline should align with the country's adaptation priorities and investment needs. Emerging best practice suggests three actions that can support project pipeline development (World Bank 2021; OECD and UNCDF 2020; Fioravanti, Lembo, and Deep 2019; Nassiry, Nakhooda, and Barnard 2016).

- **Share climate information and undertake targeted outreach.** Companies may not be fully responsive to the impacts of climate change due to a lack of information and/or understanding of their exposure and vulnerability to climate risk (World Bank 2019b; Singh, et al. 2018; World Meteorological Organization 2016; CARE 2014). Generating and sharing information on the impacts of climate change, now and into the future, across vulnerable sectors, actors, and businesses, can build this awareness and enhance companies' ability to factor climate information into their investment decision-making.

  Climate information can be generated, for example, through sharing downscaled climate projections[3] and/or by regularly monitoring and synthesising national and subnational risks and impacts in the short and longer term. Such data may be available from national meteorology centres or from open platforms, such as the World Bank Climate Change Knowledge Portal.[4] Further analysis may be needed, and multiple tools[5] have been designed that help assess the impacts and risks to vulnerable sectors (in particular agriculture and the water sector) and provide this information directly to households or businesses.[6] Businesses — acting as consumers or producers of climate adaptation[7] — can be targeted by outreach

3 Global climate models have generated projections of temperature, precipitation, and other important climate change parameters with spatial resolutions of 100 to 300 km. However, higher spatial resolution information is required to assess threats to regions. A variety of "downscaling" approaches have been used to produce high spatial resolution output (datasets) from the global climate models at scales useful for evaluating potential threats at critical regional and local scales.

4 *https://climateknowledgeportal.worldbank.org/*.

5 See, for example, *http://cridf.net/wp-content/uploads/2019/08/Knowledge_Product_Tool-2_Climate_Risk_and_Vulnerability_Assessment_Tool_Guidance_Document_v1.0.pdf* and various tools and services from Wageningen University, *https://edepot.wur.nl/471420*.

6 For more information visit *http://www.ccafs-climate.org/downscaling/*.

7 Businesses are consumers when, in order to manage their risks to climate change, they invest in adopting specific technologies, products, and services. Businesses can also be producers when they invest in developing, producing, and distributing the technologies, products, and services to other businesses (the consumers).

to increase their adaptation engagement through business associations, coalitions, or other relevant platforms, as well as through rating agencies and by an increasing number of environmental, social, and governance risk providers (Carter 2020).

Building the capacity of private actors to use climate information is central to their engagement with such information. For businesses, however, it is fundamental that climate information demonstrate that integrating climate risks into business planning can deliver higher financial and economic returns in the medium to long term. Under the CRAFT[8] program, climate projection modelling was carried out by the Climate Change Agriculture and Food Security program (CCFAS) to better understand how climate change will impact specific staple crops in Kenya, Tanzania, and Uganda. Higher resolution models based on thresholds for the selected value chains were produced. This information was then shared within workshops, bringing together companies and other key stakeholders to understand the impacts on their businesses. This allowed companies to better understand the impacts and to adjust their business models for greater resilience.

- **Support to structure investment cases through project preparation facilities.** Countries will have a variety of adaptation investment needs, from large infrastructure projects to smaller local transactions. Each investment will require different approaches, activities, and partners to prepare and structure. For each investment need, project preparation and financial structuring is a critical, potentially complex and costly phase that is considered often underresourced (Fioravanti, Lembo, and Deep 2019; Carter 2020).

  Public actors increasingly use project preparation facilities as a tool to support pipeline development of climate adaptation investment opportunities, particularly in developing and emerging economies. Project preparation can provide support across the many phases of project development (see **Table 1**, based on Nassiry, Nakhooda, and Barnard (2016), for the phases of project development). Project preparation will require a series of studies to ascertain the pro-

TABLE 1:
Phases of project development

Stage	Step	Activity
Early stage	Enabling environment	Designing enabling legislation; designing regulatory approaches; reforming project-relevant institutions' capacity-building and consensus-building
	Stakeholder consultations (throughout process)	
	Project conceptualisation and definition	Identifying desired outputs; comparing alternative projects and prioritisation; identifying project partners; preparing action plans, including implementation tasks and terms of reference; conducting feasibility studies; determining preliminary risk allocation; setting up and managing the advisory base; starting public procurement processes, if applicable
Mid stage	Project feasibility	Making administrative arrangements; performing financial modelling; formulating technical/engineering options analysis; undertaking environmental impact assessment, socioeconomic appraisal, and other specialist studies
Late stage	Project structuring	Assessing public/private financial options; designing legal entities; developing technical/engineering designs
	Bankability	
	Transaction support	Obtaining project financing; setting legal structures; financing engineering/technical designs; drafting procurement contracts; conducting bid processes; drafting contracts; negotiating financial and legal terms
	Financial closure	
	Post-implementation support	Monitoring outcomes; conducting impact evaluations; renegotiating or refinancing project

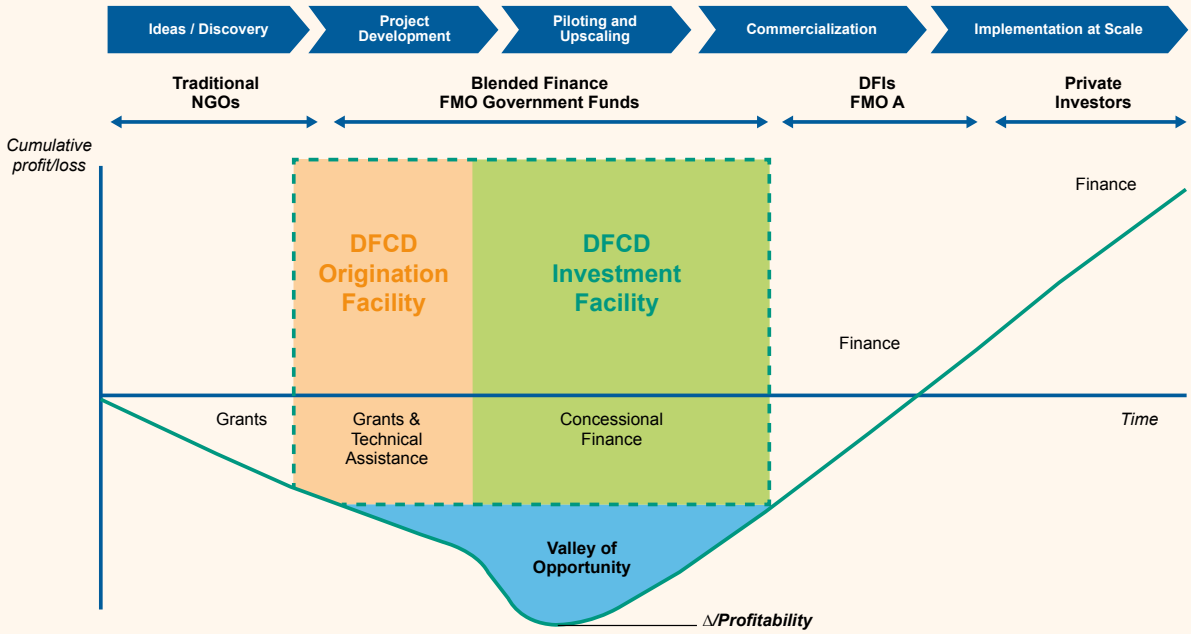
8 Climate Resilient Agriculture for Tomorrow (CRAFT) is a five-year program, valued at €39 million, implemented by SNV in partnership with Wageningen University and Research, CGIAR's Climate Change Agriculture and Food Security Programme, and Agriterra, in cooperation with Rabo Partnerships. The CRAFT program supports the large-scale adoption of climate smart practices by 50 agri businesses across Kenya, Tanzania, and Uganda, aiming to improve 300,000 farmers' productive capacity.

ject's commercial viability and investment structure, assess its need for permits, and promote better understanding of its climate, environmental, and social risks, as well as the responses needed.

Project preparation facilities have drawn criticism where they have relied too much on external expertise or have supported the interests of particular investors (Nassiry, Nakhooda, and Barnard 2016). Project preparation functions may, therefore, be best fulfilled by a competitively recruited private firm with no further interest in developing the projects. These facilities may also perform better if they are not embedded within government agencies or in groups involved in further developing the project itself (Arabe 2021). Given the large and urgent needs of ACP countries for adaptation, a learning function between project preparation facilities should be encouraged, especially those targeted toward MSMEs.

The Dutch Fund for Climate and Development (DFCD)[9] enables private sector investment into projects aimed at climate change adaptation and mitigation in developing countries. The DFCD is managed by a pioneering consortium of climate fund managers (CFM), the World Wide Fund for Nature–Netherlands (WWF-NL), and SNV Netherlands Development Organisation, and it is led by the Dutch Entrepreneurial Development Bank, FMO. The fund deploys public and private capital in pursuit of impactful climate adaptation investments. It includes an Origination Facility, managed by SNV and WWF, to identify and work with companies by providing grants and technical assistance to graduate highly impactful, climate resilient, business cases. The DFCF is also designed to link prospects with potential investors at the earliest stage and to provide life-cycle financing, starting from grants for identification and support to structuring the prospect through to investment and possibly re-financing (see **Figure 1** describing the project/finance life cycle and the roles of different agencies). Bringing in investors at an early stage allows them to assess and support potential prospect development as well as to identify early on the cases that clearly do not currently fit the investors' needs. The combination of local knowledge with SNV and WWF-NL, and the understanding of finance solutions from an international development bank, helps create and develop high-impact, climate resilient, bankable solutions.

FIGURE 1:
DCFD project preparation and structuring to build a pipeline of climate adaptation projects[10]



9 For more information on DFCD. See www.thedfcd.com.

10 This graphic is taken from a presentation by FMO on blended finance.

- **Stimulate supply through incubators, accelerators, and prizes.** Stimulus measures support testing of new investment vehicles before they can be adopted and scaled (Carter 2020). Accelerators support the growth of an existing company, while incubators support disruptive ideas, both with the aim of building out a business model and company. Prizes, too, can stimulate the private sector to innovate and find new solutions to the climate problems at hand.[11] These different facilities all help to spur climate innovation and growth on the supply side, thus supporting start-ups, early-stage companies — with grants, office space, and investor relations, for example — and opening up new entrepreneurial activities to help drive climate-smart solutions.

  The World Bank Climate Innovation Center[12] connects and builds the capacity of green business incubators and market intermediaries, helping high-growth, clean-tech, climate-resilient companies commercialise and scale innovative private sector solutions to climate change.

  2SCALE[13] is an example of a business support and incubator program for inclusive businesses in the agri-food sectors and industries. 2SCALE offers a range of support services to its business champions (SMEs and farmer groups) and partners, enabling them to produce, transform, and supply quality food products, working across nine countries in Sub-Saharan Africa. The program focuses on establishing agribusiness clusters built around business champions (entrepreneurial producer organizations or local SMEs) that trade or process farmers' produce. By providing support to these clusters, 2SCALE is developing products and markets for local consumers, preferably at the base of the pyramid. The program is helping businesses to adopt and supply climate-smart technologies from intensive rice cultivation systems, integrated pest management, and organic manure, among many innovations.

11 See, for example, *https://agresults.org/about*.

12 The World Bank Climate Innovation Center connects and builds the capacity of green business incubators and market intermediaries, helping high-growth, clean-tech companies commercialise and scale the most innovative private sector solutions to climate change.

13 For more information on 2SCALE, visit *https://www.2scale.org/en/resources*. This website includes lessons from phase 1 of the program. Phase 2 is implemented by IFDC, SNV, and BoP Innovation Center.

4. HOW TO TAILOR FINANCIAL SOLUTIONS FOR ADAPTATION

To stimulate investment, financial solutions must be more responsive to the risk profile of the adaptation projects in ACP countries. In addition to the growing climate risks, ACP countries can face considerable barriers to attracting domestic and international private commercial finance (McFarland 2021). The local investment climate can be so challenging that the risk-adjusted rate of return is uncompetitive. Investors must contend with a lack of liquidity, currency volatility, poor regulatory and policy frameworks, and limited capital markets (IFC 2011). Financial instruments that can be deployed to help reduce these risks include, for example, guarantees and insurance products, which increase companies' ability to access capital; subordinated capital, which protects senior investors by taking first losses; and results-based incentives and/or grants, which can be used to provide technical support for deal origination (Carter 2020).

The availability of concessional capital is key to deploying financial instruments to reduce risks and encourage adaptation investment. Concessional capital — capital available at below market rates — is primarily from public sources and can help to crowd in commercial or private capital by taking on the risks of projects, and so bringing risk-adjusted returns more in line with private investors' requirements (OECD and UNCDF 2020). International concessional public finance constitutes the majority of what is tracked as global climate finance for adaptation (Climate Policy Institute 2019). The flows of such capital are also what is most commonly seen as constituting the USD 100 billion developed countries have committed to mobilise annually for climate change mitigation and adaptation in developing countries by 2020.[14] The Green Climate Fund, as part of this climate finance architecture, provides increasing amounts of concessional climate finance and is now the largest multilateral climate change fund pooling contributor resources (Schalatek and Watson 2020). For providers of concessional capital, proving financial additionality will be key; in particular, concessional finance amounts must be as low as possible to avoid distorting sector developments and discouraging future investors.[15]

While there is a need to drastically scale up adaptation finance,[16] more tailored financial solutions for adaptation are also urgently needed. Emerging best practice (OECD and UNCDF 2020; Attridge and Engen 2019; E3G 2015) highlights some of the key developments and recommendations:

- **The use of more risk-tolerant financial instruments.** To mitigate the investment risks common in adaptation projects and in many ACP countries, financial instruments and transaction structures are needed that can deal with higher levels of risk than existing instruments can often manage. A particular need is for financial instruments that can mitigate early-stage project risks. For example, MSMEs are an important part of the adaptation solution and comprise a large part of the economy in ACP countries, but they lack collateral and face the risk of overleverage, severely limiting their ability to grow. A greater availability of early-stage equity financing, the creation of special-purpose vehicles that provide high-risk capital (such as early-stage finance and high-risk project tranches), risk-sharing facilities, and off- take agreements can aid to this end (Lee 2018). These financial instruments can potentially mitigate risks and attract investors to adaptation actions. Table 2 describes some of the more common risk-tolerant financial instruments. These instruments must be appropriate for the needs of the country, the investors, and ultimately the companies that require the capital.

Financial instruments have also been designed in direct response to growing climate risks and impacts. The use of such financial instruments and products is growing rapidly. These include:

Climate insurance. Climate insurance shares and spreads the financial consequences of physical climate risks. It provides protection by agreeing to compensate for a specified loss or damage in return for payment of a specified premium. There are various types of insurance; for example, with index (parametric) insurance, insurers pay out benefits based on the predetermined level of variation of a given measure (e.g., days without rain) against an index. There are multicountry climate risk pools, such as the African Risk Capacity (ARC) of the African Union and the Caribbean Catastrophic Risk Insurance Facility (CCRIF), that offer parametric insurance in the event of hurricanes, floods, and other weather-related events. Some developing initiatives seek to increase access to insurance by the poorest and

14 While the commitment to mobilise US$100 billion included both public and private sources of finance, what counts toward the total remains under debate. Highly concessional public finance flows are the most widely accepted climate finance flow (see Bodnar, Brown and Nakhooda 2015; Weikmans and Roberts 2019).

15 Taken from a presentation by FMO on concessional finance.

16 More than 30 world leaders expressed firm support for climate adaptation action at the online international Climate Adaptation Summit (CAS) 2021. Various concrete initiatives and enhanced ambitions were launched by governments, development banks, institutions, and cities to drastically expand climate adaptation worldwide.

TABLE 2:

Risk-tolerant financial instruments

Instrument	Description	Risk/barrier mitigated
Guarantee	Guarantees are provided by a third party that covers potential losses from the defaulting party so that the innocent party does not suffer losses. Providing guarantees to de-risk an investment improves its credit profile. For example, first-loss guarantees help to improve the credit profile of the financial intermediaries' underlying portfolios. The de-risked underlying portfolios can thus be expanded to underserved populations perceived to present higher risk. There are many types of guarantees, including first-loss, partial-risk, or credit guarantees.	Access to capital; credit/ counterparty risk; off-take risk; technical risk; demand risk
Junior/ subordinated capital	Junior/subordinated debt protects senior investors by taking the first losses on the value of the security, i.e., if something goes wrong, the most junior/ subordinated tranche will absorb the first loss. Subordinated financing can help bridge a project financing gap where cash flow during the initial revenue ramp-up period is too uncertain for senior lenders or if assets to offer as collateral are limited.	Multiple risks including off-take, construction, reputational; access to capital
Private equity financing	Private equity (PE) investments can be made at different stages of a firm's maturity, ranging from very early stage to mature, profitable companies. PE can provide companies with much-needed cash in the early stage of their development in return for a stake in the company. This provides the company with support for its development.	Access to capital; operational risks; lack of bankable pipeline; lack of capacity
Results-based incentives	Instruments can provide incentives and disincentives to achieve desired outcomes (tying at least a portion of payments to achievement). This includes impact bonds and performance-based contracts investors can walk away from if outcomes are not reached.	Operation and output risks
Contractual mechanism	Various contractual and project finance arrangements can support the development of bankable projects, including public and private off-take agreements; subsidies, such as feed-in tariffs; and tax credits. These mechanisms involve an agreement between producers and buyers of a resource to purchase or sell portions of future production.	Demand risk; financing risk (demonstrate bankable revenue stream)
Grants	Grants could include finance for technical assistance or project preparation to bring a project to bankability. Grants can support pipeline development, especially in less mature sectors and riskier geographies, creating significant (if often hard to measure) crowding-in of private capital. They can be repayable or non-repayable. They are particularly critical in the identification and preparation of a project pipeline.	Access to capital; high transaction costs; operational risks; lack of bankable pipeline; lack of capacity

marginalised, such as the InsuResilience Fund, administered by Kreditanstalt für Wiederaufbau (KfW), the German development bank. These initiatives require public resources, either when established or to support premium payments. Insurance, however, cannot replace efforts to reduce climate risks. Insurance instruments must be carefully designed to avoid moral hazard and are unlikely to be suitable for all events (such as slow-onset processes or events occurring with extremely high frequency). (See UNFCCC 2018.) .

Impact bonds. have Impact bonds have long been proposed as a tool for mobilising climate investment. Green bonds have been used to fund projects with climate and/or environmental impact — though predominantly for renewable energy, energy efficiency, and clean transportation — and in 2019 green bond issuance rose to USD 259 billion (Climate Bonds Initiative 2019). In the event of a disaster, catastrophe (or "cat") bonds cover losses beyond the capacity of insurers or governments by transferring risk to the capital market (often based on a parametric trigger rather than incurred losses like conventional insurance). Resilience bonds are a type of cat

bond, allowing governments to raise debt for projects — such as in infrastructure or natural capital — that fund climate change adaptation (and protect against financial losses in the event of weather-related events). (See Carter 2020.) Blue bonds, too, are being designed to raise capital for ocean climate resilience.[17] Corporate and financial issuers dominate the growth in green bonds, although the issuance of sovereign and sub-sovereign green bonds is increasing. Such issuance relies heavily on country creditworthiness, however, and thus is linked to the strength of the local capital market. Efforts are underway to increase the integrity of green bonds, particularly those for climate, to ensure that they result in new investments (rather than refinancing) as well as to reduce the possibility of greenwashing.

Debt for climate (DFC) swaps. DFCs are a type of debt swap in which the debtor nation, instead of continuing to make external debt payments in a foreign currency, makes payments in a local currency to finance climate projects domestically, based on an agreement with the creditors. DFC swaps reduce the level of indebtedness as well as free up fiscal resources to be spent on green, climate resilient, investments. While debt for nature swaps have been used, DFCs are new and aim to be more ambitious, contributing to the debtor nation's climate commitments. While the structure of the DFC swap will differ depending on the debtor nation's particular situation, as well as creditors' requirements, they are expected to be conducted directly between the sovereigns and have a mandate to mobilise downstream private investment.[18] The COVID-19 pandemic has worsened the debt vulnerabilities of many low- and medium-income sovereigns, heightening interest in this financial mechanism.

Other notable financing arrangements. Results-based finance can be used to spur adaptation actions. In this approach, performance-based contracts are used to encourage private investors to engage. Finance for carbon emission reductions has so far been the most popular form of results-based finance for climate action. Examples include reductions from changes in timber harvesting practices; agricultural products; reforestation; and managing mangrove protection. Broader nature-based solutions are gaining traction in their support of adaptation and are being shown capable of generating a variety of revenue streams (World Bank 2017; European Investment Bank 2018). The adaptation benefits mechanism (ABM), for example, a project of the African Development Bank and the International Agroforestry Agency (ICRAF), supports Ivorian cocoa farmers by signing off-take agreements for adaptation benefits that can then be used as collateral for raising finance.[19]

Structured blended finance vehicles. Blended finance is the strategic use of development finance to mobilise commercial finance toward Sustainable Development Goals, with a focus on unlocking capital that the private sector would not have invested on its own (OECD and UNCDF 2020). Blended finance is a structuring approach that allows organisations with different objectives to invest alongside each other while achieving their individual objectives (whether financial return, social impact, or a blend of both). A blended finance vehicle therefore allows investment deals to be structured according to the needs of different investors. Blended concessional finance is not necessarily getting to the countries that need it most (Attridge and Engen 2019). Only 21 percent of concessional finance used to blend in 2017 (USD 243.2 million) was used to mobilise finance in LDCs, compared with 51 percent (USD 592.5 million) in lower and middle income countries, 22 percent (USD 252.4 million) in upper middle income countries, and 6 percent (USD 70.2 million) in high income countries (DFI Working Group 2017).

Blended finance can be structured so that several layers (or "tranches") of capital can be used to invest in the same portfolio of companies but with different risk and return features for the ultimate investors. If there is a loss, the first-loss tranche will be the first to bear it, thereby protecting the other layers of investors (Carter 2020; OECD and UNCDF 2020). This allows public actors with more risk-taking finance to work to support development and climate objectives, while the later tranches, when risks to returns are reduced, appeal to private investors, who otherwise might not be interested in investing.

The Climate Investor One Fund,[20] established by the private equity firm Climate Fund Managers, is an example of a blended public and private finance vehicle for renewable energy (see **Figure 2**). Climate Investor One contains a number of sub-

17 See *https://www.climatebonds.net*.

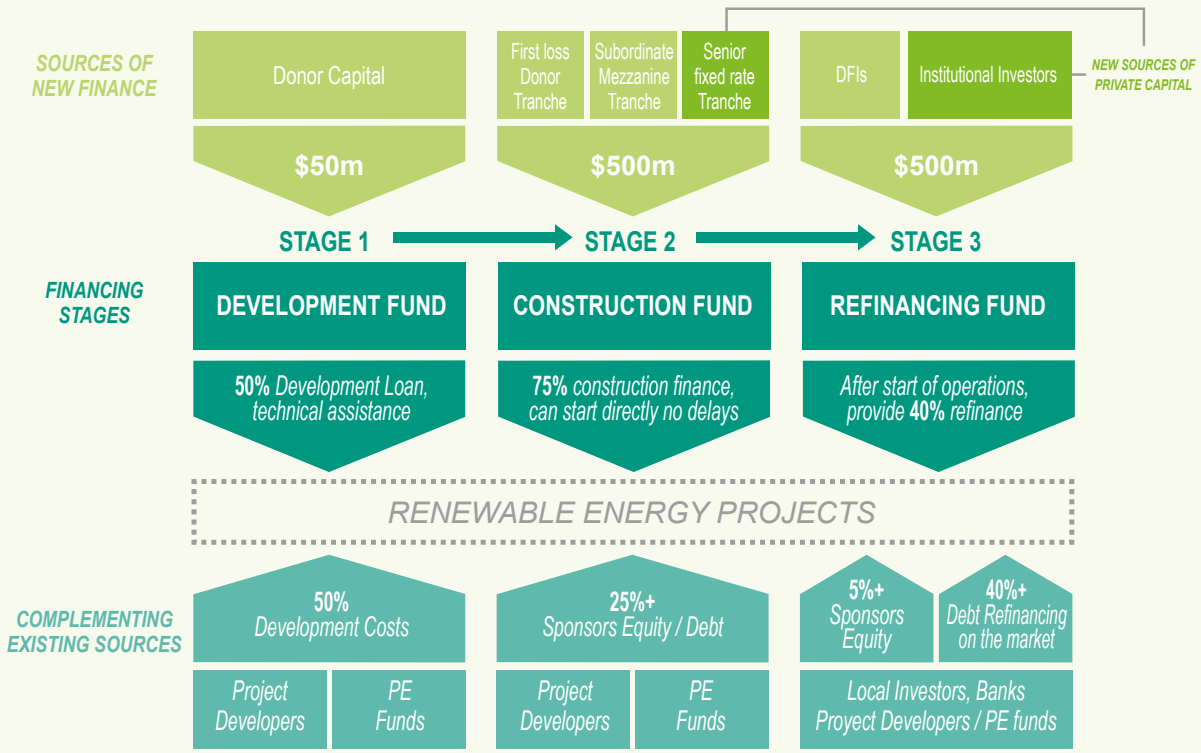
18 This information is taken from a presentation by Divjot Singh and Vikram Widge, "Debt for Climate Swaps: Supporting a Sustainable Recovery," May 2021, Climate Policy Institute; see *https://www.climatepolicyinitiative.org/wp-content/uploads/2021/05/Debt-for-Climate-Swaps-Blueprint-May-2021.pdf*.

19 See *https://www.afdb.org/en/topics-and-sectors/initiatives-partnerships/adaptation-benefit-mechanism-abm*.

20 See *https://climatefundmanagers.com/funds/#CIO*.

FIGURE 2:

Climate Investor One: A structured blended finance facility



funds. The Development Fund provides grants and results-based incentives to support companies in developing (preparing and structuring) climate-smart investments. The Construction Fund contains a first-loss tranche (Tier 1) capitalised by donor contributions. There are two further tranches: one is a subordinate or mezzanine tranche with medium risk to investors, and the other is a senior, fixed-rate tranche with the lowest risk to investors. Also included is a Refinancing Fund attractive to commercial banks and institutional investors. The Fund closed at USD 850 million in 2017, with investment in renewable energy covering multiple countries, primarily in Africa and Asia. Its successor, Climate Investor Two, will be the second facility under CFM management and will replicate this model for climate change adaptation with a focus on water investments.

- **Adopting a portfolio approach.** Adaptation solutions are highly context-specific, and given the predominance of SMEs in the economies of ACP countries, adaptation investment opportunities can be too small for many private and public sector investors, implying high transaction costs and risks (Shakya and Byrnes 2017). High appraisal costs lead private investors to seek larger investment sizes (e.g., over USD 10–15 million), but few LDCs offer stand-alone adaptation investment prospects of such scale. Pooling or aggregating a number of smaller adaptation investments increases the ticket, or deal size, to bring it more in line with investors' comfort zone. Aggregating multiple projects can occur through a portfolio approach where finance supply is improved by bundling small ticket deals and financial products into an investment portfolio. This portfolio of investments can be managed under various arrangements, using, for example, a facility or pooled fund, managed by a private equity firm, as is the case with Climate Investor One. Alternatively, funds could be channelled through local financial institutions, which on-lend to a range of clients. Working through local facilities or financial institutions, with local knowledge and presence, helps overcome the major challenge for global investors of closely monitoring and supporting the SMEs.

Diversification across projects in a portfolio also reduces the risk-return variance for investors (OECD and UNCDF 2020). However, it does not overcome the fact that each project still must be closely mon-

itored and able to deliver financial returns. To help deliver on this requires the use of different financial products, with companies supported through local platforms to provide technical support and monitoring. The United National Capital Development Fund (UNCDF), for example, through its LDC Investment Platform, manages a portfolio of loans and guarantees focused on nurturing early-stage enterprises and projects in LDCs. This blended finance facility allows the greatest flexibility for UNCDF to apply the optimal funding instrument for each business need and to crowd in domestic and international investment.[21] Such a platform has deep local expertise and on-the-ground presence, providing local know-how and support to companies.

- **Accept more risk-tolerant financial products in development finance institutions (DFIs).** With many DFIs committed to increasing the proportion of their portfolios that supports climate change adaptation, particularly visible at the MDBS, future growth in the funds available is expected. For example, the European Fund for Sustainable Development (EFSD) is increasing the amount of finance for climate adaptation, channeling the funds, mainly in the form of guarantees, loans, and grants, through European Development Banks. The ambition for the future is that the EFSD+ will provide €60 billion for support, with the aim of leveraging €360 billion.[22] More needs to be done by contributors and shareholders to increase the risk appetite of DFIs to help companies in vulnerable regions provide goods and services that build resilience to climate change. This could be achieved by reviewing the rates of return they require on facilities (Attridge and Engen 2019); it could further involve increasing capital-to-loan ratios and expanding the use of guarantees (Granoff et al. 2017).

Governments have a critical role to play as shareholders or providers of finance and thus have a significant influence on their operations. Government steering of these "public" investors (i.e., by providing direction on policy making and target-setting) can make a major difference, for example, by lowering return targets, or setting clear targets for investments in LDCs/climate adaptation. Capacity-building for regional and local banks with a local footprint is also needed.[23] The Development Bank of South Africa[24] provides an example of the growing importance and influence of regional banks. The bank supports the identification and piloting of climate change financing instruments and products created to catalyse private sector capital into climate change projects across the Southern Africa region.

Research is also emerging on the specific roles that national development banks (NDBs) can play in accelerating adaptation finance flows (Griffith-Jones, Attridge, and Gouett 2020). Given their development mandate and knowledge of local markets, NDBs can possess comparative advantages over other banks and therefore better help in identifying, developing, and originating investment opportunities for adaptation. To take on such a role, however, many NDBs need capacitation to strengthen their governance to improve their performance and to shift their business models to allow them to fully support the climate agenda. This effort can be supported by direct access to concessional public finance, predominantly through grants and technical assistance, as well as by engaging in dialogues and learning platforms and sharing climate information (Griffith-Jones, Attridge, and Gouett 2020).[25]

21 More information on the Investment Platform can be found at *https://www.uncdf.org/ldcip*.

22 This information was taken from a presentation on the state of play of the External Investment Plan by Chloé Allio, Head of Sector, DEVCO C4 (EIP Pillar 3); Filippo La Verghetta, DEVCO C3 (EIP Pillar 1); Laura Atienza, DEVCO C4 (TPSD Facility); and Francisco Lopez-Menchero, Deputy Head of Unit.

23 A report on the role in climate financing for national development finance institutions and how they could best be supported in playing this role is available at *www.icr-facility.eu/knowledge-hub/national-dfis-for-climate-action*.

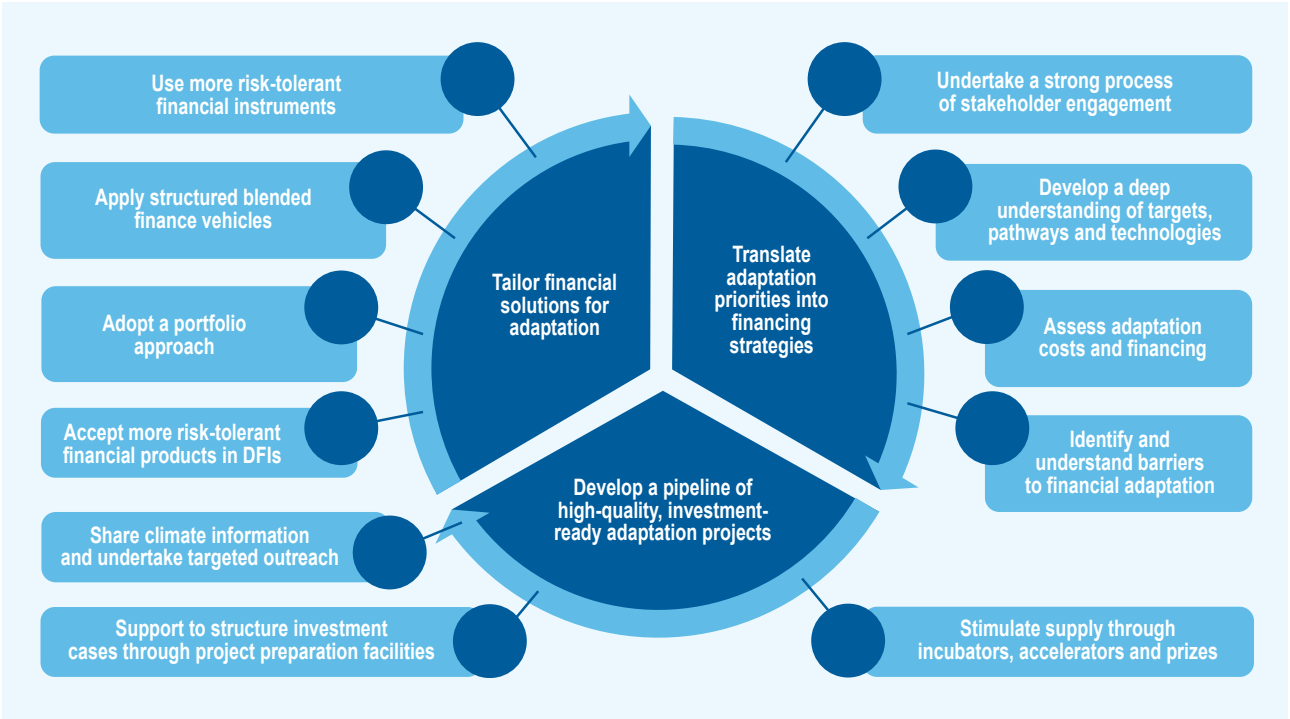
24 *https://www.dbsa.org/*.

25 The European Fund for Sustainable Development is increasing the amount of funds for climate adaptation, channeling them primarily through guarantees and blending grants and loans largely through European DFIs. As its ambition for the future, the EFSD+ will provide €60 billion for support, with the aim of leveraging €360 billion. This information was taken from a presentation on the state of play of the External Investment Plan by Chloé Allio, Head of Sector, DEVCO C4 (EIP Pillar 3); Filippo La Verghetta, DEVCO C3 (EIP Pillar 1); Laura Atienza, DEVCO C4 (TPSD Facility); and Francisco Lopez-Menchero, Deputy Head of Unit.

5. CONCLUSIONS

ACP countries are highly vulnerable to the impacts of climate change and urgently need greater investment to provide goods and services that will make their economies more resilient to its growing adverse effects. The scale of adaptation finance needed cannot be met by public resources alone. It requires the large-scale mobilization of finance from the private sector. This paper puts forward three priorities for action that if supported could catalyse investment into and from the private sector to help build a country's resilience. These opportunities and what they might entail are summarised in the diagram below.

Making progress on the three opportunities highlighted in this paper will respond to a growing appetite from public and private investors for climate adaptation projects. Specifically, this means supporting the development of a nationally appropriate adaptation investment pipeline as well as reducing real and perceived adaptation investment risks. Progress against these opportunities must be made in tandem with strengthening the investment climate in ACP countries (McFarland 2021). This includes country-led programs of policy reform, local capital market development, and capacity-building that allow both enterprises and investors to enter the markets (Attridge and Engen 2019).[26] The role of domestic financial and fiscal policy in directing and incentivizing private finance toward adaptation and away from investments that could introduce greater climate change vulnerability is also critical and will be further examined in the final paper in this series.



26 The ICR Facility is an example of such support, offering technical assistance in business environment reform for inclusive and sustainable economic development on the basis of public-private dialogue. The ICR Facility is co-funded by the European Union (EU) and the Organisation of African, Caribbean and Pacific States (OACPS) under the 11th European Development Fund (EDF), together with the German Federal Ministry for Economic Cooperation and Development (BMZ) and the British Council. It is implemented by GIZ, the British Council, Expertise France, and SNV.

This paper was authored by Richard McNally and Charlene Watson.

Valuable inputs were received at various stages in the production of this report from Diego Borrero Magaña, Will McFarland, Frederic Bustelo, Charissa Bosma, Aart Mulder, Rik Recourt and Iwan Meister (FMO), Albert Bokkestijn and Alex Downs (DFCD), Sarah Weiss (GIZ), and Miguel Campo Llopis (EU).

This paper is part of a series of papers on Climate-Smart Investments in ACP countries. For more information on the other papers, see *www.icr-facility.eu*.

About the ICR facility

The ICR Facility is co-funded by the European Union (EU) and the Organisation of African, Caribbean, and Pacific States (OACPS), under the 11th European Development Fund (EDF), together with the German Federal Ministry for Economic Cooperation and Development (BMZ) and the British Council. The ICR Facility is implemented by GIZ, the British Council, Expertise France, and SNV.

The ICR Facility supports public and private stakeholders in ACP countries in improving their investment climate and business environment via public-private dialogue. The Facility supports specific and targeted interventions at the economy-wide, sectoral, and value-chain levels with Technical Assistance for up to 90 days based on requests. It also works to strengthen national and subnational development financial institutions and compiles and shares good practices for improving the business environment and investment climate.

For more details on the ICR Facility or to submit a request for Technical Assistance, visit:

www.icr-facility.eu

References

- Arabe, L. 2021. "African Countries Cannot Leapfrog to Industrialisation." *Convergence Finance*. *https://www.convergence.finance/news-and-events/news/1AZ1HqJcwS1yLszYdenzpZ/view*.
- Attridge, S., and L. Engen. 2019. "Blended Finance in the Poorest Countries: The Need for a Better Approach." Research reports. Overseas Development Institute, London. *https://odi.org/en/publications/blended-finance-in-the-poorest-countries-the-need-for-a-better-approach/*.
- Bodnar, P., Brown, J. and Nakhooda, S. 2015. "What Counts: Tools to Help Define and Understand Progress Towards the $100 Billion Climate Finance Commitment." Working Paper. World Resources Institute, Washington, DC. *https://www.wri.org/research/what-counts-tools-help-define-and-understand-progress-towards-100-billion-climate-finance*.
- CARE. 2014. "Facing Uncertainty: The Value of Climate Information for Adaptation, Risk Reduction and Resilience in Africa." CARE Climate Change. *https://careclimatechange.org/wp-content/uploads/2014/08/C_Comms_Brief.pdf*.
- Carter, L. 2020. "The Ecosystem of Private Investment in Climate Action." Invest4Climate Knowledge Series. United Nations Development Programme (UNDP), New York, NY. *https://www.undp.org/publications/ecosystem-private-investment-climate-action*.
- CDKN. "CDKN Planning for NDC Implementation: A Quick-State Guide." CDKN, Cape Town, South Africa. *https://ndc-guide.cdkn.org/book/planning-for-ndc-implementation-a-quick-start-guide/finance/*.
- Chapagain, D., F. Baarsch, M. Schaeffer, and S. D'haen. 2020. "Climate Change Adaptation Costs in Developing Countries: Insights from Existing Estimates." *Climate and Development*. *https://www.tandfonline.com/doi/abs/10.1080/17565529.2020.1711698*.
- Climate Bonds Initiative (CBI). 2019. "Green Bonds: Global State of the Market 2019." CBI, London. *https://www.climatebonds.net/files/reports/cbi_sotm_2019_vol1_04d.pdf*.
- Climate Investment Funds (CIFs). 2016. "Climate Adaptation in Developing Countries." Climate Investment Funds, World Bank. *https://www.climateinvestmentfunds.org/sites/default/files/7544-wb_cif_ppcr_report-v5.pdf*.
- Climate Policy Initiative (CPI). 2018. "Understanding and Increasing Finance for Climate Adaptation in Developing Countries." Climate Policy Initiative, London. *https://climatepolicyinitiative.org/publication/understanding-and-increasing-finance-for-climate-adaptation-in-developing-countries/*.
- Climate Policy Initiative (CPI). 2019. "Global Landscape of Climate Finance." Climate Policy Initiative, London. *https://www.climatepolicyinitiative.org/publication/global-landscape-of-climate-finance-2019/*.
- DFI Working Group. 2017. DFI Working Group on Blended Concessional Finance for Private Sector Projects — Summary Report." A joint report by the AfDB, ADB, AIIB, EBRD, EDFI, EIB, IADB Group, ICD, and IFC; Washington, DC. *https://www.ifc.org/wps/wcm/connect/a8398ed6-55d0-4cc4-95aa-bcbabe39f79f/DFI+Blended+Concessional+Finance+for+Private+Sector+Operations_Summary+R....pdf? MOD=AJPERES&CVID=IYCLe0B*.
- E3G. 2015. "Towards an Effective International Financial Ecosystem for Climate Finance." E3G, London. *https://www.jstor.org/stable/resrep17862?seq=1#metadata_info_tab_contents*.

- Eckstein, D., V. Künzel, L. Schäfer, and M. Winges. 2020. *Global Climate Risk Index 2020. Who Suffers Most from Extreme Weather Events? Weather-Related Loss Events in 2018 and 1999 to 2018*. Bonn: Germanwatch. *https://www.germanwatch.org/en/17307*.
- European Investment Bank (EIB). 2018. "Investing in Nature: Financing Conservation and Nature-Based Solutions." EIB, Kirchberg, Luxembourg. *https://www.eib.org/attachments/pj/ncff-invest-nature-report-en.pdf*.
- Fioravanti, R., C. Lembo, and A. Deep. 2019. "Filling the Investment Gap: The Role of the Project Preparation Facilities: An Overview of MDBs and the Inter-American Development Bank Approach." IDB, Washington, DC. *https://publications.iadb.org/publications/english/document/Filling_the_Infrastructure_Investment_Gap_the_Role_of_Project_Preparation_and_Structuring_Facilities_en_en.pdf*.
- Global Commission on Adaptation (GCA) (2019). "Adapt Now: A Global Call for Leadership on Climate Resilience." Global Commission on Adaptation, Rotterdam, Netherlands. *https://gca.org/reports/adapt-now-a-global-call-for-leadership-on-climate-resilience/*.
- Granoff, I., D. Nassiry, N. Bird, C. Humphrey, P. Carter, A. Lemma, and A. Prizzon. 2017. "Six Development Finance Proposals to Expand Climate Investment." Policy Briefing. Overseas Development Institute, London. *https://cdn.odi.org/media/documents/11362.pdf*.
- Green Climate Fund (GCF) (2020). "Catalysing Action and Finance for Country Adaptation Priorities." GCF in Brief: Adaptation Planning. GCF, Incheon, Republic of Korea. *https://www.greenclimate.fund/sites/default/files/document/gcf-brief-adaptation-planning_1.pdf*.
- Griffith-Jones, S., S. Attridge, and M. Gouett. 2020. "Securing Climate Finance Through National Development Banks." Overseas Development Institute, London. *https://odi.org/en/publications/securing-climate-finance-through-national-development-banks/*.
- IFC (International Finance Corporation). 2011. "Climate Finance: Engaging the Private Sector." Background paper for Mobilizing Climate Finance, prepared at the request of G20 Finance Ministers. October 31, 2010. International Finance Corporation, Washington, DC. *https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/publications/publications_reports_climatefinance*.
- IPCC. 2018. "Summary for Policy Makers." In *Global Warming of 1.5°C*, An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty; edited by V. Masson-Delmotte, P. Zhai, H. O. Pörtner, D. Roberts, J. Skea, P. R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J. B. R. Matthews, Y. Chen, X. Zhou, M. I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield. Geneva, Switzerland: World Meteorological Organization. *https://www.ipcc.ch/sr15/chapter/spm/*.
- Lee, N. 2018. "More Mobilizing, Less Lending: A Pragmatic Proposal for MDBs." CGD Brief. April. Center for Global Development, Washington, DC. *www.cgdev.org/expert/nancy-lee*.
- McFarland, W. 2021. "Investment Climate Reform and the Adaptation 'Finance Gap': Mobilising Private Investment for Climate Adaptation in African, Caribbean, and Pacific Countries." ICR Facility. ICR, Brussels. Forthcoming.
- Morton, S., and S. Bee. 2020. "Understanding NDC Financing Needs." NDC Partnership, UNDP, New York, NY. *https://ndcpartnership.org/sites/default/files/Understanding%20NDC%20Financing%20Needs%20Insight%20Brief.pdf*.

- NAP Global Network. 2017. "Financing National Adaptation Plan (NAP) Processes: Contributing to the Achievement of Nationally Determined Contribution (NDC) Adaptation Goals." NAP Global Network. NAP Global Network, Winnipeg, Manitoba, Canada. *https://www4.unfccc.int/sites/NAPC/Documents/Supplements/napgn-en-2017-financing-nap-processes.pdf*.
- Nassiry, D., S. Nakhooda, and S. Barnard. 2016. "Finding the Pipeline: Project Preparation for Sustainable Infrastructure." Overseas Development Institute, London. *https://newclimateeconomy.report/workingpapers/wp-content/uploads/sites/5/2016/11/Finding-the-Pipeline.pdf*.
- OECD. 2021. *Strengthening Climate Resilience: Guidance for Governments and Development Co-operation*. Paris: OECD. *https://www.oecd-ilibrary.org/environment/strengthening-climate-resilience_4b08b7be-en*.
- OECD and UNCDF. 2020. *Blended Finance in the Least Developed Countries 2020: Supporting a Resilient COVID-19 Recovery*. Paris: OECD. *https://doi.org/10.1787/57620d04-en*.
- Schalatek, L., and C. Watson. 2020. "The Green Climate Fund." Climate Funds Update. HBS, Heinrich Böll Stiftung, Washington, DC, and Overseas Development Institute, London. *https://climatefundsupdate.org/wp-content/uploads/2021/03/CFF11-ENG-2020-Digital*.
- Shakya, C and Byrnes, R. (2017). Turning up the volume: Financial aggregation for off-grid energy. IIED. Available at: *https://pubs.iied.org/sites/default/files/pdfs/migrate/16636IIED.pdf*.
- Sierra, K., Roberts, T., de Nevers, M., Langley, C. and Smith C. 2013. "First Steps Towards a Quality of Climate Finance Scorecard (QUODA-CF): Creating a Comparative Index to Assess International Climate Finance Contributions". Center for Global Development, Brookings, Washington DC. Available at: *https://www.brookings.edu/wp-content/uploads/2016/06/07-climate-finance-scorecard-sierra-roberts.pdf*.
- Singh, C., J. Daron, A. Bazaz, G. Ziervogel, D. Spear, J. Krishnaswamy, M. Zaroug, and E. Kituyi. 2018. "The Utility of Weather and Climate Information for Adaptation Decision-Making: Current Uses and Future Prospects in Africa and India." *Climate and Development* 10 (5): 389–405. *https://www.tandfonline.com/doi/pdf/10.1080/17565529.2017.1318744*.
- UNDP. 2020. "Kenya's Financing Strategy for Nationally Determined Contribution." UNDP, New York, NY. *https://www.ndcs.undp.org/content/ndc-support-programme/en/home/impact-and-learning/library/kenya--financing-strategy-for-nationally-determined-contribution-.html*.
- UNEP and World Bank. 2017. "Roadmap for a Sustainable Financial System." UNEP, Nairobi, Kenya, and World Bank, Washington, DC. Available at: *http://documents1.worldbank.org/curated/en/903601510548466486/pdf/121283-12-11-2017-15-33-33-RoadmapforaSustainableFinancialSystem.pdf*.
- UNFCCC. 2015. Paris Agreement. Bonn: UNFCCC. *https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement*.
- UNFCCC. 2018. Biennial Assessment and Overview of Climate Finance Flows. Bonn: UNFCCC. *https://unfccc.int/topics/climate-finance/workstreams/transparency-of-support-ex-post/biennial-assessment-and-overview-of-climate-finance-flows-background/biennial-assessment-and-overview-of-climate-finance-flows-2018*.
- UNFCCC. 2021. "Overview: National Adaptation Plans." UNFCCC Secretariat, UNFCCC, Bonn. Available at: *https://unfccc.int/topics/resilience/workstreams/national-adaptation-plans/overview*.
- United Nations Environment Programme (UNEP). 2018. Adaptation Gap Report 2018. UNEP, Nairobi, Kenya. *https://www.unenvironment.org/resources/adaptation-gap-report*.

- United Nations Environment Programme (UNEP). 2021. Adaptation Gap Report 2020. UNEP, Nairobi, Kenya. *https://www.unep.org/resources/adaptation-gap-report-2020*.
- Volz, U., P. Knaack, J. Nyman, L. Ramos, and J. Moling. 2020. "Inclusive Green Finance: From Concept to Practice." Alliance for Financial Inclusion and SOAS, University of London, Kuala Lumpur and London. *https://www.afi-global.org/sites/default/files/publications/2020-12/AFI_IGF_SOAS_3December.pdf*.
- Weikmans, R., and J. T. Roberts. 2019. "The International Climate Finance Accounting Muddle: Is There Hope on the Horizon?" *Climate and Development* 11 (2): 97–111. *https://doi.org/10.1080/17565529.2017.1410087*.
- World Bank. 2017. "Options for Increased Private Sector Participation in Resilience Investment." Focus on Agriculture. World Bank Group, Finance and Markets, Washington, DC. *https://www.preventionweb.net/publications/view/57646*.
- World Bank. 2019a. "Action Plan on Climate Change Adaptation and Resilience: Managing Risks for a More Resilient Future." World Bank, Washington, DC. *http://documents1.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*.
- World Bank. 2019b. "Mali Climate-Smart Agriculture Investment Plan." World Bank, Washington, DC. *https://openknowledge.worldbank.org/handle/10986/32741*.
- World Bank. 2020. "Developing a National Green Taxonomy: A World Bank Guide." World Bank, Washington, DC. *http://documents1.worldbank.org/curated/en/953011593410423487/pdf/Developing-a-National-Green-Taxonomy-A-World-Bank-Guide.pdf*.
- World Bank. 2021. "Enabling Private Investment in Climate Adaptation and Resilience: Current Status, Barriers to Investment and Blueprint for Action." Word Bank, Washington, DC. *https://openknowledge.worldbank.org/handle/10986/35203*.
- World Meteorological Organization (WMO). 2016. "Climate Services for Supporting Climate Change Adaptation: Supplement to the Technical Guidelines for the National Adaptation Plan Process." WMO, Geneva, Switzerland. *https://library.wmo.int/doc_num.php?explnum_id=7936*.
- WWF (World Wide Fund for Nature). 2018. "Banking on Private Finance to Tackle the World's Water Crisis." WWF, Gland, Switzerland. *https://wwf.panda.org/?336795/Banking-on-private-finance-to-tackle-the-worlds-water-crisis*.

IMPRINT

The ICR Facility supported the production of this publication. It is co-funded by the European Union (EU), the Organisation of African, Caribbean, and Pacific States (OACPS) under the 11th European Development Fund (EDF), the German Federal Ministry for Economic Cooperation and Development (BMZ), and the British Council. The ICR Facility is implemented by GIZ, the British Council, Expertise France, and SNV. The publication of this ICReport was led by SNV. The contents of the publication are the sole responsibility of the author and do not necessarily reflect the views of the EU, OACPS, BMZ, or the other implementing partners.

The ICR Facility supports countries and regional institutions of the Organisation of African, Caribbean, and Pacific States (OACPS) in their public-private dialogue process to create a more conducive and sustainable investment climate.

PUBLISHER:
ICR Facility
Rond-Point Robert Schuman 6 / 7th Floor 1040 Brussels – Belgium
www.icr-facility.eu

AUTHORS:
Richard McNally and Charlene Watson

DESIGN/LAYOUT:
Atelier Loewentor GmbH, Darmstadt & Luis Liceaga

SUGGESTED CITATION:
McNally, Richard and Watson, Charlene. 2021. "Supporting businesses to deliver climate change adaptation in ACP countries: priority actions and the role of international capital," Investment Climate Reform Facility report series, ICR Facility, Brussels.

URL LINKS:
Responsibility for the content of external websites linked in this publication always lies with their respective publishers. The ICR Facility expressly dissociates itself from such content.

Brussels, August 2021

INVESTMENT CLIMATE REFORM FACILITY

ANY QUESTIONS? CONTACT US.

ICR Facility
Rond-Point Robert Schuman 6 / 7th Floor
1040 Brussels
Belgium

GET IN TOUCH:
info@icr-facility.eu
in /icr-facility

VISIT US ONLINE:
ICR Facility
www.icr-facility.eu