

AFRICA THRIVING AND RESILIENT

THE AFRICAN DEVELOPMENT BANK GROUP'S SECOND CLIMATE CHANGE ACTION PLAN (2016–2020)



AFRICAN DEVELOPMENT BANK GROUP

Climate Change
and Green Growth Department
PECG

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ACRONYMS AND ABBREVIATIONS

AAI	Africa Adaptation Initiative
ACCF	Africa Climate Change Fund
AfDB	African Development Bank Group
ACTC	Africa Climate Technology Centre
ADB	African Development Bank financing window
ADF	African Development Fund
AMCEN	African Ministerial Conference on Environment
ARC	Africa Risk Capacity
AWF	African Water Facility
CASU	Continental Adaptation Support Unit
CCAP1	Climate Change Action Plan (2011–2015)
CCAP2	Climate Change Action Plan (2016–2020)
CCCC	Climate Change Coordinating Committee
CDSF	ClimDev Special Fund
CIF	Climate Investment Funds
COP	Conference of the Parties
COP21	UNFCCC Twenty-First Session of the Conference of the Parties
CSA	Climate-smart agriculture
CSP	Country Strategy Paper
CSS	Climate Safeguard System
DFID	UK's Department for International Development
DBDM	Development and Business Delivery Model
FEI	Facility for Energy Inclusion
FSC	Forest Stewardship Council
GCF	Green Climate Fund
GDP	Gross Domestic Product
GEF	Global Environment Facility
GHG	Greenhouse Gas
H5s	AfDB “High 5” priority areas
INDC	Intended Nationally Determined Contribution
IPCC	Intergovernmental Panel on Climate Change
LDC	Least-developed country
MDB	Multilateral Development Bank
NDC	Nationally Determined Contribution
REDD	Reduced Emissions from Deforestation and Land Degradation
RISP	Regional Integration Strategy Paper
RLF	Results-based logical framework
RMC	Regional member country
RMF	Results Measurement Framework
SDG	Sustainable Development Goals
SEforALL	United Nations Sustainable Energy for All initiative
SEFA	Sustainable Energy Fund for Africa
TYS	African Development Bank Group Ten-Year (2012–2022) Strategy
UNFCCC	United Nations Framework Convention on Climate Change
VCS	Verified Carbon Standard



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FOREWORD

Climate change is a challenge for our world and for all of humanity.

In 2016, global temperatures were 1.2 degrees Celsius above average. It was a record year but it was by no means unique. 2015 and 2014 were record years too.

As with the rest of the world, climate change and global warming are worrisome trends for Africa. Our continent already bears the brunt of much devastation. Climate change is simply about environmental degradation, human pain, deprivation, and irreplaceable loss. As such, climate change cannot be postponed. Concerted action must be taken and now is the time!

While climate change continues to take a toll on the continent, the fact is that it also presents an opportunity to urgently implement innovative solutions and initiatives that reduce GHG emissions, and accelerate sustainable development. Africa has an opportunity to develop resilience to the ravaging effects of climate change.

This is the African Development Bank's 2nd climate change action plan, following the successful implementation of the first 2011–2015 Action Plan.

Implementation of the 1st Plan resulted in the channeling of USD 12 Billion in financing for renewable energy, energy efficiency, sustainable transport, sustainable natural resources management, climate proofing of critical infrastructure and capacity building; and significant contributions to Africa's transition to low-carbon and climate resilient development.

Our new Action plan will build on lessons learned and focus on supporting the implementation of Nationally Determined Contributions (NDCs).

One issue that continues to be alarmingly persistent however, is the significant disparity between financing for adaptation and financing for mitigation. For this reason, adaptation will continue to be an area of priority for the Bank.

The 2015 Paris Agreement specifies collective global action necessary to keep the rise in global average temperatures under 2°C of pre-industrial levels and the pursuit of efforts to keep it within 1.5°C, in order to avoid dangerous climate change impacts.

A testament to Africa's ambitious climate action is that about 80% of all African countries have ratified the Paris Agreement. Their Nationally Determined Contributions across key economic sectors are the blue prints through which they seek support.

While the continent is challenged on many levels by climate change, what the countries of Africa all have in common is a strong desire for sustainable development and improvement in the quality of lives for all citizens.

The Bank's High 5 Agenda – *Power Africa, Feed Africa, Industrialize Africa, Integrate Africa and Improve the quality of life of every African* – aligns with the Sustainable Development Goals and provides a framework for the implementation of the African Development Bank's Climate Change Action Plan.

As we look ahead, we foresee an African continent that develops in a low carbon manner and is less vulnerable to climate change. The Plan identifies specific actions and targets, consistent with areas prioritized by African NDCs as well as the High 5 objectives. The Bank has put in place a New Development and Business Delivery Model to facilitate effective implementation of the High 5 Agenda.

The African Development Bank looks forward to working with member countries, development partners and the private sector to implement the activities included in this ambitious Action Plan.

Dr. Akinwumi A. Adesina

President, African Development Bank Group



EXECUTIVE SUMMARY

The Paris Agreement adopted in December 2015 specifies the collective actions necessary to keep the rise in global average temperature under 2°C above pre-industrial levels and pursue efforts to limit the increase to 1.5°C in order to avoid dangerous climate change impacts. To date, more than 50% of African countries have ratified the Paris Agreement. The Bank is committed to supporting efforts by African countries in the implementation of their Nationally Determined Contributions (NDCs). The Bank's support will take the form of targeted and increased resource mobilisation to ensure that the Bank's climate finance aligns with African NDCs. It will further ensure that Bank finance: addresses adaptation and mitigation in equal measure as feasibly possible; improves access to clean technology and innovations; and enhances capabilities through capacity building to help African nations meet the long term objectives of the Paris Agreement alongside their development goals.

The urgency to respond to climate change and comply with the requirements of the Paris Agreement presents implementation challenges but also provides opportunities to help African households, communities and economies adapt to climate change and transition towards low-carbon development pathways that boost growth, bridge the energy deficit, and reduce poverty. Climate change threatens sustainable development in Africa, particularly among the poor and highly vulnerable countries, which have contributed least to greenhouse gas (GHG) emissions. The Bank is committed to actively addressing adaptation, mitigation, capacity building and related challenges, ensuring that development across the continent brings economic growth, social justice and prosperity to all segments of society. At the same time, it is committed to ensuring growth takes place within safe planetary boundaries, including those imposed by atmospheric limits on the disposal of GHG emissions.

The Strategic Vision of the Bank's Second Climate Change Action Plan (CCAP2) foresees an African continent that is less vulnerable to climate change and develops in a low carbon manner. This vision will be attained by: supporting the implementation of the NDCs in Africa by helping African countries define and achieve their commitments to adaptation and mitigation whilst also fulfilling their development objectives, as well as by scaling up levels of climate finance accessed and channelled to African countries from both public and private sources.

The CCAP2 sets out the Bank's climate change programme for the period 2016–2020, providing a clear framework of action while highlighting

opportunities for collaboration with its partners. The CCAP2 builds on the results, lessons learned and recommendations from the previous CCAP1 (2011–2015). Its implementation is also supported by the new Development and Business Delivery Model (DBDM) which is essential to its success.

The CCAP2 is aligned with the Bank's "High 5s Agenda" (H5s) and Regional Member Countries' (RMCs) NDCs, and African Union Agenda 2063. In addition, it will contribute to the implementation of national policies and programmes, including national development strategies and plans, national adaptation plans, and nationally appropriate mitigation actions. Through the deployment of resources under the DBDM, the Bank will ensure that all future projects indicate: whether and how they address adaptation and mitigation; provide for regular monitoring and tracking of climate- as well as development- related benefits; and the Bank's overall progress in advancing Africa's climate change agenda.

The activities under the CCAP2 are organised along four main pillars aligned with Paris Agreement priorities: adaptation and climate-resilient development; mitigation and low carbon development; financial resource mobilisation; and enabling environments addressing cross-cutting issues, including: policies and institutional reforms, capacity development, technology development and transfer, and creation of partnerships and networks.

The Bank has made a commitment to channel 40% of approvals per year by 2020, to strengthen its support for climate change activities. In addition, the Bank will mobilise additional public resources from the international climate funds and also from the private sector. This calls for "out of the box" mobilization efforts including institutional capacity building to facilitate project origination processes within RMCs. CCAP2 will guide the Bank in achieving the climate finance target (i.e. by 2020, 40% of the Bank's finance should be identified and reported as climate finance using the MDB Climate Finance Tracking methodologies)

Through the implementation of the CCAP2 and the mainstreaming of Climate Change and Green Growth into the individual H5 strategies it is expected that:

- *Light up and Power Africa investments will account for 22% of climate finance per year by 2020;*
- *Feed Africa investments will contribute 6% of climate finance per year by 2020;*

- *Industrialize Africa will contribute 3% of climate finance per year by 2020;*
- *Integrate Africa will contribute 1% of climate finance per year by 2020;*
- *Improve the Quality of Life for People of Africa will contribute 8% of climate finance per year by 2020.*

Financing will be channelled from multi-layer financial blending and leveraging across a variety of resources. These include: the Bank's balance sheet; existing and new climate funds, including the Green Climate Fund; bilateral funds; private sector investments; domestic sources of capital; and the deployment of new financing mechanisms developed under the Paris Agreement.

The CCAP2 focuses on actions that have climate co-benefits and will create synergies with other relevant initiatives at both regional and national levels. For efficient implementation of climate change initiatives, it is critical the Bank closely coordinate with regional and international partners and create synergies with relevant initiatives. The Bank will create and prioritize partnerships which maximize partners' respective comparative advantages and facilitate the leveraging of additional finance. In order to maximize impact in building resilience of the most vulnerable populations, partnerships with a range of actors at national and subnational level will be prioritized.

Agriculture, forestry and other land use change is considered the main source of GHG emissions in Africa. The key focus area under the CCAP2's mitigation and low-carbon development pillar includes: climate smart agriculture, the sustainable management of natural resources, sustainable forests management with special attention to Reduced Emissions from Deforestation

and Land Degradation (REDD) and conservation, and enhancement of forest carbon stocks (known as REDD+). The Bank will also address cooking energy as a major driver of deforestation in Africa. **Achieving the objectives set out in the Action Plan will require additional expertise on climate change.** The Bank is committed to improving institutional capacity and will continue to deliver its programmes of advisory services, training, knowledge generation and communication internally and at regional and national levels. Experienced and qualified staff will be recruited under the DBDM to fill resource gaps in the Regional Directorates to ensure the Bank addresses individual NDC and regional capacity development needs on specific areas such as climate safeguards; methods and tools for climate risk analysis; GHG accounting and reporting; green growth and green finance.

Monitoring and evaluation is critical for assessing the progress in implementation of the CCAP2. The Bank will therefore continue to strengthen, streamline, and harmonise monitoring, reporting, and evaluation for climate action (adaptation and resilience indicators, GHG accounting, co-benefits) to improve results frameworks, build capacity, and facilitate evidence-based learning.

The Result Measurement Framework of the Action Plan is therefore developed in alignment with the Bank's corporate Result Measurement Framework and based on the indicators and targets from the Bank's High5 strategies. To facilitate the tracking of the CCAP 2 progress, the comprehensive Monitoring and Evaluation (M&E) used for the CCAP 1, will be updated to take into account the specificities of the new CCAP2. The Framework will be used to carry out the medium-term review of the Action Plan as well as the final evaluation at completion ■



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CONTEXT AND RATIONALE

Climate Change and the Achievement of the Sustainable Development Goals in Africa

Climate change is imposing significant costs in Africa—costs that will increase over the foreseeable time, and that translates directly into adaptation needs. At the same time, the region has the potentials to evolve into a major source of greenhouse gas emissions if it does not follow a low carbon intensive development pathway. The impacts of climate change are being felt today and are expected to intensify in Africa over the coming years if global emissions are not substantially reduced. These impacts include: compounded stress on water resources facing significant strain from overexploitation and degradation at present and increased demand in the future, with drought stress exacerbated in drought-prone regions; reduced crop productivity associated with heat and drought stress, with strong adverse

effects on regional, national and household livelihood and food security, also given increased pest and disease damage and flood impacts on food system infrastructure; changes in the incidence and geographic range of vector- and water-borne diseases due to changes in the mean and variability of temperature and precipitation, particularly along the edges of their distribution (e.g. malaria in East Africa highlands). In addition, weather-related extremes, such as heat waves, droughts, floods, cyclones and wildfires occur annually further exposing the vulnerability of Africa's people and economies to climate change.

The adaptation costs for Africa are estimated to amount to USD 35 billion by 2050 and USD 200 billion by the 2070s and could cost as much as 7% of the continent's GDP by 2100 for a 4°C world. Most RMCs have ratified the Paris Agreement to hold the increase in the global average temperature to less than 2°C above

Box 1. Highlights of the Paris Agreement

Mitigation. Undertake rapid reductions in GHG emissions in accordance with the best available science to achieve the long-term goal of keeping the increase in the average global temperature to well below 2°C above preindustrial levels, and pursuing efforts to limit the increase to 1.5°C.

Adaptation. Strengthen societies' ability to address the impacts of climate change, and provide developing countries with continued and enhanced international support for adaptation.

Transparency and global stocktake. Convene every five years to set ambitious targets as required by science, report to each other and the public on achievements in implementing targets, and track progress towards the long-term goal through a robust transparency and accountability system.

Loss and damage. Cooperate and enhance awareness, action and support to avert, minimise and address loss and damage associated with climate change through precautions such as early warning systems, emergency preparedness and risk insurance.

Means of implementation (finance, capacity building, and technology development and transfer). Developed countries will continue to support climate actions to reduce emissions and build resilience to climate change impacts in developing countries. Other countries are encouraged to provide such support voluntarily. Developed countries have reiterated their intentions to fulfil their collective goal to mobilise USD 100 billion per year between 2020 and 2025, during which time a new and higher collective goal will be set.

preindustrial levels, while aspiring to limit warming to 1.5°C. Many RMCs have embarked on a low greenhouse gas emission and climate-resilient development path. However, about 85% of the mitigation and adaptation targets set by the RMCs depend on external financial and technical support for their achievement.

Africa and the Paris Agreement

Addressing the adverse impacts of climate change will be central to achieving the Sustainable Development Goals (SDGs) adopted by the international community in 2015. While addressing climate change is a specific goal (SDG13), it is also cross-cutting and affects the achievement of all other goals critical to national development. Extreme events will furthermore make combating climate change itself more difficult, while its impacts are likely to increase the cost of meeting all SDGs, rolling back progress made in recent decades.

Combating climate change requires solutions that are coordinated at the international level. The Paris Agreement set the goal of keeping the increase in the average global temperature to well below 2°C above preindustrial levels, and pursuing efforts to limit the increase to 1.5°C. It specifies the collective actions necessary to address climate change (See Box 1). All countries were required to articulate Intended Nationally Determined Contributions (INDCs) as part of their commitment to achieving the objectives of the Paris Agreement.

In articulating INDCs, African countries took into account national priorities and capabilities in the context of achieving sustainable development. With the coming into effect of the Paris Agreement on 4th November 2016, all submitted NDCs by Parties that have ratified the Paris

Agreement became binding. The NDCs will be the basis upon which finance, capacity building, and technology will be provided to help countries curb emissions to keep global warming at acceptable limits and to adapt to current changes in climate.

The Paris Agreement specifies that Parties will submit successive five yearly NDCs and that subsequent NDCs will be more ambitious than the previous, by which means Parties are to aim for achieving net zero GHG emissions by the middle of the second half of the 21st century. In practical terms, this means Parties must plot a trajectory to get from today's emissions to net zero within approximately the next 50 years. Unless the Paris Agreement is formally cancelled, this commitment will be binding on Parties which have ratified the Agreement and not withdrawn.

Given the complex interactions with social dimensions, there is need for an integrated approach addressing economic, social and environmental considerations for both adaptation and mitigation, particularly in climate-sensitive sectors such as agriculture, energy, transport as well as social sectors.

The African Development Bank and climate change

The principles of economic prosperity, social inclusion and environmental sustainability, which are fundamental to achieving sustainable development, are embodied in the Bank's Ten Year Strategy 2013–2022 (TYS). To scale up and accelerate the delivery and development impacts of the YYS, the Bank is focusing on five strategic priorities, known as the H5s: Light up and Power Africa, Feed Africa, Industrialise Africa, Integrate Africa, and Improve the Quality of Life for

the People of Africa. The High 5s align with the 2030 Agenda on Sustainable Development, the Paris Agreement and Africa's Agenda 2063. They provide the broad framework within which the Bank and other stakeholders will strive to ensure that "no African is left behind" with regards to the benefits of economic growth and prosperity.

By combatting climate change, the Bank can help drive the economic transformation that Africa needs through inclusive and green growth. Investing in climate-resilient and low carbon development will boost economic growth, bridge the continent's energy deficit, improve health outcomes and reduce poverty. The efforts the Bank makes between now and 2020 will contribute significantly to achieving the global objective of keeping the rise in average global temperatures below 2°C above preindustrial levels.

The Bank recognises both the threat that climate change poses to its ability to deliver on its mandate, as well as the opportunities that it brings to chart a less carbon-intensive development pathway for the African continent. The Bank's first Climate Change Action Plan 2011–2015 (CCAP1) embraced the concept of "climate-compatible development" — that is, the understanding that promoting economic development in Africa and addressing climate change are complementary objectives. The CCAP1 provided the impetus necessary for the Bank to proactively engage with Regional Member Countries (RMCs) on climate change. It also enabled the creation of new institutional structures within the Bank and enhanced the Bank's institutional capacity to support the climate change agenda.

With the ratification of the Paris Agreement and the formalization of the NDCs, RMCs now have a new means of communicating their development priorities and the Bank must ensure its TYS is compatible with RMCs' climate objectives.

Highlights of the CCAP1 (2011–2015)

The implementation of the CCAP1 achieved significant strides in advancing the continent's climate action agenda. The main highlights are as follows:

- Between 2011 and 2015 the Bank approved approximately 260 projects with climate-relevant components estimated at USD 12 billion, exceeding the target of about USD 9 billion proposed in the CCAP1. The share of this finance invested in mitigation greatly exceeded that of adaptation — an imbalance that also occurs globally. Recognizing that adaptation is generally regarded as Africa's priority in view of the continent's heightened vulnerability to the adverse impacts of climate change, the CCAP2

will aim to achieve parity between mitigation and adaptation.

- The Bank promoted adaptation and climate resilience through emphasizing "climate risk management". Bank funded projects are screened and "climate-proofed" ensuring the integration of adaptation components at the design stage. Seventy percent of the Bank's projects were designed, sited, implemented and managed to cost effectively build resilience and minimise climate risk.
- The Bank increased its investments in low-carbon development. As a result, 26 small- to large-scale projects in renewable energy (solar, geothermal and wind) are being implemented in 20 countries; projects promoting multimodal/mass rapid transit systems are being implemented in three large African cities — Nairobi, Abidjan and Dar es Salaam; and 80 projects focusing on enhancing sustainable land and forest management have been approved in 40 countries.
- The Bank successfully issued four green bonds. The first, a USD 500 million bond was issued in March 2013 with maturity in October 2016 (100% project allocated). A SEK 1 billion (approximately USD 113 million) bond was next issued in February 2014 with maturity in February 2019 (77% project allocated), followed by another SEK 1 billion issued in March 2014 with maturity in March 2019 (100% project allocated). Capital raised was invested in 14 projects which will contribute to GHG emissions reduction of approximately 6.9 million tonnes of CO₂ at completion. The last issued green bond in 2015 was a USD 500 million bond in December 2015, which is currently at 85% project allocation.
- The Bank partnered with other Multilateral Development Banks (MDBs) and other stakeholders to address the challenges of climate change in Africa. These partnerships have enabled the Bank to leverage its influence in terms of the reach of its financial investments. Partnerships have also provided opportunities to enhance transparency in reporting on climate finance and sharing best practices for mainstreaming climate change. The Bank led the joint MDB initiative to develop the methodology for tracking and reporting adaptation finance to ensure homogeneity and transparency in tracking and reporting climate finance.
- Partnership with continental institutions. The Bank in collaboration with the Africa Union Commission; United Nations Economic Commission for Africa; and the New Partnership for Africa's Development hosted the Africa Pavilions at the United Nations Framework Convention on Climate Change (UNFCCC) COP events since COP17 in Durban. The Bank has supported the Africa's Group of Negotiators to ensure

Africa's views were included and concerns addressed in the UNFCCC climate negotiations.

- Through the Bank-hosted Africa hub of the Sustainable Energy for All (SEforALL) Initiative many African countries have developed investment prospectuses at the national level that will contribute to achieving the three goals of SDG7 — universal energy access, increased share of renewables in the global energy mix and doubling the rate of energy efficiency improvement. The Bank also hosts the Africa Climate Technology Centre whose objective is to support Sub-Saharan African countries to scale up low-carbon and climate-resilient technologies for climate change. The Centre supported the use of solar in water pumping in rural and peri-urban areas in Mauritania, as well as energy efficiency in public and commercial buildings in Ghana.

Lessons learnt in the implementation of the CCAP1

As a result of the CCAP1 implementation, the Bank gained a greater awareness of the areas in which it has a comparative advantage and in which it can be Africa's leading institution in the fight against climate change. The Bank continues to draw upon the knowledge and expertise developed by the wider development community and it proactively shares its experience and contributes to joint initiatives. Implementation of the CCAP1, much of which was guided by hands on learning, also served to focus Bank-wide attention on mainstreaming climate change into the Bank's investments, while mobilising needed financial resources for RMCs.

Over the course of the CCAP1, the Bank experienced some challenges, and recognised various critical external and internal opportunities upon which it must build and the risks that it must mitigate if it is to successfully address the challenges posed by climate change and harness existing opportunities. As a result of the internal completion review of the CCAP1 conducted in December 2015, the following lessons have been incorporated in the CCAP2:

- **Engaged leadership at the Bank's highest level is critical to future CCAP achievements.** Such leadership was necessary to rally political support within and outside Africa to mobilize resources to implement the Action Plan and to create enabling environments to attract private sector investments in climate change. The Bank's senior management must therefore remain engaged in the climate change agenda to maximize future CCAP success.
- **Dedicated resources for climate change, in addition to enhanced capacity to mobilise**

climate finance at scale, will tremendously help the Bank meet future CCAP goals. During the CCAP1 implementation, limited staff resources constrained the Bank's ability to successfully navigate channels and access global climate change resources. The establishment of the Climate Change and Green Growth Department under the new DBDM, and its staffing with experienced and qualified climate change experts, will significantly improve the situation. Enhancing capacity in areas such as carbon finance, mitigation, adaptation and asset management will further help empower relevant individuals with the knowledge needed to drive the CCAP agenda forward. An incentive system to reward success in mobilizing climate finance would further encourage the raising of additional required funding.

- **Increasing climate finance will require greater innovation and risk.** The Bank has been highly conservative in financing climate change projects. As a result, it has missed out on additional opportunities to mobilise climate finance. The Bank's commitment to allocate 40 percent of its annual approvals to climate finance by 2020 and also to mobilise climate finance from external sources is a bold step in the right direction. Also, future CCAPs will benefit greatly from the expansion of the Bank's use of innovative instruments and approaches to increase its climate finance and enhance its access to other finance mechanisms.
- **Future results measurement frameworks must contain realistic parameters given the five year duration of the action plans and be either amendable or somehow take into account the need to measure newly added initiatives.** The Results Measurement Framework (RMF) developed for the CCAP1 was not effective in addressing the TYS and the H5s as they were introduced after the RMF was developed. Furthermore, many of the indicators could not be measured within the short span of the CCAP1. An updated RMF has therefore been developed that captures the H5s' key climate change elements. Moving forward, it is advised that future RMFs take into account these parameters.
- **Securing buy-in for new Bank-wide initiatives requires increased communication from top management down to all staff to ensure comprehensive and effective implementation.** Despite the establishment of the Climate Change Coordinating Committee (CCCC), there were still challenges in ensuring the Bank-wide integration of climate change in the Bank's investments. The CCCC needs to be strengthened with regular reports submitted to Senior Management and clear signals communicated to task managers across all the H5s on how the Bank is demonstrating its commitment to the climate agenda.

Strategic vision, objectives and guiding principles

The Strategic Vision of the CCAP2 foresees an African continent that is less vulnerable to climate change and that develops in a low-carbon manner. In order to realize this vision, the Action Plan aims to:

- Support the implementation of Africa's NDCs by helping African countries define and achieve their commitments to mitigation and adaptation whilst also fulfilling their development objectives; and
- Scale up climate finance mobilised and channelled to African countries from public (multilateral/bilateral) and private sources. Specifically, the Bank has committed to allocate 40 percent of approvals to climate finance annually by 2020, to facilitate the transformation of economies and societies to better cope with the challenges and to take advantage of the opportunities presented by climate change.

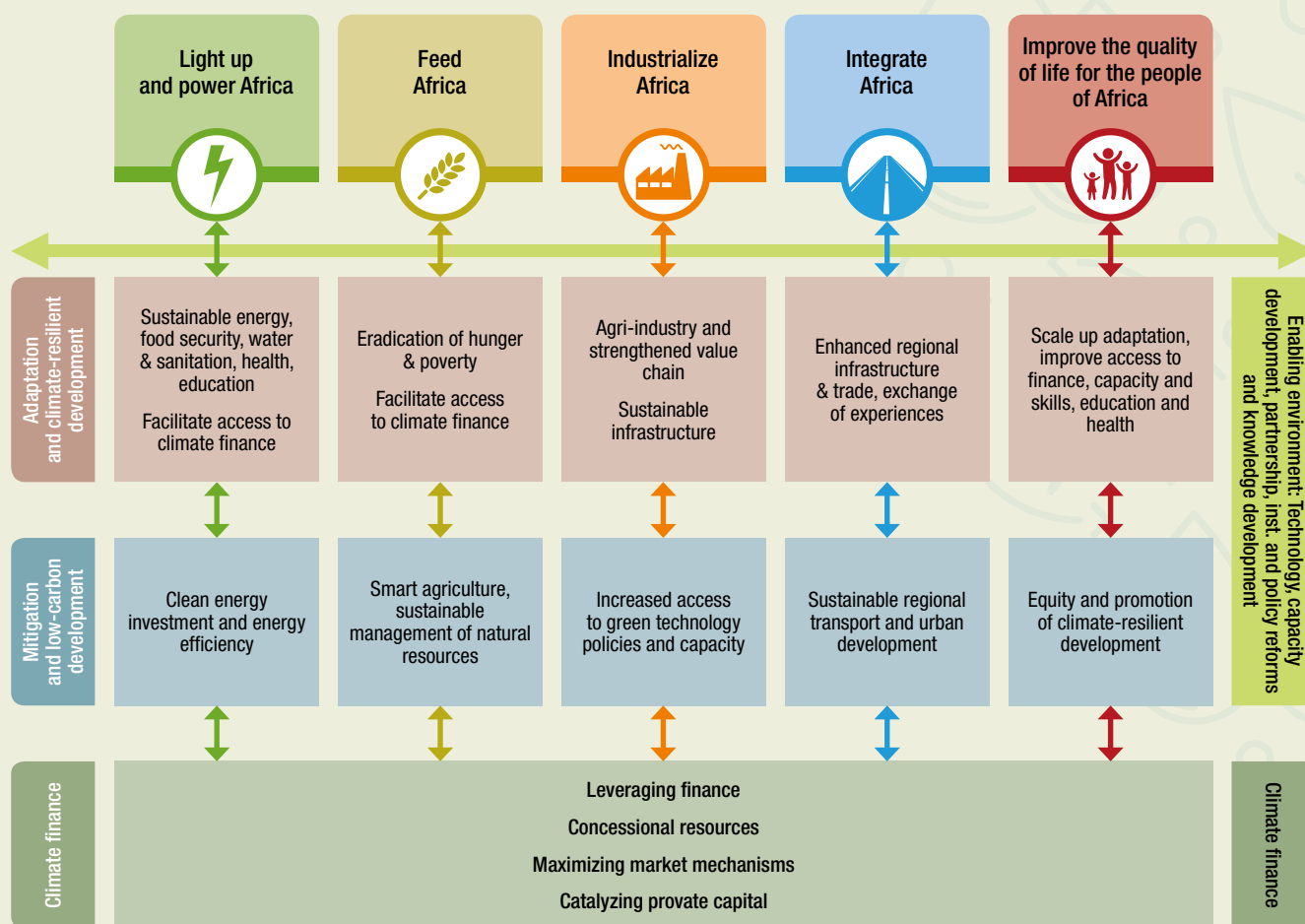
The implementation of the CCAP2 will be guided by seven key principles which will be applied to all activities whenever possible:

- **Transparency and accountability.** A participatory and consultative approach across the Bank's departments is needed to ensure ownership of the CCAP2 and transparency in its implementation. An effective monitoring and evaluation system will track implementation progress as well as the outcomes.
- **Transformational change.** The CCAP2 aims to achieve transformational change in the continent by promoting a paradigm shift from business-as-usual towards climate-resilient and low-carbon development. Transformation also extends to raising awareness about and understanding climate change both within the Bank and amongst African stakeholders.
- **Synergy between adaptation and mitigation.** In implementing the CCAP2, the Bank will actively seek

to identify situations where multiple benefits and co-benefits arise and where projects contribute to multiple strategies in host countries, such as NDCs, development strategies, National Adaptation Plans and Nationally Appropriate Mitigation Actions.

- **Knowledge-based approach.** The implementation of the CCAP2 will be informed by up-to-date scientific knowledge, including the analysis of potential climate change impacts and their interactions with socioeconomic factors. This implies the development and utilization of tools and methods to identify risks at an early stage of the project cycle and to plan appropriate actions to minimise adverse impacts and ensure project sustainability.
- **Hands on learning.** Implementation of the CCAP2 will be guided by the lessons learnt by the Bank during the CCAP1 lifecycle. As a result, the CCAP2 implementation will ensure all Bank investments fully mainstream climate change into their design and implementation processes and consider key climate change challenges and opportunities during the Bank's ongoing transformation process.
- **Selectivity.** Given the ambitious nature of the climate change agenda and the broad range of priority areas articulated by African countries in their NDCs, the Bank will be selective in its support to African countries, ensuring investments not only generate climate co-benefits but also contribute to economic and social development objectives. It will focus on core areas of comparative advantage within the operational framework provided by the H5s.
- **Results.** The most visible sign of success will be national socioeconomic development as African countries transition to low-carbon development pathways and adapt to the impacts of climate change. The Bank will monitor projects in order to capture these results and communicate them to stakeholders.

Figure 1. Conceptual framework for the CCAP2



Conceptual framework for the CCAP2

Taking into account the Paris Agreement and the priorities set out in Africa's NDCs, the CCAP2 is built upon four pillars: Adaptation, Mitigation, Climate Finance and Enabling Environment (See Figure 1). Under each of the High 5 priority areas, opportunities

will be identified to adapt to climate risk; mitigate GHG emissions; provide innovative climate finance; and under the heading of enabling environments, build capacity to respond to threats and opportunities, develop and transfer climate-friendly technology and innovation and address cross-cutting issues such as gender. ■

02



Photo © ADB

NATIONALLY DETERMINED CONTRIBUTIONS AND THE HIGH 5S

To date, 30 African nations have ratified the Paris Agreement out of a total of 127 Parties. By ratifying the Agreement, Parties convert their INDCs into NDCs and these become legally binding. Parties are now working on the conversion of their NDCs into action plans, drilling down and providing more detail on exactly how their unconditional and conditional commitments can be fulfilled. The Bank is committed to assisting African nations in this process and seeks to align its operational activities with the goals of the NDCs.

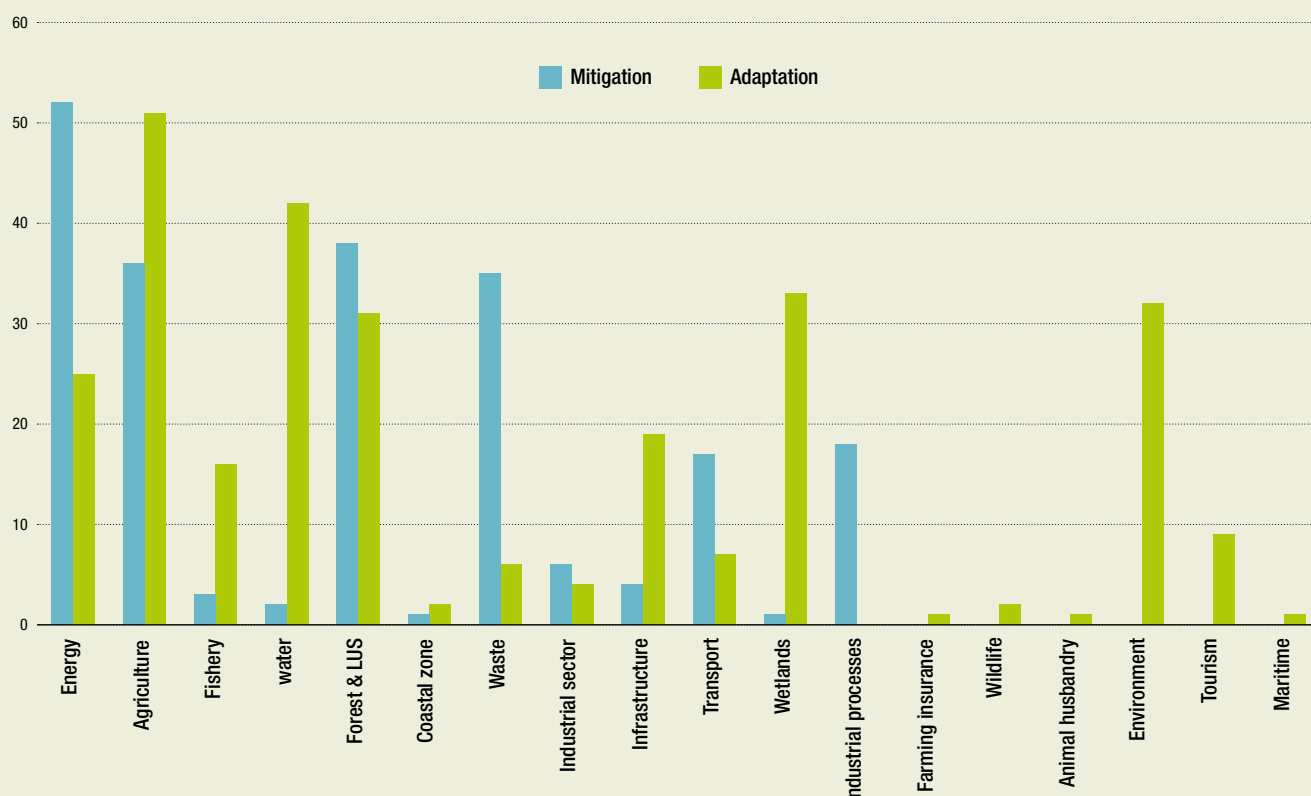
The Bank's operational activities are now organized under the Bank's new development agenda known

as the H5s, which have been designed to be responsive to regional development and poverty reduction needs. The CCAP2 illustrates how the Bank will achieve the H5s within the context of the Paris Agreement, NDCs and development strategies by harnessing opportunities which support adaptation and mitigation (See Figure 2); financial flows; and enabling environments, including via technology development and transfer, capacity building and cross-cutting issues. The objectives of the H5s and their convergence with the opportunities to address countries' NDCs are outlined below¹.

¹ A complete description of the context for, and work under, each of the High 5 areas is available in the following strategies: *The New Deal on Energy – the Bank's Energy Strategy*, *Feed Africa Strategy*, *Industrialise Africa Strategy*, and *Integrate Africa Strategy*.

Figure 2. Priority areas for adaptation and mitigation in INDCs by sectors

Number of operations per sector priorities, AfDB 2016



Light up and Power Africa

The goal of the Bank's energy strategy is to help the continent achieve universal access to modern energy by 2025, including through harnessing Africa's abundant renewable energy resources.² This will require providing 160 GW of new capacity, 130 million new on-grid connections, 75 million new off-grid connections, and providing 150 million households with access to clean cooking solutions. The strategy will contribute

significantly to supporting Africa's transition to low-carbon development. Accessing clean energy through both on and off-grid infrastructure can provide opportunities to switch from conventional high emissions sources of energy and gradually decouple emissions from Africa's economic development. However, the challenge to extensive use of renewables in Africa is their location and intermittency.

Box 2. Ethiopia's ambitious NDC

Ethiopia's NDC sets an ambitious conditional target to reduce emissions in 2030 by 64% below an estimated value of 3 tonnes CO₂e per person per annum. The NDC builds upon the Climate Resilient Green Economy (CRGE) Strategy and the second Growth and Transformation Plan, Ethiopia's flagship national five-year development plan. The CRGE is the foundation of Ethiopia's INDC. The energy sector, supported by the AfDB, is one of seven CRGE priority sectors. The NDC proposes adaptation measures which are based on the National Adaptation Programme of Action and the Ethiopia Programme of Adaptation to Climate Change. Energy projects which the Bank is likely to support include large scale hydro, geothermal, wind and solar, as well as inter-connections, grid connection and energy efficiency.

Feed Africa

The increasing frequency of droughts and floods associated with climate change will affect food security and increase the cases of malnutrition. The Bank will therefore harness opportunities to transform the agricultural sector through climate-smart agriculture (CSA) which is critical to strengthening the resilience of farmers to climate change and reducing the sector's contribution to GHG emissions. Through CSA, Africa's annual agricultural output could increase from USD 280 billion to as much as USD 880 billion by 2030; representing a significant opportunity to feed the continent's growing population.

The Bank's nutrition action plan will guide the implementation of nutrition sensitive CSA. With this

approach, not only the overall availability of food will increase, but also the dietary diversity and the quality of diets could increase through crop and animal diversification, in conjunction with nutrition awareness raising activities. To address the climate related risk of pest contamination and attendant food safety issues the Bank is already implementing the post-harvest loss reduction interventions.

The Bank further proposes to promote a range of mechanisms to help achieve the goal of feeding Africa, such as insurance for farmers, hydro-meteorological data and warning systems, in addition to improved supply lines and value chains to reduce food and financial losses.

Box 3. The Gambia highlights food security

Submitted in September 2016, The Gambia's INDC presents a 45.4% decrease in emissions by 2030 covering seven sectors, including agriculture. Targets are conditional upon financial support and no specific funding needs are specified at this point in time, awaiting further assessment. Given the significance of food security in The Gambia, the Bank's Feed Africa H5 is likely to be significant in helping fulfil its goals.

² The continent's renewable energy potential includes solar generation capacity in excess of 10,000 GW; 109 GW of wind; 15 GW of geothermal; and about 350GW of hydro.

Industrialise Africa

A transition towards low-carbon, resource-efficient and climate-resilient development pathways using science, technology and innovation is needed to steer growth towards inclusive and sustainable development for all on the continent. This paradigm shift is a structural transformation based on low-polluting and resource-efficient industrialization — i.e. green industrialization — that adds value to Africa's raw materials and increase global competitiveness, driven by a knowledge-based and inclusive economy. Through the CCAP2 the Bank will support green industrialization

in Africa through efficient industry clusters and clean production. For example, African energy intensity remains the highest in the world — at 2.6 times the world average in 1990 and 2.7 times the world average in 2013 — which suggests that Africa can save huge amounts of energy by introducing more energy-efficient technologies. Africa's developing industrial base will be competing in a world where GHG emissions are regulated and potentially traded. Through efficient industries that use scarce resources wisely, Africa can build an industrial base that is capable of competing in a 2050 world.

Box 4. Industrialization linked to energy use

Several African NDCs address industrialization through diversification of energy sources and energy efficiency. For example, Morocco's GHG mitigation goals rely in large part on an important transformation of the country's energy sector. The primary goals that underlie this energy transition include: reaching over 52% of installed electricity production capacity from renewable sources by 2030; reducing energy consumption by 15% by 2030; substantially reducing public fossil fuel subsidies, building on reforms already undertaken in recent years; and substantially increasing the use of natural gas, including the supply of major industries with imported and re-gasified natural gas by pipelines.

Integrate Africa

The Integrate Africa Strategy is aimed at facilitating the movement of people, energy, goods and services within and between African countries to promote cross-border investments and economic development. The Bank will continue to develop and implement regional integration strategy plans as a means of identifying opportunities to strengthen linkages and improve resource use efficiency. Transport costs on intra-African trade are estimated at more than twice those in South and East Asia and constitute one of the key constraints to regional integration. The strategy provides the opportunity to invest in developing greener transport links

that reduce emissions. Regional power pools and grid interconnections to facilitate the flow of renewable energy across borders and take advantage of peaks and troughs in both supply and demand will also be important areas for the Bank's activities. This also includes transboundary water resources management and regional drought resilience programmes such as Horn of Africa and Sahel. The Bank will continue to develop and implement Regional Integration Strategy Plans as a means of identifying opportunities to strengthen linkages and improve resource use efficiency, in synergy with NDCs and development strategies.

Box 5. Integrate Africa presents regional opportunities

While the NDCs are national in nature, Integrate Africa takes a regional approach to development. National and regional transport infrastructure, the built environment, and energy inter-connections all need to be built with a 2050 climate policy environment in mind while transboundary resources such as wildlife, rivers and lakes need to be managed with changing climates in mind. For this reason, the Bank seeks to increasingly screen projects for their compatibility with NDCs, future climate policies and future regional integration opportunities. For example, power inter-connections, international electric rail and urban mass rapid transport will play a valuable role in creating an integrated low-carbon economy of the future.



Improve the quality of life of Africa's people

All of the Bank's policies aim primarily to help Africa's people overcome poverty and benefit from sustainable development, including through greater access to sanitation, safe drinking water, and health and education services. This strategy offers opportunities to mainstream climate change into urban planning, promote integrated water resources development and management; support transboundary water resources management; strengthen public health security and disaster risk management; improve the nutritional status; build the resilience of water supply and sanitation, especially in the urban centres; and create green jobs.

CCAP2 recognizes that investments in Human Capital and health represent an important approach for the Bank's fight against poverty and social exclusion, which are exacerbated by climate change. In the health sector, capacity is currently being built in climate change health risk assessments. The Bank is building partnerships with the AU and the Africa Center for Disease Control to strengthen disease surveillance and emergency preparedness and with WHO and UNEP under Health and Environment Strategic Alliance (HESA) to catalyze action and stimulate policies and investments on the joint contribution of the health and environment sectors. Through its jobs for youth program, the Bank is already targeting the creation of 25 million jobs for young Africans. ■

Box 6. Uganda emphasizes adaptation and quality of life

The livelihoods of Uganda's people are highly dependent upon the exploitation of its natural resources and its climate. The country's NDC therefore prioritizes adaptation. The country will continue to work on reducing vulnerability and addressing adaptation in agriculture and livestock, forestry, infrastructure (with an emphasis on human settlements, social infrastructure and transport), water, energy, health and disaster risk management. Sustainable land management and Climate Smart Agriculture (CSA) will be scaled up to increase resilience at the grassroots level. These initiatives cut across many of the Bank's H5s and justify the Bank's focus on adaptation and improving the quality of peoples' lives.






03



THE FOUR PILLARS OF THE CCAP2

The CCAP2 is structured around four pillars drawn from the Paris Agreement. Table 1 below shows how each of the H5s interacts with the pillars.

Table 1. **Alignment of the High 5s with the CCAP2 conceptual framework**

The High 5s	Pillars			
	Adaptation	Mitigation	Climate finance	Enabling environments
 Light up and power Africa	<ul style="list-style-type: none"> Sustainable energy supply to support food security, water and sanitation, health and education services. Climate-proofing of energy infrastructure. Promote clean cooking 	<ul style="list-style-type: none"> Harness Africa's abundant renewable energy potential including for clean cooking. Scale up investments in clean energy. Support energy efficiency initiatives. Support RMCs to redirect perverse fossil fuel subsidies. 	<ul style="list-style-type: none"> Deploy concessional resources. Strengthen partnerships with SEforALL, Africa Renewable Energy Initiative, etc. Support domestic resource mobilisation. Leverage external finance from public and private sources. Develop and maximise market and non-market mechanisms. Expand co-financing opportunities. Facilitate access to climate finance and catalyse private capital. 	<ul style="list-style-type: none"> Strengthen policies, governance and capacity. Support the implementation of NDCs. Create green jobs. Build capacity and knowledge generation programs in climate change and sustainable development. Foster scientific research in climate mitigation and adaptation.
 Feed Africa	<ul style="list-style-type: none"> Contribute to eliminating extreme poverty and reduce malnutrition. Promote climate-smart agriculture to build resilience and enhance investments in adaptation. Build resilience of communities to adverse climate change impacts through improved access and connectivity, and food storage. 	<ul style="list-style-type: none"> Promote nutrition sensitive climate-smart agriculture and sustainable management of natural resources. Manage land use and forests for carbon sequestration. Reduced emissions caused by deforestation and forest degradation (incl. REDD+ implementation). 		
 Industrialize Africa	<ul style="list-style-type: none"> Strengthen the continent's value chain, especially in agriculture. Create jobs and employment opportunities. Develop resource efficient (GHG efficient) industries that compete in international markets. 	<ul style="list-style-type: none"> Increase investments in green infrastructure. Increase access to green technology. Introduce new technologies and designs to industry-related transport infrastructure. Increase energy efficiency of industrial processes. 		
 Integrate Africa	<ul style="list-style-type: none"> Support regional infrastructure and enhance trade. Build resilience of regional transport corridors. Build infrastructure—including railway systems, and air and seaports—that is climate-proofed through integration of adaptation and resilience measures to enhance sustainability. Strengthen integrated disaster risk management. Climate proofing trans-border energy systems. 	<ul style="list-style-type: none"> Encourage sustainable transport and urban development. Increase low-emission transportation. Promote regional energy interconnections. 		
 Improve the livelihoods of African people	<ul style="list-style-type: none"> Ensure resilience of urban and rural transport and utility systems including waste management Provide early warning systems and strengthen response systems for climate-related disasters. Improve capacity and decision making to manage climate sensitive health risks. Improve urban and rural air quality. 	<ul style="list-style-type: none"> Promote efficient resource use and waste management. Manage solid and liquid waste to minimise GHG emissions and recover energy Promote green awareness among youth through education and media. 		

Pillar 1: Boosting adaptation and climate-resilient development in Africa

The Bank will leverage resources to strengthen the adaptive capacities of countries by supporting the diversification of economies away from heavy dependence on climate-sensitive sectors and the creation of alternative livelihoods in grassroots communities. It will also contribute to sectoral planning and incorporation of adaptation and resilience in key sectors identified in African NDCs, such as water, agriculture, health, infrastructure and energy. and link with the Global Sendai Framework to strengthen disaster risk management. The Bank recognizes hard adaptation measures which strengthen infrastructure to make it more resilient to changing climatic conditions and soft measures which make households, communities and economies economically stronger and better able to withstand climate-induced shocks.

Priority areas to boost adaptation and climate resilience include:

1. Promoting climate-resilient agriculture

The Bank will support investments in climate-smart agriculture (CSA), sustainable forestry practices, and efforts to strengthen farmers' resilience to climate change by: promoting the integration of CSA practices among farmers and enterprises by providing funding and demonstrating the value of CSA approaches; investing in country-level infrastructure and building capacity to meet CSA objectives, as well as scaling up and replicating programmes; enhancing the capacity to adapt to climate risk by facilitating access to appropriate technology, building agriculture infrastructure, enhancing public policy

reform and improving smallholders' access to finance; and promoting economic diversification and alternative livelihoods in communities.

These activities will support the implementation of the "Feed Africa" Programme on CSA (See Box 7), which aims to transform agricultural value chains and agro-ecological zones to make them climate-resilient.

2. Scaling up investments in sustainable water resources management

Africa is exceptionally well endowed with transboundary water resources, including river basins and large inland lakes and waterways. To harness this potential, the Bank will scale up support to the water sector by: mainstreaming climate change in all investments in the water and sanitation sector); investing in integrated water resources development and management; supporting transboundary water resources management in the various river basins; and improving access to sanitation and safe drinking water in both urban and rural areas (See Box 8).

3. Sustainable infrastructure

Africa faces several challenges due to the poor state of physical infrastructure exacerbated by the impacts of extreme climatic events. Sustainable infrastructure, particularly for transport, is therefore crucial to guarantee a sustainable supply of goods and services across the continent. Urban environments are furthermore particularly susceptible to flooding and outbreaks of diseases such as malaria and cholera. Proper urban planning is necessary for enhancing the resilience of urban infrastructure and services, such as water supply and sanitation, waste and health.

Box 7. Feed Africa Climate-smart Agriculture Programme

The main goal of the flagship Feed Africa Climate-smart Agriculture (CSA) Programme (2017–2020) is to promote sustainable agriculture through sustainably increasing agricultural productivity and income; adapting and building resilience to climate change; and reducing greenhouse gas emissions. The approximately USD 2.7 billion Programme (which leverages approximately USD 1.36 billion from climate funds) aims to enhance the adaptive capacity of 5 million vulnerable farmers by building resilient water harvesting and irrigation infrastructure, promoting CSA practices among both farmers and enterprises, and also facilitating access to and use of best practices and new technologies through the Technologies for African Agricultural Transformation, Enable Youth, Agropoles and Risk Facility initiatives. By 2020, at least ten adaptation projects and/or programmes will be prepared and implemented.

Box 8. Examples of ongoing sustainable water resource management investments

In Côte d'Ivoire, the Bank is working on an approximately USD 54.3 million project expected to improve the living conditions in the city of Abidjan by reinforcing the city's sanitation network to reduce the impacts of flooding. Meanwhile, a USD 6.7 million project in Somaliland is contributing to a resilient and sustainable water and sanitation sector by adopting an integrated approach combining small- to medium-scale water storage facilities and use of ground water to increase water quantity and availability. In Kenya, the Bank is building resilience in the region through an approximately USD 54.3 million programme that comprises a multi-purpose dam with installed capacity of 20 MW in hydropower generation; an irrigation scheme which will irrigate 3,275 hectares of nearby land, mainly for the benefit of small-scale farmers, and another 36,900 hectares about 60 km downstream of the dam.

Box 9. Lomé-Cotonou Road Rehabilitation and Coastal Protection Phase 2

This project aims to contribute to strengthening regional integration, the growth of intra-regional trade, as well as protecting the Togolese and Beninese coastlines. Specifically, the project aims to: improve the level of service of the transport logistical chain and traffic flow on the Abidjan - Lagos corridor as well as the living conditions of people in the project area of influence and strengthen the climate resilience of infrastructure in coastal areas in Togo and Benin. The project will directly benefit transportation users as well as the 1.7 million people in the project area. The total cost for the project is estimated at approximately USD 182 million. The project will be jointly financed by the ADF, the Islamic Development Bank, the European Union, the West African Development Bank, the Global Environment Facility, West African Economic and Monetary Union and the Government of Togo.

To ensure the sustainability of infrastructure, the Bank will: screen projects for climate risk and integrate adaptation measures to improve the resilience of infrastructure, including regional infrastructure; support climate-proofing of urban infrastructure in cities, including flood protection measures; promote early warning for disaster management and prevention; strengthen the capacities of meteorological services to deliver early warning systems for climate disasters and disease surveillance; and strengthen the capacities of municipalities on master and land use planning for, inter alia, transport, health, energy, water supply and sanitation.

African coastal areas are particularly vulnerable to climate change impacts, such as flooding, sea level rise and coastal erosion. In West Africa, for instance, coastal areas are home to 31% of the region's population and account for 56% of the region's gross domestic product. The Bank will invest in coastal protection projects in Africa including the design and implementation of regional programmes to build the resilience of African coastal zones (See Box 9).

4. Climate-resilient energy systems

5. Adaptation in the energy sector is a key component of many African NDCs. There is a need to ensure that both existing and new energy infrastructure takes into account climate impacts. Access to energy drives economic growth, powers hospitals and schools and generally increases societal resilience to disasters and climatic extremes. Several African energy systems are already vulnerable to the negative impacts of climate change, such as the Batoka Gorge Hydropower between Zambia and Zimbabwe. Both countries have been strongly influenced by the El Niño Southern Oscillation and would be further adversely affected by intense droughts and flooding. To ensure a sustainable energy supply on the continent, the Bank will: support African countries to diversify their energy mix in order to reduce their dependency on a single source of energy, for example hydropower dependency in Southern Africa; improve access to clean energy sources by vulnerable groups, including women; and assist countries to build resilience into energy systems and networks. Annex 1.1 provides the adaptation logic model at the end of the section.

6. Scaling up adaptation finance

Following the precedent set by the Green Climate Fund, the Bank will aspire to increase funding to adaptation to achieve a 50/50 allocation between adaptation and mitigation. This commitment is also reflected in the Paris Agreement and is advocated for by the African Leaders, African Negotiators and African Members of the GCF Board.

Whereas Africa's major climate challenge is adaptation, CCAP1 reported that Bank climate investments were skewed towards mitigation; in 2015 only 29% of Bank's climate finance was invested in climate adaptation activities. This is partly due the complex nature of accounting for adaptation finance, the overlap between adaptation and development and the relative ease of quantifying mitigation outcomes. Greater recognition of softer adaptation benefits, such as the impact of applying climate smart agriculture or connecting a house to a supply of electricity will help to identify more adaptation benefits with mitigation co-benefits.

Of the Bank's planned investments (2016-2020) towards climate finance, approximately 15% will be invested in climate smart agriculture, forestry, water resource management and the social sectors which have clear adaptation benefits for African people. Additional funds will be invested in energy projects with adaptation benefits and in "climate proofing" infrastructure projects.

Demonstrating the adaptation benefits of projects will help attract additional adaptation finance, co-financing and climate finance via bilateral donors, and trust funds such as the Adaptation Fund and the GCF. The Bank will continue to work through the ACCF to build RMCs' readiness for accessing climate finance and to help generate a pipeline of adaptation project that could access GCF adaptation finance.

7. Special initiatives that support adaptation and climate-resilience

Examples of initiatives which will contribute to achieving the Bank's goal on adaptation and climate-resilience are outlined in Box 10.

Box 10. Special initiatives that support adaptation and climate-resilience

Africa Infrastructure Resilient Facility — The Facility, formed by the AfDB, together with the World Bank Group and other African institutions, will mobilize resources to climate-proof Africa's infrastructure. The Bank will play an important role in operationalizing this initiative by supporting the development of technical guidelines on the integration of climate change in the planning and design of infrastructure in climate-sensitive sectors and by establishing an Africa climate resilience project preparation facility to support the needs of the continent's infrastructure sector in terms of climate-proofing investments.

Adaptation Benefit Mechanism (ABM) — To date, private sector participation in financing adaptation in Africa has been limited. Considering the potential role of the private sector in addressing adaptation needs, the Bank will operationalize the ABM. The main purpose of the ABM will be to create a business model that encourages private sector investments in adaptation in order to help scale up climate finance and simultaneously deliver contributions to the Sustainable Development Goals and the goals of the Paris Agreement. Under the ABM, project developers will be incentivized to change their behaviour from business-as-usual to invest in technologies and services that deliver adaptation benefits to households, communities and economic sectors in developing countries, making them economically stronger and better able to withstand climate shocks.

Africa Risk Capacity (ARC) — The Bank is currently working on a programme to provide finance of about USD 100 million to African countries with co-financing from other development partners. The Bank supports key elements of the ARC Membership Programme which: provide quick-disbursing funds after a severe weather event, enabling a more timely response; reduce risk management costs by pooling risk across regionally diverse weather systems; lower the cost to governments of disaster relief and severe weather event impacts; and build on existing early warning systems. This will help shift climate risks away from vulnerable populations and African governments to the ARC which will be better equipped to handle the risks.

Africa Adaptation Initiative (AAI) — The AAI is a bold and innovative step by the continent's leaders to significantly scale up adaptation action across the continent. For example, it could provide the continental platform for effectively linking with the UN Secretary General's emerging global initiative on resilience, A2R (Anticipate, Absorb, Reshape). The AAI will do this by: enhancing observational infrastructure and early warning systems; supporting the creation and strengthening of national institutions and policies; enabling the implementation of specific projects and actions; and mobilizing finance and investments. National governments in Africa and their designated entities will ultimately drive the implementation, while a Continental Adaptation Support Unit will be established to coordinate efforts and enhance action. The Unit will require an estimated USD 20 million between now and 2020, and an estimated USD 200 million over the first five-year period from 2016 to 2020.

Adaptation of African Agriculture Initiative (AAA) — Launched at COP22 and identified as one of the priorities of the Moroccan presidency, the AAA aims to reduce the vulnerability of Africa and its agriculture to climate change. It promotes and fosters the implementation of specific projects to improve soil management, agricultural water control, climate risk management, and capacity building and funding solutions. An important response not only to climate change, but also to food insecurity, its objective is to place the AAA at the heart of climate debates and negotiations and to attract a substantial share of climate funds. It also aims to contribute to the roll-out of specific agricultural projects. To date, the initiative is actively supported by 25 African countries, the UNFCCC and the Food and Agricultural Organization and is aligned with existing initiatives.

Africa Hydromet Programme — Jointly implemented with the World Bank Group and the World Meteorological Organisation, the regional framework aims to strengthen climate adaptation and build disaster resilience in Africa. The Bank will support the modernization and strengthening of weather and climate services in Africa through: institutional development for improved hydro-meteorological services; improvement of weather and climate observation, information and early warning infrastructure; upgrades to regional hydro-meteorological monitoring infrastructure and data interpretation capabilities; and the provision of advisory services for the development of sustainable strategies, infrastructure modernization and service delivery, among others.

African Water Facility (AWF) — Hosted and managed by the AfDB, the AWF aims to mobilise and apply financial and human resources to ensure water security in Africa, thereby contributing to meeting the targets and goals established by the Africa Water Vision 2025. Over the past decade, led by the African Ministers' Council on Water, the AWF developed a portfolio of grants covering 104 projects in 52 countries, including Africa's most vulnerable states. On average, each EUR 1 contributed by the AWF has attracted EUR 34 in additional follow-up investments. Since 2006, the AWF has mobilised EUR 151.2 million from 15 bilateral, multilateral financial institutions, foundations and African governments.

Pillar 2: Promoting mitigation and low-carbon development in Africa

Most African countries have relatively low levels of GHG emissions from fossil fuels, while those from land use, land use change and forestry dominate emission inventories. However, Africa still needs to decouple growth from emissions. Development and transfer of appropriate technologies will play an important role in harnessing opportunities for low-carbon development. The Bank will

work with RMCs to invest in clean energy, sustainable management of natural resources, green infrastructure, and development and deployment of appropriate technologies. Actions under this pillar include:

1. Scaling up investment in renewable energy

The Action Plan supports the implementation of the Bank's New Deal on Energy for Africa and the Bank-hosted AREI to increase investment in renewable energy. The Bank will support renewable energy initiatives by: expanding

investments in solar, wind, geothermal, and hydro to increase the share of renewable energy in Africa's energy mix to contribute to the AREI target of at least 10 GW of generating capacity by 2020; investing in interventions beyond the grid, including mini-grid and off-grid solutions to connect at least 30 million households; supporting RMCs to develop appropriate policies and regulatory frameworks to attract private sector investments; and facilitating coordination and synergy with relevant global and regional initiatives, such as SEforALL, AREI, and Power Africa.

2. Promoting energy efficiency

While energy efficiency is often the lowest-cost means of increasing the reliability, affordability and sustainability of energy supply, its potential remains untapped. Hence, the Bank will support initiatives that will promote investment in such areas as the rehabilitation of distribution lines, as well as improve efficiency of electricity consumption in houses, public buildings, commercial enterprises and industry. It will do this by: supporting technological and process interventions in key sectors, including buildings and appliances, industry and mining, agriculture, supply-side/grid infrastructure, smart-grid, and transport; building the capacity of utilities and industries to invest in smart-grid solutions; and promoting the deployment of appropriate energy efficient technologies, such as compact fluorescent lamps (CFLs) and light emitting diodes (LEDs), in small businesses and households.

3. Supporting climate smart agriculture and reducing emissions from deforestation and forest degradation

Forests provide crucial environmental goods and services such as carbon sequestration, biodiversity conservation, soil conservation and watershed protection. Nevertheless, Africa has the highest rate of deforestation and has not benefitted significantly from REDD+, due to multiple challenges such as limited country readiness and technical capacities, as well as limited financial flows. The Bank will therefore support: initiatives that promote sustainable land-use, forest management, and agroforestry practices that enhance carbon sequestration through reducing deforestation and land degradation and restoring vegetation in degraded areas; implementation of REDD+, conservation, and

sustainable forest management activities, aiming to avoid about 50 million tonnes of CO₂ equivalent emissions (See Box 11); and interventions in irrigation and livestock to reduce methane emissions. Based on lessons learnt from CBFF implementation, the Bank will scale up its forestry and REDD+ activities in preserving African forests, including the Congo Basin forest which is the second largest rainforest in the world.

4. Developing green infrastructure

To ensure access to regional and global markets, Africa must invest more in green industrialization and supportive infrastructure, such as energy and transport systems (See Box 12 and 13). Some countries, such as Ethiopia, Rwanda, Kenya, South Africa, and Ghana, are already taking the lead. For example, Ethiopia's Growth and Transformation Plan underpinned by its Climate Resilient Green Economy strategy; Ghana's AKOBEN Environmental Rating and Disclosure Programme that is used to assess the environmental performance of mining and manufacturing operations; and Rwanda's National Strategy for Climate Change and Low-Carbon Development are just a few of the many initiatives governments are putting in place to promote green industrialization.

In Africa, urban centres are the hubs of economic activity, but face severe challenges. Poor infrastructure and planning has led to non-climate-smart and suboptimal provision of services. Significant opportunities exist to enhance welfare and efficiency gains through the provision of improved housing, clean energy services, public transport services, waste management services (including waste to energy) and to reduce congestion and air pollution in African cities exist. It is therefore essential to support the development of sustainable cities.

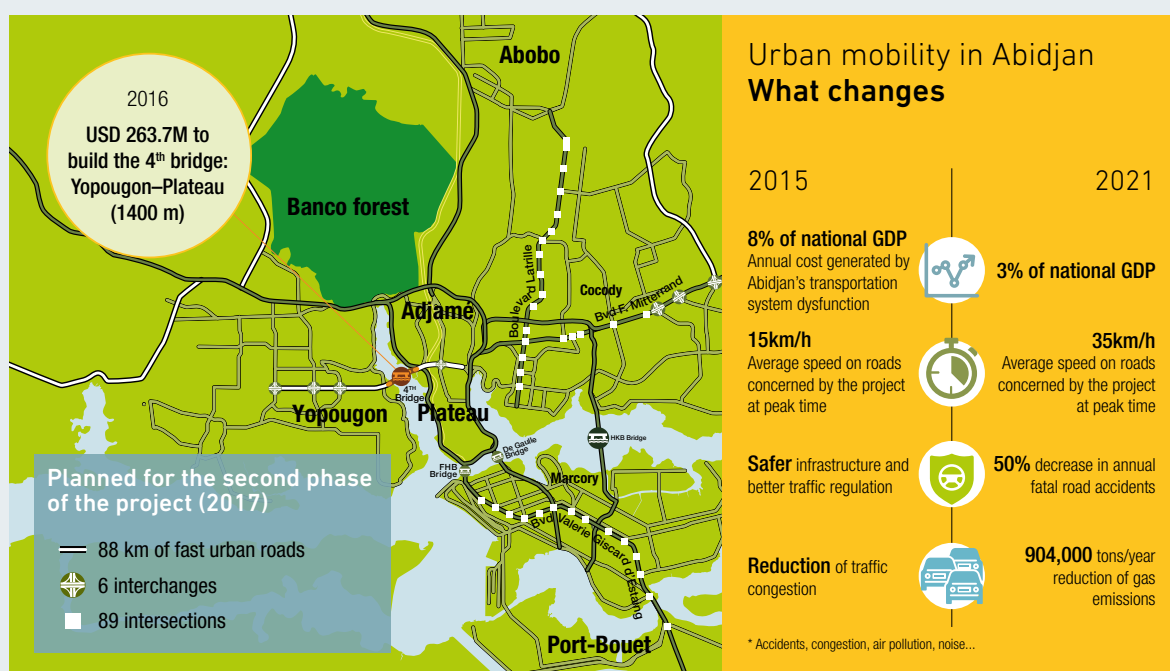
Sustainable energy solutions for the urban poor

The Bank will support the implementation of the Access to Clean and Efficient Cooking Solutions Programme under the Bank's New Deal on Energy for Africa by: developing modern fuel industries and investing in necessary infrastructure while improving the efficiency of traditional biomass and charcoal use and minimizing their environmental and health impacts; working with countries and regional institutions for policy development and

Box 11. Public-private partnership for restoration of degraded forest reserve in Ghana

The newly approved project, which includes a first-of-its-kind Public-Private Partnership in Ghana's forest sector, aims to restore and expand an existing Forest Stewardship Council (FSC) certified 5,000 ha forest plantation to nearly 12,000 ha of sustainable commercial forest plantation. The program will conform to both FSC and Verified Carbon Standard (VCS) certification standards. In partnership with Form Ghana, a private Ghanaian company which applies sustainable plantation management to attract new investors in the forest plantation subsector, the project is expected to generate the following co-benefits: sequestration of 1.8 million tons of CO₂ equivalent by 2030; an estimated climate change mitigation potential of 4.79 MtCO₂ equivalent over 25 years; and an increase in employment and biodiversity conservation. The project is funded by loans from ADF for USD 14 million and the Climate Investment Fund (CIF)'s Forest Investment Program (FIP) for USD 10 million.

Box 12. Abidjan Urban Transport Project Phase II



With a total project cost of EUR 482.4 million, including EUR 29.5 million of AfDB financing, the project will improve the competitiveness of the city of Abidjan by improving the city's urban mobility and protecting its environment through emissions reductions, waste management improvements and biodiversity conservation. The project will reduce annual gas emissions in the city by almost 904,000 tons of CO₂. By improving mobility and reducing traffic accidents, the project will impact the daily life of millions of commuters and reinforce the city's economic competitiveness.

Box 13. Morocco's Railway Infrastructure Reinforcement Project

Approved in 2016, the project aims to enhance the competitiveness of the Casablanca-Marrakech railroad as well as the living conditions of project area communities. The project includes works on: (i) the Kenitra-Rabat-Casablanca line, comprising the reinforcement of existing tracks, including the construction of a third 148 km railroad for freight between Zenata and Kenitra; and (ii) the Casablanca-Marrakech line, which involves the upgrading and partial doubling of 38 km of the track between Settat and Marrakech. The phase targeted by the project relates to: (i) complete doubling of 141 km of the track between Settat and Marrakech; and (ii) the construction of five modern railway stations between Tangiers and Casablanca. The project will facilitate a modal shift in transport thereby contributing to climate mitigation through reduced road transport. The project received an ADB loan of USD 112.3 million combined with co-financing of USD 290.8 million from the Government of Morocco for a total project size of USD 403.1 million.

regulatory reforms, including the adoption of international standards and introduction of appropriate economic incentives; supporting industries and enterprises to scale up clean cook stoves and fuel value chains through technical assistance, innovative financial products, and infrastructure financing; and increasing significantly the level of consumer demands for clean cooking solutions through awareness campaigns, marketing programmes and innovative distribution schemes.

The Bank is currently exploring financing mechanisms under development by partners to support this segment such as the World Bank Group's Africa Clean Cooking Energy Solutions Initiative; World Bank Group's Efficient

Clean Cooking and Heating Partnership; Global Alliance for Clean Cook stoves; Energizing Development Programme (2005–19); and Nigeria Green Energy & Biofuels Refinery and Cook Stoves Project supported by the Sustainable Energy for Africa Initiative (SEFA).

Sustainable waste management

Africa today is in the midst of a dramatic urban transition. A change in human consumption patterns and economic activity is resulting in various types of waste generation that require appropriate management to ensure sustainable development and a decent standard of living for all urban residents. The Bank will invest in sustainable waste management projects to reduce emissions from urban

Box 14. Egypt's Abu Rawash Wastewater Treatment Project

Faced with a growing population and development, Egypt has already used almost 100% of its available renewable water resources. USD 95 million in Bank financing is working to enhance the quality of wastewater treatment and treating wastewater to make it suitable for irrigation, produce sludge for fertilizer and collect methane for electricity generation to reduce GHG emissions. The project is expected to reduce emissions by more than 600,000 tCO₂e per annum and create more than 500 jobs. Annex 1.2 provides the mitigation logic model.

Box 15. Special initiatives which contribute to mitigation and low-carbon development goals

Africa Renewable Energy Initiative (AREI) — Launched during COP21 in Paris, the AREI is a transformative, Africa-owned and led inclusive effort to accelerate and scale up the harnessing of the continent's huge renewable energy potential. The Initiative is set to achieve at least 10 GW of new and additional renewable energy generation capacity by 2020 and mobilize potential to generate at least 300 GW by 2030. At its launch, G7 countries and several development partners committed to mobilizing at least USD 10 billion cumulatively from 2015 to 2020. The AfDB hosts the AREI Independent Delivery Unit and serves as trustee.

New Deal on Energy for Africa — The Bank's New Deal on Energy for Africa aims to achieve Africa's universal access to energy by 2025 by increasing: on-grid generation to add 160 GW of new capacity by 2025; on-grid transmission and grid connections that will create 130 million new connections by 2025, 160 percent more than today; off-grid generation to add 75 million connections by 2025, 20 times the current level; and access to clean cooking energy for around 130 million households. To ensure effective prioritization and implementation of the New Deal, a new Vice Presidency for Power, Energy, Climate Change and Green Growth Complex has been created with five directorates that will coordinate the implementation of the 12 identified flagship programmes of the New Deal. To implement the New Deal, the Bank has pledged USD 12 billion of its resources by 2020, while its portfolio includes over 50 energy sector projects, both public and private, in its 2017 pipeline.

African Green Financing Facility (AGFF) — The AGFF supports sustainable energy investments in Africa, including energy efficiency projects. The Bank will support the operationalization of the AGFF to increase the use of energy efficiency and clean cooking along with renewable energy in Africa's energy mix through the provision of lines of credit of about USD 200 million in debt financing to qualifying financial intermediaries while leveraging additional climate finance from the Green Climate Fund. Consistent with the Bank's High 5 priority on lighting and powering Africa, this action aims to support cost effective and climate-friendly energy efficiency investments, including through the rehabilitation of energy distribution lines; improved cook stoves and sustainable charcoal production; and promotion of the second generation of bio-ethanol and bio-gas technologies that provide energy efficiency co-benefits.

Sustainable Energy for All Initiative (SEforALL) – Africa Hub — The SEforALL aims to make sustainable energy for everyone a reality by 2030. It will do this by mobilizing action from all sectors of society in support of three interlinked objectives: providing universal access to modern energy services; doubling the global rate of improvement in energy efficiency; and doubling the share of renewable energy in the global energy mix. The AfDB hosts the initiative's Africa Hub and has been directly supporting several African countries – Kenya, Tanzania, Ghana and Rwanda – with the development of the SEforALL Action Agenda and Investment Prospectuses. As part of the Initiative, the Bank is also launching a Green Mini-Grid Africa Market Development Programme and several Mini-Grid Country Support Programmes.



Power Africa — A transaction- and partnership-driven model launched by former US President Barack Obama in 2013, Power Africa is designed to address African energy poverty and promote inclusive economic growth for African communities. The initiative will provide investment of about USD 7 billion to create 30,000 MW of clean energy generation across all of Sub-Saharan African and increase electricity access by adding 60 million new connections. The Bank is a strategic partner in this initiative.



Electrification Financing Initiative — Launched by the European Commission at COP21 in 2015, the Electrification Financing Initiative is a financing mechanism to support market development and private sector initiatives for affordable, sustainable, and reliable energy solutions in developing countries.

Africa Energy Leaders Group — Launched in 2015, the Africa Leaders Group is a working group of African political and economic leaders who are pooling their skills to build momentum for a new vision and new solutions to the energy challenge. They share a common commitment to leveraging the continent's rich energy resources for the benefit of its people and wider economy. Guaranteeing access to reliable, affordable energy services for all Africans by 2030 is a key goal, in line with the targets of SEforALL. The Bank hosts the Secretariat for this initiative.

Facility for Energy Inclusion (FEI) — The FEI facilitates access to energy by promoting small scale renewable energy projects. This USD 500 million debt fund will focus on providing senior and mezzanine debt financing to off-grid solar photovoltaic, mini-grids and small scale independent power producers or independent power producers under USD 30 million in total project cost. By leveraging a streamlined lending platform, including specialized lending guidelines and due diligence procedures, FEI aims to address the challenges of high transaction costs and lack of access to finance currently faced by small scale renewable energy projects, thus increasing the flow of capital into Africa's energy sector. While playing a catalytic role, the Facility will also seek to operate on a commercial basis.

Figure 3. The Bank's projected climate finance scale up by 2020 (%)

Annual projections – Bank climate finance commitment (40% of total approvals per year by 2020)

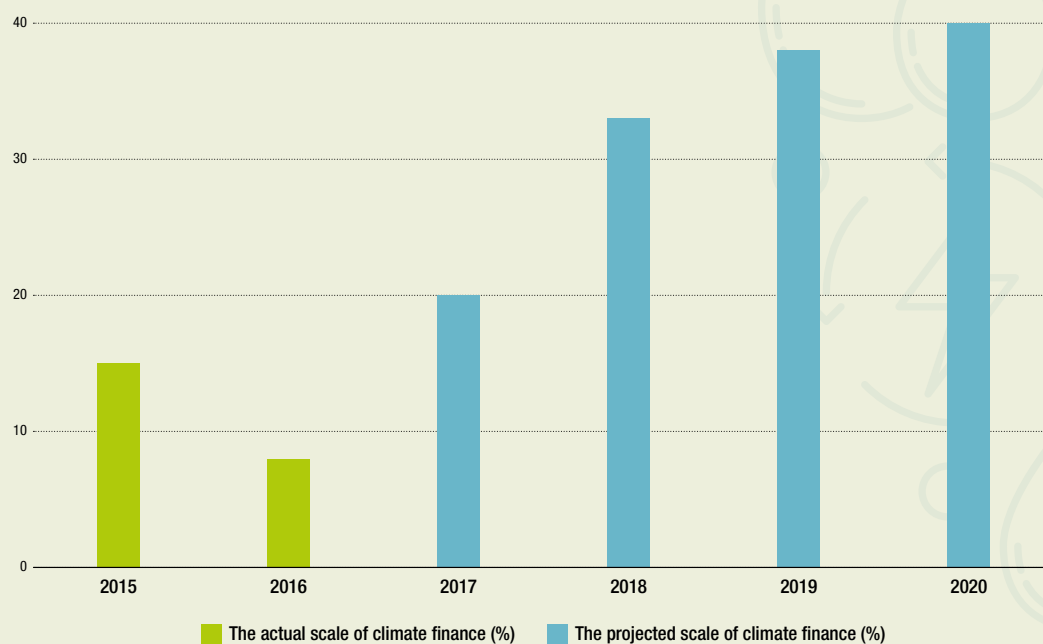
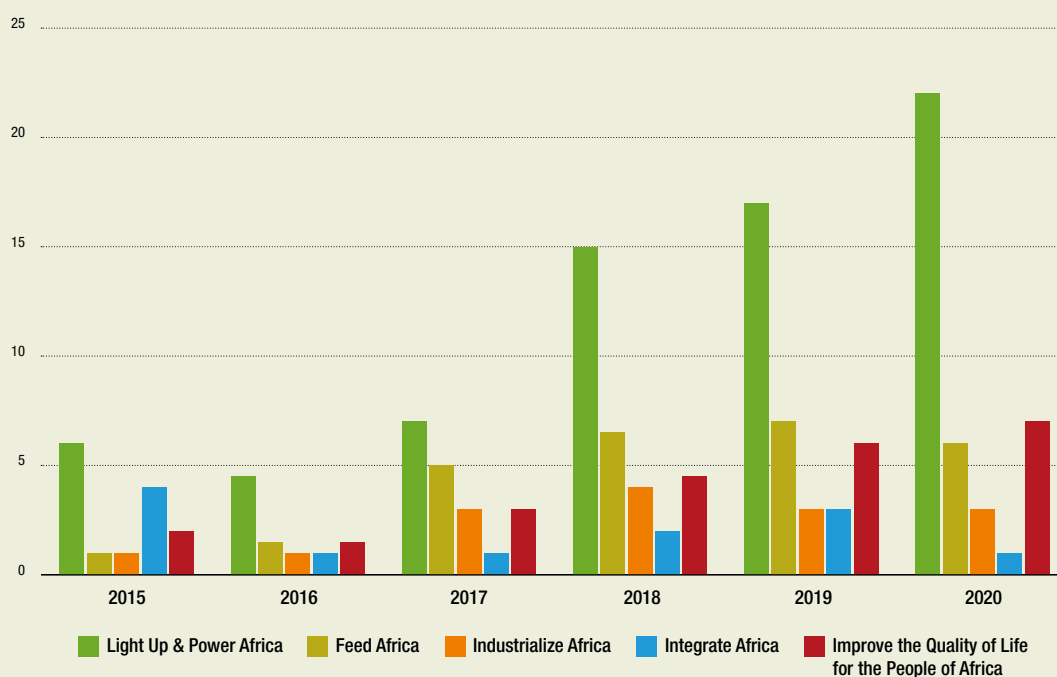


Figure 4. Projected climate finance scale up by H5s (%)

Projection trend – H5s contribution to Bank commitment of 40% approvals as climate finance by 2020



waste, thus contributing to the achievement of NDC targets on sustainable waste management while supporting the Bank's High 5 priority on improving quality of life (See Box 14). CCAP2 will also support waste management investments that facilitate the creation of opportunities and incentives in key areas such as waste-to-energy projects.

5. Special initiatives that support mitigation and low-carbon development

Examples of initiatives which will contribute to achieving the Bank's goal on mitigation and low-carbon development are outlined in Box 15.

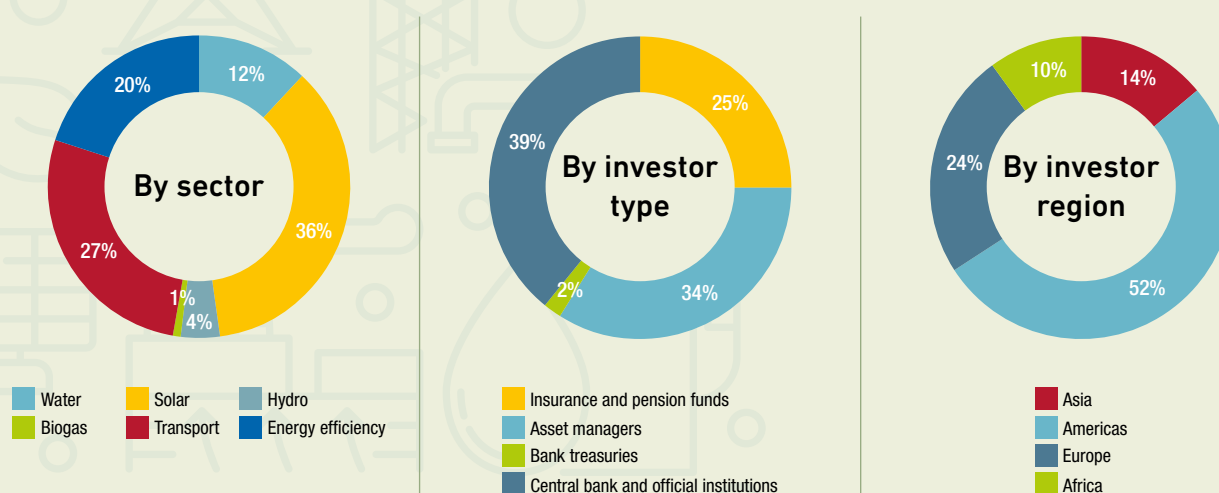
Pillar 3: Mobilizing financial resources to finance climate action and the CCAP2

Although climate finance provided globally has increased by 18%, from USD 331 billion in 2013 to an estimated USD 391 billion in 2015, Africa received only 4% of this finance, which decreased further to 3 percent in 2016 (CPI, 2016). Africa's limited access to climate finance can be attributed to various bottlenecks, including the limited quality and size of viable projects to attract funds at scale, and the complexity of processes and procedures to access climate funds, among others. Africa is not a significant contributor of GHG emissions and unsurprisingly the largest proportion of mitigation finance has been secured by economies with higher

aggregate emissions in East Asia; in 2014 China alone accounted for 21% of total climate finance (CPI, 2015). Furthermore, although adaptation is a priority for African countries, adaptation finance accounts for approximately 20% (USD 25 billion) of total climate finance) (ibid) in 2015 — approximately 19 % of this amount has been channelled to Sub-Sahara Africa. Under the CCAP2, the Bank has committed to allocate 40% of approvals per year) — as climate finance by 2020. In addition the Bank will mobilise climate finance from external sources. The Bank will also scale up adaptation finance from 29% in 2015, to reach parity with mitigation finance; and will prioritise mobilisation of adaptation finance from the climate funds. In line with the H5s goal to provide universal energy access to the continent's people, the highest investment scale up will be in clean energy technologies (See Figure 3 for projected scale up by 2020 and Figure 4 for breakdown by Hi5).

The majority of Bank-sourced climate finance comes from the ADB and ADF financing windows, external climate funds for which the Bank is an implementing entity and from internal trust funds hosted at the Bank. In light of its ambitious target, the Bank will scale up climate finance from current sources. However, past experience and current trends indicate that the anticipated level of scale up will require going beyond traditional funding mechanisms to embrace innovative means of mobilizing finance. As private financial flows have risen from 63% of total external resources in 2002–2006 to over 70%

Figure 5. USD 500 million Green Bond (Dec 2015) – Allocation and distribution



Source: The AfDB Annual Green Bonds Newsletter Issue 03

in 2010–2014¹ given attractive regional growth, the Bank will invest its resources strategically to attract and leverage increasing private sector investment.

The main sources of climate finance are:

1. ADB/ADF resources

Securing internal resources for climate action will require the Bank scale up the proportion of its existing development finance, in particular the ADF and ADB financing windows which are invested in climate-resilient and low-carbon projects. Out of the Bank's total climate finance mobilised of USD 1.36 billion in 2015, 1.21 billion (89%) came from ADB and ADF resources, split roughly equally (the rest, USD 0.15 billion, came from external climate funds housed by the Bank and Bank's internal climate trust funds). This represents just under 10% of the total ADB approved operations in 2015 and approximately 28% of ADF approved operations. By 2020, the aim is to scale this percentage up to 40% from both the ADF and ADB windows, with the ADB becoming the core internal instrument which will be used to mobilize resources for

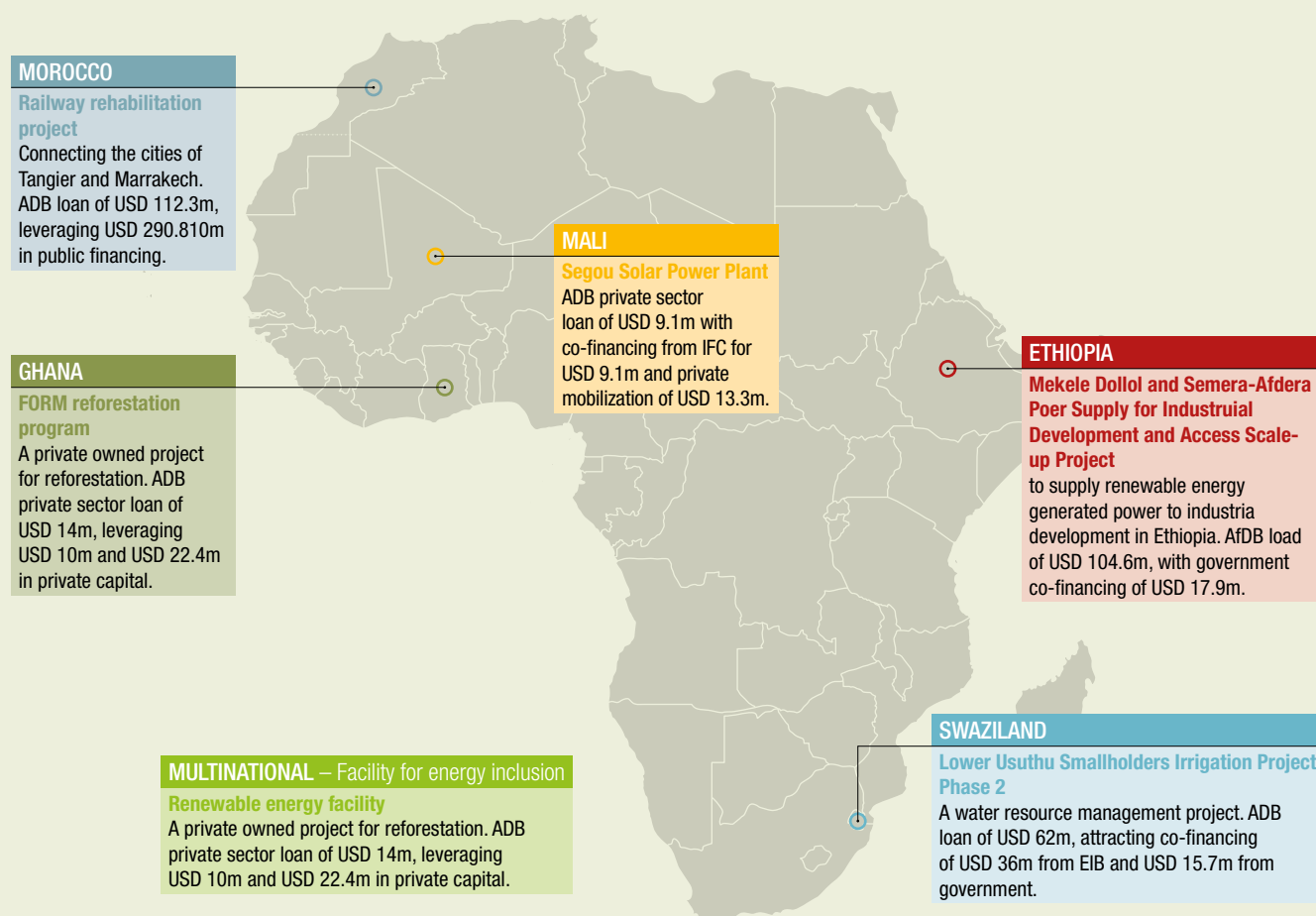
the CCAP2, including using both non-concessional and concessional private capital. (Figure 3 – Climate Change Finance Projections to 2020). A breakdown of these projected approvals show that much of the approvals will be in the energy sector (Figure 4 – Achievement of the Climate Finance Targets through the High 5s).

2. Internal trust funds

Although internal trust funds represent less than 1% of the Bank's climate finance (with an equivalent of USD 61 million of disbursements), they play a catalytic role in the deployment of climate finance in Africa (See Annex 3). The funds represent a flexible source of funding that support a wide range of non-traditional partners and projects and allow the Bank to expand its reach, while meeting the needs of the growing segment of private sector energy start-ups. The Bank will engage proactively with traditional trust fund donors to strengthen existing partnerships and secure new contributions, but will also seek to blend trust fund resources with domestic climate funds, such as South Africa's Green Fund with a USD 100,00 million allocation that represents the initial resources available to

¹ Africa Economic Outlook 2015

Figure 6. Leveraging public and private climate finance using Bank resources



finance climate actions at national and subnational levels. Furthermore, the Bank will explore partnerships with new and non-traditional partners, such as philanthropies, emerging economy governments, social investors, corporations and individuals with the aim of securing new trust fund resources in support of its climate-related goals.

3. External climate funds

The Bank is an implementing entity for all major international climate funds (See Annex 3). To date, the Bank has accessed funding through the Climate Investment Funds (CIF) and the Global Environmental Facility (GEF) amounting to USD 2.4 billion (2011–2015). The Bank is yet to access funding from the Adaptation Fund or the Green Climate Fund (GCF). The latter currently being the largest multilateral climate fund. The Bank has therefore an important role to play in developing large scale projects that will use GCF concessional resources along with its own co-financing to leverage and crowd in additional private capital. The Bank envisages continuing to access CIF and GEF resources at roughly the current scale, accessing funding from the Adaptation Fund, and scaling up its access to GCF resources. It further aims to match all GEF, CIFs, and GCF resources in co-financing from its own resources in private sector funding for all mitigation projects. The Bank may also support the implementation of other financing mechanisms and sources that will be established globally to support the implementation of the Paris Agreement and the SDGs, particularly SDG7 and SDG13.

4. Scaling up private finance

The Bank has acquired considerable experience in preparing the ground for private sector investments through Public-Private Partnerships (PPPs) and its use of risk mitigation and credit enhancing facilities to support investments in low-carbon and climate-resilient development. The Bank will increase its use of PPPs and blended finance instruments to attract multiple investors and will also explore new partnerships with financiers with whom it has not typically engaged in the past such as impact investors, private equity funds, and institutional investors. In 2016, the Bank mobilized UA 2.8 billion (USD 3.8 billion) in resources from the private sector and is planning to accelerate resource mobilization by better leveraging its own risk capital to attract private investment into projects through innovative sources of private finance, such as continental climate risk insurance schemes, crowdsourcing, diaspora bonds and remittances. In addition to the four green bonds issued in previous years, two green bonds were issued in 2016; the institutional SEK 1.2 billion bond issued in November and the AUD 55m bond issued in December 2016. The Bank recognizes the potential of the green bond markets to channel private capital toward green investments in Africa.

5. Leveraging market and results-based mechanisms

To date, the Bank has had little experience in using market mechanisms and payment for results mechanisms to scale

up climate related investments. However, these incentive-based mechanisms can offer important opportunities to shift funding flows towards low-carbon, climate-resilient investments. For example, in the forestry sector, results-based payments linked to carbon benefits can create incentives for improved forest management and reduced deforestation. Under the CCAP2, the Bank will consistently track and monitor GHG emissions from a wide range of sector operations under the High 5s and will explore opportunities to enhance Africa's access to carbon markets, in particular through the REDD+ mechanism in Africa.

6. Domestic resource mobilization

The Bank will work with African countries to mobilize domestic resources through the expansion of their tax bases, reallocation of perverse subsidies to cleaner energy production and securitization of remittances. The Bank will encourage RMCs to establish national climate change funds to support national climate change actions.

7. The role of Regional Resource Centres

The Bank's regional centres are instrumental in implementing the commitment to allocate 40% the Bank's approvals to climate finance per year by 2020. Prioritizing projects with climate benefits and engaging local stakeholders on domestic resource mobilisation, including co-financing opportunities, will contribute to the climate finance scale up. The Bank's green bonds program where potential for growth is very evident relies mainly on the ability to generate a strong pipeline of eligible projects and that is a key task of climate change experts within the regional centres.

The Bank will also leverage the following continental special initiatives which contribute to achieving the Action Plan objectives: Africa Renewable Energy Initiative; Africa Adaptation Initiative; The initiative for the Adaptation of African Agriculture to Climate Change (AAA); Sustainable Energy for All Initiative — Africa Hub; Power Africa; Electrification Financing Initiative; and Africa Energy Leaders Group. Annex 1.3 provides the climate finance logic model.

Pillar 4: Enabling environment

Effective adaptation and mitigation actions cannot be undertaken without an enabling environment, which includes adequate institutional capacity in which climate-related investments can be effectively designed and implemented. The policy environment in RMCs has to be enabling whereby risks are identified and managed, providing predictability and stability to potential investors. Meanwhile, national stakeholders have to be engaged, empowered and assume ownership of their development agendas over the long term.

The Bank has significant experience in supporting the development of enabling environments stemming from

Box 16. The Africa NDC Hub

The Africa NDC Hub is positioned within the Bank and will act as a focal point for the collation and coordination of NDC related activities with strategic partners and development institutions throughout the continent. The Bank's NDC Hub will interface with the Global NDC Partnership and will seek to raise finance for and implement specific NDC related projects within RMCs. The work of the NDC Hub is closely linked to the goals of the African Climate Change Fund (ACCF) and the Hub may also serve as a host to other initiatives such as the Adaptation Benefit Mechanism

The Hub will therefore support the implementation of AfDB's Climate Change Action (2016 -2020) which aims at supporting NDC implementation, and raising the share of AfDB's climate finance to 40% of total approvals by 2020.

The Hub will particularly focus on the three (3) following key support areas:

Fostering long-term climate action – this will entail analytical work to assess country NDCs vis-à-vis its development agenda; its voluntary contributions; and potential to raise ambition necessary for low carbon and climate resilience growth on a long-term trajectory.

Mobilizing means of implementation – finance, capacity building, technology development and transfer. These are critical enablers to reach the Paris Agreement objectives. The hub will engage global climate funds to cater for conditional pledges of the NDCs; and

Coordination, Advocacy and Partnerships – the Hub will provide a platform for coordination of NDC support activities on the continent for the efficient use of limited resources.

its long term consultative engagement with country level stakeholders in designing processes of Country Strategy Papers and Regional Integration Strategy Papers. Several of the Bank's funding instruments, including some of its trust funds, have specific goals of creating enabling environments in order to clear the way for investments in technologies that lead to low-carbon and climate-resilient development pathways. SEFA financing for: standardized Power Purchase Agreements, resource mapping, feasibility studies, power master plans, renewable energy tariff policies, environmental and technical regulations targeting grid and off-grid renewable energy (green mini-grids) installations, for example, all mitigate investor risk in emerging markets. The Bank's enabling environment support will include the following areas:

1. Readiness for accessing climate finance

The Bank is providing preparatory (or "readiness") support to African countries to strengthen their capacities to access climate finance. For instance, through the ACCF the Bank is working in six African countries to strengthen capacity for project development and to develop a pipeline of projects for submission to global financing mechanisms. Through the ClimDev Special Fund, the Bank provides financial and technical assistance to strengthen the capacities of climate-related institutions. The Bank is also a member of the climate finance readiness coordination mechanism, which is convened by the GCF Secretariat with the aim of ensuring effective coordination and coherence between the various institutions and initiatives that are providing readiness support to countries.

Through the CCAP2, the Bank will use its climate readiness experience, combined with its convening power and its recent experience from the GCF accreditation process, to support African countries and institutions to strengthen their fiduciary standards, project development and management capabilities, financial instruments, and environmental and social safeguards through a wide

range of capacity building and institutional strengthening programmes. These programmes will focus on two key areas: providing training and capacity building support to national institutions in Africa on accreditation and project development; and strengthening the awareness of African stakeholders to enhance their engagement with multilateral funds.

2. Enhancing Capacity for NDC development and implementation

African Countries have made commitments to take action and articulate their contributions in the form of targets, activities and policies. To help RMCs in the transformation of those commitments into tangible action and ultimately the achievement of results, the Bank has established the NDC Hub. Through the NDC Hub, the Bank will draw on its broad range of experience to provide advisory services and generate knowledge in support of the implementation of NDCs

Through the NDC Hub, and in partnership with strategic partners including WWF, UNFCCC and IIED, the Bank will prioritise its capacity-building agenda to support the needs expressed by African countries in their NDCs, in particular where there is a clear relevance to the implementation of the H5s. Capacity building, advisory services and knowledge generation activities will support:

- African countries in transforming their INDCs into NDCs and integrating them into national development strategies and budgets, as well as aligning them with the Bank's strategies. The Bank aims to work with at least 15 countries to transform their INDCs into NDCs (by 2019) with measurable targets and timelines and also support their implementation. In addition, the Bank will help RMCs plan for successive NDCs which will be used to achieve the long term goal of the Paris Agreement — net zero GHG emissions by around 2075.

- Development of National Adaptation Plans in collaboration, where appropriate, with the GCF's readiness programme which makes funding available to develop such plans. This will complement the work the Bank is doing with CIF funding to develop national climate investment plans, e.g. the Uganda investment plan.
- Generation of scientific and technical information in addition to enhancing knowledge and communication to relevant stakeholders at different scales and levels. For example, the Bank and ClimDev are collaborating with the World Meteorological Organization, World Bank Group, United Nations Development Programme, World Food Programme, and *Agence Française de Développement* to establish a framework programme through which 17 RMCs will be supported in building the capacity of national meteorological and hydrological stations to integrate climate information for risk management and risk transfer.
- Enhanced institutional capacity within government ministries and agencies. In particular, the CCAP2 will support technical assistance to Ministries of Finance and planning to facilitate budgeting processes for NDC implementation. Projects such as technical assistance to Egypt's Ministry of Petroleum and Mineral Resources to establish an energy efficiency and climate unit will be replicated and scaled up to support the entire administrative value chain. Financial instruments such as policy based loans will be applied for this programmatic scale up.
- Developing accounting systems to track progress towards NDC targets — including GHG inventories, mitigation and adaptation actions and means of implementation (finance, technology development and transfer and capacity building support)

3. Methods, guidance and tools

The Bank will continue to develop new tools and enhance its existing ones to improve the design and implementation of its investments and share these with RMCs. These actions include the development of legal structures, risk sharing agreements and legal contracts,

as well as technology-related guidance such as GHG accounting and reporting tools, safeguard screening, and climate change country profiles. Areas for further study will include long term emission trajectories, macro-economic planning and allocation; development and application of new policies and measures to support low-carbon climate-resilient development; and studies into the use of market and non-market mechanisms under the Paris Agreement.

4. Enabling technology transfer and innovation

The development and transfer of technologies is one of the focus areas of the African NDCs. The Bank will provide support to RMCs for the development, deployment and adoption of appropriate climate change technology and to promote innovation in relevant sectors. Enhancing scientific expertise and support for public-private partnerships will be also prioritised. The Bank will continue to support African countries in taking advantage of technological advances — “climate technologies” — in all sectors that will facilitate their transition to low-carbon and climate-resilient development pathways (see box 16). Key actions will include:

- The improvement of technology development and transfer, including hard technologies such as modern irrigation systems, water harvesting and storage, renewable energy technologies and construction technologies. Actions will also include improvements to soft technologies, such as procedures and practices, institutions, regulations, knowledge and information management systems, and ways to strengthen cooperation between African countries and others, in particular south-south cooperation.
- Support to interventions that address issues related to barriers to technology transfer and improve technology adoption and penetration through the creation of incentives and supportive rules and regulations.
- Scale up of its Africa Climate Technology Finance Centre and Network, a pilot project that supports the deployment and scaling up of both climate change mitigation and adaptation technologies. ■

Box 17. Strengthening the enabling environment for private sector investment in Mali

In spite of tremendous possibilities for additional power generation from the country's solar, hydro and wind resources, only about 30% of the population has access to a reliable power source in Mali. In 2014, in an effort to attract a viable private sector focused on developing the country's renewable energy potential, SEFA approved a USD 530,000 grant to the Government of Mali to strengthen the enabling environment for private sector involvement in renewable energy. SEFA will finance activities related to revision of the country's national energy policy; implementation of the capacity building and skill enhancement program; and creation of guidelines for private investors and standardized documentation that will pave the way for private sector companies to deliver sustainable energy projects. The project is a component of a wider USD 2.6 million technical assistance project under the country's CIF's Scaling Up Renewable Energy Program (SREP).



IMPLEMENTATION

The Bank's Development and Business Delivery Model

The Bank's development agenda is delivering financial and technical support for inclusive and sustainable economic growth in Africa through the H5s. The Bank has recently adopted a New Development and Business Delivery Model (DBDM) to promote the successful implementation of this agenda by aligning its organisational structure with the strategic objectives for achieving the H5s.

Under the DBDM, the Climate Change and Green Growth Department (PECG) will coordinate the implementation of the Action Plan, and will be responsible for mainstreaming climate change across the Bank's business processes and investments. Achieving the objectives set out in the CCAP2 will require additional expertise on climate change specifically, and sustainable development more generally. Existing staff

will be trained to enhance their capacity and equip them with key skills on climate change adaptation, mitigation, climate finance business development and management and new staff will be recruited to fill resource gaps in areas of need, such as climate safeguards, methods and tools for climate risk analysis, GHG accounting, integrating resilience into projects, climate economics, carbon markets. These staff will work with task managers to ensure that climate change and green growth considerations are integrated into all projects. Whilst these additional tasks will incur costs for the Bank, it is anticipated that these will be more than balanced out by a) the scaling up of activities and b) the added value in identifying, designing and implementing projects that have long term low carbon climate resilient benefits.

The Climate Change Coordination Committee CCCC which is an inter-departmental forum for the coordination of climate change and green growth programmes and activities across the Bank will

continue to: make recommendations for policies, actions and measures which the Bank can pursue to enhance the effectiveness of the implementation of its climate change and green growth mandate, ensure institutional coherence and consistency among different implementing organizational units, and maximize the impact of the Bank's interventions in its RMCs. The CCCC will also promote transparent reporting on CCAP2 results.

In order to ensure that the Bank effectively and rapidly ensures that climate change and green growth considerations are implemented under the new DBDM, PECG will use existing Indicative Operational Plans (IOPs) and participate, in the drafting and mid-term reviews of CSPs and RISPs going forward. Where resources are constrained, effort will focus on selected projects across all H5s where the biggest impacts may be achieved.

Partnerships and cooperation

The Bank will work with development partners, based on respective comparative advantages, to create linkages, ensure synergies, avoid duplication of work in future initiatives and leverage additional finance. For example, the Bank will continue to work closely with the GCF Secretariat and other partners in the delivery of climate finance readiness support to African countries. It will also engage closely with a range of public, private and civil society partners at the international, national and sub-national levels, as well as partnerships with academia, chambers of commerce and industry associations in efforts to identify appropriate solutions for RMCs.

Within the Power, Energy, Climate Change and Green Growth Complex, for example, the Bank has created a division to specifically focus on energy partnerships in order to avoid duplication and maximize synergies between the large number of energy-based initiatives which are running on the continent, including Power Africa, Africa Renewable Energy Initiative, SEforALL, African Energy Leaders Group, Electrification Financing Initiative and the Bank's own New Deal on Energy.

The Bank will build on the work done through existing partnerships with international development institutions, such as the multilateral development banks' Working Group on Climate Finance Tracking and the Working Group on Developing Joint Climate Actions; the international financial institutions' Working Group on Harmonization of GHG Accounting Methodologies; as well as with international non-governmental organizations.

At the country level, the Bank will promote and support public-private partnerships to implement the CCAP2.

It will do this through innovative partnerships leading to increased investment from traditional and non-traditional partners, including via supporting implementation of the NDCs (See Box 17). It will also work with civil society organisations, including non-governmental organizations, local cooperatives and community-based organisations, in particular, to scale up its investments in adaptation and resilience. This will require increased engagement at the subnational and local level, leveraging grassroots networks of partners such as Oxfam and technical environmental research strength of the World Wildlife Fund and International Union for the Conservation of Nature.

Operational mechanisms and tools

Drawing on the lessons learnt from the implementation of the CCAP1, the Bank is updating its climate screening tools to support the implementation of the H5s and the INDCs (See Box 18). Other tools that will be deployed in the implementation of the CCAP2 include the Monitoring and Evaluation Framework; the Guidance Note for Mainstreaming Climate Change in Country Strategy Papers and Regional Integration Strategy Papers; the GHG Accounting and Reporting Tool; the Green Growth Framework; tracking climate finance in the Bank's key intervention sectors; and support for the issuance of green bonds. The Bank also uses its project quality-at-entry and due diligence processes to ensure that the Climate Safeguard Systems (CSS) outputs are systematically integrated into project design.

Climate change and gender inequality are inextricably linked. Climate change can slow progress towards gender equality by posing a challenge to poverty reduction. Indeed, in Africa, existing disparities related to the social positions of women within the family and the community are aggravated by the effects of climate change on the factors that protect women's means of subsistence (food, water and energy supply). It is therefore critical to understand the linkages between gender and climate change.

Cross cutting issues – Gender, fragility, capacity, education, health

CCAP2 notes the growing body of knowledge on gender and climate change and emphasizes that this should be continuously reflected in the formulation of Bank policies, strategies and investment projects. Science, Technology and Innovation including research will be enhanced to achieve the critical mass of skilled labour required to address issues of climate change. The link between gender and climate must be an integral dimension of the design, implementation, monitoring and evaluation of policies and investment plans.

Box 18. Examples of partnerships

Nationally Determined Contributions Partnership. Following regional NDC submissions, there is increasing interest in enhanced cooperation to achieve climate change goals collectively through a multilateral response and raise ambitions for the future, with respect to strengthening access to finance, technology transfer, and capacity building to create an appropriate enabling environment. The Bank will join the NDC Partnership, as well as other appropriate initiatives to help achieve these goals. Furthermore, the Bank is establishing the Africa NDC Partnership Hub, with the aim to bring partners together and ensure coordination of the NDC implementation in Africa.

African Ministerial Conference on Environment (AMCEN). The strategic collaboration with the AMCEN and the African Group of Negotiators will be strengthened to help address issues related to regional implementation of the Paris Agreement. At the global level, past strategic partnerships and cooperation initiatives will be scaled up and new ones will be developed. Working jointly will promote a culture of transparency and accountability, which is critical for reporting on climate change interventions, particularly financing.

Global Green Growth Institute Inclusive Green Growth Partnership (IGGP). In partnership with IGGP members, the Bank will work to develop a practical application of green growth to help identify projects that make efficient use of natural resources, but also natural and financial capital and labour.

The CCAP2 will be guided by the Bank's Gender Strategy 2014–2018 and Gender Plan of Action (GPOA) adopted by the Bank in 2014, particularly in relation to its main areas of focus: supporting investment activities that promote women's economic activities, building institutional capacity and knowledge, and supporting governance and policy reform. Through the Gender Plan of Action, the Bank plans to strengthen the capacity of RMCs to collect, analyse and disseminate gender statistics. This will also involve the collection of data needed to understand gender differences in access to climate information and productive resources, which can help improve the adaptive capacity of populations in RMCs. The Action Plan calls for gender experts at the Bank to ensure African decision-makers are well informed about the gender dimensions of development, particularly of climate-sensitive sectors such as agriculture, water resources, transport and energy. The Action Plan also seeks to empower women in all aspects, including access to appropriate information, training, adaptive technology and adequate resources necessary to adapt to climate change.

Climate impacts have the power to undo decades of development gains, reversing progress made on issues such as fragility, education, health and development in general. The Bank's Human Capital Development Strategy recognizes that climate change is a threat to human capital development and seeks to strengthen resilience of livelihoods by supporting the development of early warning systems, disaster risk reduction systems and emergency preparedness. The Bank's investment in Higher Education and Research will seek to mainstream climate change at all levels of the education system to build the necessary capacity and skills in climate adaptation, green jobs. Human development operations will also seek to promote clean energy transition at the level of households and productive enterprises, via promoting awareness of

the risks of household and outdoor air pollution, and increasing the uptake of newer energy technologies.

To ensure sustainability of climate investments in transition states, the Bank pay attention to: 1) building the capacity of governance institutions, including mediation and arbitration bodies to resolve disputes over natural resources under stress; 2) developing opportunities for fragile states to build technical capacity to respond to climate change; and 3) designing and implementing climate-proofed peacebuilding development initiatives¹. The Bank aims to enhance internal capacity development in line with the objectives of DBDM. The PECG has planned internal training programmes tailored for project teams. These include: mainstreaming climate change at project level or upstream (CSPs/RISPs), access to external climate finance and domestic resource mobilization and NDC support.

Monitoring and evaluation

The Bank will continue to strengthen, streamline, and harmonize the monitoring, reporting, and evaluation of climate change interventions to improve results and facilitate evidence-based learning. Monitoring and Evaluation (M&E) for the CCAP2 is critical for assessing that the implementation progress is consistent with the stated objectives and goals and with the Bank's Results Measurement Framework. The M&E Framework helps ensure that existing and future investments are climate-resilient and low-carbon, and are also contributing to building climate resilience in RMCs in general, as well as amongst targeted, high-vulnerability populations in Africa. It builds on other proven systems with measurable indicators, including those of SDG13 and the GCF (See Annex 2: Indicative Results Framework for the CCAP2).

¹ AfDB (2016) *From Fragility to Resilience: Managing Natural Resources in Fragile Situations in Africa*

Box 19. Building resilience in the Bank's investment using the Climate Safeguards System

Consistent with the Bank's Climate Risk Management and Adaptation Strategy and the CCAP1, the Bank has developed the Climate Safeguards System (CSS) to ensure the climate resilience of its investments in Africa. The CSS is a web-based set of four decision-making tools: climate screening, adaptation review and evaluation procedure, country climate change profiles and climate information database. The CSS is being upgraded to include, among other features, additional sector, multinational, and multisector project scorecards, and a GHG accounting tool that will be used to account for and report GHG emissions from Bank investments.

The CCAP2 will be monitored at various levels across the organisation in alignment with the corporate results-based management framework. The various operational units (departments and divisions) will be assisted by the placement of Climate Change and Green Growth staff in the regional offices who will work with Task teams to ensure accurate monitoring and reporting. M&E will need to take into consideration the complexities associated with the international climate change transparency and reporting frameworks and the Bank's obligations in that regards.

Programme/project level. Although the CCAP2 M&E Framework is not meant to be a blueprint for project design, at the project/programme level, task managers will be responsible for identifying project activities, outputs and outcomes that are in line with the Framework. Guidance on the selection of adaptation and mitigation activities will be provided through the use of appropriate tools, including the CSS and the tracking by AfDB sector and sub-sector codes. Guidance on the identification of specific outputs, outcomes, and their subsequent metrics, or indicators, is included in the CCAP2 M&E Framework. Each project being submitted for approval will contain a section on climate change, demonstrating how it contributes to building climate resilience and low-carbon development, how it contributes to achieving the Bank's target of allocating 40% of its annual approvals as climate finance by 2020 and the climate finance mechanisms that the project will be accessing for additional resources.

Country and sector level. The Bank's country offices, the Regional Business Development Centres, and the Operational Sectoral Complexes and Departments will be responsible for monitoring the progress of the CCAP2 in their sectors and regions. The Operational Departments will be expected to use the M&E Framework to frame their overall approach to developing climate-change-related projects and to ensuring climate change resilience in ongoing projects. Reporting on progress in fulfilling the CCAP2 objectives should be summarized as part of the Sector Note(s) on Results (prepared annually, or as required).

Most countries do not have the capacity to establish an effective performance monitoring system to track climate change mitigation- and adaptation-related indicators. To ensure the reliability of performance

measurement data, support for building results measurement capacity should be an integral part of the Bank's projects and programmes. In the CCAP2, systems will be put in place to support RMC staff with guidance, coaching, training, and online toolkits and templates.

Staff in the Bank's country offices and Regional Business Development Centres, working with RMC staff, can use the CCAP2 M&E Framework to revise or update CSPs and RISPs in line with national/regional climate change priorities. Climate change results at the country level will be reported through the Country Note(s) on Results that are prepared annually, or as required, by regional departments.

Bank level. The CCAP2 results will be monitored by the Climate Change and Green Growth Directorate in collaboration with the Results Department with support from the Bank's Results Unit. With support from the Climate Change and Green Growth Directorate, the Results Department will also be responsible for tracking operational and institutional progress for delivering the CCAP2 results (Levels 3 and 4) related to climate-proofing of Bank investments and human resource capacity to mainstream climate considerations throughout Bank operations. The Bank's primary corporate results reporting tool, the Annual Development Effectiveness Report (ADER), provides an overview of progress on selected indicators across all four levels of the Bank's corporate Results Measurement Framework (RMF) — including results in the priority area of climate change and clean energy. As the CCAP2 indicators are taken up by the Bank's RMF, additional and more substantive climate change results can be reported as part of the ADER reporting process.

For independent evaluation, the Bank's Independent Development Evaluation may choose to use the CCAP2 M&E Framework to evaluate whether what has been achieved with CCAP2 investments is in line with the goals and objectives of the CCAP2. Given the high degree of uncertainty associated with climate change (impacts, timelines, models, scenarios), and because the elements for the implementation of the Paris Agreement are still works-in-progress, the Bank will need to review the Framework periodically to identify new areas of risk and uncertainty and adjust quickly to any changes in the global agreements.

Communication and outreach

To ensure the visibility of the CCAP2 portfolio and advance the Bank's climate change agenda, the Bank will support the organisation of several climate change events at the RMC, continental and global levels. Special attention will be given to the Bank's participation at COPs 23 to 26. The Bank used the COP22 platform in Morocco for example, to strengthen the case for climate change and green growth in Africa. At the continental level, the Bank's strategy on communication and outreach will be deployed to promote new and emerging initiatives on the High 5s as they relate to climate change.

The Bank will continue to advocate for climate-resilient low-carbon growth and will use its experience, knowledge and convening power to help RMCs continue to raise their ambition under the Paris Agreement. The Bank will continue to work with its partners to strengthen advocacy positions. Bank staff will continue to provide input to discussion and debate through the publication of blogs, thought leadership articles and publications. The Bank will also scale up the production of economic and sector work, films, exhibitions and various reports during the implementation of the CCAP2.

The communication of the Bank's climate change agenda will be based on: i) Emphasis on demonstrating achievements and sharing good practices; ii) Institution of "champions" in sectors/activities: countries or

flagship projects; iii) Communication and knowledge products/events tailored to audience needs: matching audiences, messages, and the tools and channels of communication, (including the development and dissemination of newsletters such as those prepared for the green bonds and climate finance, to create awareness of its initiatives); iv) Communications targeted to various audiences: internal (staff — senior management and staff) and external (differentiated by targeted audiences: shareholders, partners, media, civil society and project developers); v) Importance of digital and social media to target new and younger audiences; vi) Strengthening the existing partnerships and explore new strategic ones.

Increased communications and knowledge management effectiveness will enable the Bank to be more transparent and attain higher accountability standards vis-à-vis its shareholders. Raising the visibility and credibility will help support the development of strong pipeline of projects, more resources mobilization, especially from climate finance funds and more opportunities to support and encourage African countries to engage on a low-carbon and climate-resilient pathway.

Internally, regular reports will be submitted to senior management and clear signals communicated to task managers across all the H5s to improve the efficacy of the Climate Change Coordinating Committee ensuring the Bank-wide integration of climate change in the Bank's investments. ■

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RISK MANAGEMENT

The Bank has identified the following major risks and mitigation actions:

Table 2. **Risks to the CCAP2 and mitigation actions**

Risk	Likelihood	Consequences	Mitigation actions
Insufficient ADF resources to enable the Bank to achieve its goal of allocating 40% of annual approvals as climate finance	Donor finance is stretched as developed economies face significant political changes (notably the change in the US Administration Brexit). Reductions in ADF resources are likely.	Since the target is expressed in % terms, a reduction in financing should not impact upon the achievement of the target but less funds could mean that RMCs prioritise for example infrastructure projects which do not have a significant climate finance component	The Bank will work to identify and raise new sources of climate finance from the private sector and development partners. The Bank is already developing a range of new financing mechanisms which will allow access to such new sources of finance.
Lack of international commitment to fulfilling climate goals	The withdrawal of the US from the Paris Agreement significantly increases the risk that other countries will not honour their international financing commitments, although to date, the rest of the world has remained firm in its commitment.	African countries have demonstrated their commitments though their unconditional actions in the NDCs and have laid out their needs to additional support for conditional actions. Without funding, these conditional will not implemented and there would be a real risk that African countries would also abandon their unconditional commitments – with real consequences for the rest of the world since Africa has a lot of fossil fuel resources.	Advances in new technology already mean that many low-carbon technologies outperform conventional technology in financial, economic, environmental and/or social terms. Climate-resilient technologies and practices are central to achieving the Sustainable Development Goals. The Bank will seek to highlight the underlying benefits of low-carbon technologies and not simply rely on the Paris Agreement to justify investment decisions.
Internal capacity within the Bank	The Bank is under-going a restructuring process and is recruiting new staff to fill positions. A period of lowered capacity is inevitable as the transition takes place and new staff come up to speed.	Without sufficient internal capacity, the implementation of the CCAP will be delayed and opportunities to improve the design of projects and combat climate change will be lost.	The Bank will continue to build knowledge and experience amongst existing staff and add new staff through international recruitment procedures. Under the New Business Development and Delivery Model, staff will be made available to assist Regional Directorates in ensuring that projects identify and address climate change and green growth constraints and opportunities. Where necessary, the Bank will recruit consultants to help boost internal capacity.
A potential shift in RMC's focus from low-carbon and climate-resilient development	Elected governments are constantly under pressure to address near term issues such as food security, employment, education and health. Climate change can seem a far off issue. It is inevitable that some countries will prioritize in this manner.	Short term decisions will lead to the lock in of dirty technologies or missed opportunities to increase adaptation benefits. Some of these decisions may have impacts for a generation or more.	It is increasingly understood that the “develop now, clean up later” model incurs massively higher costs than the adoption of an upfront clean development model. The Bank will continue to support its RMCs and will always highlight the benefits of clean development whilst working to raise additional finance to meet the short-term costs of clean development.



CONCLUSION

The CCAP2 responds to the challenge of building climate resilience and promoting low-carbon-intensive development in Africa, integrating the Bank's H5s, the SDGs and the outcomes of the Paris Agreement. It describes and defines how respective Bank departments will work together to deliver on the Bank's climate change agenda. The Plan will seek to consolidate the Bank's position as a key operator in climate change work in Africa, building on the institution's strong operational capacity.

The CCAP2 is consistent with the Bank's TYS and H5s. The operational priorities have been mapped to specific time-dependent targets. It is to be noted that while the plan is being drafted and finalized, its implementation has already begun following the CCAP1.

In implementing the Action Plan, the Bank will seek to maximize efficiency and resource utilization. The CCAP2 will build on the achievements of the CCAP1 and serve as a framework for improved coordinated actions within the Bank for a "one-Bank approach", as well as outside with different partners to avoid a duplication of actions.

The CCAP2 (2016–2020) comes at very critical period in climate history, as developed countries plan to honour their commitment and mobilise USD 100 billion per year by 2020 and extend this until 2025. The implementation of the CCAP2 should ensure that necessary capacities are built to enable RMCs access fair and sufficient shares of climate finance for achieving the ultimate goal of climate-resilient and low carbon development. ■



Annexes

ANNEX 1.1: ADAPTATION LOGIC MODEL

Transformative result	Shift to more climate-resilient development				
The Paris Agreement	Implementation of Nationally-Determined Contributions				
The High 5s	Light up and power Africa	Feed Africa	Integrate Africa	Industrialise Africa	Improve the quality of life of Africans
Indicative project results	Increased climate-proofing of power systems	Increased use of climate-resilient crops and agriculture systems	Increased climate-proofing of infrastructure	Increased application of energy efficiency standards by industry	Increased climate risk resilience to diseases and disasters among communities
	Sustainable energy supply to support the social sector	Improved land management and climate-resilient agricultural practices and technologies	Expanded regional infrastructure to enhance trade	Increased incentives for transfer of technology, know-how for adaptation	Improved climate data, information management, and early warning systems
Indicative types of activities	<ul style="list-style-type: none"> Hydro-infrastructure subject to due diligence against climate and hydrological models Investment in embedded renewable generation to reduce distribution requirements Investment in climate-resilient energy system 	<ul style="list-style-type: none"> Promoting improved/sustainable soil management and use of organic fertilisers Adoption of sustainable aquaculture techniques to supplement local fish supplies Promote crop and animal diversification and the use of heat-, drought-, and saline-tolerant crop varieties Apply efficient irrigation Enhance post-harvest handling and storage Preservation of protected areas and establishment of migration corridors for wildlife in at-risk ecosystems 	<ul style="list-style-type: none"> Developing and implementing climate-resilient transport strategies Investments in green infrastructure Mass transit systems More robust building regulations and improved enforcement practices 	<ul style="list-style-type: none"> Improvement in utility-scale energy and industrial efficiency Installation and use of more efficient facilities Waste recycling projects that recover or reuse materials, and waste as inputs into new products or as a resource Promote and provide incentives for green technologies 	<ul style="list-style-type: none"> Monitoring of changes in disease outbreaks and development of a national response plan Improving public health security and support RMCs develop national action plans for public health adaptation to climate change Improving access to clean water and sanitation Improving nutrition through enhanced food processing capacity, diversification and nutrition awareness raising Support and protect livelihoods and livelihood diversification Strengthen climate data services Strengthen capacities to integrate climate information in planning Mainstream climate change in health and social sectors
Cross-cutting issues	Support RMCs to develop: green growth action plans; enhanced legal and regulatory environments to incentivise climate-resilient investment; private sector/institutional investors who increasingly invest in climate-resilient development; increased capacity of key ministries (incl. finance) to develop policy, laws and climate-resilient incentive systems; and dedicated financing mechanisms to promote the uptake of climate-resilient technologies.				

ANNEX 1.2: INDICATIVE MITIGATION LOGIC MODEL

Transformative result	Shift to low-emission development pathways through climate change mitigation				
The Paris Agreement	Implementation of Nationally Determined Contributions				
The High 5s	Light up and power Africa	Feed Africa	Integrate Africa	Industrialise Africa	Improve the quality of life of Africans
Indicative project results	Increased use of renewable energy and clean technology	Reduced GHG emissions from sustainable land-use and livestock management practices	Increased knowledge and deployment of green infrastructure	Increased application of energy efficiency standards by industry	Improved land-use planning
	Increased amount of low-carbon energy generated and fed into national grids	Increased investment in low-carbon agriculture and forestry practices	More low-carbon transportation strategies implemented	More appliances built and installed that adhere to green standards	Reduced emissions from waste
Indicative types of activities	<ul style="list-style-type: none"> On-grid and off-grid renewable energy generation projects Renewable energy access projects and programmes Improving regulatory and enabling policy environments Deployment of efficient lighting solutions and water heating technologies Clean cook stoves 	<ul style="list-style-type: none"> Promoting improved/sustainable soil management and use of organic fertilisers Promoting energy-efficient agriculture technologies Improving existing carbon pools. Activities that reduce deforestation (REDD+) Reducing emissions from livestock 	<ul style="list-style-type: none"> Developing and implementing low-carbon transport strategies Investments in low-emission systems Investments in green infrastructure Investments in clean energy in regional power pools Mass transit systems 	<ul style="list-style-type: none"> Improvement in utility-scale energy and industrial efficiency Installation and use of more efficient facilities Reduction of GHG emissions from industrial processes Waste recycling projects that recover or reuse materials and waste as inputs into new products or as a resource Manufacture of renewable energy and energy efficiency technologies and products 	<ul style="list-style-type: none"> Integration of transport and urban development planning leading to a reduction in the use of passenger cars Solid waste management that reduces fugitive emissions Reduction of indoor air pollution through deployment of clean cooking solutions Build a green conscience / awareness among new generation of youth through education Capacity building and knowledge generation programs in climate change and sustainable development Foster scientific research in climate mitigation and adaptation
Cross-cutting issues	Support RMCs to develop green growth action plans; legal and regulatory environment enhanced to incentivise low-carbon investment; private sector/institutional investors increasingly invest in low-emission technology; increased capacity of key ministries (incl. finance) to develop policy, laws and low emission reduction incentive systems; establishment of systems for monitoring the emission of greenhouse gases in RMCs.				

ANNEX 1.3: CLIMATE FINANCE LOGIC MODEL

Transformative result	Scaled-up access to climate finance across all High 5s				
The Paris Agreement	Implementation of Nationally Determined Contributions				
The High 5s	Light up and power Africa	Feed Africa	Integrate Africa	Industrialise Africa	Improve the quality of life of Africans
Indicative project results	<p>Achievement of Bank's target of 40% of 2020 finance tagged as climate adaptation or mitigation finance</p> <p>Development and deployment of innovative financing mechanisms</p> <p>Access to bilateral and multilateral climate funds including Green Climate Fund</p>				
Indicative types of activities	<ul style="list-style-type: none"> ■ Mainstream climate change into all energy projects to identify those which have climate finance characteristics ■ Explore and promote the concept of carbon pricing within the energy sector to favour low carbon technologies ■ Facilitate discussions on feed in tariffs, guarantees and other financial mechanisms to encourage private sector investment in low carbon generation ■ Enhanced energy partnerships to leverage energy co-financing for climate change related activities 	<ul style="list-style-type: none"> ■ Mainstream climate change into all agriculture and food security related projects to identify those which have climate finance characteristics, particularly adaptation in the climate smart agriculture (CSA) space ■ Develop and expand funding mechanisms for sustainable forest management including greenfield plantations, agroforestry and natural forest management conservation ■ Identify adaptation benefits associated with enhanced value chains, risk sharing instruments and insurance schemes and seek finance accordingly 	<ul style="list-style-type: none"> ■ Mainstream climate change into all regional integration projects to identify those which have climate finance characteristics ■ Seek opportunities to attract climate finance to support the deployment of new technologies, manage cross border resources and build climate resilient infrastructure ■ Highlight regional opportunities for low carbon climate resilient investments 	<ul style="list-style-type: none"> ■ Mainstream climate change into all industrialisation-related projects to identify those which have climate finance characteristics ■ Seek opportunities to attract climate finance to support the deployment of new technologies for green industrialization ■ Catalyse finance for promoting plantations forestry as an industrial asset with a wide range of climate, environmental and social benefits 	<ul style="list-style-type: none"> ■ Mainstream climate change into all social related projects to identify those which have climate finance characteristics ■ Highlight the links between quality of life and climate adaptation / Mobilise additional finance to reduce vulnerability through social protection/safety nets, education and health programs ■ Broaden the understanding of adaptation to include quality of life in order to expand access to climate finance
Cross-cutting issues	Support RMCs to develop green growth action plans; legal and regulatory environment enhanced to incentivise low-carbon investment; private sector/institutional investors increasingly invest in low-emission technology; increased capacity of key ministries (incl. finance) to develop policy, laws and low emission reduction incentive systems; establishment of systems for monitoring the emission of greenhouse gases in RMCs.				

ANNEX 1.4: ENABLING ENVIRONMENT LOGIC MODEL

Transformative result	Enabled Environment for investment in low carbon climate resilient development across all High 5s				
The Paris Agreement	Implementation of Nationally Determined Contributions				
The High 5s	Light up and power Africa	Feed Africa	Integrate Africa	Industrialise Africa	Improve the quality of life of Africans
Indicative project results	Development and deployment of tools to help implement NDCs such ESW on improved quality and ambition in NDCs Macro-economic models and studies to support development of long term strategies for the Paris Agreement Development of Climate Change and Green Growth policies and measures Development, deployment and capacity building for the use of sector specific investment tools				
Indicative types of activities	<ul style="list-style-type: none"> Establishment of the NDC Hub as a means to coordinate activities to implement energy related projects under the NDCs Development of energy specific Economic and Sector Works (ESWs) related to climate finance Use of the GHG accounting and reporting tool for carbon foot-printing and emission intensity Improving bankability of NDC projects from private sector developers Support to innovative PPPs, FIT, REIPPPs, guarantees etc. 	<ul style="list-style-type: none"> Establishment of the NDC Hub as a means to coordinate Feed Africa climate-related activities to implement NDCs ESW to highlight the links between agriculture, land use and biodiversity and climate resilience to strengthen relevant policies Promotion of investment in agro-forestry, biodiversity and ecosystem services Support to development of forestry and land use policies such as PPP and benefit sharing 	<ul style="list-style-type: none"> Establishment of the Africa NDC Hub as a means to coordinate regional climate-related activities to implement NDCs Identification of opportunities for regional collaboration on cross border resource management and climate / carbon related policies and measures 	<ul style="list-style-type: none"> Establishment of the NDC Hub as a means to coordinate green industrialization related activities to implement NDCs Macro-economic ESW to support long term planning for industrial investments Support to develop low carbon policies such as standards and performance benchmarks 	<ul style="list-style-type: none"> Establishment of the NDC Hub as a means to coordinate social and cross-sectoral climate activities to implement NDCs Mainstreaming of climate adaptation and reduced vulnerability to climate change into core elements of society including education, health, welfare and gender Increasing awareness of climate change throughout society
Cross-cutting issues	Support RMCs to develop green growth action plans; legal and regulatory environment enhanced to incentivise low-carbon investment; private sector/institutional investors increasingly invest in low-emission technology; increased capacity of key ministries (incl. finance) to develop policy, laws and low emission reduction incentive systems; establishment of systems for monitoring the emission of greenhouse gases in RMCs.				

ANNEX 2: INDICATIVE RESULTS FRAMEWORK FOR THE CCAP2

CCAP Impacts (Level 1)				
Results chains/Expected result	Performance indicator	Baseline (2015)	Expected (2020)	Bank's RMF
Reduced vulnerability to the adverse impacts of climate change and variability (adaptation)	Share of population with access to clean cooking solutions (% population)	32	63	Level 1
	Cereal yield (ton/hectare)	1.6	2.2	Level 1
	Access to safely managed drinking water services (% population)	72	77.5	Level 1
	Building resilient water harvesting and irrigation infrastructure Resilience to water shocks (index)	3.5	3.8	Level 1
	Access to safely managed sanitation facilities (% population)	39	41	Level 1
African economies transitioning to low carbon growth (mitigation)	Production efficiency (kgCO ₂ emissions per \$ of GDP)	0.45	0.28	Level 1
	Installed renewable energy capacity (GW)	32	62	Level 1
	Production efficiency (kgCO ₂ emissions per \$ of GDP)	0.45	0.28	Level 1
	Electricity losses through transmission, distribution and collection (%)	15	<10	Level 1

Level 1: Development progress in Africa; Level 2: Regional Contribution; Level 3: Operation efficiency; Level 4: Institutional efficiency

*The baseline captures average annual outputs from completed operations over a three-year (2013–2015) and recorded in Project Completion Reports. During this period no outputs were recorded for these indicators.

Mitigation and low-carbon development pillar (Level 2)				
Results chains/ Expected result	Performance indicator	Baseline (2015)	Expected (2020)	Bank's RMF
CCAP2 Outcomes - country /regional level				
Scaling up investment in renewable energy	New renewable energy capacity installed (MW)	24	6,950	Level 2
	Cereal yield (ton/hectare)	0	3,000	Level 2
Promoting energy efficiency	Access to safely managed drinking water services (% population)	72	38,000	Level 2
GHG emissions reductions from mitigation actions (energy sector)	GHG emission reductions from energy sector (thousand tCO ₂)	7,000	22,500	Level 2
Reducing emissions from deforestation & forest degradation (Investments in Afforestation)	Increased finance for afforestation and reforestation (USD Million)	13.0	252.0	Level 2
Improved Africans livelihood through education and creation of new jobs in agro-industry	People trained through Bank operations (thousands) Direct and indirect green jobs created (millions)	625 1.6	4,050 6.25	Level 2

Level 1: Development progress in Africa; Level 2: Regional Contribution; Level 3: Operation efficiency; Level 4: Institutional efficiency

*The baseline captures average annual outputs from completed operations over a three-year (2013–2015) and recorded in Project Completion Reports. During this period no outputs were recorded for these indicators.

Finance Pillar (Level 4)				
Results chains/ Expected result	Performance indicator	Baseline (2015)	Expected (2020)	Bank's RMF
Increased mobilization of Climate finance	% of climate finance by 2020 relevant to the total project funds	15%	40%	Level 4

Level 1: Development progress in Africa; Level 2: Regional Contribution; Level 3: Operation efficiency; Level 4: Institutional efficiency

*The baseline captures average annual outputs from completed operations over a three-year (2013–2015) and recorded in Project Completion Reports. During this period no outputs were recorded for these indicators.

Enabling Environment Pillar (Levels 2, 3 and 4)				
Results chains/ Expected result	Performance indicator	Baseline (2015)	Expected (2020)	Bank's RMF
Improved institutional and policy reforms	% of Bank's Policies integrating climate change	60%	100%	Level 4
	% of Bank's operations aiming towards institutional support	NA	increasing	Level 2 & Level 4
Capacity development	Number of Bank staff trained on climate changes issues	100	900	Level 4
	Number of climate experts based at Regional Hubs	0	5	Level 4
Increased knowledge services	Number of ESWs and climate related publications	NA	increasing	Level 3
	New operations with climate-informed design (%)	75	>95	Level 3
	Operations with satisfactory environmental/social risk mitigation measures	85	>95	Level 3
Partnerships	Status of operational partnerships under the NDC Partnership Hub	none	progressing	Level 2

Level 1: Development progress in Africa; **Level 2:** Regional Contribution; **Level 3:** Operation efficiency; **Level 4:** Institutional efficiency

*The baseline captures average annual outputs from completed operations over a three-year (2013–2015) and recorded in Project Completion Reports. During this period no outputs were recorded for these indicators.

ANNEX 3: SOURCES OF ADDITIONAL FUNDING FOR CCAP2 IMPLEMENTATION

Internal Bank-managed climate related trust funds



Sustainable Energy Fund for Africa (SEFA) – A USD 95 million multi-donor trust fund, launched in 2012 with funding from the Danish International Development Agency, US Agency for International Development, UK's Department for International Development and Italy, its early stage involvement enables SEFA to play a catalytic role in supporting sustainable, private-sector led economic growth through the efficient utilisation of untapped renewable energy resources.



Africa Climate Change Fund (ACCF) – Launched in 2014 with EUR 4.7 million from Germany, the ACCF supports African governments, nongovernmental organisations and research institutions in carrying out preparatory activities and scaling up access to climate finance. To date, ACCF has approved eight projects for a total of USD 3.3 million. In December 2015, the ACCF received a commitment of EUR 4.7 million from Italy and EUR 2 million from Flanders, Belgium, and has converted it to a multidonor trust fund.



ClimDev Special Fund (CDSF) – A financing arm of the joint African Union Commission, UN Economic Commission for Africa and AfDB ClimDev-Africa Programme, CDSF is a demand-led fund that pools resources to finance investments for the generation and use of climate information for climate-resilient development. As its Trustee, the Bank administers and manages the Fund and hosts its Coordination Unit.



Africa Renewable Energy Fund – With a total budget of about USD 100 million, the Fund is financed by the Bank and SEFA, and by a grant from the GEF. It supports small- to medium-scale independent power producers (between 5 and 50 MW) with a commitment per project of USD 10–30 million, with the capacity to source further funding from co-investors for a larger investment.



African Water Facility (AWF) – The AWF aims to mobilise and apply financial and human resources to ensure water security in Africa. Led by the African Ministers' Council on Water, the AWF developed a portfolio of grants covering 104 projects in 52 countries, including Africa's most vulnerable states. Since 2006, the AWF has mobilised EUR 151.2 million from 15 bilateral, multilateral financial institutions, foundations and African governments.

External climate funds for which the Bank is an implementing entity



Climate Investment Funds (CIF) – AfDB has approved 21 projects for USD 770 million (of which AfDB co-finances USD 1.7 billion) under four programmes: Clean Technology Fund, Forestry Investment Programme, Pilot Programme for Climate Resilience and Scaling Renewable Energy in Low-Income Countries. The Bank still has about 24 projects yet to be approved by the CIFs. These investment pipelines are highly relevant to the High 5s.



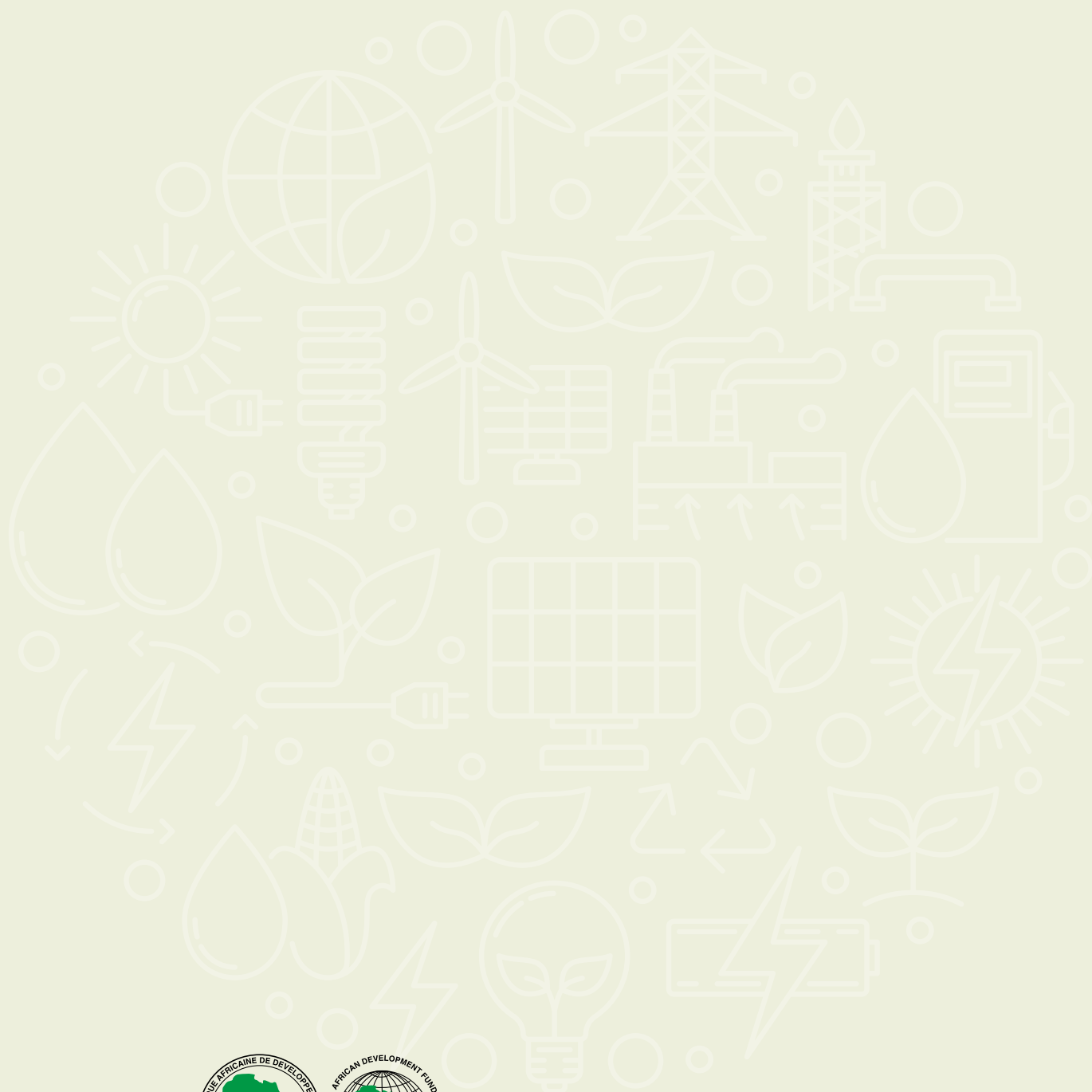
Global Environment Facility (GEF) – The GEF co-funds 35 Bank projects for a total of USD 302 million in GEF financing and over USD 2.8 billion in co-financing. The GEF7 replenishment cycle (2018–2022) starting in 2017 offers a unique opportunity for the Bank to mobilise additional resources to achieve the High 5s and the Action Plan.



Green Climate Fund (GCF) – The Bank was accredited to the GCF in March 2016 and is building its project pipeline for funding, holding discussions with the GCF Secretariat to identify sectors and projects that align with the priorities of the Bank and the GCF. The Bank has submitted project requests and expects to have its first set of projects approved in 2017. To date, the Bank has a GCF project pipeline of about USD 7 billion, with an additional USD 1.1 billion to be mobilised from the GCF.



Adaptation Fund (AF) – This Fund surpassed its fundraising goal at COP22 of USD 80 million. The Bank will use a two-pronged approach to access adaptation funds either as an implementing entity or by providing institutional support to RMCs for direct access if the latter is most feasible. Accredited with the Fund in 2011 for 5 years, the Bank has recently been re-accredited for 5 more years in order to mobilise additional resources for adaptation financing in Africa.



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