PROPOSAL FOR FINAL CONSIDERATION

Project Fact Sheet

C91- REGIONAL AFRICA - Africa Climate Resilient Investment Facility (AFRI-RES)	
Partner Agency	World Bank (WB)
Executing Agency	African Climate Policy Centre (ACPC) / World Bank
Sector	Environmental policy and administrative management CRS code: 41010
Country	Sub-Saharan Africa
Budget - NDF - Partner Agency - Other Funders	EUR 23.10 million[1] EUR 5.0 million WB (in-kind) EUR 8.10 million AFD, AfDB, GIF, PPIAF, UNECA/ACPC (TBC) EUR 10.0 million
Project Period	2017 - 2020
Mode of Finance	Joint co-finance
Previous Support to Country	Credits: EUR 295.5 million; SDR 134.6 million Grants: EUR 119.35 million
Rio Markers	Mitigation: 1 = Significant Objective Adaptation: 2 = Principal objective
Gender Marker	1 = Significant Objective
Climate Screening Satisfied	Yes for climate change adaptation
Processing Schedule	Pipeline - Jun 2016 Final - Mar 2017 Signature - Apr 2017 Effective - May 2017

[1] Exchange rate 1 EUR = 1.07 USD

PROJECT SUMMARY

NDF grant EUR 5.0 million
Project Period: 2017–2020
Partner Agency: World Bank (WB)
Implementing Agency: African Climate Policy Centre (ACPC) and World Bank

Objective

The overall objective of the initiative is to strengthen the capacity of African institutions (including national governments, river basin organisations, regional economic communities, power pools and others) and private sector to plan, design and implement investments in selected sectors, so as to increase their resilience to climate change. The specific objective is to establish an Africa-based centre of technical competence and excellence that would assist governments, planners and private developers in Africa to integrate climate change in project planning and design, thereby attracting funding from both development and climate finance sources.

To sustain Africa's growth, and accelerate the eradication of extreme poverty, investment in infrastructure is fundamental. To fill Africa's infrastructure gap, some USD 93 billion per year for the next decade will need to be invested. Much of this investment will support the construction of long-lived infrastructure (e.g. dams, power stations, irrigation canals, transport corridors, etc.), which may be vulnerable to changes in climatic patterns: water needed for power generation or irrigation may not be available in the amount needed or at the right time; roads may get washed away more frequently as a result of more frequent high rainfall events.

The integration of climate risks in the planning of climate-sensitive investments requires a change in mind-set away from consolidated behaviour and practices to an integrated framework approach that brings together climate information, climate impact assessment and decision-making for infrastructure investment. Such a shift in mind-set requires credible climate information used with appropriate modelling tools and supported by dedicated institutions to better inform policy and development planning. Efforts to shift the mind-set of investment planning towards climate resilience is likely to be most effective if conducted in Africa, by Africans, and from within the established policy institutions on the continent.

The proposed establishment of an Africa Climate Resilient Investment Facility (AFRI-RES) to be anchored with the UN Economic Commission for Africa (UNECA) in the existing Africa Climate Policy Centre (ACPC) will be a critical step in this direction, and essential to both improve planning and avoid wasted investment resources.

NDF support will make it possible to establish the AFRI-RES Facility. NDF will seek to involve - where feasible - relevant Nordic knowledge, skills and technology for development of climate-resilient infrastructure.

Financing

The total project cost estimate is EUR 23.10 million. NDF is providing EUR 5.0 million in grant while WB provides in-kind co-financing of EUR 8.10 million. Although still not fully confirmed, UNECA and other financiers are expected to provide an additional EUR 10 million.

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List of Abbreviations and acronyms

ACPC	Africa Climate Policy Centre
AFD	Agence Française de Développement
AfDB	African Development Bank
AFRI-RES	Africa Climate Resilient Investment Facility
AUC	Africa Union Commission
AWF	Africa Water Facility
Clim-Dev	Climate for Development in Africa Program
CR4D	Climate Research for Development
CSAG	Climate Science Assessment Group, University of Cape Town
DfID	Department for International Development
ECRAI	Enhancing the Climate Resilience of Africa's Infrastructure (study)
EIA	Environmental Impact Assessment
ESCI	Emerging and Sustainable Cities Initiative
ETC	Extended Term Consultant
EU	European Union
FCFA	Future Climate for Africa
GFCS	Global Framework for Climate Services
GIF	Global Infrastructure Facility
GP	Global Practices
IPCC	Intergovernmental Panel on Climate Change
NDC	National Determined Contributions
NDF	Nordic Development Fund
OECD	Organisation for Economic Co-operation and Development
PIDA	Program for Infrastructure Development in Africa
PPIAF	Public Private Infrastructure Advisory Facility
QA	Quality Assurance
RDM	Robust Decision Model
SASSCAL	South African Science Service Centre on Climate Change & Adapted Land Use
SDG	Sustainable Development Goal
STC	Short Term Consultant
UNECA	United Nations Economic Commission for Africa
WASCAL	West African Science Service Centre on Climate Change & Adapted Land Use
WB	World Bank
ZAMCOM	Zambezi Watercourse Commission

1. INTRODUCTION AND PROJECT BACKGROUND

The present proposal is direct follow-up to a previous NDF project with the World Bank (WB): *Addressing the Vulnerability of Africa's Infrastructure NDF C28*. The major outcomes of this project were the two publications: *Enhancing the Climate Resilience of Africa's Infrastructure: The Power and Water Sectors (2015)*[2], and *Enhancing the Climate Resilience of Africa's Infrastructure: The Roads and Bridges Sector (2016*[3]*),* which demonstrated that proper integration of climate change into the planning and design of infrastructure investments can considerably reduce the risk posed by future climate to their physical and economic performance.

To sustain Africa's growth, and accelerate the eradication of extreme poverty, investment in infrastructure is fundamental. External financial flows to Africa have arguably been on the rise over the last decade, approaching some $200 billion per year over the last few years[4]. But the ability of much of this financing to deliver the intended development benefits to contribute to Africa's development is being increasingly threatened by climate change. Consider man-made capital, such as infrastructure. In 2010, the Africa Infrastructure Country Diagnostic found that to enable Africa to fill its infrastructure gap, some USD 93 billion per year for the next decade will need to be invested. The Program for Infrastructure Development in Africa (PIDA), endorsed in 2012 by the continent's Heads of State and Government, lays out an ambitious long-term plan for closing Africa's infrastructure gap, including through major increases in hydroelectric power generation and water storage capacity. Much of this investment will support the construction of long-lived infrastructure (e.g. dams, power stations, irrigation canals, transport corridors, etc.), which may be vulnerable to changes in climatic patterns: water needed for power generation or irrigation may not be available in the amount needed or at the right time; roads may get washed away more frequently as a result of more frequent high rainfall events.

Bilateral and international development finance institutions plus the private sector (which account for 60% of total external financing for Africa) are increasingly looking at ways to ensure that their investment is climate-resilient, to reassure the respective financing constituencies (taxpayers in OECD countries and private investors) that the effectiveness of the investments in Africa is not in question.

The integration of climate risks in the planning of climate-sensitive investments requires a change in mind-set away from consolidated behaviour and practices to an integrated framework approach that brings together climate information, climate impact assessment and decision-making for infrastructure investment. Such a shift in mind-set requires credible climate information used with appropriate modelling tools and supported by dedicated institutions to better inform policy and development planning.

The proposed establishment of an Africa Climate Resilient Investment Facility (AFRI-RES) is a critical step in this direction, and essential to both improve planning and avoid wasted investment resources. The proposed Facility will adopt the results and methods developed in the earlier NDF-WB project; move them forward in practical and relevant ways, and enable the application of a new category of project support in Africa to facilitate this needed shift in mind-set. The African Union Commission (AUC) and the United Nations Economic Commission for Africa (UNECA) has asked the WB to team up with them to establish AFRI-RES Facility. Moreover, UNECA's African Climate Policy Centre (ACPC) - which will be the secretariat and lead of the Facility - is also home

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[2] https://openknowledge.worldbank.org/handle/10986/21875

[3] http://documents.worldbank.org/curated/en/270671478809724744/pdf/110137-WP-PUBLIC-ECRAI-Transport-CLEAN-WEB.pdf

[4] Source: Africa Economic Outlook (2015)

to the Africa Partnership Facility for NDCs. This set-up would allow for a win-win scenario since the NDC facility works with facilitating concrete implementation of the NDC actions (Water, Agriculture, Energy and Transport) identified by countries, and tailor them to enhance climate-resilient infrastructure as defined by AFRI-RES.

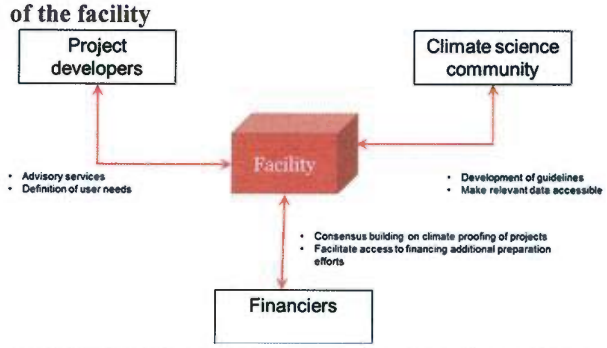
2. RELEVANCE AND RATIONALE

2.1. Project Relevance and Rationale

There is a growing recognition in Africa of the need to improve climate science and climate services to generate information and knowledge of use for development purposes. This is confirmed by the flourishing of several initiatives in this domain, such as Climate Research for Development (CR4D), Future Climate for Africa (FCFA), and the Global Framework for Climate Services (GFCS).

Building on these initiatives, the proposed facility is intended to further spur progress by linking explicitly the three key actors that have a stake in integrating climate considerations into the development process: project developers, project financiers and the climate science community (see Figure 1 below). Efforts to date have been typically limited to address one or two links in the chain, often with a focus on a limited number of development sectors/ themes.

Figure 1: The added value of the facility



Project developers (e.g., Ministries, parastatals, river basin organisations, private sector developers) are the ultimate users of climate information for planning or designing projects. They are becoming increasingly aware that climate change could have an impact on project performance, but they often remain unclear about what climate information is needed or on how that information should be integrated in the project preparation process, particularly in view of the considerable amount of uncertainty that still surrounds future impacts of climate on key natural processes (hydrology, sedimentation, coastal geo-morphology, etc.). The extra cost that climate mainstreaming may add to the preparation process is also a significant concern for many project developers.

Project financiers also recognise that climate change poses challenges to the ability of their financing to achieve the intended development outcomes. Several funding organisations are concerned, however, by the lack of consensus on how the challenge should be addressed during project design, complain about the lack of readily available tools, and demand standardised approaches that could reduce the extra cost of integrating climate considerations into project preparation.

Finally, the *scientific community* is aware of the need to better consider end users' needs in the planning of its activities. Important challenges remain, however, constraining the actual delivery of the knowledge needed by project developers and financiers. First, the understanding of who the potential end users actually are and what they need tends to be based on ad-hoc interactions with specific representatives of that community, rather than on a comprehensive assessment of needs

across various types of users (for example, a municipal government is likely to have very different needs than a river basin organisation). Second, important differences in approaches remain among the different components of the science community. The cluster of climate scientists privileges rigorous assessments of climate scenarios at the upper end of the chain of analysis; the evaluation of biophysical effects of climate change (for example, on river basin hydrology) is carried out by a separate group of experts. Often the analysis of the economic and financial implications, and of possible responses in terms of project financing, tariffs, etc., is done by yet other types of experts. Finally, there is often a bias in favour of research endeavours with a relatively long time horizon, which might leave unaddressed the needs of project developers who have to make critical planning or design decisions in a matter of months or even weeks, not of years.

The resulting fragmentation of knowledge on what is needed, when in the project cycle, and at what cost, suggests that there is a need for a mechanism that can bring together the three communities in a structured way, that:

a) Assesses more systematically than in the past what end-users need;
b) Convenes the community of scientists and practitioners to deliver the needed knowledge; and
c) Promotes a dialogue with the financing community to define what is reasonable to expect during project preparation and how additional resources could be mobilised to meet the extra costs of including climate change in the preparation process.

Following an iterative approach to learning, AFRI-RES will play this role of knowledge-broker across the three communities, thereby filling an important niche that remains unattended to date, and making the integration of climate in the investment planning process faster and cheaper. The most advantageous timing of this role is in the pre-feasibility, feasibility and design, and financing steps of the infrastructure delivery process.

2.2. Relevance to NDF's Mandate and Strategy

The proposal passes the NDF climate change screening for adaptation and is fully consistent with the present NDF strategy, contributing to its implementation in several focal areas, including support for project development, innovation, private sector development, and piloting of interventions with a high risk level. The proposed project will establish a Facility to secure that the planning and preparation of large high-value infrastructure projects will focus on critical aspects related to climate change. The proposal will directly target SDG 9 to build resilient infrastructure.

The Public Private Infrastructure Advisory Facility (PPIAF) will co-finance and participate actively in the Facility with its knowledge on establishing PPPs and managing climate risk in infrastructure PPPs. One criterion for project selection will be private sector involvement. Private sector developers will benefit from the activities and guidance from the Facility (e.g., free and open access to the climate data portal) to be in a better position to avoid future costs linked to non-adaptation or mal-adaptation. Moreover, it is planned to involve private sector engineering and consulting firms in developing guidelines and good practice notes by serving as commentators or peer reviewers.

3. THE PROPOSED PROJECT

3.1. Objectives

The overall objective of the initiative is to strengthen the capacity of African institutions (including national governments, river basin organisations, regional economic communities, power pools, and others) and private sector to plan, design, and implement investments in selected sectors, so as to increase their resilience to climate change. The specific objective is to establish an Africa-based

centre of technical competence and excellence that would assist governments, planners and private developers in Africa to integrate climate change in project planning and design, thereby attracting funding from both development and climate finance sources.

3.2. Project Activities /Outputs

Component 1: Project-level technical assistance. This includes expert input to project developers to draft terms of reference that include specifications for carrying out climate resilience assessments in pre-feasibility or feasibility studies, quality assurance consultant reports, or including climate risk management actions in the structuring of public-private partnership agreements or contracts. The facility may also provide additional incremental financing to top up project preparation resources to cover the additional costs of including climate change considerations in project design.

In many cases, planning, designing, building and operating projects in a more climate-resilient way will take more time and resources. AFRI-RES will help countries address the resulting incremental costs in two ways. First, by topping up resources available for project preparation, so that climate resilience issues can be better addressed during preparation; and secondly, by documenting in a credible way the need, where applicable, to mobilise additional funds for project implementation, to ensure that the project can adequately perform even under climate change, thereby helping countries make the case with project financiers.

Projects benefitting from AFRI-RES support in this area will provide a summary of the approach followed and of lessons learned, so that a library of real-life experience in climate-resilient investment planning can gradually emerge and can be shared through the Facility climate knowledge portal (component 4).

Component 2: Outreach, dissemination and training. AFRI-RES will undertake a range of activities to encourage behavioural change on climate-resilient investment planning. These will range from upstream work of awareness-raising (e.g. workshops, seminars), intended to enhance understanding of public and private sector decision-makers as to the risks of climate variability and change on the performance of local infrastructure; to more in-depth technical workshops (targeted at practitioners), to support robust decision-making, access to finance, technology transfer and capacity-building, reflecting the real-life experiences accumulated through the activities carried out under component 1.

As part of this continuous and iterative learning model, AFRI-RES will organise an annual conference on climate-resilient project planning and design (which might include a contest for innovative climate-resilient solutions), and a series of workshops to be carried out in collaboration with relevant communities of practices (e.g. hydropower associations; river basin organisations).

Component 3: Guidelines, standards, and good practice notes for climate-resilient infrastructure investment. The facility will identify good practices and develop guidelines to inform decision-making on incorporating climate risk into infrastructure planning and design, across different sectors and stages of decision-making (e.g., from the policy level to sector level planning to individual project design). The first good practice note will focus on the use of climate data for Africa (including baseline data and projections of future change), and techniques for capturing a range of future projections as well as managing the uncertainty inherent in these projections. Consultations for this product are already under way with the Climate Science Assessment Group (CSAG) at the University of Cape Town, which has for many years been the primary source of African climate scenarios for use in impact and adaptation assessments.

Component 4: Climate knowledge and data portal. The facility will develop and maintain an online repository of knowledge of relevance for climate-resilient investment planning and design in Africa. This will include a library of project level experiences, including (built from work carried out under component 1 of AFRI-RES and other sources), sample Terms of Reference for work at different stages of the project cycle; access to key data, including vetted climate change projections for Africa; tools, models, and analytics to support climate-resilient infrastructure investment; and multi-media learning and knowledge products.

The scope of the work of the facility would span different sectors and different stages of the planning and project development cycle. To date, methodological development efforts within ECRAI have focused on the water resources, power, and transport sectors, but AFRI-RES support would also include other areas of climate-resilient investment planning. This could comprise climate-resilient development of the blue/ ocean economy and landscape management.

3.3. Cost Estimates and Financing Plan

The total budget for the AFRI-RES is EUR 23.10 million with NDF contributing EUR 5.0 million and the WB providing EUR 8.1 million in-kind co-financing. UNECA is planning to contribute EUR 3.165 million and EUR 1 million in-kind. The NDF funding together with WB and UNECA co-financing will make it possible to launch the AFRI-RES almost immediately. The remaining part of the budget - though not confirmed - would be provided by partners who have indicated interest and willingness to provide co-financing including AFD, the Public-Private Infrastructure Advisory Facility (PPIAF)[5], the Global Infrastructure Facility (GIF) and the NDC Partnership.

Table 1: Budget including Sources and World Bank in-kind contributions (MEUR)

Nr	Component	Implementation lead	NDF	Other Financiers(b)	World Bank in-kind contribution (c)	Total
1	Project level technical assistance	World Bank	2.88	5.75	6.00	14.94
2	Training, dissemination, outreach	UNECA	0.40	0.80	0.45	1.65
3	Guidelines, standards and good practice notes	World Bank	0.67	1.33	0.45	2.45
4	Climate Knowledge Portal	UNECA	0.33	0.67	0.45	1.45
5	Overall coordination, management and QA	World Bank	0.50	1.00	0.75	1.95
6	TF Cost recovery fees (a)		0.18	0.35	-	0.51
7	Contingencies		0.05	0.10	-	0.14
	Total		**5.00**	**10.00**	**8.10**	**23.10**

(a) Personnel costs (including staff time, Short Term Consultant – STC and Extended Term Consultants – ETC) are estimated across all the areas of proposed AFRI-RES activity
(b) To be confirmed
(c) World Bank will have a 9-person team working on AFRI-RES for three years.

[5] PPIAF will provide funding for USD 0.5 million for FY18 through its dedicated Climate Change Trust Fund for Infrastructure (CCTFI). Subject to the outcome of ongoing fund-raising efforts of CCTFI, and on implementation progress, an additional USD 0.5 million/year will be allocated for 3 fiscal years (i.e. USD 2 million in total).

Table 2: AFRI-RES cost estimate and financing plan (MEUR)

Nr	Area	Implementation lead	Units	Quantity	Unit cost (MEUR)	Total cost (MEUR)	NDF	Other Financiers	Share on total
1	Project level technical assistance	World Bank	Projects	30	0.29	8.63	2.88	5.75	57.5%
2	Training, dissemination, outreach	UNECA	Workshops, conferences	8	0.15	1.20	0.40	0.80	8.0%
3	Guidelines, standards and good practice notes	World Bank	Technical documents	8	0.25	2.00	0.67	1.33	13.3%
4	Climate Knowledge Portal	UNECA	Lump sum	1	1.00	1.00	0.33	0.67	6.7%
5	Overall coordination, management and quality assurance, of which:	World Bank	Annual cost	3	0.50	1.50	0.50	1.00	10.0%
	Bank staff and travel		*Annual cost*	*3*	*0.2*	*0.6*	*0.20*	*0.40*	
	Short Term and Extended term consultants		*Annual cost*	*3*	*0.15*	*0.45*	*0.15*	*0.30*	
	Firm contracts		*Annual cost*	*3*	*0.15*	*0.45*	*0.15*	*0.30*	
6	TF Cost recovery fees[x]			17%	3.11	0.53	0.18	0.35	3.5%
7	Contingencies[y]			1.00%	14.33	0.14	0.05	0.10	1.0%
	Total					**15.00**	**5.00**	**10.00**	**100.0%**

x) Percent points applied to personnel costs (a) (excluding firm contracts)
y) Percent points applied to all cost items (excluding TF cost recovery fees)

3.4. Nordic Interest

Nordic development cooperation has a long history of support to infrastructure investments in Africa and new bilateral strategies continue to stress the importance of infrastructure investments (e.g. the new Danish Strategy[6]). There is knowledge, skills and technology in the Nordic countries that are important for development of climate-resilient infrastructure including the structuring of financing from both public and private sources. Two Nordic institutions, KTH Royal Institute of Technology in Stockholm and Stockholm Environment Institute (SEI), both participated and provided technical inputs to the ECRAI study. The Facility will be closely linked to and complement the ClimDev-Africa[7] program supported by Norway, Sweden and NDF.

3.5. NDF's Added Value and Comparative Advantage

The NDF funding will allow the AFRI-RES Facility to be established. NDF has been one of the main funders of the ECRAI study under the *Addressing the Vulnerability of Africa's Infrastructure* effort and has retained an active role on the multi-donor steering committee. NDF would also be part of the leadership group in the AFRI-RES Facility. NDF has participated in several workshops in Africa (e.g. ACRIS II which had 300+ participants including 40+ major companies) related to the project, and was part of the panel to present the Facility at COP21 together with representatives of African countries, institutions, and WB. Moreover, NDF has a large portfolio of infrastructure investments using different financial instruments (1989-2005) and retains an active portfolio of transport and climate change adaptation with activities in several African countries and elsewhere. NDF has shared and presented results from our transport portfolio to AFRI-RES stakeholders at

[6] Verden 2030: Danmarks udviklingspolitiske og humanitære strategi, januar 2017
[7] Climate for Development in Africa (ClimDev-Africa) Programme is an initiative of the African Union Commission (AUC), the United Nations Economic Commission for Africa (UNECA) and the African Development Bank (AfDB). The ClimDev Special Fund [NDF C64] is supported by NDF.

several events. Furthermore, NDF has helped establish contacts in order to have the AfDB participate in AFRI-RES preparatory activities.

Other examples of relevant NDF support includes the ADB (NDF C90), a fund to enhance the readiness of infrastructure investment projects related to climate change and a new fund with IDB (NDF C98) to accelerate preparation of climate relevant infrastructure investments.

4. IMPLEMENTATION ARRANGEMENTS

4.1. Technical Aspects

A demand analysis was carried out during preparation. The user interest can broadly be classified into two main clusters: a) support at the project design and preparation stages (including mobilisation of technical knowledge to evaluate climate risks as well as incremental financing, to cover, where applicable the incremental cost of building the project in a climate-resilient way) and, reflecting incremental learning built at the project level, b) upstream support in the form of knowledge, guidelines and good practices to inform sector and project planning. AFRI-RES will provide both types of support, through the four planned components. The facility will provide support using a wide range of emerging methods such as these summarised below:

Robust-Decision Making (RDM): The ECRAI study applied an RDM approach to demonstrate basin- and project-scale climate resilience analysis for seven river basins in Sub-Saharan Africa. RDM is a powerful approach that is capable of reflecting a large number of alternative climate futures, and provides readily interpreted results which provide a strong analytic basis to identify changes in planning and project design solutions.

Decision Tree for Climate Resilience: The Decision Tree approach provides a structured, tiered approach to assessing and identifying climate resilience options that progress from simple to more complex analyses. The more advanced steps of the approach have been demonstrated in a scenario-based uncertainty analysis framework that is similar to RDM, but incorporates both climate and non-climate sources of uncertainty. The Decision Tree framework is flexible enough to accommodate a wide range of adaptation methodologies.

Flexible design: This is an adaptive management approach that combines climate and non-climate risk analysis with an engineering approach which provides flexibility to modify built infrastructure as future conditions unfold, retaining flexibility in design solutions (e.g. civil works that allow for incremental installation of hydropower turbines, rather than committing the project irrevocably to a given power generation size). The approach is appealing as a response to the deep uncertainty of future climate forecasts, particularly involving precipitation forecasts.

Financial products: There is increasing interest in utilising financial products to reduce climate-related risk of projects. For example, an energy stabilisation fund or an insurance instrument could mitigate the risk that drier-than-expected hydrological regimes may result in under-performance of hydro-power schemes or other water-related investments. The work supported by AFRI-RES could assist in the identification of appropriate financial products for climate risk mitigation.

4.2. Institutional Aspects

AFRI-RES is conceived as a partnership between the World Bank, UNECA, and the AUC in response to a request by AUC and UNECA for support in developing Africa's capacity to systematically integrate climate change considerations into the planning and design of long-lived investments. More recently, the African Development Bank (AfDB) has informally indicated interest in joining AFRI-RES; the modalities for collaboration will be confirmed after completion of

the AfDB's reorganisation. Together, these institutions will provide strategic direction to AFRI-RES, identifying priorities and promoting the dialogue with public and private sector financiers, and organising a high visibility event of dissemination of AFRI-RES activities. The AFRI-RES Facility is part of the WB Africa Climate Business Plan presented at COP21.

The ACPC, which will be the secretariat and lead of the Facility, is also home to the Africa Partnership Facility for NDCs. This facility is designed to support individual countries in the implementation of their Intended Nationally Determined Contribution (INDCs) to the Paris Agreement. The ACPC serves Regional Economic Communities, governments and communities across Africa. The centre is actively working with stakeholders and partners to address Africa's climate challenges and engage high level policy makers, particularly ministers of finance and economic planning, the African Group of Negotiators on climate change, the Board of the Green Climate Fund and various other high level constituencies.

4.3. Project Organisation

Strategic Coordination: A Leadership Group representing UNECA, AUC, AfDB, the WB and donors (including NDF) will be formed to carry out overall program coordination activities and provide strategic direction. The first meeting of the Leadership Group will be to discuss and approve the annual work plan, and afterwards there will be quarterly meetings (in person or video-conference) to monitor implementation. (see annex 2 for the project implementation structure).

Implementation Team: The AFRI-RES Facility will be based in Addis Ababa and have an office in UNECA/ACPC with a full-time coordinator from ACPC and a technical team. The WB has designated a team leader together with an eight-person specialist team (energy, water, transport, disaster risk, climate change and economy) to work closely with the UNECA/ACPC team on the implementation of AFRI-RES Facility. The ACPC coordinator and the WB team leader will together be responsible for the day-to-day management of the Facility.

The division of labour in the start-up phase of the Facility will have UNECA/ACPC lead the development of the climate knowledge portal and training, dissemination, and outreach. The WB will lead the project level technical assistance, development of guidelines, standards, and good practice notes in addition to overall management and quality assurance. After the start-up phase, it is planned to increase the role of UNECA/ACPC.

Implementation partners: The Facility will contract individuals from the roster of experts, as well as outside organisations to carry out the activities included in the work plan. Specific tasks will be contracted out to regional or sub-regional centres of excellence in Africa, as an additional way to strengthen capacity in the continent for climate-resilient investment planning. A broader network of peer reviewers would be mobilised to comment on certain products, such as guidelines and good practice notes.

Project selection: In order to have a rapid start-up, the first phase of the Facility will use the existing requests such as one from ZAMCOM plus projects from WB where key selection criteria would be private sector participation, e.g. in sectors such as energy or water. Other selection criteria would be co-financing from AFDB, geographical balance across sub-regions in the continent, and balance among climate vulnerable sectors. At a later stage, there will be a call-for-proposals.

4.4. Procurement, Contract Structure, and Timing

The project is joint co-financing and NDF will transfer the entire grant to the WB who will administer the grant through the existing trust-fund agreement between NDF and WB. Part of the resources will be managed by UNECA under a recipient executed agreement to be signed between WB and UNECA. Procurement will be carried out by the WB using its policies and guidelines.

There will be a small number of contracts for TA and technical studies. Procurement opportunities will be shared with NDF for publication on the NDF webpage.

The duration is 3.5 years with planned launch in the second quarter of 2017 and 1st phase completion by end of 2020. The inception phase in 2017 will be followed by a two-year pilot phase (2018-19) with the consolidation phase in 2020. As part of preparation for a 2nd phase there will be a study on future sustainability including income-generation.

4.5. Risk Analysis

The following table summarises the potential risks to the achievement of the component objectives and recommended measures to minimise those risks. The overall risk rating is Medium.

Table 4: Risk assessment

Risk	Mitigation factors and measures	Risk rating
Limited demand of AFRI-RES services	This risk has been mitigated already at design stage of the initiative, during which a detailed end-user survey has been carried out to identify priority areas of demand for knowledge related to climate-resilient investment planning.	Moderate
Limited engagement of African partners	UNECA and AUC have expressed commitment at the highest level to the initiative. The scope of UNECA's participation will be determined by the outcome of the financing of phase II of the ClimDev-Africa program. Regular dialogue will help address any challenge to the partnership. The facility will explicitly seek to collaborate with African organisations, including centres of expertise and universities.	Moderate
Implementation delays related to ongoing re-financing of the CLIM-DEV program	Implementation duties will be carried jointly by the World Bank and ACPC / UNECA. The seed funds from NDF would be administered through a World Bank-executed trust fund, with part of those resources to be managed by UNECA under a subsidiary Recipient Executed Trust Fund Agreement to be negotiated between the World Bank and UNECA. Implementation arrangements will be revisited, if necessary, in early 2018.	Moderate
Limited uptake of the tools developed by the facility	During the detailed design stage, there have been frequent interactions with potential end users to prioritise knowledge needs and identify bottlenecks possibly constraining adoption.	Moderate / high
Insufficient funds mobilised to implement the facility as planned	Consultations are underway with potential donors who have indicated interest in supporting the facility. The funds provided by NDF will enable the facility to begin operation and start to show results. It is expected that additional funds will be mobilised once the facility is up and running and demonstrates its value	Moderate
Fiduciary risk/ Risk of fraud and corruption	All funding will be channelled via the World Bank or UNECA; no direct funds will be provided to governments so existing safeguards are adequate.	low

4.6. Monitoring and Evaluation

The Bank task team will regularly monitor progress in implementation to enable collection of the information and data referred to in the result framework (Annex 1). Reporting on progress to NDF (and other donors as applicable) will be made on an annual basis. A mid-term review (to be supported by the Facility budget) will be undertaken to allow for adjustments in the project design or implementation arrangements as well as possible preparation of follow-up activities to those financed by the project. By the end of the project, a summary report will be generated with lessons learned and experience gained. The report will be disseminated to relevant stakeholders nationally and internationally.

5. ECONOMIC AND SOCIAL ASPECTS

5.1. Economic Justification

The ECRAI work provides a very strong economic justification for the proposed facility: the benefits in terms of reduced impacts of climate change on the financial performance of infrastructure exceed the cost of carrying out the adaptation interventions considered. The project also has potential to provide important benefits in reducing the overall social vulnerability of a wide range of livelihoods within Sub-Saharan Africa. For example, the ECRAI analysis shows the potential for robust climate adaptation to reduce electric power costs across many Sub-Saharan Africa countries. Further, climate aware water resource management also holds significant potential for reducing the impacts of climate change on the yields of irrigated crops, and thereby for reducing the need for expensive agricultural imports.

5.2. Social Aspects

The proposed AFRI-RES facility has been screened by the WB and rated as medium risk. Where applicable, the WB social and environmental safeguards will be used. The present proposal focuses on carrying out specific technical studies, training and planning exercises that are not expected to have any negative social or environmental impacts. The larger infrastructure works that will be analysed and climate-screened will need EIA assessments and WB safeguards will apply.

Although the proposed AFRI-RES initiative, given its limited financing envelope, does not envisage a larger set of gender-specific activities, the development of more climate-resilient investment will have benefits on more vulnerable groups, including women, since they often critically depend for their livelihoods on the sustained provision of the services of key infrastructure, such as power, roads or irrigation. The planned climate portal will include references to relevant tools for gender mainstreaming in infrastructure projects. The training activities will include both men and women (min. 30%) and there will be an effort from AFRI-RES to have gender balance in the activities and the project teams.

6. CONCLUSION

Although climate change impacts in the mid-21st century may seem far away, they are going to be very real during the life span of the infrastructure that is planned now and will be built within the coming decade. If these impacts are not taken into account now, there is a considerable risk to lock the next generation of infrastructure in Africa into designs that could turn out to be inadequate for the climate of the future and costly or impossible to modify later.

7. RECOMMENDATION

The Board approved grant financing of up to EUR 5.0 million to the project C91 REGIONAL AFRICA - Africa Climate Resilient Investment Facility (AFRI-RES)

Helsinki, 15 February 2017

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Managing Director

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Annex 2: Project Implementation Structure