PUBLIC
Board of Directors meeting II/2017
on 6-7 June 2017 in Iceland
Agenda no. 6.2.1.

PROPOSAL FOR FINAL CONSIDERATION

Project Fact Sheet

C99 - REGIONAL AFRICA - responsAbility Renewable Energy Holding (rAREH)	
Partner Agency	responsAbility Renewable Energy Holding Company (rAREH)
Executing Agency	rAREH
Sector	Energy generation, renewable sources - multiple technologies CRS Code: 23210
Region	East Africa (Kenya, Rwanda, Uganda, Tanzania)
Budget - NDF - Partner Agency - Other Funders	**(Total capital base after second call) USD 75,000,000** **(Second call) USD 50,000,000** EUR 7,500,000 (≈USD 8,000,000[1]) (responsAbility acting as manager for rAREH) ≈USD 500,000 ≈USD 41,500,000 (First call KfW provided initial capital USD 25 million)
Project Period	2017 - 2025 (project development activities assumed to stop)
Mode of Finance	Shareholder Equity (EUR 7.0 million), Grant (EUR 0.5 million)
Previous Support to Country	Credits: EUR 101.7 million; SDR 21.8 million Climate projects: EUR 73.8 million
Rio Markers	Mitigation: 2 = principal objective Adaptation: 0 = not targeted
Gender Marker	1=significant objective
Climate Screening Satisfied	Yes (mitigation)
Processing Schedule	Pipeline - March 2017 Final - June 2017 Signature- June 2017

[1] Exchange rate 1 EUR = 1.05765 USD

PROJECT SUMMARY

NDF shareholder equity EUR 7.0 million, grant EUR 0.5 million
Project Period: 2017 – 2025 (After 2025 focus on managing the assets)
Partner Agency: responsAbility/rAREH
Implementing Agency: rAREH

Objective
The overall objective of supporting rAREH is to help them increase the renewable energy supply in Sub-Saharan Africa (SSA) with an initial focus on East Africa at a reasonable price and in a responsible way, while generating attractive, long-term, stable cash flows across a diversified portfolio of renewable energy plants.

rAREH has identified a gap in the market. On the one hand, there is an existing and constantly growing demand for the supply of electricity and there is investor interest in the SSA area. On the other hand, the missing link is the availability of small to medium-sized projects that can be implemented and are investable. This means that if you want to invest in small- to medium-scale power plant projects, they need to be built first. Larger companies focus on larger projects creating a niche for smaller projects to be developed that rAREH is ready to capitalise on.

By supporting rAREH, NDF will help rAREH materialise the projects in the pipeline and act as a catalyser for further investments by both other Development Finance Institutions (DFI) and private investors. rAREH's target for 2017 is to raise USD 50 million and by that increase the total capital base to USD 75 million and thereby be able to develop around 100MW of projects and invest USD 65 million in equity. The long term goal is to have a capital base of USD 250 million which rAREH aims at reaching in 2020.

The following outcomes are expected
- Access to affordable clean energy
- 610,000 MWh/year of renewable electricity produced and fed into the local/national grid
- Taxes paid by the local project companies benefitting the community
- Jobs created during both the construction phase and also during operation of the energy assets
- Climate stability by reducing the carbon intensity of energy. 350,000 tons of CO^2 avoided P/A.

Financing
The target for this second capital raise is USD 50 million. NDF is providing EUR 7.0 million (≈USD 7.4 million) in shareholder equity and EUR 0.5 million (≈USD 0.5 million) in grant for Technical Assistance (TA) while responsAbility provides USD 0.5 million and other investors about USD 41.5 million in shareholder capital.

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ABBREVIATIONS

CSR	Critical Situation Report
DFI	Development Finance Institution
ESMS	Environmental and Social Management System
ESRP	Environmental and Social Review Procedures
EPC	Engineering, Procurement and Construction
IFC	International Finance Corporation
KfW	Kreditanstalt für Wiederaufbau
NDF	Nordic Development Fund
rAREH	responsAbility Renewable Energy Holding Company
REPP	Renewable Energy Power Plants
SSA	Sub-Saharan Africa
SDG	Sustainable Development Goals
SPV	Special Purpose Vehicle
TA	Technical Assistance
WB	World Bank

1. INTRODUCTION AND PROJECT BACKGROUND

This proposal seeks final approval from the NDF Board for EUR 7.5 million consisting of EUR 7.0 million in equity and EUR 0.5 million in grant finance for technical assistance, to support the responsAbility Renewable Energy Holding Company (rAREH).

responsAbility is a USD 3 billion impact asset manager based in Zürich with a dedicated focus on emerging market investments. responsAbility employs about 250 people in 20 offices around the world and manages 12 investment solutions in the financial, energy and agriculture sectors, which invest in fixed-interest securities as well as equity investments. responsAbility now intends to raise an additional USD 50 million for rAREH. responsAbility itself directly holds 1% of the capital of the company and will maintain a 1% participation until a capitalisation of USD 150 million has been reached.

rAREH is a limited company and was established in 2013 with an initial USD 25 million investment from KfW that is expected to be fully committed during 2017. It has a 15-strong Nairobi-based team with experienced investment professionals, project developers and engineers who have built a strong pipeline of 14 projects representing 173 MW of solar and hydro energy. Two projects have reached financial close. Thirteen out of the 14 projects in the pipeline are located in East Africa, which is a focus area for NDF. Furthermore, the board has approved a development budget for six projects to the amount of USD 7.5 million. The proceeds of the current capital raise would be used to fund the development, investment in and construction of projects in rAREH's expanding pipeline.

There is a Management Agreement between responsAbility (the Manager) and rAREH (the Company). Please see annex 1 for the current rAREH structure.

rAREH's mission is to increase the renewable energy supply in Sub-Saharan Africa (SSA) with initial focus on East Africa at a reasonable price and in a responsible way, while generating attractive, long-term, stable cash flow across a diversified portfolio of renewable energy plants. The aim is to develop, own and operate renewable energy infrastructure projects in SSA, with scope for both significant returns and positive social impact.

NDF can play an important role in rAREH at this early stage. By contributing equity and grant funds for TA now, it will help rAREH materialize projects in its pipeline and, maybe even more importantly, show the way for other investors and in that way leverage private capital.

In December 2016, NDF joined a joint Due Diligence mission with KfW and Norfund to visit rAREH in Nairobi and one of the projects in the pipeline in Rwanda. A follow-up meeting with the same stakeholders was held in Zürich in February 2017.

2. RELEVANCE AND RATIONALE

2.1. Project Relevance

The natural resources needed for energy production - biomass, water and the necessary river gradients, geothermal heat, wind, and in particular solar radiation - are available in abundance in Africa. It is therefore not surprising that Africa is increasingly looking at these resources to generate more power. While currently the share of renewable energy in power production in Africa is still small, it is expected to grow significantly. Around 600 million people in SSA still have no access to electricity, despite the fact that the region's economy is growing. (Between 2000 and 2014, countries in SSA achieved average annual GDP growth rates of 5%).

Energy demand in East Africa is expected to grow by 5.3% annually to 2020. Projections indicate that capacity will have to grow by 37.7% in Uganda, 75.3% in Tanzania, 96.4% in Kenya and 115% in Rwanda to keep up with demand. In 2015, electricity access was less than 22% in East Africa.

Demand for supply of electricity exists, as does the legislative framework for investment. In Kenya, Rwanda and Uganda, the governments want to support the production of renewable energy and are therefore providing price guarantees for renewable electricity. As a result, the investments will generate reliable returns over 20 or 25 years.

The potential of smaller-scale projects in the area of renewable energy in SSA is vast. Such projects can make a significant contribution towards supplying rural areas with electricity. At the same time, they are of a manageable size - making them easier than large plants to develop, finance and construct, while at the same time having less of an impact on the environment.

Considering the facts above, rAREH is well-placed to seize the opportunity to develop, finance, construct and operate small- and medium-scale renewable energy projects.

By partnering with rAREH, NDF would enable rAREH to expand its portfolio and take a long-term approach to develop renewable energy supply in SSA. With a capital base of USD 75 million, rAREH is projecting to develop around 100 MW of projects and invest USD 65 million in equity.

rAREH's intention is to create significant long-term social and environmental benefits, including: **access to clean energy, reliability of electrical supply, carbon emission reductions, elimination of bottlenecks and mobilisation of capital, development of local capacity, empowerment and job creation.**

2.2. Relevance to NDF's Mandate and Strategy

This proposal will address the energy need existing in SSA and the individual countries' targets of generating 50% of the energy from renewable sources by 2030. Focus is on identifying both new and existing projects with renewable energy and investment potential that otherwise would not materialise. The proposal reflects the core of NDF's mission and strongly captures several of the underlying strategic focal areas, including:

Catalytic Role and Leverage: KfW and Norfund are positive to the idea of investing in rAREH. However, Norfund have said they will only go in if there is another investor in addition to KfW. NDF could fill that role and thereby leverage Norfund's investment. KfW have also conditioned their second investment on the participation of additional financiers, which means that an NDF investment could leverage both KfW and Norfund investments immediately. Swedfund has also shown interest and may be interested in coming on board in 2018 once other Nordic participation is locked in. Once rAREH is making profits and paying dividends, private sector investors are likely to come in as shareholders. The first profits are currently expected to be in 2020 and dividends in 2023. Profits between 2020 and 2023 will be reinvested in the company. rAREH's goal is to raise USD 250 million by end 2020, of which more than USD 50 million would come from the private sector. NDF would at this early stage play a critical role in helping rAREH reach its target. From a mathematical perspective, NDF could with its preliminary ownership percentage of 11% claim a direct catalytic impact of at least EUR 5.5 million from private investors and EUR 22 million from other public investors. On a local level, NDF's funds will leverage more local developers to be partners in the projects.

Project Preparatory Funding: rAREH has taken on a role as a developer given the lack of development finance and expertise for small to medium-sized renewable energy production in SSA. Therefore, an investment would provide upstream funding to help realise existing opportunities as well as identify new opportunities. The TA funding would provide additional upstream work for the identification of renewable energy production.

Support for Innovation: Clean and renewable energy production of this kind (small and medium-sized) provides great opportunities to try new technologies and set-ups, including with local participation in development and operation. Local populations can benefit greatly in addition to the energy supply, as rAREH develops community involvement plans, hiring plans, etc.

Support for Private Sector Development and Emerging Climate Change Issues: Once rAREH can show profit, and is able to pay dividends, private sector investors looking for long-term holdings, such as pension funds and (re-)insurance companies, are likely to show interest in rAREH. NDF funding would therefore leverage private sector investment. Furthermore, the investment is in Special Purpose Vehicles[2] (SPV) for private sector development and operation of renewable energy production.

In addition, this proposal addresses NDF's financials due to the nature of an equity investment and dividend distributions that would strengthen NDF's financial resources.

As all projects are focusing on renewable energy, the proposal is well-aligned with NDF's climate mandate with mitigation being the principal objective.

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[2] A special purpose vehicle (SPV) is a subsidiary company with an asset/liability structure and legal status that makes its obligations secure even if the parent company goes bankrupt and is usually created to fulfil narrow, specific or temporary objectives.

Gender aspect: It is in the hiring plans that rAREH can make the most concrete and quantifiable efforts to include women. rAREH indicated that they are increasing the focus on promoting women and vulnerable groups in the hiring plans, and NDF asked them to include clear targets (in figures) for women and vulnerable groups in the hiring plans. Based on a capital base of USD 75 million, the target in 2023 is to create 3,500 jobs in project companies during construction and 114 jobs in project companies during operation. Furthermore, 7,300,000 people will be using electricity generated by the project companies, leading to more clean energy available and better indoor air quality, mostly benefitting women.

3. THE PROPOSED PROJECT

3.1. Objectives

responsAbility's mission is to bring together responsible-minded ("responsible") investors with companies (in this case rAREH) that can ("ability") make positive contributions to social development.

Before small- and medium-scale energy projects can be financed in Africa, they must first be developed. This requires financial resources and, above all, expertise.

The objective is to open the way to more power for the region and to ensure a sustainable supply of renewable energy at fair prices for the growing population while, at the same time, providing stable long-term income for investors from a diversified portfolio of power plants.

3.2. Project Activities

NDF aims at partnering with rAREH by investing both equity and grant financing.

1. **Shareholder equity (EUR 7.0 million) to become shareholder in rAREH**

The equity financing would enable rAREH to expand its portfolio and take a long-term approach to develop renewable energy supply in SSA. At the moment, early and mid-stage small to medium-sized projects with capacity up to 50MW offer particularly attractive investment opportunities, given the shortage of developers and investors in that space for SSA and the strong demand for investment-ready projects.

The region has few readily investable small-scale renewable energy projects and few operation and maintenance providers for small-scale renewable energy power plants. Therefore, rAREH invests in its own greenfield projects. In addition, the company has in its current pipeline projects co-developed with six different local private developers. These projects are expected to generate about 70 MW at a total cost of about USD 100 million. rAREH may (to a minor extent) also acquire operating renewable energy plants (brownfield investments).

Regardless of the projects' development stage, rAREH's intention is to create significant long-term social and environmental benefits, including:

- Access to clean energy, reliability of electrical supply, carbon emission reductions, elimination of bottlenecks and mobilisation of capital, development of local capacity, empowerment and job creation.

NDF's equity financing will more precisely be used for investing in the equity portion of projects that rAREH is involved in. That typically means setting up an SPV, usually comprising of 30% equity and 70% debt (in some cases even 100% equity), which will own and operate the assets once they are fully developed. rAREH aims at holding the whole equity portion.

2. **Grant (EUR 0.5 million) to the Technical Assistance (TA) Facility**

The TA Facility is established to mitigate the shortcomings of renewable energy generation markets, which rAREH is facing when developing and investing in renewable energy power plants in SSA, and to facilitate access to know-how and expertise for local promoters. KfW has provided initial capital of EUR 1.5 million and the additional funding need is expected to be EUR 5.5 million for the next five years.

The beneficiaries of the TA facility are the SPVs rAREH intends to invest in. As per TA policy, projects supported by TA and that reach financial close[3] will repay the TA support at financial close, making the TA facility a revolving fund. However, as there will inevitably be some projects that will not be able to reimburse the costs, the funds will eventually deplete. For that reason, and also as it takes time for the SPVs to start generating positive cash flow, there is a need for TA funds.

The TA Facility's objectives are to build capacity with local promoters and financial institutions and to support the development of renewable energy projects rAREH will potentially invest in. This support is key in the early stages of the project development, in order to ensure robustness of the pipeline. The TA will be tailored to the needs of each project, seeking to provide the minimum subsidy needed to enable such projects. End beneficiaries of both the project output and taxes paid are the countries where the projects are located.

Examples of assistance provided from the TA Facility:

- Support early stage project preparation (e.g. geotechnical study, hydrology study, etc.)
- Pre-feasibility and feasibility study
- Enhancement/improvement of existing studies

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[3] Stage in a financial agreement where conditions have been satisfied or waived, documents executed, and draw-downs become permissible.