Ministry of Foreign Affairs – (Department for Green Diplomacy and Climate)

Meeting in the Council for Development Policy on 22 September 2022
Agenda Item No. 11

1. Overall purpose:	*For discussion and recommendation to the Minister*
2. Title:	Danish Support to the Energy and Environment Partnership Africa Trust Fund (EEP Africa)
3. Presentation for Programme Committee:	2 May 2022
4. Previous Danish support presented to UPR:	No, this is the first presentation to UPR

Danish Support to EEP Africa 2022-2026

Key results:

- *1.7 million people will benefit from an improved energy source as a result of EEP Africa support.*
- *EUR 21 million annual savings on energy-related expenditure.*
- *At least 9000 formal and direct new jobs will be created by EEP supported projects during the contract period, whereof 47% are women.*
- *EUR 143 million will be mobilised in investments committed to EEP Africa supported enterprises.*
- *970,000 tonnes of CO2e emissions will be avoided as a result of improved energy access provided for by EEP Africa supported partner.*

Justification for support:

- *Renewable Energy is an enabler for pro-poor, sustainable growth, building resilience against climate change.*
- *Local entrepreneurs and small-scale businesses play a key role in tailoring green technology and business models for Africa.*
- *Green start-ups and small enterprises have a unique opportunity to create thousands of new and decent job opportunities.*
- *EEP Africa is benefiting poor and energy poor households in Sub-Saharan Africa, and is targeting its support towards youth and female-led start-ups delivering low-carbon and climate-related services and products.*
- *Denmark's Strategy for Development Cooperation includes a dedicated objective to ensure access to clean and renewable energy for more people in Africa.*

Major risks and challenges:

- *Weak enabling regulatory frameworks in target countries could impact project implementation. Risk reduced through ex-ante risk review, due diligence and mitigation planning at proposal stage from applicants.*
- *The challenge of reaching poor and disadvantaged groups will be considered in early engagement with grantees. Engagement with women, youth and/or vulnerable communities will be closely monitored in results indicators and through user surveys.*

File No.	2022 - 14297					
Country	Inter-regional (Africa)					
Responsible Unit	GDK					
Sector	Climate and Energy					
Partner	EEP Africa					
DKK million	**2022**	**2023**	**2024**	**2025**	**2026**	**Total**
Commitment	50					50
Projected disbursement	10	15	15	10	0	50
Duration	2022-2026					
Previous grants	No					
Finance Act code	06.34.01.40					
Head of unit	Karin Poulsen					
Desk officer	Anders Ørnemark					
Reviewed by CFO	Katja Thøgersen Staun					

Relevant SDGs *(Maximum 1 – highlight with grey)*

No Poverty	No Hunger	Good Health, Wellbeing	Quality Education	Gender Equality	Clean Water, Sanitation
Affordable Clean Energy	Decent Jobs, Econ. Growth	Industry, Innovation, Infrastructure	Reduced Inequalities	Sustainable Cities, Communities	Responsible Consumption & Production
Climate Action	Life below Water	Life on Land	Peace & Justice, strong Inst.	Partnerships for Goals	

Objectives:

Access to clean energy, development and investment enhanced, with a focus on benefiting poor and underserved groups. This will be achieved by providing early-stage catalytic financing and technical assistance to innovative clean energy projects, technologies and business models benefitting countries across Southern and East Africa.

Environment and climate targeting - Principal objective (100%); Significant objective (50%)

	Climate adaptation	Climate mitigation	Biodiversity	Other green/environment
Indicate 0, 50% or 100%		**100**		
Total green budget (DKK)		**50**		

Justification for choice of partner:

EEP Africa has demonstrated an innovative and solid approach to support clean energy and climate-relevant start-up and scale-up companies in Africa that can deliver critical access to green energy services, enhance climate resilience and pro-poor growth. Only a few incubator funds in Africa are providing early-stage capital for locally based entrepreneurs delivering climate-relevant products and EEP Africa is one of them. EEP also has a strong track-record of supporting young and female entrepreneurs. NDF functions as host institution and Fund Manager.

Summary:

Off-grid energy technology and new pro-poor business models have the potential to support a transition to low-carbon growth models, create millions of jobs while contributing to increased climate resilience and food security for poor and underserved households in Africa. EEP Africa is an early-stage grant and catalytic financing facility supporting climate-relevant technologies and business models. EEP Africa supports locally-based entrepreneurs, start-up and scale-up companies to reach last-mile customers with affordable low-carbon and climate-relevant products and services.

Budget:

Component 1: Clean Energy Financing	DKK 35 million
Component 2: Investment Facilitation and Business Development Support	DKK 4 million
Component 3: Knowledge, Policy and Partnerships	DKK 4 million
Programme Management	DKK 7 million
Total	**DKK 50 million**

Danish support to the

Energy and Environment Partnership Africa Trust Fund (EEP Africa)

7 September, 2022

F2: 2022 - 14297

Content

Abbreviations

AfDB	African Development Bank
BDS	Business Development Support
BGFA	Beyond the Grid Fund for Africa
BUILD	BUILD Impact Fund
EEP	Energy and Environment Partnership
EMCAF	Emerging Market Climate Action Fund
ESMAP	Energy Sector Management Assistance programme (World Bank)
FTE	Full-time-equivalent jobs
IC	Investment Committee
IPP	Independent Power Producer
IEA	International Energy Agency
IRENA	International Renewable Energy Agency
GDK	Department for Green Diplomacy and Climate
GPA	Global Platform for Action on Sustainable Energy in Displacement Settings
GHG	Green House Gas
MSME	Micro, Small and Medium Enterprises
NDC	Nationally Determined Contributions
NDF	Nordic Development Fund
MFA	Ministry of Foreign Affairs
P4G	Partnering for Green Growth and the Global Goals 2030
PAYG	Pay As You Go
PPA	Power Purchase Agreement
PUE	Productive Use of Energy
OGEF	The Off Grid Energy Access Fund
SDG	Sustainable Development Goals
SEAH	Sexual Exploitation, Abuse and Harassment
SEFA	Sustainable Energy Fund for All
SvB	Supervisory Board
UNEP	UN Environment Programme

1. Introduction

The present project document outlines the background, rationale, objectives and management arrangements for the planned Danish contribution of DKK 50.0 million to the Energy and Environment Partnership Africa Trust Fund (EEP Africa) hosted and managed by the Nordic Development Fund (NDF) for the period 2022-2026. The project document is an annex to the legal bilateral agreement with the implementing partner and constitutes an integral part hereof together with the documentation specified below.

Denmark's Strategy for Development Cooperation includes a dedicated objective to ensure access to clean and renewable energy for more people in Africa. Almost 600 million people in Sub-Saharan Africa have no access to electricity and more than 900 million people no access to clean cooking. The off-grid solar industry together with other forms of clean energy solutions allows the poorest communities located outside the energy grid to gain access to electricity combatting the challenges of multifaceted poverty. New technology targeting the bottom-of-the pyramid customers, lower prices on renewable energy and new business models such pay-as-you-go solutions are all aspects of the new opportunities offered by off-grid and clean energy solutions. In this way the off-grid energy sector can become a powerful engine to sustainable pro-poor growth in Sub-Saharan Africa, particular for rural areas where more than 80 pct. of people without access to energy lives. The off-grid solar sector can also generate new employment opportunities ranging from entry-level to highly skilled positions. It is estimated that in East Africa the pay-as-you-go off-grid energy sector will have created 350,000 jobs by 2023. This is a unique development opportunity as around 11 million young Africans are expected to join the labour market every year for the next decade. However, a major barrier remains to further unlock the enormous potential for the domestic off-grid energy sector in Africa and that is the lack of capital for early-stage companies and start-ups producing innovative pro-poor climate technology and innovative green business models.

The Energy and Environment Partnership Africa Trust Fund (EEP Africa) is a multi-donor fund hosted and managed by the Nordic Development Fund (NDF). Its overall objective is to enhance clean energy access, development and investment, with a focus on benefiting poor and underserved households and communities. EEP Africa invests in companies that are piloting or scaling clean energy technologies and business models primarily targeting poor communities in Africa. This is done by providing early stage financing and technical assistance to build sustainable businesses. EEP Africa has been a driver of the clean energy transition in Africa since 2010 and has supported more than 270 pioneering projects across 15 countries in East and Southern Africa. In recent years, the EEP Africa has strengthened its focus on supporting local and women-led clean energy companies.

The Danish contribution will support the work of EEP Africa and contribute to consolidating the fund as a catalytic financing facility. Although EEP Africa will be a new partner for Danish development cooperation, it will operate under the umbrella of the NDF where the Danish Ministry of Foreign Affairs (MFA) already plays an active role. Thus, the Danish support will contribute to strengthening the close Nordic collaboration to overcome the energy gap in Sub-Saharan Africa.

2. Context, strategic considerations, rationale and justification

2.1. Context and relevance off-grid energy

More than half of the population in Sub-Saharan Africa still lives without access to electricity. Although the number is increasing for the first time since 2013 due to the Covid-19 pandemic and the recent increase in energy prices and global inflation rates, there are also encouraging trends. Falling prices on renewable energy, progress on off-grid technology and new pro-poor business models are imposing hope of steadily closing the energy gap.

A green off-grid energy revolution in Sub-Saharan Africa requires tailor-made products and business models for the bottom-of-the-pyramid customers. Small early-stage companies and start-ups in East and Southern Africa are highly innovative combining new green technology with new digitalisation opportunities and financing models to develop affordable clean energy products to customers outside the grid. Most of these products and services do not receive any government subsidies but can still reach millions of poor households. This is in many ways a revolution similar to the introduction of mobile phones in Africa only this time an even more diversified range of life changing products can be envisaged. Off-grid energy solutions such as solar-powered stand-alone irrigation systems can increase productivity but also reduce local exposure to more frequent droughts and changing rain patterns. Solar cooling storage for fish, diary product and fresh fruit and vegetables can open new business opportunities to local farmers and reduce food losses. Green charcoal based on agricultural waste or use of biogas for cooking can reduce deforestation in semi-arid regions while reducing the work load for women and girls.

Youth unemployment is another significant and growing problem in Sub-Saharan Africa. Over 60 pct. of the population is under the age of 25 and the number is expected to double to over 830 million by 2050. This means that 10-12 million young Africans are entering the job market each year and yet only about 3 million formal jobs are being created annually. Particular young women are negatively affected and 35 pct. of female youth are not in employment, education, or training, compared to 20 percent of men. The impact of climate change on agriculture is increasing livelihoods risks for everybody. In this context, the off-grid clean energy sector generates significant direct employment opportunities throughout its value chains, even greater than those of conventional energy sources. A study by the IKEA and Rockefeller foundation estimates that distributed renewable energy technologies could create more than 6 million jobs directly and more than 150 million indirect jobs in Sub-Saharan Africa during the next decade.

One of the major barriers to growth of early-stage clean energy companies in Sub-Saharan Africa is access to finance, especially patient and early-stage capital. To truly scale up new pioneering clean energy business operations, these companies need to be able to gradually access more commercial financing. Considering the extended impact of the Covid-19 pandemic combined with global supply chain disruptions, higher inflation and interest rate, the need for risk-tolerant early stage financing is becoming more important than ever for clean energy start-ups to mature to more commercial investments and loans.

2.2. Justification and rationale for the support

A Danish contribution to EEP Africa will be well-aligned with the Danish Strategy for Development Cooperation “The World We Share” and Denmark’s “Global Climate Action Strategy”. These strategies

prioritise access to clean and renewable energy for underserved people in Africa contributing to both social and economic development as well as local job creation. The project will also contribute to the Danish government's ambition to support improved access to clean energy for 5.8 million people in Africa. Furthermore, the strategy emphasises that Danish development assistance should promote integration of renewable energy including initiatives for climate change adaptation such as solar water pumps for irrigation purposes. The strategy also stresses the need to contribute to a sustainable and socially just economic recovery after the Covid-19 pandemic, which should allow for the creation of new green jobs and mobilize private investment that can decarbonize growth. EEP Africa will contribute to a leave-no-one-behind approach by supporting business models targeting energy poor households, which is also a key priority for the Danish development assistance. In addition, EEP Africa has a strong gender focus.

Off-grid renewable energy solutions, such as stand-alone energy systems, solar-home-systems, cleaner cooking fuels and stoves as well as mini-grids, will play a crucial role in achieving universal access to clean and affordable energy (SDG7). Off-grid energy is also an enabler for achieving other SDGs and EEP Africa pays special attention to: No Poverty (SDG 1); Gender Equality (SDG 5); Affordable and Clean Energy (SDG 7); Decent Work and Economic Growth (SDG 8); and Climate Action (SDG 13).

The Danish development strategy also emphasizes that without a flourishing private sector, long-term development is impossible. Africa has the highest entrepreneurship rate in the world according to the African Development Bank (AfDB) which include many young and female entrepreneurs. This means that Micro, Small and Medium Enterprises (MSME) are now the biggest formal employers in Sub-Saharan Africa. While these numbers may appear promising, the majority of these businesses are so-called petty-cash and survival entrepreneurs who are pushed into entrepreneurship by unemployment and adding limited value to the local socio-economic development.

Despite high rates of female entrepreneurs in Africa, women in particular struggle to find investment capital. EEP Africa is proactively seeking to promote female entrepreneurs and companies with high level of female employees. In 2019 a dedicated call for female leadership in the clean energy sector was launched and in 2021 almost 50 pct. of all jobs created by the support of EEP was for women (compared to the average of 20-30 pct. in the renewable energy sector). An example is the EEP Africa support to Powerlive Zimbabwe, which is a for-profit women-led social enterprise providing solar-based energy (incl. associated products) to residential households and small-scale farmers and schools. Through a network of rural women sales agents, technicians and women social groups, the company provides energy access to households outside the grid and energy to run water pumps to ensure safe, clean drinking water. It also offers other associated products such as radios, televisions and internet to provide access to information, and appliances that can be used to increase income, such as hair clippers and refrigerators. All has been based on a pay-as-you-go model allowing affordability of poorer households.

EEP Africa works very closely with companies, both local and international. By supporting EEP Africa, Denmark will support early-stage start-up companies in Africa to proof their product and business model by providing pre-seed capital. By this, EEP Africa can connect the companies to larger ticket sizes of seed funding, commercial investments and working capital to scale up their business. The early-stage companies could become relevant for investors like IFU in the next stage but also for several equity and debt funds in the clean energy access space, such as BUILD Impact Fund (BUILD), Emerging Market Climate Action Fund (EMCAF), The Off-Grid Energy Access Fund (OGEF) and SPARK+ Africa Fund, which Denmark either directly or indirectly

supports financially. Synergies to Danish supported challenge funds such as P4G and the Danida Green Business Partnerships would also be relevant. Fostering synergies between EEP Africa and other initiatives in the climate finance landscape will be a Danish priority moving forward our collaboration with EEP Africa.

Synergies between Denmark's bilateral and multilateral engagement is mutually benefitting and should always have high priority. NDF has confirmed that this is very much the case with other donor embassies and that they have had good experiences with such collaborations. The Danish MFA will support EEP Africa to build closer partnerships with other Danish partners such as Beyond the Grid Fund Africa (BGFA), Energy Sector Management Assistance Program (ESMAP), International Renewable Energy Agency (IRENA), UNEP Copenhagen Climate Centre (UNEP CCC) and the Sustainable Energy Fund for Africa (SEFA). Some of these organisations have opportunities to scale knowledge, co-organise events or have access to next level funding opportunities. EEP Africa also opens up opportunities to collaborate with Danish NGOs to develop joined solutions to target scalable solutions to close the energy gap for poor and marginalised households. Possibilities to connect to specific countries where Denmark have extended partnerships such as Kenya and Uganda will also be explored. Particularly in Kenya there are substantial opportunities for linking bilateral engagements with EEP as clean energy features prominently in the Country Strategic Framework and given the new Strategic Sector Cooperation with Kenya on energy was launched in 2022. Finally, the support to EEP Africa will allow the Danish MFA to connect with new types of donors such as international philanthropic funds who are very active in this space.

2.3. Institutional context and lessons learned

EEP Africa is a clean energy financing facility established in 2018 hosted and managed by the Nordic Development Fund (NDF) founded in 1988. EEP Africa invests in companies that are piloting or deploying clean energy technologies and business models with the potential to improve particular rural livelihoods in East and Southern Africa. The EEP Innovation window provides early-stage grant financing to projects in active development through competitive, open calls for proposals. EEP Africa also leverages the applied learning happening inside its diverse portfolio to develop a wide range of knowledge products, events and partnerships that advance best practices in the clean energy sector. It is currently being considered if EEP Africa should expand its geographic scope to include new countries with less mature markets for off-grid energy.

EEP Africa is a recognised international impact fund in the clean energy sector and last-mile-energy-distribution market. EEP Africa monitors its investment by clearly defined impact indicators for the end-users, e.g. numbers of jobs created, CO2 reduction and number of people improving access to energy. In 2021, EEP Africa's support to early-stage investments contributed to creating 1200 jobs (of which 48 pct. were for women), more than 217.000 people received enhanced energy access and 155,000 tCO2e of GHG emissions reduced or avoided (see cases in Box 1). Although these SDG-related impact indicators continue to be highly relevant, they only reflect to a lesser extend the business' ability to become sustainable and attract commercial finance. Therefore, in order to measure the success of early-stage clean energy business project, it is expected that EEP Africa will complement the existing indicators with measurements such as commercial progression, market stimulation and grant-enabled learnings to provide an even better picture of the wider impact of the activities.

Box 1: EEP Africa cases

Examples of EEP Africa early-stage investment in clean energy start-ups targeting marginalized communities:

- *Jaza Energy*: A solar hub and battery rental company funded by EEP Africa in 2020-2021. It is pioneering a way to deliver solar energy to last-mile communities. The company has deployed 63 rental hubs in Tanzania providing electricity to 51,000 people. The hubs are operated 100% by women, who are hired from local communities and serves customer segment earning less than $2 per day. Jaza Energy has managed to raise additional USD 2.85 million in equity, debt and grants during the project period.
- *Zembo*: An e-mobility start-up funded in 2019- 2021. It is introducing electric taxi motorcycles in Uganda based on a network of pay-as-you-go solar-powered charging stations using a battery swap business model. The motorcycles cost less to lease and operate than traditional models and dramatically reduce noise and air pollution. It managed to double its grant in co-financing during the project and afterward it has mobilized an additional EUR 3 million.
- *Wala:* A local, women-owned start-up bringing solar irrigation to smallholder farmers in Malawi. Farmers purchase solar water pumps through a lease-to-own model using soft loans from a member-based finance cooperative. In addition to training related to the technical use and maintenance of the equipment, Wala and its partners also provide agribusiness training on land productivity, crop diversification, water conservation and financial management.

EEP Africa conducted an impact evaluation of the fund in 2020, which confirmed that EEP Africa adds value through its willingness to take risks and invest in early-stage technologies and business models. In recent years, this has included an increased focus on supporting local and women-led companies as well supporting local entrepreneurs bridging the gap to commercial capital. In addition, NDF also conducted an assessment of EEP Africa in 2021 where it was concluded to continue, expand and strengthen the EEP Africa as multi-donor trust fund under NDF.

Based on the evaluation and the NDF assessment the Fund is expected to up-date its strategic focus and engagement based on recommendations from the Supervisory Board (SvB) where Denmark would have a seat. The MFA will use its seat in the SvB to influence the design and priorities in the annual calls. Among Danish priorities will be to increase support in less mature market for off-grid energy, products that could be adopted in humanitarian settings, continue a strong gender focus in the calls and strengthen links between access to off-grid clean energy solutions and local abilities to adapt to climate change. Furthermore, Denmark will also support the recommendation that EEP Africa should strengthen its technical assistance to early-stage companies in the readiness process and prioritise matchmaking with investors to make the business project sustainable over time.

Flexibility and adaptive management is critical for developing early-stage companies. In the clean energy sector things are constantly evolving and not always go according to the plan, especially for early-stage projects. A review of EEP Africa's project portfolio demonstrated that nearly 70 pct. of companies have needed to modify their project activities, budget or approach during implementation. After adjustments due to the effects of COVID-19, the most common reason for a modification (24 pct.) was to make a market-driven pivot. Developers need to be able to pivot their business model in response to lessons learned or changes in market conditions.

3. Fund objectives and components

The overall objective of EEP Africa is to enhance clean energy access, development and investment, with a focus on benefiting poor and underserved communities and groups.

This objective is achieved by providing early-stage grant and catalytic financing to innovative clean energy projects, technologies and business models in 10-20 countries across Southern and East Africa. Project financing is supplemented by technical support, investment facilitation and knowledge sharing. The scope is to build up domestic entrepreneurs that can deliver clean energy products, services and businesses that allows underserved and bottom-of-the pyramid households and communities to improve their livelihoods by gaining access to modern energy and leapfrogging to new clean energy solutions.

The Fund focuses its operations on three linked and interrelated activities: (i) Clean Energy Financing supporting early-stage energy access projects; (ii) Investment Facilitation and Business Development Support (BDS), and; (iii) Knowledge, Policy and Partnerships.

The Clean Energy Financing component has two primary financing windows to support start-ups and scale-ups with direct capital. The main window is the EEP Innovation Window. It is targeting early-stage energy access projects while the EEP Catalyst window is currently piloting follow-on loans to selected projects stemming from the EEP innovation window. *The EEP Innovation window* is the primary window and channels the majority of the fund's overall investment volume in direct clean energy financing. The window targets early-stage energy access projects through open and competitive Calls for Proposal. The Supervisory Board consists of donors and NDF and can give priority to specific technologies, countries and target groups. This allows flexibility to target certain types of products and services, changes in market conditions or reaching specific groups such as female entrepreneurs and farmers. Examples of innovation to be supported include: introducing and testing new business models, new clean energy technologies; new access and delivery models to markets and bottom-of-the-pyramid customers; transferring business models already tested in one country to another country with less maturity or higher risk. The ticket size of EEP innovation support range from of EUR 200,000 and EUR 1 million, allocating financing in the form of grants and so-called repayable grants which is in essence concessional loans. All supported projects should be aligned with the fund's cross-cutting objectives and environmental and social and integrity safeguards. The EEP Africa Investment Committee chaired by NDF is responsible for the final selection of projects for financing.

The Investment Facilitation and Business Development Support component aims to assist grantees with technical advisory and investor outreach. The objective is to provide technical support that can mature and develop credible business cases to become attractive for follow-on commercial investment. Commercial financing remains a critical constraint for many of the supported businesses in the EEP portfolio so matchmaking events will be an important tool connecting the most advanced businesses to a network of investors. EEP Africa has mainly arranged larger investor forums but has recently also introduced smaller and more customized matchmaking events and meetings between early-stage local companies and investors.

The Knowledge, Policy and Partnerships component will leverage the applied learnings taking place inside EEP Africa's diverse portfolio to develop a wide range of knowledge products that advance best practices in the clean energy sector. The objectives for this component is to further develop and disseminate such relevant knowledge products and to establish a network of formal and informal partnerships among key

stakeholders, which would enable as wide as possible. EEP Africa is already putting a lot of effort into fostering "peer-to-peer" learning and is consistently on the lookout for new ways to improve this aspect of operations. Under this component, EEP Africa is collecting thematic data, which is published in smaller reports, news articles and presented in events. EEP Africa will also strengthen partnerships with other relevant stakeholders and participate actively in relevant events.

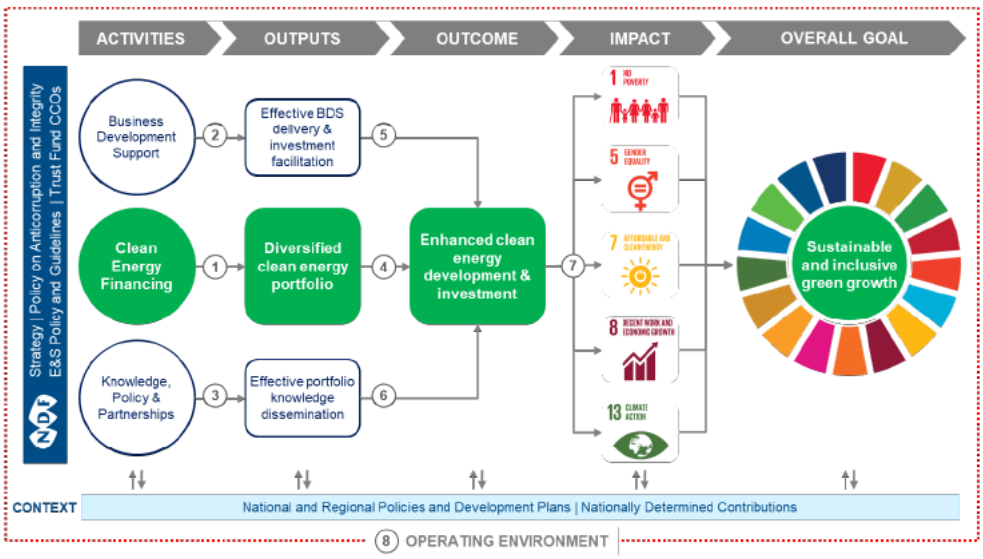
4. Theory of change and key assumptions

EEP Africa aims to support countries across the region toward the realization of a climate resilient, zero-carbon future by enhance clean energy access, development and investment in South and East Africa.

The Theory of Change adopts and integrates the SDG framework by focusing on achieving impacts towards selected SDGs. Providing access to energy is an enabler for many SDG's and the Theory of Change. This approach is also reflected in the overall results framework and supported by the Pathway of Change flowchart (see annex 4).

Furthermore, EEP Africa's theory of change aims to align with relevant regional and national policies, development plans, and Nationally Determined Contributions (NDCs) to the Paris Agreement. The project's ability to drive change builds on a number of assumptions. Most evident is the assumption that the annual Call for Proposals will generate a sufficient number of high quality proposals that cover a mix of technologies, business models and countries. For maximum impact the projects preferred through the Call for Proposals will include activities promoting of social inclusive, pro poor, sustainable and resilient growth. Over time the project portfolio will aim to provide effective demonstration of clean energy projects, technologies, businesses and access models and create viable opportunities for replication, scale-up and follow-on investment. The selection process for calls for proposals takes into consideration the fact that not all countries are at the same stage concerning green transition. This has already been discussed in the SvB and EPP Africa will introduce more specific guidelines for the next call for proposals, including more concrete guidance on what can be considered as EEP Africa "sweet spot" in each target country.

Figure 1: Outline of EEP Africa's Theory of Change



5. Summary of the results framework

EEP Africa's Results Framework adopts and integrates the SDG framework and facilitates direct reporting to donors on progress against the above mentioned SDGs. The aim of the Results Framework is to establish impact indicators and projections (based on previous results) which constitutes a frame for monitoring, supervision and reporting at the level of every project in the portfolio. The Results Framework has been harmonised with the metrics being required of Project Developers across financing institutions. Project reporting is then aggregated for key metrics across the portfolio to provide results-based data to donors at Fund level. Core outcome indicators are identified and outlined in the below matrix (see full results framework in Annex 3).

EEP Africa is currently also exploring opportunities to develop complementary indicators that also can measure and monitor more directly on the individual companies' sustainability and growth journey. It could be indicators covering investment readiness and percentage of grantees accessing follow-on financing. This is also in line with the findings in the 'Generating Success' study and in the recent impact evaluation where it was recommended that EEP Africa tries to better understand the long-term impact and sustainability of the supported early-stage and start-up companies for scaling up their businesses. Such insights will also be useful when aspects of EEP's work as such as poverty alleviation and resilience are studied.

The high-level SDG-related indicators are expected to remain the same but the Results Framework and Theory of Change will be periodically updated to keep up with the evolving sector. In the future, more emphasis will be put on other types of Key Performance Indicators demonstrating the early stage businesses ability to move from pilot project to more mature and sustainable businesses by monitoring results such as commercial progression and investment readiness. Observations from previous EEP Africa experience shows that projects in the scale-up stage generate significantly higher development outcomes than pilot projects, which emphasized the importance to support business moving from early-stage to scale-up. Updates to the both the ToC and RF will be proposed by management to the SvB in time for the 2022 annual meeting. Denmark will engage in EEP's update process and push for aspects such as energy poverty reduction and co-benefits regarding strengthening climate resilience and adaptation will be well reflected in the annual reports.

Selected indicators and targets.

Project/Programme		**EEP Africa**	
Project/Programme Objective		To enhance clean energy access, development and investment, with a focus on poor and underserved groups	
Outcome 1		**Savings on energy-related expenditure (SDG 1)**	
Outcome indicator		Estimated amount of savings on energy-related expenditure over expected lifetime of product or services sold with EEP support, thereby contributing to poverty alleviation	
Baseline	Year	2019	0
Target	Year	2025	EUR 21 million/year

Outcome 2		**Women in leadership (SDG 5)**	
Outcome indicator		Proportion of females employed in leadership positions in EEP partner organisations	
Baseline	Year	2019	N/A
Target	Year	2025	47%
Outcome 3		**People enhanced energy access (SDG 7)**	
Outcome indicator		Cumulative number of people who have lived in a house with an improved energy source and better resilience as a result of EEP support	
Baseline	Year	2019	0
Target	Year	2025	1.7 million people
Outcome 4		**Direct job creation (SDG 8)**	
Outcome indicator		Number of new jobs created by EEP supported project during the contract period contributing to raise incomes and secure livelihoods	
Baseline	Year	2019	N/A
Target	Year	2025	9,700 jobs
Outcome 5		**Mobilised climate finance (SDG 13)**	
Outcome indicator		Total investment committed to EEP supported projects	
Baseline	Year	2019	0
Target	Year	2025	EUR 143 million
Outcome 6		**CO2 emissions reduced or avoided (SDG13)**	
Outcome indicator		Estimated CO2 emissions avoided as a result of improved energy access provided for by EEP supported projects	
Baseline	Year	2019	N/A
Target	Year	2025	970,000 tonnes of CO2e

6. Budget

The Danish funding to EEP Africa is planned to run from 2022-2026. A number of donors have already committed funding for the coming years to EEP Africa. This includes contributions from Austria, Finland, Iceland, Switzerland and a flexible multi-year grant from NDF. The total budget for the next five years is expected to be at least EUR 25-30 million, which would cover 2-3 Calls for Proposals. Each call typically is followed by a 2-year implementation period.

The below budget summarizes the overall budget for the Danish contribution and the estimated total budget for EEP Africa in the period for 2022-2026. Budget composition (70% grants, 25% implementation, 5% NDF administration) is basically defined by the Fund Rules. Implementation is allocated to ensure effective delivery of the three core activity areas: Clean Energy Financing; Investment Facilitation and Business Development Support; and Knowledge, Policy and Partnerships. Detailed overview of donor commitment, estimated multi-annual budget and overview of fund spending can be found in Annex 5.

Overall budget	**DK contribution DKK (millions)**	**Expected total EEP* EUR (millions)**
Component 1: The Clean Energy Financing		
Outcome 1.1: EEP Innovation window	35.00	20.00
Component 2: Investment Facilitation and Business Development Support		
Outcome 2.1: Technical assistance and business advisory	3.00	1.55
Outcome 2.2: Investor outreach	1.00	0.50
Component 3: Knowledge, Policy and Partnerships		
Outcome 3.1. Learning and dissemination	3.00	1.55
Outcome 3.2. Partnership building	1.00	0.50
Programme management		
Calls for proposals, technical assistance and monitoring	4.50	2.50
Management fee/admin costs	2.50	1.40
TOTAL	**50.00**	**28.00**

*Estimated total budget for EEP Africa 2022-2026

Indicative disbursement schedule for the Danish contribution (DKK millions)

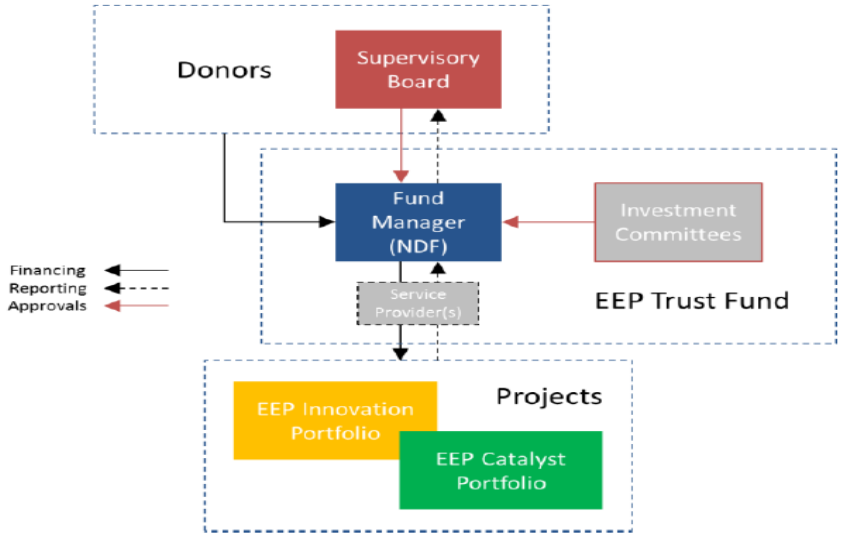
2022	**2023**	**2024**	**2025**	**Total**
10	15	15	10	50

Disbursements will be made based on a written request from the partner indicating the detailed information on recipient bank account. The partner must confirm receipt of funds as soon as possible and no later than 14 days after receipt of funds from MFA.

7. Institutional and management arrangement

EEP Africa institutional structure includes: (1) Supervisory Board (SvB); (2) NDF as host institution and Fund Manager; and (3) Investment Committees (ICs), one each for the EEP Innovation and EEP Catalyst financing windows. Figure 2 below illustrates this structure with indications for financing, reporting and approval lines.

Figure 2: Governance structure of EEP Africa.



The Department for Green Diplomacy and Climate (GDK) from the Ministry of Foreign Affairs will represent Denmark in the Supervisory Board (SvB). The SvB serves as the highest decision making authority for EEP Africa providing strategic guidance, reviewing and approving the audited Annual Fund Report as well as annual work plans and budgets, approving changes to the Fund Rules, Operational Guidelines or Results Framework and handling any other business as defined in the Fund Rules. It is also the SvB that take overall decisions for the annual Call for Proposals and what new strategic and thematic priorities should be included in the call. According to the Fund Rules the SvB convenes at least once a year usually in early December, however in the past couple of years, the board has met two or three times.

In addition, an Investment Committee has also been established with the responsibility for selection and approval of projects for financing. Currently the EEP Investment Committee consisting of representatives from the Ministry for Foreign Affairs of Finland, Nordic Development Fund (NDF), and the Austrian Development Agency (ADA). Donor partners can nominate a representative to the committee while NDF will provide additional external technical experts as relevant. The committee will meet once at the conclusion of each round of Call for Proposals to review final proposals and make selections. Preparation and signing of financing agreements will follow normal NDF policies and procedures, including legal and integrity review. Denmark will not seek representation in the investment committee since the MFA finds that this will cross the line of Denmark's engagement in EEP implementation and that MFA as a donor should not interfere in the individual investment decisions.

The day-to-day fund manager is NDF with the overall responsibility for management, administration and performance of the Fund throughout its life. NDF will manage Fund resources in compliance with its existing policies and procedures, and ensuring appropriate internal controls and separation of key functions. A new third party service provider was selected in May 2022 based on a competitive selection process where eight pre-identified companies were invited to submit Expressions of Interest. The not-for-profit international development organisation SNV, supported by Open Capital Advisors, won the bid and has taken on the

implementation support services starting 23 July 2022. The service provider will support NDF in all fund activities providing technical know-how and field presence that is essential, especially in the areas of project monitoring, investment readiness support and knowledge generation. SNV and Open Capital will have technical staff based in all countries where EEP Africa have active projects. Furthermore, EEP Africa has a setup where the core team consists of 2 NDF staff and 6 SNV staff who have common planning and portfolio review meetings. Work plans are coordinated closely and NDF staff periodically join the SNV field staff on monitoring missions. During grant contracting NDF's legal staff and E&S advisor conduct a final quality check on required documentation on risk identification/ mitigation matrixes.

8. Financial management, planning and reporting

NDF will manage and administer the resources of the Fund in line with the EEP Africa Fund Rules complemented by NDF's policies and procedures, ensuring that resources of the Fund are administered and reported separately from NDF's own capital. Financial statements of the Fund and all funds administered will be audited annually in conjunction with regular and ordinary NDF internal and external audit practices. Costs will be drawn from Fund resources. EEP Africa requires a full external audit for all projects as a condition for final disbursement. Costs for these audits is included in the project budgets.

Annual Reports, consisting of narrative results presentation and audited financial report are delivered no later than 30 June each year. Both parties will strive for full alignment of the Danish support to the implementing partner rules and procedures, while respecting sound international principles for financial management and reporting. EEP Africa is also planning to produce and distribute a brief quarterly fund progress report to the donors (pilot planned for Q3, 2022) that provides a brief overview of disbursements, project progress and key deliveries and results for period.

NDF procurement guidelines as well as social and environmental safeguards will apply to all Fund operations. The principles of these guidelines follow internationally recognized practice among multilateral development banks (MDBs). NDF operations also adhere to a strict policy of zero tolerance towards corruption in all forms. As outlined in NDF's Policy on Anticorruption and integrity, NDF reserves the right to withdraw from, and be fully reimbursed by, any funded project found in breach of anticorruption and integrity principles. All financing agreements and contracts supported by the Fund will include clauses and provisions pertaining to NDF's policies and guidelines on anticorruption and integrity.

Any repayments, reflow or income accruing from investment operations of the Fund will be added to the general resources of the Fund for further deployment and will not be credited to the contributions of any donor. Any placement of Fund resources will follow NDF's liquidity policy. Unspent funds after the implementation period shall be returned to MFA.

Procedures and minimum requirements pertaining to disbursements, partner procedures pertaining to financial management, procurement and financial control procedures, work planning has recently been redefined when the service provide was selected in June 2022 to provide country-based technical support and financial management of grants to the selected businesses. The roles and responsibilities between NDF and the Service Provider (SNV and Open Capital), as well as diligent grant management practices, will be described in detail in the Financial Manual. Rules defining the responsible use of the grant by the grantees

are defined in the Administrative Manual for Project Implementation that is periodically revised based on lessons from the field.

As previously stated, the Danish MFA will accept that joined donor impact evaluations will be considered as mid-term review and final evaluation. EEP Africa has independent external impact evaluation every three years. The Terms of Reference for the impact evaluations is circulated to donors for comments, inputs and final approval. The next impact evaluation is scheduled for late 2023 or early 2024, and the following for 2026. As the Fund is an open ended fund, it is not expected to have a completion evaluation report. The mid-term review and final completion report from EEP Africa will be substituted by the two planned impact evaluations. GDK will undertake an assessment of the Danish experience with the support to EEP midway through the grant period. The assessment will be done outside the budget of the grant.

The Department of Green Diplomacy and Climate (GDK) in the Ministry of Foreign Affairs of Denmark shall have the right to carry out any technical or financial supervision mission that is considered necessary to monitor the implementation of the project. Further, after the termination of the project support, the Danish MFA reserves the right to carry out evaluations in accordance with this article.

The Danish MFA has a zero tolerance for corruption and inaction approach to tackling sexual exploitation, abuse and harassment (SEAH) as well for child labour and any associated link to support terrorism. Any violation could be ground for immediate termination of the Agreement if not managed accordingly to international standards. Denmark requires maximum openness and transparency is essential when fighting corruption, and information concerning the public sector is generally accessible to the general public in accordance with the Danish Public Administration Act and the Danish Act on Access to Public Administration Files. Therefore, any reports on corruption will be made publicly available by the MFA. In this connection, NDF/EEP Africa will report any corruption cases to the Ministry according to the Danish Anti-corruption Policy (https://amg.um.dk/en/policies-and-strategies/anti-corruption-policy/).

9. Risk management

The most common contextual risk for EEP Africa's work is probably weak enabling policy environment and/or weak regulatory framework in the Fund's target countries. Most countries in the region have limited capacity to secure a robust regulatory framework so EEP Africa seeks to mitigate these risks through engagement with policy makers and key regional influencers and leaders. EEP Africa has a rigorous ex ante evaluation scheme for assessing such political risk and undertake regular due diligence studies. This might even mean possible non-selection of projects with significant uncertainty related to the political economy of a given target country. Still, vested interests and the inherent volatility of political changes in many African countries will leave some residual risk here.

Regarding programmatic risks inadequate resource mobilisation for the Fund should be considered. Although unlikely at this stage, cutbacks vis-à-vis the Fund's ambitions level could be the consequence of expected donors diminishing their support. EEP Africa has a good track record for delivering results, but changing priorities or overall shrinking resources among donors can sometimes occur with very short notice, leaving a certain residual risk. The same goes for the risk of significant non repayment of repayable grants. Non repayment risk is inherent in loan schemes, but since EEP Africa is primarily a grant program non repayment will not in itself endanger the project.

It is possible that EEP Africa projects, although commercially successful, can fail to reach disadvantaged groups as planned. To avoid this potential projects and intended engagement with disadvantaged groups, including women, youth and/or vulnerable communities are thoroughly scrutinized before any commitments are made. These aspects are also monitored through implementation.

To reduce risks of particular Danish concern, including reputational risks, Denmark will ensure that the SvB pays attention to such eventualities. Such risks can to a certain extend be mitigated by careful attention to the partners selected through the Call for Proposal as well as the safe guards governing project designs. If any specific activities give rise to concern, Denmark will be in a position to raise awareness at SvB level and offer advice to the program implementers on how to alleviate the risks. This will be especially true in countries where Denmark has knowledge from the bilateral engagement.

A detailed risk matrix can be found in Annex 4. The risk matrix is currently subject to an update by EEP Africa.

10. Sustainability and closure

It is important to consider a sustainable exit strategy from Danish support from the beginning. This includes considerations on how EEP Africa and partner activities will be able to continue without external assistance from Denmark. In the case of EEP Africa, sustainability of the selected grantees, including both start-up and scale-up entrepreneurs, is integrated in the selections process as all businesses are screened and evaluated from the beginning to possess the potential to attract commercial capital at the end of the project period. Furthermore, sustainability is strengthened as a key target in *investment Facilitation and Business Development Support component* by focusing more on the supported grantees commercial progression and investment readiness. The aim here is to provide an envelope of technical assistance and business advisory expertise at an early stage of the engagement in order to guarantee efficient and sensible use of the grant with a goal of enhancing scalable and sustainable investment readiness. This will be complemented by investor networking and matchmaking to facilitate linkages between EEP Africa funded projects/enterprises with a credible business case and investors looking for pipeline.

The Danish funds are expected to co-finance 2-3 Calls for Proposals which each takes approximately two years to implement. Danish funding will be pooled with other donor funding and will not be accounted for as earmarked funding. Annual accounting will allow to document the complete annual disbursement and that the Danish funding has been spend according to the Rules and Operational Guidelines of the EEP Africa Trust Fund by the end of planned period. In case of delays, NDF own contribution to EEP Africa has a flexible financing approach which could allow Danish funding to be completed first to allow a timely exist from the Fund.

EEP Africa is an open ended trust fund, and a final narrative and financial report will be substituted with the joined donor impact evaluation planned for 2026 and the annual narrative and financial report which includes an accumulation financial and results overview. In case these reports are not produced as planned, the Danish MFA is entitled to require that EEP Africa delivers a final narrative and financial report no longer than six months after the close of the project financing.

Annex 1: Context Analysis

Overall Development Challenges, Opportunities and Risks

Introduction

Universal access to affordable, reliable, and modern energy services by 2030 (SDG 7.1) is a prerequisite and a catalyst for improving the living and working conditions of all the world's people, especially the poorest and most vulnerable populations who lack any modern energy services. Universal access to energy is integral to the transition to an inclusive, just, sustainable, secure, and net-zero-emissions energy system in line with the Paris Climate Agreement. Universal access will sustain the transition and will, in turn, be sustained by it (SDG7 High-Level Dialogue Report, Thematic Working Group 1, 2021).

Russia's invasion of Ukraine has sent food, energy, fertilizer and other commodity prices soaring, increasing the strains on African economies already hard hit by the Covid-19 pandemic. The overlapping crises are affecting many parts of Africa's energy systems, including reversing positive trends in improving access to modern energy. According to the IEA 25 million more people in Africa are living without electricity today compared to the situation just before the pandemic. In rural areas, where over 80% of the electricity-deprived people live, mini-grids and stand-alone systems, mostly solar based, are the most viable solutions for making scalable, rapid and cost-efficient progress to achieve universal access to energy (IEA, *Africa Energy Outlook 2022*).

EEP Africa geographic scope and market opportunities

Achieving universal energy access by 2030 requires concerted action by all development partners to close funding gaps and enable an energy transition. In the EEP countries alone, a market scoping study estimated that 183 million people live without access to modern energy. There is unilateral acknowledgement of the importance of renewable energy and decentralised energy access in improving energy access. However, national governments in the region are still focused on grid extension and many renewable technologies builds on experiences from developed countries. This despite the current challenges in meeting demand due to inadequate generation capacity and aging, unreliable infrastructure. Therefore, catalytic change is required and particularly the off-grid energy technologies opens new windows of opportunity and leapfrogging to renewable energy solutions. Across the EEP target region, the off-grid energy transition has reached various degrees of development and the markets have different levels of maturity.

Within the Southern and East African region (EEP supported countries), the rate of rural electrification is 22% on average across the region. Excluding the Seychelles and South Africa it is only 12%. Access to clean cooking is below 36% for all countries except Botswana, Seychelles, South Africa, and Swaziland. The main barriers to establishing a vibrant off-grid renewable energy access market are: stability and openness of the general business climate, the capital investment, establishing economies of scale, the development and retention of human capital, access to capital, adequate government policies and failures along the value chain.

A key challenge in establishing successful off-grid, rural enterprises in Africa is the sparse population distribution. This is particularly the case in Botswana, Namibia, Mozambique, and Zambia but it does affect all the countries in the region in remote areas, affecting economies of scale. The private sector therefore tends to focus on densely populated areas, where purchase power is greater and the need for extensive infrastructure not so large. However, the off-grid energy sector provides a unique opportunity to close the energy gap in the rural regions where most of the energy poor communities

are located. Yet, it is still costly to establish a sales distribution network in rural areas and having technician available to service the local rural markets.

Several countries in the region demonstrates a pathway to achieve universal access to energy. This include countries like Kenya and Rwanda. Here, very clear national plans and policies shows how to achieve access to energy through both grid and off-grid energy solutions. Government policies and regulations are also important to ensure commercially viable off-grid and clean energy business model. There is a growing consensus that without grant funding for capital expenditure and cross-subsidy models, viability cannot be achieved. Government policies are also affecting the business case. The subsidies provided by government to the electricity tariffs and fossil fuels, particularly kerosene, create market distortions that reduce the viability of the commercial models. The market-based approach requires an environment where the prices are self-regulating. However, private companies are competing with subsidised services and in some cases are restricted to conform to subsidised tariffs.

Off-grid market and energy efficiency – closing the energy gap

By 2018, the adoption of off-grid energy sources had tripled worldwide from 2010 levels. Solutions for off-grid renewable energy, either via solar photovoltaic (PV) and hybrid mini-grids or stand-alone solarsystems have become the backbone to closing the energy access gap. The development is driven by three key trends: (i) continued reductions in hardware costs – in solar modules, batteries, energy management systems, meters, etc. and energy efficient appliances; (ii) a digital revolution facilitating geospatial planning, preparation for scaling, marketing, payments and monitoring, as well as new fintech solutions (for example, end-user credit assessments); and (iii) innovation in business models, such as pay-as-you-go (PAYG) and third-party ownership for solar home systems. The latter offer energy-as-a-service, and can remove previously prohibitive up-front costs for households and small businesses . These new business models have also contributed to gender equality in energy access by allowing women the possibility to afford off-grid solar products through flexible financing schemes (SDG7 High-Level Dialogue Report, Thematic Working Group 1, 2021).

Majority of the EEP supported early stage companies and start-up are within the energy sector. This can be divided into four overall areas:

- *Small-scale on-grid Independent Power Producers (IPPs*), which provides renewable energy to the grid based on a competitive market approach. It is often smaller run-off-river system, wind or solar power systems that are connected to the grid through so-called Power Purchase Agreements (PPA's).
- *Mini-grid developers* which provides access to higher tier energy solutions in rural Africa but even also for medium sized towns located outside a grid. It is particular solar powered mini-grid combined with battery storage that is applied but also run-off-river systems.
- *Solar home systems, rechargeable battery solutions, stand-alone systems providers* have demonstrated to be the most cost-efficient approach to scale access to energy in Africa. It often includes the Pay-as-as-you-go (PAYG) systems. It can be for solar-home-systems providing basic electricity access to an individual household, batteries that can be recharged for marginalised customers with a minimal purchasing power or solar-powered water-pumps or cooling for agricultural productivity.
- *Clean cooking technology* include different types of modern cooking stoves and clean cooking fuels that improves particular the livelihoods of women and girls.
- *Energy efficiency* is particular targeted in the clean cooking sector where efficient cooking stoves are introduced. The stand-alone solar systems and mini-grids can replace the often expensive, inefficient and polluting diesel generators.

Jobs creation potential
The off-grid solar industry is generating thousands of employment opportunities in emerging markets. These opportunities have crucial impacts on individual livelihoods, on rural and urban development, and on other sectors in the economy.

The off-grid solar sector is generating a wealth of new employment opportunities across the value chain, ranging from entry-level to highly skilled positions. The scale and nature of these jobs will continue to evolve. Technological innovation will also drive an expansion in job opportunities, with larger off grid solar systems supporting a wider range of complex consumer goods.

By 2022, the off-grid solar sector could support up to 1.3 million full-time-equivalent (FTE) jobs by 2022 in Africa and South Asia. East Africa alone will account for 350,000 FTE jobs predominantly generated by the rapid and ongoing growth of the PAYG service delivery model.

Of these jobs, the majority will be in rural areas, supporting job creation and diversification among often economically disadvantaged and vulnerable communities. There is also a strong representation of women among workers in the off-grid solar sector, and this trend is expected to rise. Wages in the industry are in line with, or higher than, average national wages and many companies are also supporting the expansion of skills and capacity of their staff through training and development programs. This drives an expansion of job opportunities with larger off-grid solar systems supporting a wider range of complex consumer goods.

Main barriers and risks
One of the major barriers which often are affecting the business case is inadequate government policies. The subsidies provided by government to the electricity tariffs and fossil fuels, particularly kerosene and diesel, creates market distortions that reduce the viability of the commercial clean energy models. The market-based approach requires an environment where the prices are self-regulating however private companies are competing with subsidised services and in some cases are restricted to conform to subsidised tariffs.

Another challenge is the lack of clear policies, planning and regulations for the off-grid market. Particular IPP's and mini-grid developers are dependent on clear long-term policies and regulations. For example, standardisation of PPAs and the issuing of government guarantees are requirements to attract investors. There is often a high off-taker risk as most utility companies are highly indebted and tariffs are often not reflecting real costs due the national subsidies baked into the grid. The same goes for mini-grid solutions that have not proven to work without subsidies yet despite the lower the prices. Furthermore, government guarantees are also needed to allow mini-grids to connect to government plans for grid extensions. The storage capacity of solar power is also a challenge and battery storage make the mini-grids significantly more expensive to set up. However, for both models, building stronger links to the Productive Use of Energy (PUE) is critical and direct PPA's with local industries, services and agricultural sector have demonstrated as a way forward to build a stronger and more sustainable business case.

The operating environment is perceived as the major risk. About 50% of developers seeking support from EEP identify the operating environment as the main risk to project implementation, although there are wide variations among the countries. Risks associated with technology have decreased, but developers are taking risks in testing new business models and entering new markets.

Women are underrepresented in the clean energy sector and significant action is needed to integrate more women as employees, leaders and entrepreneurs. EEP Africa organised a gender-themed Call for Proposals in 2019 to promote gender inclusion and create economic and leadership opportunities for women. Gender focus continue to be a top priority and female-led start-ups is given priority by EEP Africa.

Finally, attracting commercial investors remains a challenge for most of the EEP Africa targeted countries. Achieving Africa's energy and climate goals means more than doubling energy investments this decade. This requires over USD 190 billion each year from 2026 to 2030, with two- thirds going to clean energy. EEP Africa will therefore focus more on building links to the international and national investor communities to ensure sustainability of the early-stage companies.

Sources:

- Gogla_off_grid_solar_a_growth_engine_for_jobs_web_opt.pdf
- SDG7 High-Level Dialogue Report, Thematic Working Group 1, 2021
- IEA, *Africa Energy Outlook 2022*
- EEP Africa, Renewable Energy Market Landscape Study, 2017.
- EEP Africa, 2019 Market Report, Clean Energy Financing Demand.

Political Economy and Stakeholder Analysis

Political economy & main barriers for green business development

Energy subsidies remain a challenge for the off-grid sector. On the one hand, most energy subsidies to electrification is benefitting national utility companies and other parts to subsidies petrol, diesel and kerosene. It is very rare that the off-grid energy sector receives any subsidies to support scale, outreach to underserved regions and to compete with prices on tradition fossil-fuel-based technology. Nonetheless, the off-grid sector in Africa have been demonstrated to be cost-competitive with limited support from international donors by introducing new business models.

Many utility service providers in Sub-Saharan Africa were, in 2019, already under financial distress and highly indebted. The COVID-19 health crisis, supply chain disruptions and Russia's war against Ukraine will continue to exacerbate such duress and jeopardize their ability to provide essential services. Most national utility companies that will be off-takers of renewable energy are financially distressed and with a very low creditworthiness which questions their ability to enter into long-term PPA agreements.

Public utilities will need to be responsible for much of the investment in upgrading the electricity systems across the African continent, particular the expansion of the grid and increased energy demand. This is a daunting prospect, given their perilous financial state today. Operating losses among all African utilities are thought to have exceeded USD 150 billion in 2020. Poor payment collection rates, theft, cost increases (including the cost of capital), operational problems and supply chain constraints are reducing cash flows and driving up debt. Priority areas for action include tariff structure reform, the use of concession agreements granting rights to private operators, regulatory carve-outs for private sector investment and ownership, and the introduction of auctions and competitive tenders (IEA 2022).

Models to introduce competition and private sector participation include concessions and regulatory carve-outs that allow other grid or mini-grid operators to build and operate assets within utility territories under certain conditions. Auctions for new energy capacity have also proven to be effective in bringing down supply costs, notably for utility-scale renewables projects but also for mini-grids. However, these approaches have often meet resistance from traditional utility companies and other stakeholders.

In this context, to reach financial sustainability, most mini-grid developers are focusing on productive use of energy – such as providing energy efficient appliances or forming local business hubs – as a means to increase demand and generate sufficient revenue. The most financially sustainable mini-grids use an "ABC" strategy: first, identify and negotiate an agreement with an anchor load client (often in agro-processing); then identify, or help develop, small local businesses; and only last target domestic consumers. Targeting business clients offers a more secure customer base and attracts private investors, but many donor agencies focus more on the number of households connected in the short-term rather than long-term viability.

Stakeholder Analysis

Each country in the region has established similar institutional frameworks for the energy sector. These typically includes a ministerial department that leads on policy and planning, a regulatory body that manages and monitors service delivery, licences and tariffs, an agency or department responsible for promoting rural electrification, and a national utility service. In general, due to the link between energy consumption and greenhouse gas (GHG) emissions, ministries of environment are often also closely involved in the energy sector, particularly in energy efficiency. The level of capacity of ministry staff varies significantly across the region.

The participation of the private sector in off-grid energy also varies significantly across the region. The development of the off-grid market in East Africa has been greatly facilitated in recent years by mobile technology. There are a number of examples of expatriate entrepreneurs that have seen the potential to apply simple technologies to the local context and have developed innovative business models very successfully. However, these ventures were supported by grant schemes and have yet to reach commercial viability. Local capacity building has taken place through these enterprises. There is little engagement with industry associations as agents of change. The capacity of the associations is recognised as being limited to support industry and represent their interests to policy makers. There are some positive examples of effective association engagement in South Africa that could potentially be replicated to other contexts. The African Mini-Grid Developers Association is establishing chapters in Kenya and Tanzania and is working with the Rockefeller Foundation to develop innovative financing models.

In broad terms, the degree of cross-border business concept transfer is much lower than would be expected. Simply sharing information does not constitute knowledge exchange and therefore it is important to develop business partnerships across borders. There are significant risks of entering into

neighbouring markets for existing businesses and therefore these cross-border alliances can be valuable in minimising the initial risk, particularly if supported with concessional financing or grants.

The role of financing institutions is vital for scaling up projects that are proven. In general, across the region, the number of commercial institutions that are prepared to provide loans for renewable energy is increasing and in most countries in the region, commercial banks are beginning to offer green loans. However, these loans are offered to single clients and require proof of income before they will be issued making them inaccessible to the underserved. The institutions continue to be risk averse and the terms of the loans are generally not attractive, applying interest rates between 14% in Kenya to 24% in Zambia. Therefore, most commercial institutions require the support of the development banks or donors to buy down the risk through the provision of soft loans or guarantees. Micro-financing institutions are offering credit to consumers particularly in East Africa in collaboration with companies such as iSmart, an EEP supported project. Crowd funding is also being used, with Kiva partnering with energy entrepreneurs to develop their customer base (EEP Africa, Renewable Energy Market Landscape Study, 2017).

As one of the major barriers to growth of early-stage clean energy companies in Sub-Saharan Africa is access to finance, especially patient capital. To truly scale up their operations, these companies need to be able to gradually access more commercial financing. This requires a solid and detailed business plan, which consists of a clear business model and a financing plan backed up by relevant data and a good team. Moreover, a company needs to understand which investors to approach. In 2021, EEP Africa therefore conducted an investor mapping exercise. The analysis consisted of a desk review of active investors in the clean energy sector in Africa. The exercise allowed EEP Africa to screen relevant companies from its portfolio and directly introduce them to potentially suitable investor(s) based on mutual consent. It also produced an investment readiness checklist to help companies understand investor expectations. See also stakeholder mapping figure below.

List key documentation and sources used for the analysis:

- IEA, *Africa Energy Outlook 2022*
- EEP Africa, Opportunities and Challenges in the mini-grid sector in Africa
- EEP Africa, Renewable Energy Market Landscape Study, 2017.
- EEP Africa, 2021 annual report.

Fragility, Conflict and Resilience

The vast majority of the world's displaced people do not have access to affordable, reliable, sustainable and modern sources of energy: an estimated 94% of displaced people in camps do not have access to electricity and 81% rely on firewood and charcoal for cooking. This is leading to displaced people live in the dark, surrounded by smoke and pollution, unable to access basic electricity services or sustainable cooking solutions. Furthermore, this is often leading to unsustainable harvesting of firewood resulting in rapid environmental degradation and increased vulnerability to climate change. Around 30 million internally displaced persons, refugees and asylum-seekers live in Africa, representing almost one-third of the world's refugee population.

The UN High Level Dialogue on Energy which took place in 2021 underlined that the 'last mile' of energy access must become the 'first mile' to be tackled. It underpins that half of the population without access to electricity live in countries experiencing fragility and conflict, where lack of access to clean cooking and electricity disproportionately affects low-income and vulnerable populations especially women and girls. The impacts of the lack of clean cooking and electricity access are often the greatest in countries experiencing fragility, conflict, and violence.

Energy poverty in countries marked by conditions of fragility, conflict, and violence, with particular reference to displaced persons and host communities, can be addressed in a number of ways: (i) improving enabling environment and scaling up both public and private financing in fragile and conflict-affected countries, (ii) establishing and implementing dedicated energy-access programmes for displaced persons and their host communities; (iii) including displaced persons in national energy-access plans of host countries and supporting them in achieving the goals of these programmes; and (iv) supporting innovations and providing knowledge exchange on successful business models.

Alternative forms of institutional funding are needed to finance the supply of sustainable and renewable energy in displacement contexts. Innovative financing mechanisms and collaboration with the private sector can enable new ways of working, but institutional changes within agencies and collaboration with local markets are necessary to support such progress. By increasing its focus on displacement contexts, EEP Africa could provide much needed capital to early stage companies providing technology and business models that could be adopted in humanitarian settings.

EEP Africa is currently operating in 15 countries whereof only Zimbabwe appears on the World Bank's list of fragile and conflict-affected countries. However, the EEP Africa's Supervisory Committee could consider including more fragile and conflict-affected countries. It would also be relevant to consider the number of countries that are hosting significant numbers of refugees and forcibly displaced people which currently include countries like Kenya, Uganda and Tanzania. EEP Africa could therefore contribute to meet the demand outlined by the Global Platform for Action on Sustainable Energy in Displacement Settings (GPA).

Sources:
UN, High Level Dialogue on Energy, theme Report, Access to energy, 2021.
UNITAR, GPA, The State of the Humanitarian Energy Sector 2022.

Human Rights, Gender, Youth and applying a Human Rights Based Approach

Human Rights

Access to energy is not a human right in itself but is nonetheless related to ensuring human rights in many ways. There is a strong positive correlation between countries' with high rates of energy access and their human development index (HDI) rank. This indicates that energy has positive socio-economic impacts related human rights (e.g., to life, health, food, water, education, an adequate standard of living and the right to development). Households that suffer from energy poverty are often trapped in a whirlpool of deprivation. The lack of energy, in addition to insufficient access to other key services and assets, affects productivity, time budgets, opportunities for income generation and, more generally, the ability to improve living conditions.

It is important to be aware that off-grid energy can potentially also have negative human rights impact if consultations are not done correctly. An example could be that community and state-owned land is used to host mini-grids to the detriment of the local population. Another potential pitfall is that certain target groups can find themselves excluded from benefits, e.g. if women are left out from job opportunities or marginalised communities barred from energy services.

EEP Africa complies with a set of Minimum Standards for environmental and social policy. The standards built on the rules of the Nordic Development Fund, the World Bank Environmental and Social Standards and IFC Performance Standards.

On the operational level:

- NDF supports rights of workers guided by the eight fundamental conventions of the International Labour Organization (ILO).
- NDF is committed to the principles of transparency, accountability and stakeholder engagement, and promoting adoption and implementation of these principles in the projects it finances. NDF is also committed to its business ethics and to fight fraud and corruption in all its activities. Details of NDF's commitments are found in separate policy documents.
- NDF is committed to full gender mainstreaming of the projects and programs it finances, preventing gender discrimination and actively promoting gender equality.
- NDF builds partnerships with recipients to assist them in adding value to their activities, improve long-term sustainability and strengthen their environmental and social management capacity.
- NDF works together with strategic partners and other organisations in coordinating effective interventions to promote environmental and social sustainability.

Sources:

- A human rights approach to energy: Realizing the rights of billions within ecological limits
- Nordic Development Fund: Environmental and Social Policy

Gender

Renewable energy employs about 32% women, compared to 22% in the energy sector overall. Still, within renewables, women's participation in science, technology, engineering and mathematics (STEM) jobs is far lower than in administrative jobs. IRENA estimates that the number of jobs in renewables could increase from 10.3 million in 2017 to nearly 29 million in 2050. The ongoing global energy transition offers the chance to create new jobs and reshape all aspects of how energy is produced and distributed, included with strong gender perspective to increase the number for women in the energy sector.

In 2019, EEP Africa opened a themed Call for Proposals under its Innovation window on Promoting Gender Inclusion, Female Leadership and Opportunities for Women across the Clean Energy Sector in Southern and East Africa. By the close of the call on 2 April, 285 Concept Notes had been submitted with a combined project value of EUR 400 million. Over 60% of applications were from women-led companies.

To continue the strong gender focus, EEP African is directing support to local and women-led businesses: EEP Africa will fund more local companies and Developers that are led by or target women and marginalised groups. A recent EEP Africa Evaluation and study recommended the following:

- Apply a gender lens to all Donor and Investor origination, evaluation and selection decisions. Include specialists in gender lens investing in portfolio design and support activities, especially for grant providers new to the space.
- Identify and provide funding to companies with a gender-positive and inclusive approach to recruitment and companies that prioritise diversity at all levels of management.
- Disaggregate a wide array of collected data by gender so that indicators can be used to show initial gender imbalances and the resulting improvements after initiatives have been implemented.
- Develop Industry partnerships with universities, women's networks, and SME incubators to facilitate a pipeline of women engineers and business leaders.
- Support mentorship programmes, networking opportunities and investment readiness training for women-led businesses

Sources:

- IRENA. Renewable Energy: A Gender Perspective, 2019
- EEP Africa, Generating Success, 2021.
- EEP Africa, Understanding the Role of Women and Girls in the Renewable Energy and Efficiency projects
- EEP Africa, Annual Report 2019

Youth

Each year 10-12 million young Africans enter the job market and youth unemployment is a significant problem. Unemployment among young women is especially high. Against this background it is worth noticing that the clean energy sector has high potential to create new jobs and sustainable livelihoods for thousands of young people in Africa.

The EEP Africa portfolio has created close to 3,000 permanent jobs for young people since 2010. The recent thematic brief on 'Profiles of Change: Opportunities for Youth in the Clean Energy Sector shows that jobs are being created through the direct generation and distribution of energy, as well as productive use of energy. Experiences from our portfolio indicate that young people find a diversity of opportunities for professional growth and development in the clean energy sector. In Profiles of Change, some of the diverse career paths available to youth are highlighted. These include a young man lacking formal education who is now a successful local technician, and a young woman with a banking and finance degree who is now a project manager for a pipeline of rural mini-grids. Through its projects and partnerships, EEP Africa is investing in youth and opening new green growth pathways for young people across Southern and East Africa

Sources:

- EEP Africa, Profiles of Change: Youth Opportunities in the Clean Energy Sector
- EEP Africa, Annual Report 2019.

Inclusive sustainable growth, climate change and environment

Africa is already facing more severe climate change than most other parts of the world, despite bearing the least responsibility for the problem. With nearly one-fifth of the world's population today, Africa accounts for less than 3% of the world's energy-related carbon dioxide (CO2) emissions to date and has the lowest emissions per capita of any region. Africans are already disproportionately experiencing the negative effects of climate change, including water stress, reduced food production, increased frequency of extreme weather events and lower economic growth – all of which are fuelling mass migration and regional instability. Electricity is the backbone of Africa's new energy systems, powered increasingly by renewables. Africa is home to 60% of the best solar resources globally, yet only 1% of installed solar PV capacity. Solar PV – already the cheapest source of power in many parts of Africa – outcompetes all sources continent-wide by 2030. Renewables, including solar, wind, hydropower and geothermal account for over 80% of new power generation capacity to 2030

To cope with climate change energy is critical to move away from rain-fed agriculture and diversify Africa's economies in general. In agriculture, which represents one-fifth of Africa's GDP, irrigation pumps are electrified, reducing diesel generator use, and cold-chains for storage agricultural products are extended, boosting agricultural productivity and the scope for these products to reach urban markets. Off-grid technologies can deliver much of the needed technology together with new innovative business models.

The core mandate of EEP Africa is to invest in early stage companies that are piloting or deploying clean energy technologies and business models, particularly in off-grid and marginalised communities. A recent evaluation of the fund's impact confirmed the value of supporting companies to achieve proof of concept and attract follow-on investment. Some EEP Africa grantees have grown into market leaders, but the sector remains challenging and will only reach the scale needed to achieve a real energy transition if more private investment is catalysed.

Sources:

- IEA, *Africa Energy Outlook 2022*
- EEP Africa, Annual Report 2021

Capacity of public sector, public financial management and corruption

Most countries in Africa lacks specific policies for mini-grids in their national electrification plans, which makes planning difficult for private developers. Regulatory issues impact site selection, licensing and permitting procedures, future grid integration, and the access of developers to national subsidy schemes. Projects are often delayed due to the long lead time required to apply for concessions, licenses and environmental approvals. Regulatory requirements are often fixed costs, independent of the size of the project, and can be very expensive.

Government policies are often affecting EEP Africa's business cases. The subsidies provided by government to the electricity tariffs and fossil fuels, particularly kerosene, create market distortions that reduce the viability of the commercial models. The market-based approach requires an environment where the prices

are self-regulating however private companies are competing with subsidised services and in some cases are restricted to conform to subsidised tariffs.

Corruption and mismanagement is unfortunately not uncommon in the traditional grid-based energy sector in Africa. Public utilities are often used to secure attractive jobs for political cronies or family members, while the income generated can be embezzled. The substantial assets that traditional power plants and grids represent often makes them vehicles for loan taking which again can be used to fuel a corrupt economy.

Due to its market-driven approach, EEP Africa has limited possibilities to influence public policies. Rather, EEP Africa seeks to tackle one of the other major barriers which is access to financing for early-stage clean energy companies in Sub-Saharan Africa, especially patient capital. To truly scale up their operations, these companies need to be able to gradually access more commercial financing. This requires a solid and detailed business plan, which consists of a clear business model and a financing plan backed up by relevant data and a good team. Moreover, a company needs to understand which investors to approach for different types of capital needs.

All EEP Africa financed activities are required to be aligned with the NDF's Policy on Anticorruption and Integrity.

Matching with Danish strengths and interests, engaging Danish actors and seeking synergies

EEP Africa is well aligned with the Danish Strategy for Development Cooperation, the Danish Global Climate Action Strategy and the internal "how-to-note" on energy transition and emission reductions.

There are particular opportunities to strengthen collaboration with Danish NGO's and civil society related to developing inclusive and people-centred business models for off-grid energy. Some of the most successful projects can also with time become interesting investment objects for IFU and other development finance institution and investments funds.

Finally, EEP Africa is already seeking synergies with a number of other Danish supported organisations and funds such as ESMAP, IRENA and NEFCO.

Annex 2: Partner assessment

The result of Denmark's development cooperation is dependent on our ability and willingness to enter into the right strategic partnerships. As presented in the justification in Chapter 2, EEP provides sweet-spot area for Danish development assistance as it both meets many priorities in the Danish strategy for development cooperation but also contributes to building up a domestic African private sector approach to develop a market for off-grid and clean energy products/services for bottom-of-the-pyramid customers outside the grid in Africa.

Selecting EEP as a new partner hosted by NDF

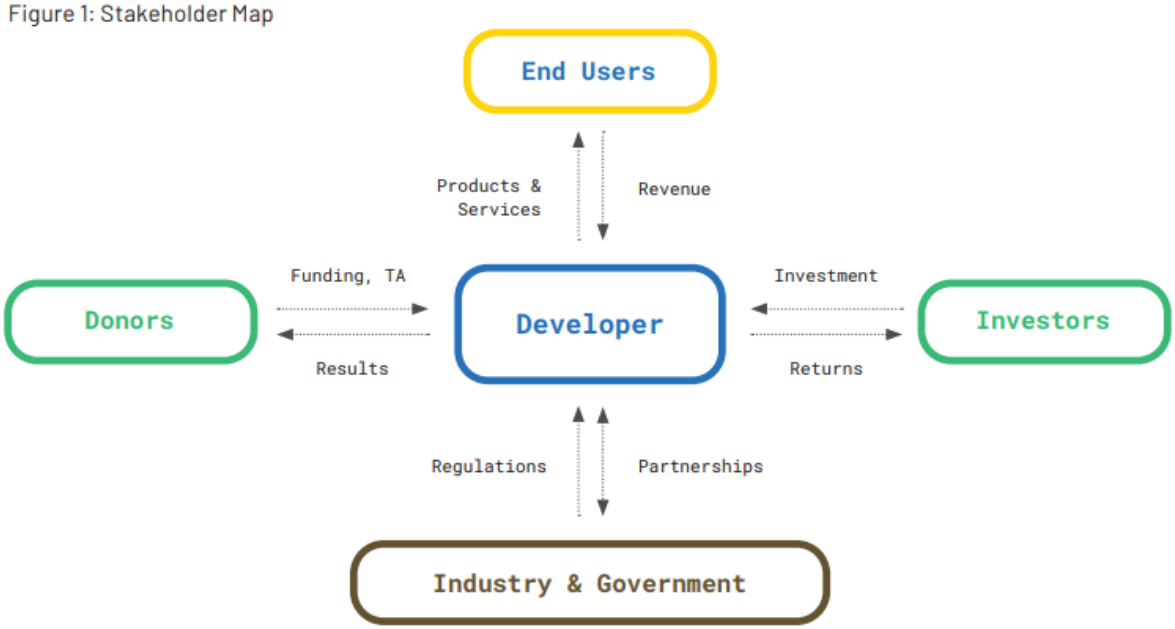
In 2020, Denmark and the other Nordic countries decided to re-capitalize the Nordic Development Fund (NDF). It was based on a thorough evaluation which demonstrated the relevance and niche for the continuations of a Nordic climate fund targeting development countries with agile, risk-willing and catalytic financing. Strengthening a climate fund with Nordic like-minded countries would allow to push the international agenda on climate change adaptation and mitigation, allow for bold and pioneering climate investments and be less dominated by politics as other international climate funds.

In 2021, NDF commissioned an external-led study with the objective to analyse NDF's strategic choices and business development opportunities related to its two financing facilities – EEP Africa and the Nordic Climate Facility. Both of the financing facilities were primarily supporting early-stage climate and development activities and the workload to extensive to continue both. Based on the strategic considerations and lessons learned from previous activities, NDF (including consultation with the Board) made the decision to continue, expand, and build on the EEP Africa concept by seeking to further improve the contents and operational model of the EEP Africa to support the strategic intentions of supporting early stage, sustainable SMEs, and to seek additional financing from other donors. At the time, it was decided to discontinue the Nordic Climate Facility by 2024. By following EEP Africa results over the years, Denmark decided to join other Nordic donors in strengthening EEP Africa.

The relevance and capacities EEP Africa

The traditional model of grant financing is top-down, from the Donor, and easily ends of being prescriptive. The stakeholder map used in the recent EEP analysis (Figure 1) represents a more modern paradigm, espoused by EEP Africa and others, that puts the Developer at the center. From this perspective, financing is provided by Donors and Investors to enable a Developer to produce and deliver products and services to End Users (customers at the bottom-of-the-pyramid market). The Developer also interacts with the larger clean energy Industry, operating within the framework of government regulations and industry norms, and helping to shape the environment through shared learnings, partnerships, and market stimulation.

Figure 1: Stakeholder Map



Since its current organisation with NDF (since 2018), EEP Africa has been very clear about its niche and value added to the clean energy and off-grid energy sector in Africa. Several studies have re-confirmed that the majority of financiers in the renewable energy sector are reluctant to engage with project developers in the early stages. The value proposition of EEP is seen as providing early stage financing to project developers and establishing a robust project pipeline that can be scaled up, either through EEP or by referring developers to other financing mechanisms. The support of EEP enhances the credibility of the projects seeking to scale up. Grant funding is required during the initial stages of project development to buy down the risk of entering into a new venture and potentially new territories.

Most recent, in 2021 EEP Africa conducted an investor mapping exercise. The analysis consisted of a desk review of active investors in the clean energy sector in Africa complemented by 20 interviews. The aim was to determine the “sweet spot” of each investor, including type of financing available, risk appetite, as well as thematic and geographic priorities. The exercise allowed EEP Africa to screen relevant companies from its portfolio and directly introduce them to potentially suitable investor(s) based on mutual consent. It also produced an investment readiness checklist to help companies understand investor expectations.

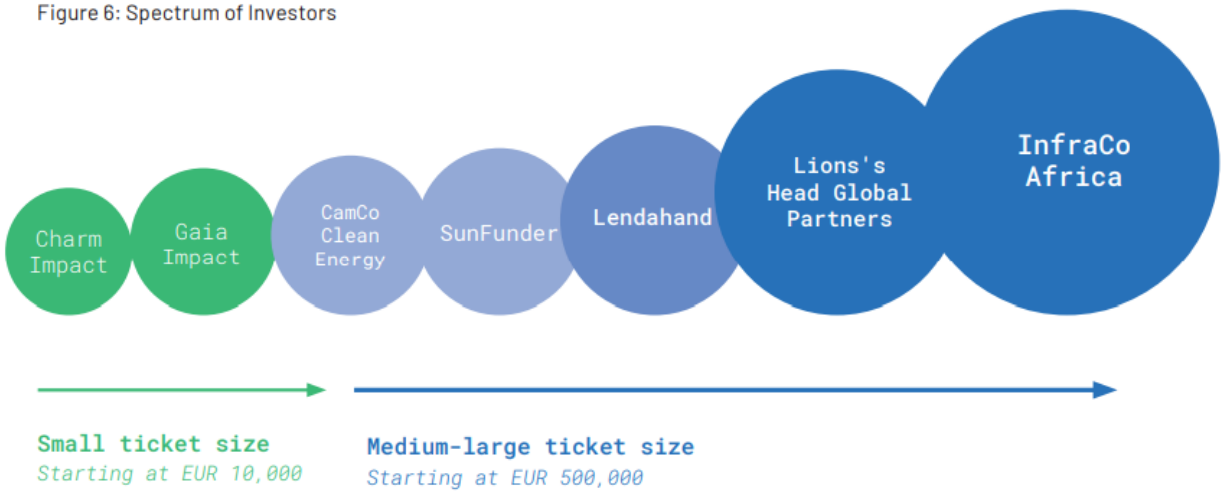
Early-stage companies generally carry higher risk than more developed companies so the most important consideration is the Investor’s risk appetite. The risk tolerance of an Investor is strongly affected by the amount of impact financing it has. The more a fund is backed by impact-focused money, the more patient and risk tolerant it typically is. It is typical, therefore, for early-stage companies to move from grant funding to some kind of concessional or blended finance vehicle. Some commercial investors, such as venture capitalists, also have a high-risk appetite, but they look to balance this with high returns. Such investment is rare in this sector as the potential for very high returns is much lower than in other markets.

Risk appetite usually dictates the size of investments offered (the ticket size) and the maturity of the target companies. Small ticket Investors typically offer debt financing between EUR 10,000-500,000, often as co-financing for grants. These Investors occupy an early-stage space, funding Developers' commercialization after successful pilots and purchasing stock to scale. Above this level are medium-large ticket Investors, typically investing EUR 500,000 and above in the form of equity and/or debt. These Investors look for more mature companies and demand a lower risk profile. Only businesses with a proven track record and projects in the scaling phase are considered. Established companies that used grant funding for just one aspect of their business, or some start-ups that grew rapidly during the grant period, may reach the level of business development and scale needed to attract this kind of investment.

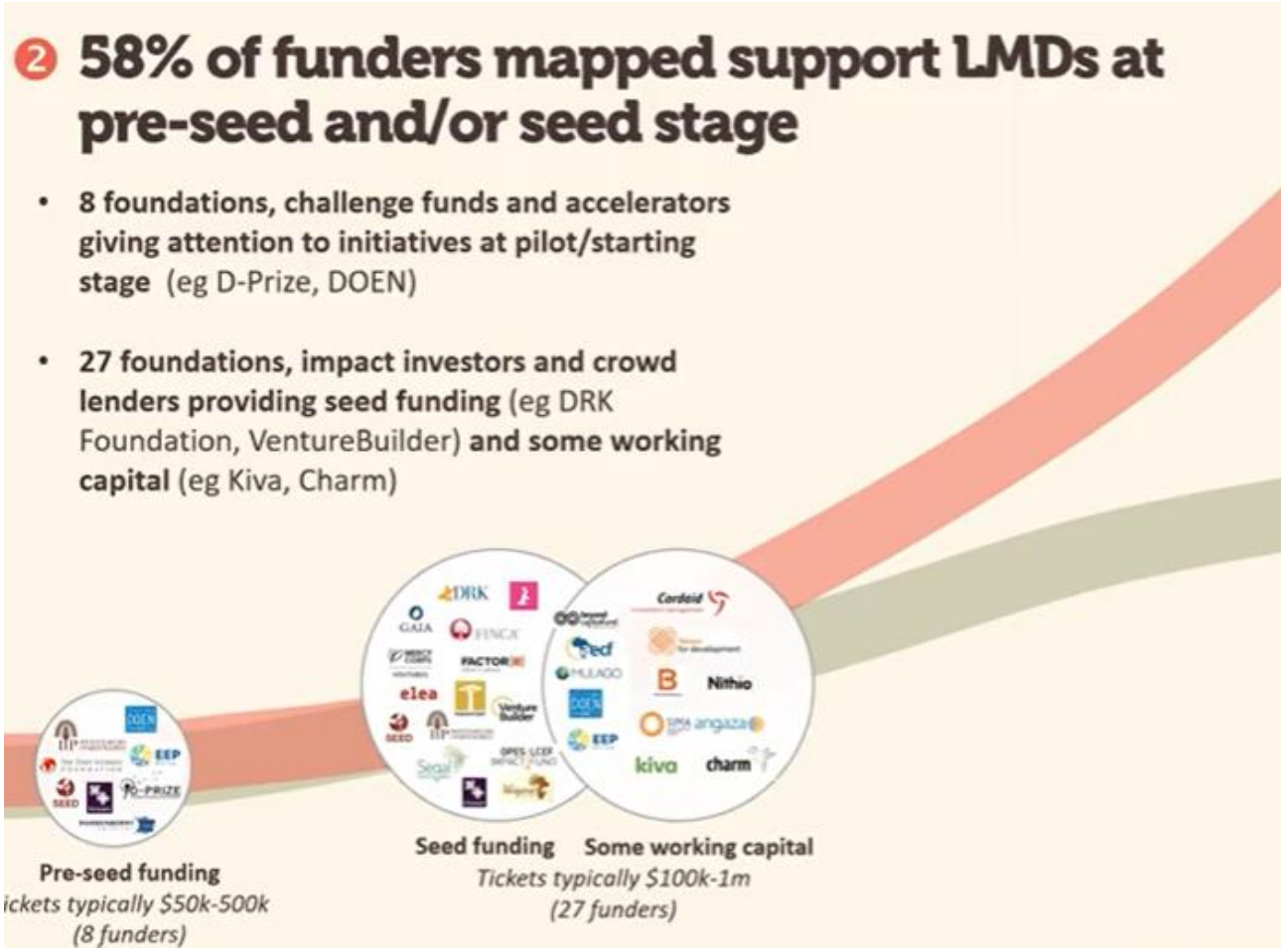
The diversity amongst Investors is very challenging for Developers to navigate. One of the objectives is therefore, to simplify the picture by finding commonality in the approach of all Investors – the end goal being to provide Donors and Developers with a checklist that will allow them to assess how ready a company is for follow-on investment.

EEP Africa is very aware of its own position and niche among the investors in the clean energy sector. Its position is clearly defined as an early stage investor but increasing also delivering technical support to its grantees to reach the next level of maturity to attract more commercial funding. The two below illustrations demonstrate the diversity of investors and where EEP Africa fits in. It also illustrates that Sub-Saharan Africa has very limited number of early stage investors like EEP, though more funders emerging.

Figure 6: Spectrum of Investors



Source: Generating Success, 2021, EEP Africa.



Source: Last Mile Distributor (LMD) Forum 2022

Simple SWOT analysis of EEP Africa

Annex 3: Theory of change and Results Framework

EEP Africa overall goal is to contribute to sustainable and inclusive green growth and achievement of the Sustainable Development Goals (SDGs). The Fund aims to support countries across the region toward the realization of a climate resilient, zero-carbon future with particular focus on supporting progress toward: No Poverty (SDG 1); Gender Equality (SDG 5); Affordable and Clean Energy (SDG 7); Decent Work and Economic Growth (SDG 8); and Climate Action (SDG 13).

EEP Africa's aim is to enhance clean energy access, development and investment in the Southern and Eastern Africa region. The Fund achieves this by implementing activities in three linked and interrelated areas: i) Clean Energy Financing directly supporting a diversified portfolio of competitively selected early-stage energy access projects; ii) Investment facilitation and business development support, and; iii) Knowledge, policy and partnerships, with particular attention to supporting job growth and gender equality as well as poor, vulnerable and underserved groups.

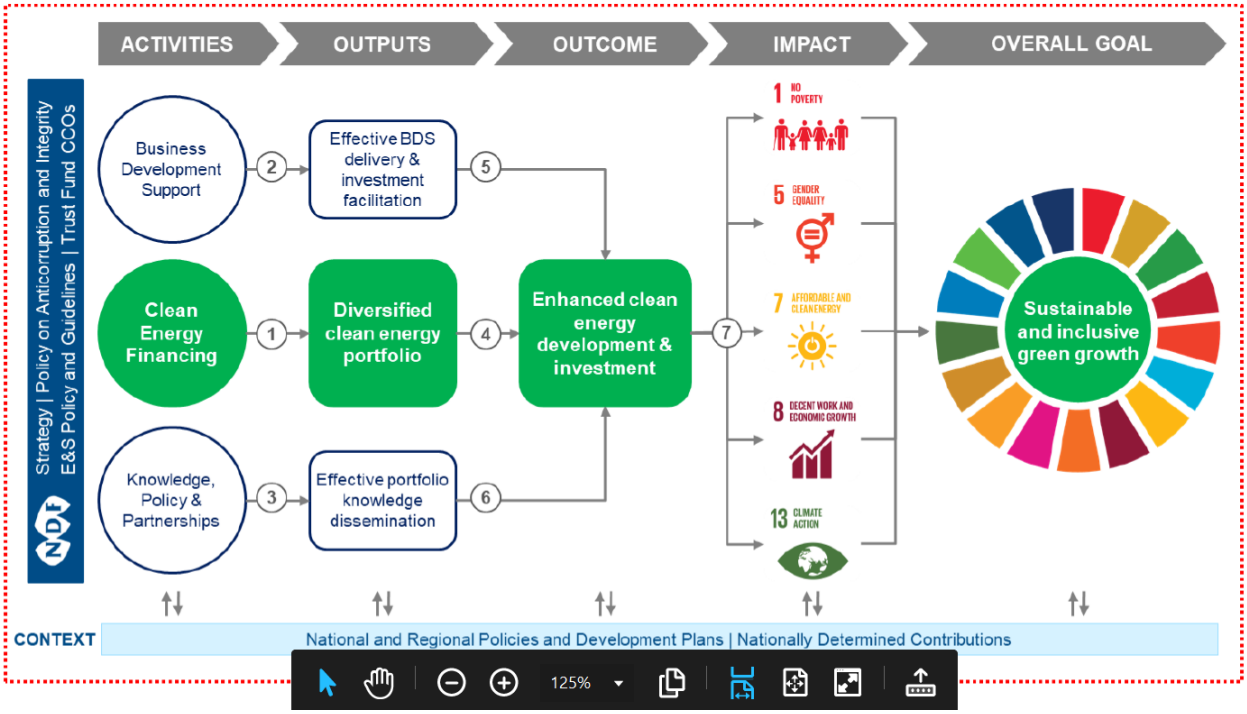
All financed activities are required to be aligned with the NDF Strategy, Environmental and Social Policy and Guidelines, and Policy on Anticorruption and Integrity, as well as Trust Fund Cross-Cutting Objectives (see Chapters 2.2, 5.1, and 5.2). The Fund also aims to be aligned with relevant regional and national policies, development plans, and Nationally Determined Contributions (NDCs) to the Paris Agreement. Figure 1 illustrates the Fund's Theory of Change (ToC) together with accompanying assumptions and the Pathway of Change flow-diagram. The ToC forms the basis for the Fund Results Framework which defines key Fund indicators at output, outcome and impact levels and is designed as a flexible, "living" tool to accompany an open-ended trust fund structure and meet the reporting needs of donors. The contribution of the Fund to the SDGs more broadly will be considered in periodic impact evaluations and selected knowledge products.

As evidenced by the September 2017 OECD guidance on incorporating SDGs into development operations, the process of refining indicators for the SDGs is dynamic and likely to evolve over an extended timeline just as the Fund itself is intended to operate and remain relevant over an extended timeline. Hence the need for the Fund Results Framework to be a "living" document to be reviewed periodically based on changing needs on the ground and changing strategic outlook among donors.

The Fund Results Framework also allows for continuity of reporting by picking up the latest data on key indicators and value-for-money from previous phases. This enables the Fund to capture annual results stemming from year-on-year implementation of the Fund as well as to analyse and report cumulative results encompassing the full life cycle of EEP Africa operations.

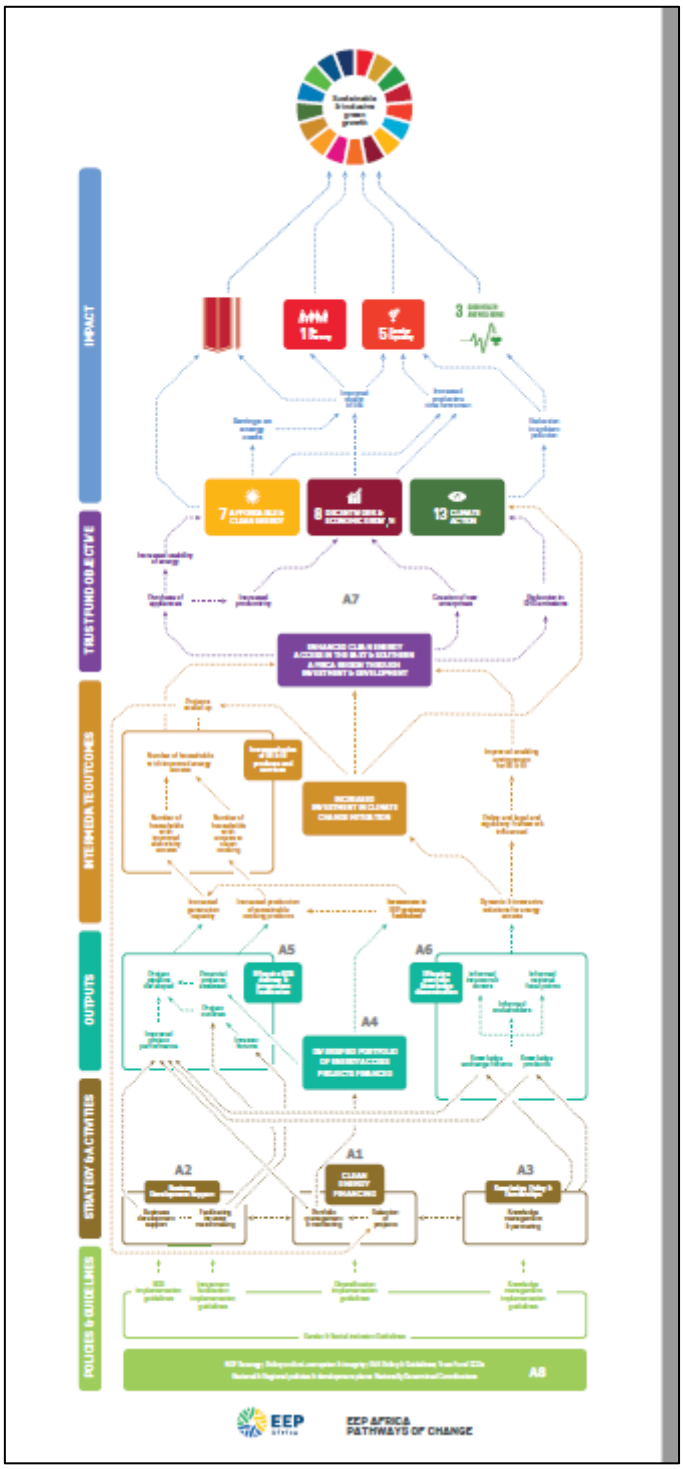
The practical significance of the Fund Results Framework and indicators in terms of Fund implementation is to establish core indicators and a frame for monitoring, supervision and reporting at the level of every project in the portfolio. The Results Framework has been harmonised with the metrics being required of Project Developers across financing institutions. Project reporting is then aggregated for key metrics across the portfolio to provide results-based data to donors at Fund level. Core indicators are identified and forms part of the Fund Results Framework.

Illustration: Theory of Change and Assumptions:



No	ASSUMPTIONS
1	• EEP Africa financing opportunities are well matched with market demand and conditions. • CfPs secure sufficient high quality proposals that cover a mix of technologies, business models and countries, as well as promote socially inclusive growth. • Projects are contracted and launched on a timely basis. • EEP Africa Trust Fund receives adequate replenishments to launch regular Calls for Proposals
2	• There is demand among project developers for EEP BDS and investment facilitation support. • Project developers and investors actively participate in match-making services and investor events.
3	• Knowledge events attract a wide range of key stakeholders. • EEP Africa brand attracts interest among key stakeholders in partnering on knowledge products, events and other initiatives. • Social media channels are relevant, meaningful and visible and attract significant numbers of users.
4	• Portfolio projects are implemented and completed according to planned timelines. • Portfolio projects provide effective demonstration of clean energy projects, technologies, businesses and access models and create viable opportunities for replication, scale-up and follow-on investment.
5	• BDS and investment facilitation enhance investment readiness of portfolio projects and catalyse follow-on investment flows.
6	• EEP knowledge products and activities contribute meaningfully and substantially to clean energy market understanding and development in the region.
7	• Targeted investment in early stage clean energy projects, technologies and business models unlocks development impact benefits linked to SDGs 1, 5, 7, 8 and 13 and contributes to sustainable and inclusive green growth across the region. • Access to clean energy is an enabler for substantial co-benefits and development impact.
8	• The operating environment does not impose undue barriers to achievement of impact targets. External influences include: varied and changing policy and regulatory context across the 15 target countries; public attitudes; macroeconomic trends; other donor and investor interventions; and climate trends.

Illustration: Pathway of Change flow-diagram.



EEP Results framework

Core	Indicator		Indicator definition	Disaggregation	Unit of measure	Achievement to date[30]	Target[31]
IMPACT							
X		Savings on energy-related expenditure	Estimated amount of savings on energy-related expenditure over expected lifetime of the products or services sold with EEP support	Technology, business model, urban/ rural	Euro/ year	76,982,004	55 million
X		Women in leadership	Proportion of females in the total number of persons employed in leadership positions in EEP partner organisations	Project type, country, level (senior, middle, junior), location	%	N/A	40%
X		People with enhanced energy access	Cumulative number of people who have lived in a house with an improved energy source as a result of EEP support	Country, urban/ rural, MTF tiers, off-/on-grid	Number	4,833,155	3.5 million
X		Direct job creation	Number of new jobs created by EEP supported projects during the contract period	Gender, youth, urban/ rural, country	Number %	8,025 N/A women 38% youths	5,750 50% women 40% youths
X		Mobilised climate finance	Total investment committed to EEP supported projects	By source, country, technology	EUR	200 million	143 million
X		CO_2e emissions reduced or avoided	Estimated CO_2 emissions avoided as a result of improved energy access provided for by EEP supported projects	Country, technology	Tonnes of CO_2e	1,276,081	910,000
OUTCOME							
	Sales volumes		Cumulative number of products sold or customers connected to an improved energy source as a result of EEP support	User group, tier, urban/ rural	Number	966,631	690,000
X	Clean energy capacity supported		Renewable generating capacity added as a result of EEP financing	Actual/ planned, technology, country, business model	MW	3.52 (actual) 457 (planned)	2.5 (actual) 330 (planned)
X	Leveraged investment		Total value of co-financing committed during the EEP contract period	Country, technology, type of financing	EUR	200 million	144 million
	Projects replicated and/or scaled up		Number of projects that expand services to new countries or significantly increase their market within a country	EEP funding window, project type, ESMAP tiers, technology, country, business model	Number	35	25
	Enabling market		Proportion of EEP project developers reporting an improved ease of doing business due to changes in the enabling environment that affect the RE/EE market	Country, technology, drivers	%	N/A	N/A
OUTPUT							
	Portfolio disbursement rate		Proportion of committed contract financing that is paid out to project developers	EEP funding window, project stage, ESMAP tiers, technology, country, business model	%	75	80
	Improved business performance		Average revenue per customer	Technology, MTF tier, business model, geography,	EUR	N/A	N/A
	Repayment of repayable grants		Default rate for projects financed under the repayable grant mechanism	Project stage, business model, geography	%	N/A	50
	Relevance of BDS and investment services		Net promoter score®	BDS/ Investor Forums	Score	N/A	70
	Readiness for investor facilitation		Proportion of projects referred for participation in investor forums	Project stage, technology, country	%	18	20
	Responsiveness of BDS		Proportion of projects receiving a response from EEP to a request for BDS support within 5 working days		%	N/A	100
	Relevance of knowledge exchange forums		Net promoter score®	Participant sector, technology	Score	N/A	70
	Active cooperation or partnerships with other organizations and initiatives		Number of publications and events that are co-produced or co-hosted with organisations that are promoting RE energy access and EE	Sector, media type	Number	7	16
	Increased visibility and awareness of EEP Trust Fund		Number of visits to the EEP website and posts shared through social media	Channel (social media, search engines, referrals, etc.)	Number	55,000	67,000

Annex 4: Risk management

EEP Africa's Risk Management Framework is presented below with indications for potential risk factors that may impact the Fund at contextual, programmatic and institutional levels, their likelihood and possible impact on Fund objectives as well as proposed mitigation measures.

Contextual risk factors are defined as beyond what the Fund is directly able to manage or mitigate. These risks may occur in one or more of the target countries, but are not expected to simultaneously occur in all target countries, and are therefore judged to have minor overall impact on the Fund. Contextual risk factors are primarily related to policy, regulatory and enabling environments in target countries that may adversely impact implementation of individual projects in the portfolio. Project developers will be required to identify key contextual risks at the time of requesting financing and provide a mitigation plan.

Programmatic risk factors are related to non-realisation of intended impacts and outcomes of the Fund due to failure or underperformance of a significant number of projects. These risks may lead to lower results achievement and value-for-money than anticipated and/or reduced sustainability in the case of non-repayment of repayable grants or non-grant financing. Programmatic risks will be mitigated through a comprehensive screening and evaluation process at proposal stage and continuous and proactive supervision and monitoring and evaluation of funded projects with advisory and other technical support available as relevant to overcome challenges in implementation.

Institutional risk factors are related to mismanagement of project funds and violation of social, environmental, integrity or other safeguards. These risks may lead to the loss of credibility for the Fund and potential reputational risks to NDF and other contributing donor partners. Institutional risks will be mitigated by undertaking detailed financial and administrative due diligence of project developers and continuous proactive monitoring and supervision of the project portfolio. NDF as the Fund Manager will be responsible for monitoring the Risk Management Framework on an ongoing basis, and looking to update and refresh as relevant and in line with lessons learned accumulated during the course of implementation. As with the Fund Results Framework, any revisions and updates to the Risk Management Framework will be circulated for review and approval according to normal Fund governance procedures. Reporting on the implementation of the Risk Management Framework will be undertaken on an annual basis.

Contextual risks

Risk Factor	Likelihood	Impact	Risk response	Residual risk	Background to assessment
Weak enabling policy and regulatory framework in target countries impacts project implementation.	Likely	Minor	Ex-ante risk review and mitigation planning at proposal stage; Data collection, M&E during implementation and knowledge management and dissemination to policy makers and key regional influencers and leaders	Risks may materialise in some target countries, but are not expected to occur simultaneously in all target countries	It is a basic fact that the enabling policy and regulatory framework in target countries is the norm in most developing countries in Africa.
Lack of follow-on financing for EEP grantees limits impact and possibilities for next stage financing/scale-up.	Likely	Major	Proactive engagement, information exchange and events aimed at investor community; EEP Catalyst offers option for risk sharing to unlock follow-on financing; Enhance role of Fund as market signaller and pipeline engine, recognised among investors as providing a "pre-qualified" pipeline of credible scale-up and investment opportunities.	Can be expected to materialise in a number of individual cases despite all efforts. With time and experience the number will go down	EEP investments are basically high risk-high return. A certain portion of the companies will not be able to attract private investors, while other will.

Corruption issues in countries impacts project implementation.	Likely	Minor	The Fund to pull out from country with high level corruption. Anti-corruption dialog between governments of target countries and contributing development partners and between project developers and the Service Provider.	Corruption will continue to be a threat in individual countries/cases	The countries where EEP is operating are generally not well placed on corruption indexes such as TI. This is a known business risk and will have to be navigated within the boundaries of EEP's anti corruption policy.
Instability in countries impacts project implementation	Unlikely	Major	Ex-ante political risk review and mitigation planning at proposal stage; Proactive M&E during implementation and early identification of political risk issues; Identifying focal points in relevant ministries in all countries for information exchange.	The threat of political instability will continue at different levels in most countries EEP is operating in	Fragility continues to be a factor in most of the countries EEP is operating in. The issue quickly becomes at what level does it prevent EEP operations. EEP is not operating in the most fragile countries
Natural disasters and extreme weather events impact project implementation	Likely	Significant	The livelihood improvement aspect of the Fund will help build resilience to impacts of climatic change. Diverse and local RE resource use and EE measures will also help support a climate-compatible energy system.	Natural disasters will continue to threaten the countries where EEP operates	Climate change brings about more and more extreme weather events while a number of EEP-countries are prone to natural disasters.
Domestic fuel subsidies deter investment in clean energy	Likely	Significant	Ex-ante review and assessment of impact at proposal stage will take market distortions into account when calculating the individual business cases	Despite best efforts and international pressure fossil fuel subsidies are hard to abolish due to strong domestic vested interest	Fossil fuel subsidies are wide spread in many African countries and protected by strong interest groups both on the supply and the demand side.

Programmatic risks

Risk Factor	Likelihood	Impact	Risk response	Residual risk	Background to assessment
Resource mobilisation for the Fund is not successful	Unlikely	Major	Adequat donor ressources will be secured through: Effective reporting and publication of Fund results in line with donor priorities, specifically the SDGs; Resource mobilisation and fund raising efforts on rolling basis, allowing for entry of new donors at any point; Demonstrate that EEP has a good track record for delivering results among the plethora of other challenge funds.	Changing priorities or overall shrinking resources among donors	The development space is overcrowded with initiatives that requires financing and only limited financial resources. At the moment investments in green energy is popular among donors, however external chocks can change priorities with very short notice
Fund targets not realised due to high level of project failure	Unlikely	Significant	Rigorous evaluation, risk review and selection process on proposals at entry; Evaluation teams and Investment Committee will include appropriate expertise spanning relevant technical, development, business and financial aspects; Clear milestone planning, reporting and results indicators agreed at contracting stage; Proactive M&E of active project portfolio ensuring timely reporting and early identification of risk factors; Support, as appropriate, with resolution of contextual risk challenges that arise; Efficient process for terminating non-performing projects and redeploying resources toward other projects.	The risk of individual projects failing will always remain.	Development investments are by nature high risks endeavours. Despite rigorous screening of potential projects some investments will underperform or fail. Indeed it can be argued that if no investments fail then the risk appetite of the project is too low.

Fund sustainability impaired due to significant non repayment of repayable grants as anticipated	Unlikely	Significant	Selective application and use of repayable grant option, recognizing that this instrument is not suitable for all projects	Non repayment risk is inherent in loan schemes	Although EEP Africa is primarily a grant program it also includes repayable grants (in effect concessional loans).
Significant number of projects do not result in sustainable business models	Unlikely	Major	Rigorous evaluation, risk review and selection process on proposals, business plans and sustainability strategies at entry; Co-finance requirements ensure project developers have "skin in the game;" BDS support is provided during the implementation cycle; Market intelligence and knowledge management will provide insights on market potential and how to avoid potential pitfalls.	The risk of individual projects failing will always remain.	It is in nature of EEP Africa to engage in high risk projects. Despite rigorous screening of potential projects some investments will not result in sustainable business models. Again, it can be argued that if no investments fail then the risk appetite of the Fund is too low.
Non-feasibility of technology impairs project results	Likely	Minor	Rigorous evaluation, technical review and selection process on proposals at entry; Technical business development support; Dissemination of lessons learned and future CfPs will analyse and take on board project failures.	Application of technical solutions is often a process with several rounds of adaptation	A well-known challenge in development work is the identification and application of appropriate technology. Technical solutions that seems promising at first may not be the right fit for the implementation environment at hand
Project result in unanticipated and negative environmental or social impacts	Unlikely	Major	Strict application of NDF Environmental and Social Policy and Guidelines; Proactive M&E of active project portfolio ensuring timely reporting and early identification of risk factors; Efficient process for terminating non-performing projects.	All development activities which contains an element of physical infrastructure contains a residual risk of changing the immediate surroundings	Although the project is defined as climate and environmental friendly it also contains an element of physical infrastructure which will have an impact on the locations where new facilities will be located. These are, however, relatively small and localised.
Disputes between Fund Manager and project developers impede project progress and results	Unlikely	Significant	Detailed financing agreements in place, drawing on experience from previous phases of EEP and NDF's experience with NCF and including clear project descriptions, guidelines for implementation, procurement and disbursements, references to all relevant safeguards and establishing clear milestones and expected results; Maintain constructive communication on a regular basis to develop a collaborative relationship; Maintain a flexible approach to adapt on changing realities on the case-by-case basis in the interests of achieving optimal results.	The project relies on human interaction and disputes can never be totally avoided	EEP Africa revolves around engaged individuals who stake both their passion and their livelihood in the success of the project. Occasional disagreements must be expected
Disputes between Fund Manager and service provider(s) impede Fund or project progress and results	Unlikely	Significant	Detailed TORs with clear deliverables and targets and assignment of roles and responsibilities in place for any and all service provider(s); Effective contract dispute clauses in place.	The project relies on human interaction and disputes can never be totally avoided	EEP Africa revolves around engaged individuals who stake both their passion and their livelihood in the success of the project. Occasional disagreements must be expected

Institutional risks

Risk Factor	Likelihood	Impact	Risk response	Residual risk	Background to assessment
Fund targets not realized due to government policies and strategies that affect private sector promotion of renewable energy access solutions.	Unlikely	Significant	Rigorous ex ante political risk evaluation and due diligence for particular on-grid projects and mini-grids, possibly including non-selection of projects with significant uncertainty related to signature of power purchase agreements; EEP National Focal Points and Project Developers are encouraged to engage on issues of the national enabling environment.	Vested interests and the inherent volatility of political changes in the cooperation countries will always leave some residual political risk	On-grid project may fail as a result of a number of government policies and strategies such as non-signature of power purchase agreements, adverse subsidies, and changes in the rural electrification plans.
Significant project failure leads to loss of credibility among stakeholders	Unlikely	Significant	Rigorous evaluation, risk review and selection process on proposals at entry; Detailed supervision, portfolio management and proactive M&E processes in place.	The risk of individual projects failing will always remain	Development investments are by nature high risks endeavours. Despite rigorous screening of potential projects some investments will underperform or fail. Indeed it can be argued that if no investments fail then the risk appetite of the project has been too low
Supported projects fail to reach disadvantaged groups as anticipated	Unlikely	Significant	Rigorous ex-ante review of project impact and intended engagement with disadvantaged groups, including women, youth and/or vulnerable communities. Close monitoring of project implementation.	Reaching the last, most marginal members of a community (geographical or social) will be a continues challenge	Benefitting the most disadvantaged groups in a given community is a challenge in most development work, but also an important element in the projects poverty orientation
Corruption or financial mismanagement by project developers causes reputational loss to NDF and donor partners	Unlikely	Major	Rigorous integrity due diligence and risk review on proposals at entry; Effective and reliable financial management and disbursement procedures and safeguards in place.	Corruption will continue to be a threat in individual countries/cases posing potential reputational risk	The countries where EEP is operating are generally not well placed on corruption indexes such as TI. This is a known business risk and will have to be navigated within the boundaries of EEP's anti corruption policy.
Violation of environmental and social safeguards and/or standards by project developers causes reputational loss to NDF and donor partners	Unlikely	Major	Strict application of NDF Environmental and Social Policy and Guidelines on proposals at entry; Rigorous integrity due diligence and safeguards review on proposals at entry; Project developers must demonstrate a commitment to responsible business conduct and citizenship including respect for human rights, labour rights, environment and all relevant local legislation and regulation; Detailed supervision, portfolio management and proactive M&E processes in place.	All development activities which contains direct interaction with population groups and/or physical surroundings entails risk that safeguards are violated	Although the project is designed with a full set of safeguards in place the very nature of implementation contains an element of unpredictability which can cause safeguard violations
Significant project failure leads to loss of credibility among stakeholders	Unlikely	Significant	Rigorous evaluation, risk review and selection process on proposals at entry; Detailed supervision, portfolio management and proactive M&E processes in place.	The risk of individual projects failing cannot be totally eliminated.	EEP Africa is a risk prepared project. While a certain proportion of projects can be expected to fail the overall success-rate of the project can still be satisfactory. However, if too many projects fail the overall premisis of the project must e called into question.

Annex 5 – Budget details

Rules of the Energy and Environment Partnership Trust Fund (Fund Rules) define the rough outline for the use of donor contributions as detailed below:

Budget category	Projected share
Project financing	70%
Implementation	25%
NDF admin fee	5%

Direct financing to projects under the Clean Energy Financing activity will constitute the largest share of Fund commitments, expected to be at least 70% of available resources in full operational mode. EEP Africa reached this in 2020 after having conducted two calls for proposals resulting in 40+ active projects.

A budget for implementation is not expected to exceed 25% of available resources in full operational mode. This will be allocated to ensure effective delivery of the three core activity areas: Clean Energy Financing; Investment Facilitation and Business Development Support; and Knowledge, Policy and Partnerships. The actual share allocated to implementation relative to overall Fund resources is expected to decrease as Fund size grows. Service providers with relevant sector expertise will be recruited to assist NDF with implementation activities as necessary.

NDF will charge and deduct a non-refundable administrative fee of 5% on all contributions to defray the costs of administration, except as otherwise provided.

Any repayments, reflow or income accruing from investment operations of the Fund will be added to the general resources of the Fund for further deployment and will not be credited to the contributions of any donor.

All costs related to external audits and evaluations as well as Investment Committee arrangements, not otherwise covered, will be deducted from the resources of the Fund.

EEP Africa Expenditure forecast for 2022-2025

	2022	2023	2024	2025	Total	%
Project disbursements	4.000.000 €	4.500.000 €	5.000.000 €	5.500.000 €	**19.000.000 €**	72%
TA, implementation & knowledge facilitation	1.500.000 €	1.500.000 €	1.500.000 €	1.500.000 €	**6.000.000 €**	23%
Admin costs	270.000 €	270.000 €	270.000 €	270.000 €	**1.080.000 €**	4%
Impact evaluation			250.000 €		**250.000 €**	1%
Total	**5.772.022 €**	**6.272.023 €**	**7.022.024 €**	**7.272.025 €**	**26.338.094 €**	**100%**

EEP Africa Financial Report 2021

FUNDS RECEIVED [2]	EUR
Funds provided by:	
Austrian Development Agency	3 000 000,00
Ministry for Foreign Affairs of Finland	13 300 000,00
Nordic Development Fund	7 500 000,00
Swiss Agency for Development and Cooperation	860 000,00
EEP Catalyst Repayments	471 114,42
Funds provided, total	**25 131 114,42**
Deposit interest	9 484,93
Funds received, total	**25 140 599,35**
USED FUNDS	
Project disbursement, EEP Innovation	11 900 000,00
Project disbursement, EEP Catalyst	2 504 214,39
Administrative expenses	1 377 536,31
Implementation expenses [3]	5 183 877,18
EEP Africa Impact Evaluation	230 000,00
VAT disbursements [4]	304 356,72
Bank expenses	476,72
Negative interest fee	10 536,91
Audit expenses	2 585,00
Used funds, total	**21 513 593,23**
REMAINING FUNDS	**3 627 006,12**
Placements [5]	998 500,00
Bank account, 31.12.2021	2 628 506,12

Donor contributions to EEP Africa from 2018 to June 2022.

Donor	Period	Commitment
Confirmed		**55 912 000 €**
Austria	2018-2021	3 000 000 €
Finland	2018-2022	20 900 000 €
Iceland	2022-2025	1 440 000 €
NDF	Flexible	22 000 000 €
Switzerland	2021-2025	8 572 000 €
Pipeline		**9 700 000 €**
Austria	2022-2024	3 000 000 €
Denmark	2022-2026	6 700 000 €
Finland	2023-2026	TBC late 2022
	Overall total	**65 612 000 €**

Annex 6 – List of supplementary materials

#	Documents / Materials	Source
1	ESG Checklist	EEP Africa, 2021
2	2020 Annual Report	EEP Africa 2021
3	Market Landscape Study Volume 1: Market Study Volume 2: Country Profiles Volume 3: Donor Mapping	Danish Energy Management & Esbensen, 2017
4	Communications and Knowledge Management Guidelines	EEP Africa, 2020
5	Theory of Change	EEP Africa, 2020
6	Pathways of Change	EEP Africa, 2020
7	EEP Africa Operational Guidelines	EEP Africa, 2018
8	M&E guidelines	EEP Africa, 2021
9	Call Guidelines 2020	EEP Africa, 2020
10	Energising Resilience	EEP Africa, 2020
11	Generating Success	EEP Africa 2022
12	TOR Implementation Support	EEP Africa 2022
13	Impact and Performance Evaluation of EEP Africa	Altai Consulting, 2020
14	EEP Africa Fund Rules	

Annex 7: Plan for communication of results

Data and stories from the EEP Africa portfolio – including the annual report and results framework - is disseminated through relevant media, newsletters, blogs, podcasts, videos and social media campaigns with different partner such as BBC StoryWorks, Efficiency for Access, Energy 4 Impact, Energy World, ESI Africa, Financial Times, Power for All, Sun Connect News. For example, in 2021 EEP Africa partnered with BBC StoryWorks and the World Energy Council on a film and article about gender and energy for the Humanising Energy campaign about grassroots drivers of the energy transition.

EEP Africa is also collaborating with partner on producing relevant research, case studies, reports and toolkits through content development and peer review with 60 Decibels, Acumen, Catalyst Off-Grid Advisors, CLASP, Clean Cooking Alliance, Efficiency for Access, GET.invest, Power for All, Shell Foundation, and Value for Women. For example, EEP Africa and CLASP jointly produced an E-Waste Toolkit in 2021 to help off-grid solar companies in Sub-Saharan Africa develop proactive e-waste management strategies and mitigate risk. EEP Africa is also producing own sector briefs, case studies and reports that are available on their webistes and promoted across the African start-up business community.

Arranging investor matchmaking for companies and contributing to the development of funding databases and other tools to help facilitate investment pipelines with Alphamundi, Charm Impact, Clean Cooking Alliance, EDFI ElectriFi, Gaia Impact Fund, GET. invest, InfraCo Africa, Lendahand, Lion's Head Global Partners/FEI-OGEF, Oikocredit, Persistent, Shell Foundation, Sima Funds, SunFunder, Trine, USAID Development Innovation Ventures, Venture Builder.

EEP Africa has traditionally hosted two annual flagship event known as the EEP Investor Forum and the Knowledge Exchange Forum. With the global COVID-19 pandemic still influencing in-person events, EEP Africa transformed its traditional Investor Forum into a series of tailored Investor Workshops to introduce key investment partners to relevant companies in the portfolio. Similarly, the knowledge exchange forum was replaced by an online Knowledge Week hosting a series of online events that examines evolving themes and innovative clean energy projects and business approaches. These experience have given food-for-though to think in new and innovative opportunities which will be discussed with the donors and partners. EEP Africa will also look more into co-hosting events with other partners and getting speaking slots in relevant events.

What? (the message)	**When?** (the timing)	**How?** (the mechanism)	**Audience(s)**	**Responsible**
Clean energy access is a proven driver for inclusive, climate resilient green growth and job creation, as well as advances in health, education and gender equality.	Continuously	This will be a key message in all forms of knowledge and communications	Donors, Policy Makers, General Public	Fund Manager, Lead Coordinator, Communications

Since 2010, EEP Africa has been at the forefront of efforts to fast track clean energy access and sustainable and inclusive green growth, with positive impacts on lives and livelihoods.	Annually, continuously	This will be communicated annually through the Annual report. Available publicly on the EEP Africa website as well as a key message in all knowledge products.	Donors, Policy Makers, General Public	Fund Manager, Lead Coordinator, Communications
EEP Africa's combination of early-stage financing, business development support, knowledge exchange and downstream investor networking offers unique value toward enhancing energy access and enabling green growth.	Continuously	Available publicly on the EEP Africa website as well as a key message in all knowledge products.	Project Developers, Strategic Partners, Partners, Donors, Policy Makers, General Public	Fund Manager, Lead Coordinator, Portfolio Managers
EEP Africa offers investors a pipeline of credible, proven, "pre-qualified" clean energy projects across the SEA region.	Annually, continuously	Direct outreach with investors on an annual basis. The information will also be continuously available on our website.	Investors, Project Developers	Lead Coordinator, Portfolio Managers, Communications
EEP Africa data gathering and monitoring and evaluation (M&E) provides critical market intelligence that informs broader policy and development issues.	Annually	Publishing of Market Report after every call, informed by received applications and surveys from current and past grantees.	Project Developers, Strategic Partners, Policy Makers, Investors	MEL Expert, Lead Coordinator, Portfolio Managers
Technological developments are making clean energy increasingly efficient,	Ad hoc	Knowledge products will be produced when relevant. This knowledge will also	Project Developers, Investors	Lead Coordinator, Portfolio Managers

affordable and mainstream.		be shared through Knowledge Exchange Forums or virtually through online Knowledge Weeks.		
Early-stage financing for innovative renewable energy technologies and business models reduces risk and builds pathways to market viability.	Continuous	Available publicly on the EEP Africa website as well as a key message in all knowledge products.	Donors, Policy Makers, General Public	Fund Manager, Lead Coordinator, Communications
EEP Africa's business development support enhances access to finance and increases project pipeline development for the renewable energy and energy efficiency sector with a focus on building credibility and investment readiness of EEP Africa project developers.	Continuous	Available publicly on the EEP Africa website as well as a key message in all knowledge products. Specific success stories to be shared via social media.	Donors, Investor a (brief) quarterly fund report that provides a brief overview of disbursements, project progress, results etc in a visual and easy to read format. Q3 report this year will be the first pilot s, Project Developers	Fund Manager, Lead Coordinator, Portfolio Managers, communications

Annex 8: Process Action Plan (PAP) for EEP Africa project preparation

Action/product	Deadlines	Responsible/involved Person and unit	Comment/status
Preparation of two-page concept note of EEP Africa	January 2022	GDK	
First meeting with EEP Africa Team	8 February	GDK/EEP Africa	
Prepare preliminary draft programme document	1- 17. March	GDK-Reduction/EEP Africa	- EEP Africa to deliver background - Physical meeting 18 March in Helsinki
Confirm agenda item for Programme Committee	10. March	GDK- Reduction	
Mini-workshop with EEP Africa team in Helsinki	18. March	GDK/EEP Africa	
Draft programme document for GDK management review	4. April	GDK-Reduction/EEP Africa	
Submit draft programme document to MFA internal Programme Committee including public consultation	7. April	GDK	
Meeting Programme Committee	2. May	GDK	
Prepare full programme documents including annexes for appraisal	3. - 16 May	GDK-Reduction/EEP Africa	
Submission of draft programme document to Appraisal Team	1. August	GDK/EEP Africa team	
Final appraisal report	5. September	Appraisal Team	
Incorporate recommendations from appraisal into programme documentation	5. Sept. – 6 sept.	GDK	
Submit for management approval	7. September	GDK	
Submit programme documentation including annexes to Council for Development Policy	8. September	GDK/ELK	
Council for Development Policy meeting	22. September	GDK/ELK	

Approval of the programme by the minister	1. October	GDK	
Prepare and submit "aktstykke"	6. October	GDK	
Meeting in the Finance Committee	10. November	GDK	
Signing of agreement	15. November	GDK	
First disbursement	18. November	GDK	

Annex 9: Summary of Recommendations of the Appraisal

Summary of recommendations of the appraisal

Title of Programme/Project	**Danish support to the Energy and Environment Partnership Africa Trust Fund (EEP Africa)**
File number/F2 reference	**F2: 2022-22240**
Appraisal report date	**5. September 2022**
Council for Development Policy meeting date	**22. September 2022**

Summary of possible recommendations not followed

GDK will not follow the recommendation to nominate a person to participate in EEP Africa's Investment Committee. GDK will, however, as planned participate in EEP Africa's Supervisory Board.

Overall conclusion of the appraisal

The EEP programme is a relevant programme that covers early stage off-grid investments in renewable energy aimed at SME's well positioned to provide local renewable energy solutions close to where they are most needed. The project design and competitive funding mechanism are well tested through 15 calls since 2010 and 250 mostly successful SME investments and in recent years the EEP has successfully focussed on gender sensitive business initiatives lead by women.

The Danish support has been prepared in a consultative process with the Nordic Development Fund (NDF) which is hosting the EEP and other donors. The Danish support will enable EEP to promote wider up-take of new renewable energy technology and further mature business models for up-scaling and investment readiness leveraging additional funding. The Danish support will be pooled with other donors without earmarking making administration and reporting less complicated.

The PD is generally well written, but a thorough editing, such as streamlining some repetitive text passages and remove typos, would significantly strengthen the presentation. Moreover, the cover page should use the most recent template, which includes a section on environment and climate targeting. The main reservations relate to a wish for some improvements of the results framework, the use of impact indicators and adjustments to the risk matrix as well as some recommendations regarding operations.

The overall conclusion of the appraisal is that the proposed project is recommended for approval with only minor adjustments taking the recommendations of the appraisal report into consideration.

Recommendations by the appraisal team	Follow up by the responsible unit
1. Justification of the project should include more around contributing to poverty reduction and could also further explain the co-benefits regarding strengthening climate resilience and adaptation. In addition, consider to include in the Theory of Change and the Results Framework text and indicators around how the project will contribute to climate resilience. This aspect could also be a specific focus in the annual reports	Partly agree. The PD has been revised to more clearly articulate the poverty reduction aspects of EEP Africa's activities as well as the co-benefits between the strengthening of climate resilience and adaptation. Denmark will push for these aspects to be well reflected in the annual reports. Updates to the both the ToC and RF will be proposed by management to the SvB in time for the 2022 annual meeting so at this stage DK will not add new indicators to the existing ToC and RF reflected in the PD, but instead engage in EEP's update process.
2. The Danish MFA should encourage EEP/NDF to implement the IFC framework for impact investments and as much as possible use a set of harmonised standard indicators[1] and report green transition according to the EU Taxonomy [2]	Agree. EEP Africa is currently revising its approach (results framework, milestone requirements, risk monitoring) and in this context Denmark will encourage EEP Africa to be inspired from the IFC framework for impact investments and pursue green transition reporting according to the EU Taxonomy.
3. The results framework should be strengthen around the causality between output-outcomes-impacts by looking at the interlinkage between the three main components of the EEP and indicators should be fine-tuned including disaggregation by gender in some instances and less disaggregation categories in others.	Agree. EEP Africa is currently revising its results framework with a view to strengthen said aspects. EEP Management plans to present a set of proposals for an updated RF at the annual SvB meeting in December. Denmark will in this context work towards securing the right level of data disaggregation.
4. The service delivery through the service provider SNV / Open Capital Advisers, Kenya should be monitored closely by NDF the first 6 months, especially the detailed handling of ESG procedures for the first 3 projects like is common practise for DFI's dealing with financial intermediaries.	Agree. EEP Africa has a setup for close coordination including shared planning and NDF staff periodically joining SNV field staff on monitoring missions. These aspects have been further elaborated in the PD.
5. The selection process for calls for proposals should take into consideration that not all countries are at the same stage with regards to green transition.	Agree. This has been underlined in the PD, just as Denmark will continue to raise the question in the SvB.

[1] Examples are Global Reporting Indicators(GRI), Global Impact Indicator Network (GIIN), International Capital Management Association (ICMA), or Harmonised Indicators for Private Sector Operations (HIPSO)
[2] Sustainable Finance Reporting Directive (SFRD) and Corporate Sustainability Reporting Directives (CSRD)

6. The potential for in-country collaboration between the EEP programme and Danish Embassies should be explored further during the implementation of the project.	Agree. Synergies between Denmark's bilateral and multilateral engagement is mutually benefitting and should always have high priority. This has now been underlined in the PD and will form an integral part of Denmark's future work with EEP Africa.
7. Partnerships between similar grantees within the portfolio should be further encouraged by the TA service provider (SNV / Open Capital Advisers) through regional events under the Knowledge Exchange Forum	Agree. EEP Africa is already putting a lot of effort into fostering "peer-to-peer" learning. The relevant paragraph in the PD has been expanded.
8. Resources permitting the Danish Ministry of Foreign Affairs could consider also nominate a person with knowledge of the energy sector to participate in the investment committee.	Disagree. MFA will not put forward a member for the investment committee. The MFA finds that this will cross the line of DK engagement in EEP implementation implementation and that MFA as a donor should not interfere in the individual investment decisions.
9. The PD should further justify the budget allocation between main components and include a separate budget line for conducting a mid-term review	Partly agree. The PD chapter on the budget has been expanded. EEP Africa's impact evaluations serve as regular 'evaluations' of the Fund's activities, which forms the collective review mechanism for all donors. GDK will, however, undertake an assessment of the Danish experience with the support to EEP midway through the grant period. The assessment will be done outside the budget of the grant.
10. Update of the PD risk management matrix should be completed to include *residual risks* and *background to assessment*. The EEP should aim at reducing risks by working in partnerships between local and international companies and include handling of weak corporate governance of grantees under the institutional risks	Agree. The risk management matrix has been completed so it now includes both *residual risks* and *background to assessment*. EEP Africa works very closely with companies, both local and international, which has now been more clearly reflected in the PD.

I hereby confirm that the appraisal team has identified the above-mentioned issues and provided the corresponding recommendations as stated above to be addressed properly in the follow-up to the appraisal.

Signed in Copenhagen on the 7 Sep 2022

Appraisal Team leader/ELK representative

TOBIAS VON PLATEN

I hereby confirm that the responsible unit has undertaken the follow-up activities as stated above. In cases where appraisal recommendations have not been accepted, reasons for this are given either in the table or in the notes enclosed.

Signed in Copenhagen on the 8/9 - 2022

Head of Unit/Embassy

KARIN POULSEN