# **EEP AFRICA TRUST FUND** Annual Report 2020







**Cover Photo:** Biodigesters transform organic waste into electricity and thermal energy that can power productive use and clean cooking. They also produce organic fertiliser, which increases crop yield. Sistema.bio is working with smallholder farmers in Kenya to address the challenges of poverty, food security and climate change through its modular biodigesters, productive use appliances and consumer financing options.

Female farmer from Kericho county next to her eight cubic meter Sistema.bio digester. 2018. Copyright © Sistema.bio. All rights reserved.

EEP Africa is hosted and managed by the Nordic Development Fund (NDF) with funding from Austria, Finland and NDF.

Austrian
 Development
 Agency





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# WELCOME FROM THE SUPERVISORY BOARD CHAIR



Dear Friends,

In 2020, EEP Africa celebrated its 10-year anniversary. Finland is proud to have been involved since the very beginning and remains a committed funder.

Looking back, the Energy and Environment Partnership (EEP) was launched in Southern and East Africa in 2010 by the Governments of Finland and Austria. This was the fifth regional EEP programme created by Finland. The idea behind all EEPs was to support innovative business models that could be scaled up to bring access to clean energy to off-grid and marginalised people and communities, while also mitigating climate change.

Over the years, EEP Africa matured and eventually transformed into the present-day multi-donor trust fund. It now covers 15 countries and has invested over EUR 50 million grant funding in 274 projects, which have mobilised over EUR 227 million from public and private financiers. Today it is the only one of the EEP programmes to remain active. This is due partly to the still high energy access gap in the region and partly to the successful implementation of the fund and high demand for its financing.

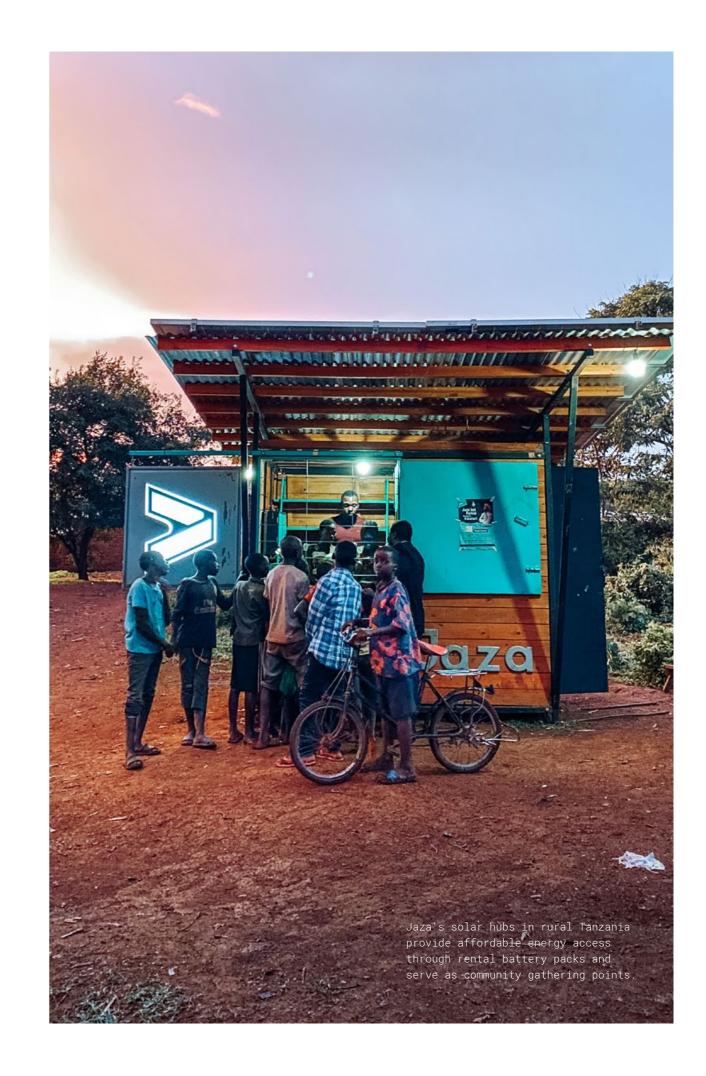
In its 10<sup>th</sup> year, EEP Africa is hosted and managed by the Nordic Development Fund (NDF) with continued funding from Finland and Austria, as well as NDF. According to a recent evaluation, the fund's valueadded is perceived as its willingness to take risks and invest in early-stage companies and unproven technologies or business models. EEP Africa has had a significant impact by increasing access to sustainable energy, especially to last-mile customers, while achieving several climate and other co-benefits, including job creation, income generation and women's entrepreneurship.

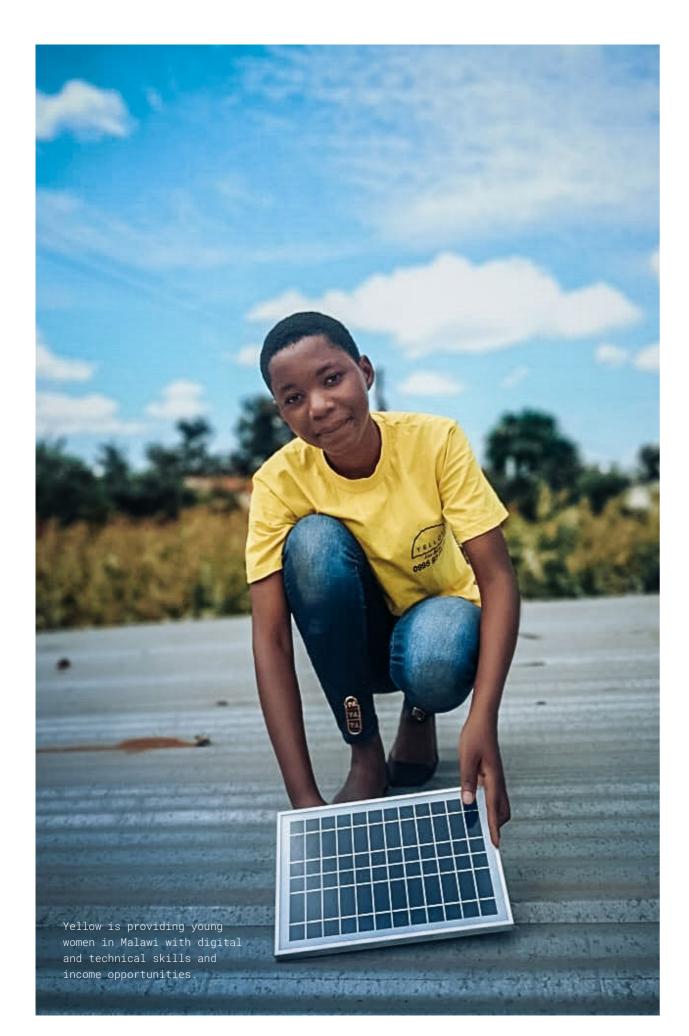
Climate change mitigation and adaptation are high priorities in Finnish foreign policy. The Government of Finland is committed to achieving a carbon-neutral circular economy by 2035 and recently launched a new Africa strategy that recognises the importance of the continent, and its 54 diverse countries, as a partner for green recovery and sustainable development.

It is clear that EEP Africa will remain very relevant for us in the coming years. We also seek to welcome other donors on board to help meet the substantial demand for early-stage financing and business support.

We look forward to the exciting future of the EEP Africa and the continued success of its project developers who, despite the increased challenges posed by the Covid-19 crisis, are leading the clean energy transition.

**Jan Wahlberg** Ambassador for Climate Change Ministry for Foreign Affairs of Finland





# MESSAGE FROM THE FUND MANAGER



Dear Partners and Friends of EEP Africa,

2020 was a challenging year for all of us. The unexpected circumstances introduced a heavy burden, especially on those whose livelihoods depend on free movement of people and goods. Early stage clean energy companies are no exception. Such times call for added flexibility from financiers, as well as creativity and perseverance from entrepreneurs. NDF has been impressed by the exceptional results and progress demonstrated by some of the EEP Africa portfolio companies in 2020 and is pleased by the fact that the Covid-19 pandemic did not bring any project to an abrupt end.

Regardless of the unconventional year, EEP Africa reached some significant milestones in 2020. We launched a call-for-proposals emphasising clean energy solutions for circular economy and productive use that attracted more than 350 applications. Both women-led companies and local entrepreneurs were encouraged to apply and we were excited to see them well represented in the final project selection.

The first EEP Catalyst loan was signed in May with REDAVIA. The new injection of financing enables REDAVIA to accelerate the clean energy transition in the commercial and industrial sector and scale up solar farm installations in Ghana and Kenya.

The first external EEP Africa impact and performance evaluation under NDF management was completed in the end of 2020. The results were encouraging and confirmed EEP Africa's niche as a much needed earlystage risk taker for unproven businesses, as well as an appreciated investment facilitator. The evaluation also highlighted that EEP Africa should constantly adapt to the needs of the market to keep that edge and work more through partnerships for enhanced success.

NDF fully supports the findings of the evaluation and, together with the donor family, is motivated to continue the evolution of EEP Africa as an effective instrument for enhancing energy access and for supporting small and medium sized enterprises (SMEs) in developing solutions for the climate and development challenges. EEP Africa is well-aligned with NDF's refreshed strategic direction and will continue to be an important part of our holistic approach to climate financing.

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Leena Klossner Deputy Managing Director Nordic Development Fund

# **ABOUT EEP AFRICA**

In 2020, the Energy and Environment Partnership Trust Fund (EEP Africa) celebrated 10 years of financing for early-stage clean energy projects in Southern and East Africa.

EEP Africa invests in companies that are piloting or deploying sustainable technologies and business models with the potential to transform lives and livelihoods. An impact evaluation of the fund conducted in 2020 confirmed that EEP Africa's valueadded is its' willingness to take risks and invest in early-stage and unproven technologies and business models. In recent years, this has included an increased focus on supporting local and women-led companies.

EEP Africa has been a driver of the clean energy transition in Africa since 2010, investing over EUR 50 million in 274 pioneering projects across 15 countries. The overall objective is to enhance clean energy access, development and investment, with a focus on benefiting poor and underserved groups.

**EEP AFRICA CONTRIBUTES TO THE PARIS** CLIMATE AGREEMENT AND SUSTAINABLE **DEVELOPMENT GOALS THROUGH THREE CORE ACTIVITIES:** 



# 9,450 Direct jobs created $\sum$

llion People with improved energy access

# 1.475 million tonnes of CO2e reduced/avoide



## Knowledge, Policy & Partnerships

EEP Africa 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.



The EEP Innovation window provides early stage grant financing to projects in active development through competitive, open calls for proposals. The EEP Catalyst window is piloting follow-on debt financing to a few successful grantees with the purpose of closing financing gaps and crowding-in new investors.

As an early investor, enabling entrepreneurs to achieve proof of concept, EEP Africa is a catalyst and facilitator for future funding. More recently, it has evolved to directly help entrepreneurs bridge the gap to commercial capital through the launch of a new funding window that provides follow-on debt financing to successful grantees. In 2020, the first loan under the new EEP Catalyst window was signed with REDAVIA and a second loan was in the pipeline.

EEP Africa is a multi-donor fund that is hosted and managed by the Nordic Development Fund (NDF). Funding for the current portfolio comes from the Austrian Development Agency, the Ministry for Foreign Affairs of Finland and NDF.

### **Clean Energy Financing**

### Investment Facilitation and **Business Development Support:**

EEP Africa improves the investment readiness of projects through targeted business support services and by facilitating linkages with the global investor community.

The ACE One is an advanced cookstove produced by Africa Clean Energy with integrated smartphone technology to track usage and payments.

portfolio coordination hubs. The Fund headquarters are in Helsinki, Finland.

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# $\bigcirc$ Locations of EEP Africa



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Countries covered by EEP Africa: Botswana, Burundi, Eswatini, Kenya, Lesotho, Malawi, Mozambique, Namibia, Rwanda, South Africa, Tanzania, Seychelles, Uganda, Zambia, Zimbabwe

# **2020 MILESTONES**



**CLEAN ENERGY FINANCING** 

# **Powering Green Growth Call**

The theme of the 2020 EEP Innovation window call for proposals was Clean Energy Powering Green Growth. The call focused on advancing productive use of clean energy and harnessing clean energy for circular economy solutions. A total of 357 concept notes were submitted for projects in 14 of the EEP Africa countries. The total amount of financing requested was EUR 123 million, with a median grant request of EUR 340,000.

# 26 New Innovation **Grants Awarded**

EUR 8.3 million in grant funding was committed to 26 companies through the 2020 call. The projects approved for financing encompass a diverse range of productive use and circular economy solutions. Many of the projects are in the pilot or demonstration stage, highlighting EEP Africa's role as an early-stage financier willing to take risks on new technologies and business models. The new portfolio includes strong representation from local and women entrepreneurs.

# **First Catalyst Loan** Signed

The first loan under the new EEP Catalyst window was signed with REDAVIA. EEP Catalyst is designed to provide follow-on debt financing to successful companies from the grant portfolio and finance the scaling of the next generation of clean energy market leaders in Africa. The EUR 1.5 million loan will accelerate scale-up of REDAVIA's solar leasing model with C&I and SME clients in Ghana and Kenya.



# **INVESTMENT FACILITATION**

# **Financial Training** and Modelling

Strong financial management is a foundation of growth and commercial sustainability, but many start-ups and early-stage companies struggle in this area. EEP Africa conducted training on financial accounting, budgeting and forecasting, as well as how to use scenario planning to navigate challenges and support effective decision-making. EEP Africa also partnered with the IFC Lighting Global Group to improve commercial viability through the Path to Profitability (P2P) tool. The P2P enables off-orid solar companies in emerging markets to evaluate their pricing, margins and cost structures in order to achieve last-mile operating unit profitability at scale.

# **Response to** Covid-19

In response to the market upheavals caused by Covid-19, with rapid analysis of the their operating environment. provided the companies with actionable recommendations on how to mitigate the most business plan to adjust to the Energy Access Relief Fund.

I am delighted to see more and more creative instruments being initiated. EEP Africa, among others, is filling the gap for financing of high-risk transactions and significantly contributing to SDG 7.

EEP Africa to this day plugs a key gap in the financing landscape. This [Investment Forum] was a great opportunity for companies and financiers to engage in times of COVID. Michael Franz, GET, invest Team Leader

EEP Africa supported grantees most significant challenges in Sector-specialised consultants urgent problems and revise their changed landscape. EEP Africa also participated in a technical assistance working group for the

## **Clean Energy Investment Forum**

EEP Africa, in cooperation with GET.invest, hosted a virtual event to catalyse investments in private sector clean energy development. This invitation-only event brought together 50 global and regional investors, representing a diverse investment spectrum of equity, debt, grant and impact investors. A group of 25 marketready companies working in Sub Saharan Africa were invited to pitch their investment needs through matchmaking sessions, offering investors a prescreened pipeline of high impact projects.



## **KNOWLEDGE SHARING**

# **Case Study on** e-Mobility in Uganda

Zembo, a start-up company revolutionising the motorcycle taxi market in Kampala, was featured in the EEP Africa case study Electric Boda Bodas. Since 2018, Zembo has put 200 electric motorcycles on the road and built a network of recharging stations using a PAYG battery swap model. This clean energy solution is achieving high impact by reducing GHG emissions and pollution while creating green jobs. Through this pilot project, Zembo developed a partnership with the Kampala city authorities that has added e-bikes to the municipal fleet and is providing training and jobs for local youth.

# **Market Report on Productivity and** Circularity

The EEP Africa 2020 Market Report focused on the rapidly developing areas of productive use of energy (PUE) and circular economy. Data from the call for proposals and active portfolio show an evolution in the sector from simply providing energy access to an increased focus on how the energy is used. The report also looked at impact of Covid-19 on early-stage projects and the need for the clean energy sector to be more inclusive for local, women and youth entrepreneurs.

# In-depth Study on Climate Co-**Benefits**

The flagship EEP Africa publication in 2020 was Energising Resilience, a study of climate adaptation and resilience co-benefits achieved through clean energy projects. The study identified climate co-benefits at community and household levels throughout the portfolio, with the greatest impact found in promoting agricultural resilience, strengthening local value chains, building resilient infrastructure and enhancing local self-reliance. The study recommended a more holistic approach to climate financing to capitalise on the synergies between mitigation and adaptation.

## Virtual **Knowledge** Week

EEP Africa organized a series of virtual events to showcase innovative companies and lessons learned from our portfolio around the themes of climate resilience, circular economy and productive use of energy. About 200 people tuned in to hear insights from project developers, investors, donors and technical experts working in the clean energy sector in Africa. The event also celebrated EEP Africa's 10<sup>th</sup> anniversary of operations and the 2020 winners of EEP Africa's Project of the Year and Rising Energy Leader awards.

# Impact and Performance **Evaluation**

An Impact and Performance Evaluation of EEP Africa was completed in 2020. The evaluation team conducted close to 60 stakeholder interviews and over 1,500 interviews with end users. The main findings confirmed that EEP Africa's activities are perceived as relevant with the key added value being the Trust Fund's willingness to invest in early-stage and unproven businesses.

EEP Africa has had a significant impact by increasing access to sustainable energy, especially for last-mile customers, while achieving several climate and other co-benefits, including job creation, income generation and women's entrepreneurship to name a few. Jan Wahlberg, Finnish Ambassador for Climate Change

We are pleased to see that despite the unexpected challenges of 2020, EEP Africa has remained fully operational and continued to contribute to the growth and development of the clean energy sector. As the recent impact evaluation points out, EEP Africa's interventions generate positive changes that are now more essential than ever.

Petri Wanner, Chair of the EEP Africa Supervisory Board (2020)



# **FUND MANAGEMENT**

# **Donors Guide Direction of the** Fund

Representatives of the Austrian Development Agency, Ministry for Foreign Affairs of Finland and Nordic Development Fund provided guidance to the Fund by taking active roles in the Innovation Window Investment Committee and the Supervisory Board. The donors were also featured speakers at EEP Africa's flagship investment and knowledge events.

# **INNOVATION PORTFOLIO**

# PORTFOLIO OVERVIEW

In 2020, EEP Africa received 357 applications for funding under its call for proposals on Clean Energy Powering Green Growth. The call focused on advancing clean energy for productive use and circular economy solutions. The Investment Committee approved EUR 8.3 million in financing for 26 projects. The most prevalent themes included agricultural processing and waste-to-energy technologies, solar irrigation and cooling solutions, energy for water and fisheries, and e-mobility.

These join the projects already under implementation from the 2018 open call and 2019 gender-themed call. The result is a combined portfolio of 67 active projects in 14 countries. The total value of the portfolio at the end of 2020 was EUR 86.7 million, with EUR 25.7 million in committed grants and repayable grants from EEP Africa. The projects utilise 11 different technologies and reflect a wide diversity of business models and impact objectives, with a collective goal of advancing the clean energy transition in Africa.

€86.7M Total

project value

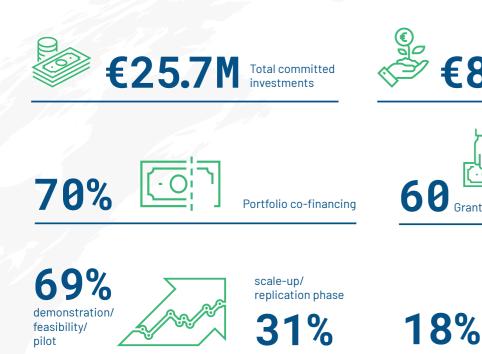
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Repayable

Grants

Mini-grids

### PORTFOLIO FAST FACTS







Burundi

Songa Energy KTF Concept

Eswatini Wundersight Investments

### Kenya

Acacia Innovations EcoZoom EkoRent Africa Micro Energy Credits Mukuru Clean Stoves OVO Solar Technologies Pawame Sanivation Sistema.bio SokoFresh Tiny Totos Tree\_Sea.mals\*

Village Industrial Power

### Lesotho

Nala PayGo African Clean Energy OnePower Lesotho

### Malawi

Green Impact Technologies Kumudzi Kuwale SolarWorks! Yellow Solar Power Wala

Mozambique

Pamoja Cleantech Gommyr Power

Namibia Doranova iDeal-x Taatisolar\*

### Regional Aasol ASOBO Kenya\*

Phaesun Tespack Villageboom

#### Rwanda

East African Power Empower New Energy Empowering Villages OffGridBox Water Access Rwanda\*

South Africa

iLive Plentify Talbot & Talbot Witech Africa

Seychelles Swimsol

### Tanzania

ENdep HannyG Investment Jaza Energy Millennium Engineers\* Mobility for Africa Solar Sister

#### Uganda

EnerGrow Engie-Equatorial Greenlight Planet Mandulis Energy OneLamp The Waste Transformers VAC Solar Zembo

#### Zambia

SupaMoto Mphepo Power Solarworx WidEnergy Africa

### Zimbabwe

Celfre Energy Clamore Solar Powerlive Techno Plus\* Zonful Energy







8|12% Solid Biomass



7 | 10% **Biogas** 



5 8% **Energy Efficiency** 



4 6% Cookstoves



**3** | 5% Hydropower

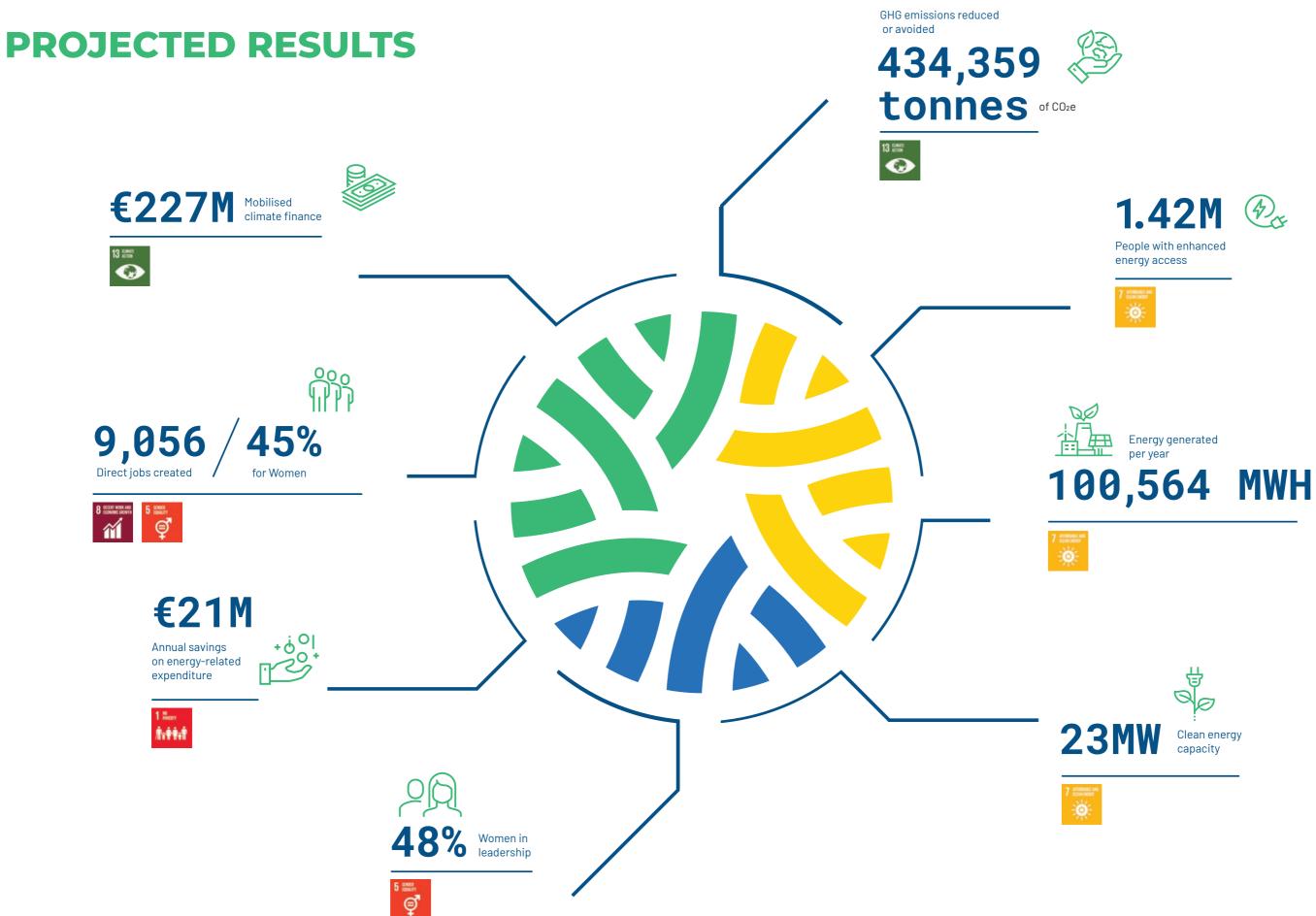
2|3% Multi-technology



1 1% **Biofuels Liquid** 



1 1% Wind





# **NEW PORTFOLIO HIGHLIGHTS**

### HIGHLIGHTS OF 2020 CALL ON CLEAN ENERGY POWERING GREEN GROWTH:

The high number of applications (357) reflects the rapid growth in productive use of energy in the sector, as well as increased focus on circular forms of production and consumption.

Applications were received from companies based in 41 countries, with a significant increase in locally registered companies or social enterprises (79%).

Even without a specific gender focus in the call, 39% of applicants were women-led companies or women entrepreneurs.

The majority of applications (57%) were for pilot or demonstration projects, confirming the need for early-stage, risk-tolerant funding to test new technologies and business models.

Solar PV remained the most popular technology (43%) but the circular economy theme was evident in the 26% that proposed biofuels or other waste-to-energy solutions.

The productive use theme led to a high share of proposals for standalone products or systems (41%), as well as mini-grids (23%) with integrated PUE solutions.



# Cold Storage

Expanding off-grid access to refrigeration and cold storage is critical to reducing post-harvest loss, which improves food security, increases smallholder farmer income, and enhances adaptation to climate change. In addition to catalysing agricultural value chains, solarpowered cooling solutions are vital for safely storing medicine and vaccines at off-grid health clinics. The new portfolio will bring affordable cooling technology to rural customers through projects implemented by **SokoFresh, ENdep, OneLamp, Taatisolar\*, Tree\_Sea. mals\***, and **Phaesun**.





# Agricultural Productivity

Clean energy systems that improve agricultural productivity are critical for smallholder farmers and farmer cooperatives. Products that can be sold on a PAYG or energy-as-a-service model are helping even last-mile customers adapt to climate change and generate income. The new portfolio includes projects that are developing and distributing solar-powered irrigation kits, egg incubators, fishing lamps and drying facilities. These will be implemented by Water Access Rwanda\*, OVO Solar Technologies, Clamore Solar and Millennium Engineers\*.





# Waste-to-Energy

As part of the global shift to more circular economies, companies are developing innovative technologies to transform rural and urban waste into biogas and electricity, as well as organic fertiliser, for local households and businesses. Many of these projects will be implemented in partnership with the local municipality or a primary off-taker. The new portfolio includes waste-to-energy projects by Green Impact Technologies, The Waste Transformers, Witech Africa, Mandulis Energy and Sanivation.







# E-mobility

There is large market potential for electric vehicle (EV) in Africa. Improvements in battery technology and cost have made EVs a realistic option, even in rural areas, and the positive impact of EVs on emissions, air quality and health are attracting government resources and private investment. In the new portfolio, companies focusing on EVs and charging facilities include **EkoRent Africa**'s NopeaRide e-taxis, **Asobo**\*'s electric outboard engines for fishing boats on Lake Victoria, and **Mobility for Africa**'s e-tricycles to help rural farmers bring their goods to market.





Mini-grids are a core part of efforts to increase energy access across Africa. Beyond electrifying households, companies are focusing more on promoting productive use of energy to boost demand and increase the ability to pay in the community. In the new portfolio, developers are integrating productive use into minigrid development by supporting the creation of women-led companies, **OnePower Lesotho**, powering greenhouse aquaculture for fish farming, **Techno Plus\***, establishing a business park, **Gommyr Power**, and turning every customer into a prosumer, **Solarworx**.





# **Clean Cooking**

Accelerating the shift to clean cooking is a highly impactful way to improve health, advance gender equality, reduce pressure on forests and avoid GHG emissions. Companies need to bring biomass pellets and briquettes to new markets at an affordable price. In the new portfolio, the women-led companies **KTF Concept** and **HannyG Investment** will scale-up their fuel production and distribute improved cookstoves to households, businesses and institutions.





# **Energy Storage**

Energy storage is one of the most dynamic areas for growth and innovation in the clean energy sector. Both off-grid and on-grid systems benefit from more efficient energy storage solutions. In the new portfolio, **Tespack** will demonstrate a solar media backpack that can turn any room into a classroom, while **Plentify** will pilot smart devices that can transform household water heaters into intelligent thermal batteries.



# **SUCCESS STORIES**

### **REDAVIA Receives First** EEP Catalyst Loan

EEP Catalyst is an evolution of the EEP Africa platform that builds on a decade of grantmaking to enable scale up of commercially viable clean energy solutions. Flexible early-stage debt is still scarce in the sector and expansion stage loans are needed to support innovation and unlock commercial capital. NDF launched the EEP Catalyst window as a pilot to provide follow-on debt financing to successful companies from the grant portfolio and signed the first loan with REDAVIA in 2020.

"This first EEP Catalyst loan to REDAVIA is a clear demonstration that we can deliver on the new NDF Strategy and its commitment to deliver flexible financing and catalytic impact. It has all the ingredients that define NDF's added value in the Nordic climate financing landscape. It demonstrates our unique mix of financing instruments and capacity to blend and match solutions to support our partners, public or private."

Karin Isaksson, Managing Director, NDF

The EUR 1.5 million loan will support scale-up of REDAVIA's solar leasing model toward commercial and industrial (C&I) clients, as well as small and medium-sized enterprises (SMEs), in Ghana and Kenya. REDAVIA clients benefit from a cost-effective and reliable clean energy solution with minimal upfront investment and no technical skills required.

EEP Catalyst financing will enable REDAVIA to contribute to green growth by installing 1.26 MWp and generating 1700 MWh/year of clean energy. The shift among SME and institutional clients to lower cost, clean energy consumption will lead to savings of USD 20,000 per year in energy expenditures and reduce or avoid GHG emissions by 730 tCO<sub>2</sub>e annually.





This loan builds on EEP Africa grants in 2015-2018 that enabled REDAVIA to develop its solar farm concept in Tanzania. The system is a pre-configured model, including high performance solar modules and electrical components, that is easy to ship, set-

"EEP Africa is one of REDAVIA's longest funding relationships and this transaction proves again that long-term, trust-based relationships are the key to meeting today's challenges. This crucial funding enables REDAVIA to continue to support companies in Ghana and Kenya with affordable, clean power so these businesses build local wealth and increase employment Erwin Spolders, CEO, REDAVIA

> REDAVIA deployed a carport solar farm at an inspection and testing facility in Ghana's main harbor.

### Companies Building Climate Resilience

Access to clean energy is generally approached through the lens of climate change mitigation. However, the potential for clean energy to support climate adaptation and resilience is robust and, in some cases, even stronger than the linkage to mitigation.

In its 2020 study, Energising Resilience, EEP Africa explored some of the climate co-benefits achieved through early-stage clean energy projects and found examples at community and household levels especially in the areas of:

- Promoting agricultural resilience and strengthening local value chains through clean energy for irrigation, cold chain, agricultural processing and food preservation.
- Building local self-reliance and resilient infrastructure through clean energy for municipalities, social services, local production and transportation.

"The private sector has an important role in scaling solutions, products and technologies, and there is an actual business opportunity in developing new market segments. Investments towards resilience increase business value and produce positive returns for companies, financiers and investors." - Isabel Leroux, NDF

The study showcases six projects supported by EEP Africa that are producing climate resilience cobenefits through clean energy.



### Cold Chain Technology Reduces Food Loss

InspiraFarms' solar-powered cold storage technology and post-harvest handling facilities offer cost-effective, first-mile solutions for farmers and agribusinesses. On-farm cooling solutions reduce food losses, strengthen agricultural value chains and open opportunities for addedvalue products.

### Solar Rain Makers Enhance Food Security

SunCulture's solar water pumps and irrigation systems enable farmers to access a steady supply of water, engage in precision irrigation and store energy to power lights and appliances. The company's Pay-as-You Grow business model is increasing crop yields at an affordable price, helping to reduce food insecurity and increase farmer income.





### Dung to Table: Biodigesters for Sustainable Farming and Cooking

Sistema.bio's modular and easy-to-install biodigesters enable small-scale farms to convert organic waste into biogas and fertiliser. This waste-to-energy solution reduces GHG emissions and household expenses while improving health and increases self-reliance for rural farmers.

#### Mini-grid Brings Light and Opportunity

Ensol's solar PV mini-grid with integrated storage capacity brings reliable electricity and resilient infrastructure to remote, off-grid communities. In addition to households, the system supports the local school, health clinic, agri-processing facilities, shops and entrepreneurs.



**Cleaner Air in Schools While Saving Trees** Acacia Innovations' low-carbon biomass briquettes are sold to schools and small businesses. Each tonne of Kuni Safi briquettes sold is estimated to save 25 trees, and clean cooking in schools has a positive impact on health, safety and educational achievement.





### Hubs for Solar Energy and Clean Water

OffGridBox's solar-powered all-in-one containers provide off-grid communities with clean water and renewable energy. The durable boxes can be quickly and easily installed, making them a good solution also for disaster response and humanitarian missions.

### New On-Grid Solar Plant in Burundi

An international jury of experts selected **Gigawatt Global** as the 2020 EEP Africa Project of the Year for its 7.5 MW grid-connected solar PV plant in the Gitega province of Burundi. This project was chosen by the jury due to its significant impact as the first power plant to be built in Burundi in more than 30 years. The solar plant will increase installed capacity in the country by 15%.

Gigawatt Global has secured a 25-year Power Purchase Agreement (PPA) with the Government of Burundi, becoming the first non-diesel Independent Power Producer (IPP) in the country. In 2020, the project completed financial close and began construction. Through collaboration with partners, including the public utility Regideso, Gigawatt managed to continue building the plant during the Covid-19 pandemic, creating over 250 jobs for local labourers.

"Gigawatt Global deserves the award for pulling off a remarkable project in a challenging market that had no previous renewable energy IPP projects. Their contribution to the total installed capacity in Burundi will have a strong impact on the country's development." Aleksi Lumijärvi, Chair of the Award Jury

Burundi is one of the world's poorest countries and 92% of the population live without electricity. Expanded access to clean energy will stimulate desperately needed economic growth and opportunity.

The Project of the Year award recognizes outstanding achievement by an EEP Africa portfolio company. Gigawatt Global received a grant from EEP Africa in 2015 for the plant's feasibility study. This earlystage financing was crucial to reducing risks for this ambitious project and enabling it to move forward.

"The patience and flexibility of EEP Africa enabled us to have the resources and risksharing to get to the finish line." Dr. Hanna Klein, VP Project Management and Research, Gigawatt Global



- JAZA ENERGY for scaling-up a network of women-operated solar energy hubs that provide battery rental packs in Tanzania.
- **TINY TOTOS** for a pilot project to increase access to clean energy financing and
- YELLOW for scaling-up women's digital inclusion through a solar home systems
- solar company in Zimbabwe and adapting its business to better meet the needs of its

- African Guarantee Fund: Nishdeep Sethi, Acting Group Head of Structured Finance
- EACREEE: Michael Kiza, Programme

## **Rising Energy Leaders**

In 2020, EEP Africa launched a new Rising Energy Leader award to shine a spotlight on young professionals who are leading the clean energy transition in Africa. Nominees were asked to demonstrate a strong commitment to advancing clean energy solutions, significant professional growth or achievement in the sector, and ambitious goals for the future.



The inaugural group of awardees were:





### PRISCILLA SANI-CHIMWELE Founder & CEO, Wala Ltd. (Malawi)

After a decade working for UN and other development agencies at regional and international levels, Priscilla decided to return to Malawi and focus on addressing the needs of her own country. She founded Wala to increase access to solar-powered technologies for irrigation and agricultural processing. Priscilla is also active in national development processes and championed clean energy strategies on the Youth Core Advisory Panel for the Malawi 2063 national plan.

"I had a skillset that I had gathered over my years with the UN. I just had to take that skillset and apply it to a local context to fulfil my life's mission." - Priscilla Sani-Chimwele

### ELANA LAICHENA

Founder & CEO, Acacia Innovations (Kenya) Elana began her career in green community development in New York. After moving to Kenya, she saw the huge impact of clean cooking on efforts to recycle waste, reduce deforestation and improve health. She also identified the untapped potential of selling briquettes to schools and she created Acacia to fill this gap in the market. Within four years, Acacia has sold over 6,000 tonnes of Kuni Safi briquetts to 500+ schools and businesses.

"Most school owners and school cooks had never heard of briquettes. But schools are where many children in Kenya get the majority of their nutrition." - Elana Laichena



### CLEOPHAS AHISHAKIYE Operations Manager, MeshPower (Rwanda)

Cleophas grew up without electricity in rural Rwanda. After high school, he volunteered for a trial of solar lighting kits in his village, leading him to pursue a career in rural electrification. He joined the mini-grid start-up MeshPower during college and has since risen to Operations Manager, with oversight of all day-to-day field operations and direct management of special projects, such as minigrids for refugee camps.

"We had no access to electricity at all and I faced a lot of negative impacts in my studies and health, [but] being open to taking on new tasks and trying new things are my key defining characteristics." - Cleophas Ahishakiye





### ESTHER ALTORFER Managing Director for East Africa, Sistema.bio (Kenya)

Esther started out in impact investment in Europe and Latin America. She developed a passion for clean energy financing as a means to address the challenges of poverty, food security and climate change. Esther joined Sistema.bio when it was a biodigester start-up in Mexico. After helping launch its first international subsidiary in Nicaragua, she now leads the company's operations serving smallholder farmers in East Africa.

"I consider climate change as being the umbrella problem. By focusing on climate change, we can actually solve many other problems, including empowering women." - Esther Altorfer

### MAYA KHONJE-STEWART

### Co-founder & COO, Yellow (Malawi)

In response to the high level of energy poverty in her country, Maya has dedicated her career to promoting and disseminating cookstoves and solar products. She first founded Maeve Project, a clean cooking NGO, and then Yellow, a company that has grown into the largest distributor of solar home system in Malawi. In all her work, Maya emphasises an inclusive approach to energy access that provides opportunities for rural women and fosters local empowerment.

"We need to come together with all our special strengths and push towards one agenda of creating access to sustainable energy with no one left behind." Maya Khonje-Stewart

# **MEASURING IMPACT**

### KEY TAKE-AWAYS BY OECD-DAC CRITERIA:

Impact and Performance Evaluation		OECD-DAC criteria	Key take-aways
<b>EVALUATION</b> In 2020, NDF contracted Altai Consulting to conduct an evaluation to assess the Trust Fund's impact and performance, gathering lessons learned from the past and providing recommendations for the future. The evaluation team interviewed 32 EEP Africa project developers and 27 stakeholders (including associations, investors, donors and government officials) to understand the fund's impact in the clean	They enabled the proof of concept behind certain transactions. If a company with EEP financing lands on my desk, it makes the lead more serious. - Stakeholder1 Knowledge and Partnerships: EEP Africa is a relevant source of sector knowledge but there is room for improvement on dissemination.	RELEVANCE	<ul> <li>EEP Africa's core value-added is businesses and unproven model</li> <li>Investor events are relevant and developers, but business develo</li> <li>EEP Africa has relevant knowled there is a need for more coopera sector</li> <li>EEP Africa will have to keep adap companies, profile of entreprene</li> </ul>
energy sector in Africa. The team also carried out a survey of over 1,500 end users of companies financed by EEP Africa, representing the core technologies of solar home systems, clean cookstoves and mini-grids.	A facility like EEP that is European and pan-African and putting out knowledge products provides visibility for companies Stakeholder22 End User Impact: The research provided evidence	EFFECTIVENESS	<ul> <li>EEP Africa has successfully built the market</li> <li>The impact EEP Africa's support testifies to its contribution</li> <li>EEP Africa is a catalyst for follow of an ecosystem that has helped radional</li> </ul>
The results of the evaluation show EEP Africa performs well and provide evidence that EEP's interventions generate positive change at the outcome and impact level. <b>Clean Energy Financing</b> : EEP Africa has been a	<ul> <li>supporting EEP Africa's theory of change.</li> <li>The new energy solutions are overwhelmingly adopted by customers and lead to a reduction in the use of other sources.</li> <li>Most customers report savings on energy expenses.</li> </ul>	EFFICIENCY	<ul> <li>Entrepreneurs mostly praise the issue mentioned by entrepreneu</li> <li>Customers interviewed during the money for the clean energy solution</li> </ul>
<pre>key player in financing pioneers and early-stage companies in the renewable energy and energy access space in Southern and East Africa. They focus on a part of the development stage where there is a real shortage of funding. Their grant funding replaces early-stage equity funding, which allows companies to get out of the starting block Stakeholder19</pre>	<ul> <li>The studied solutions mainly provide households with access to clean energy, but clean energy can have significant knock-on economic impacts when it can be applied to productive use.</li> <li>Many customers report improved access to light as a benefit that improves children's ability</li> </ul>	IMPACT	<ul> <li>The research provides evidence to energy and savings on energy</li> <li>The research highlights links to on The research showed evidence of kerosene and charcoal and impro-</li> </ul>
<b>Investment Facilitation and BDS</b> : EEP Africa is perceived as a catalyst for follow-on financing and can strengthen this role through business development support.	<ul> <li>Many customers report their health or that of their family has improved since switching to renewable energy due to reduced exposure to toxic fumes and reduced risks of injury.</li> </ul>	SUSTAINABILITY	<ul> <li>It should not be expected that al</li> <li>When looking at the sector's sus as being the most influential</li> <li>The fieldwork, conducted during can improve households' ability t fragilize projects and their impar</li> </ul>

d is the willingness to take risk on early-stage odels
and praised for their format by investors and project velopment services could be better adapted to needs
vledge to share with the sector given its portfolio, but peration and coordination with other stakeholders in the
adapting (e.g. in terms of geography, size of supported reneurs) to maintan its value added.
built a diversified portfolio that is fairly representative of
port has had on many project developers' trajectories
llow-on financing for many entrepreneurs, and is part ped grow and enhance clean energy markets in target
the value for money of EEP Africa's support; the main eneurs is the burden of reporting ng the end-user research report high perceived value for olutions they use
nce that links EEP Africa activities to improved access ergy
to decent jobs through productive use of energy
ce of improved health through displacement of nproved education through lighting
at all projects will become sustainable
sustainability, interviewees sees the role of regulators
ring Covid-19, highlighted that clean energy solutions lity to cope with the situation, but the pandemic can npact
L

# **Trust Fund Results**

are women-led companies

In recent years, EEP Africa has strengthened its focus on building an inclusive energy sector. Important aspects include funding more women-led and local companies, and promoting the productive use of energy in order to create more income-generating opportunities for end users.

EEP Africa grant financing is supplemented by technical support, investment facilitation and knowledge sharing. Through all these activities, the fund has continued to build on the success of previous phases and achieve results in key impact areas.

AMONG OUR ACTIVITIES BEYOND DIRECT FINANCING:

companies received targeted  $\mathbf{O}$ O business development support

50

investors participated in the Clean Energy Investment Forum

AMONG THE COMPANIES IN OUR CURRENT PORTFOLIO:



# 200 participants from 44 countries engaged in Knowledge Week

**RESULTS SINCE 2018:** 

**€9.5**M Mobilised climate finance

8,000 MWh Clean energy generated per year

AMONG THE NEW JOBS CREATED BY OUR PROJECTS:





1,250 Direct jobs created



companies received training in financial planning and management



investment matchmaking meetings were arranged



newsletter subscribers and 15,000 followers on social media

Annual savings on energy-related expenditure



People with enhanced energy access

# 120,000 tCO<sub>2</sub>e GHG emissions reduced or avoided



### Partnerships

EEP Africa leverages its impact through partnerships with other key players in the clean energy sector. This collaboration takes a variety of forms such as co-hosting events, facilitating investment opportunities, speaking on panels, contributing case studies and peer reviews for publications, and collaborating on social media campaigns. During 2020 EEP Africa collaborated with:





IKEA Foundation

Shell Foundation



finnfund















# alphamundi







# **OUTLOOK 2021**

The private sector plays an important role in providing solutions for the causes and consequences of climate change by providing financing, innovation and solutions as well as market development. SMEs are in a key role in this process. In its second decade of operations, EEP Africa will continue to leverage its financing and knowledge to advance the clean energy transition, reduce inequality and address climate change.

The clean energy sector in Africa and globally continues to face significant challenges and market upheavals due to the Covid-19 pandemic. Given this unprecedented situation, EEP Africa will not arrange an open call for proposals in 2021 and will instead focus on consolidation and support for its current portfolio.

Early-stage clean energy companies are dealing with new and unexpected challenges to business viability. EEP Africa is committed to working closely with its portfolio companies to strengthen their operations and improve the potential for successful implementation of their projects. This includes providing more flexibility in disbursements and milestone targets, offering targeted business development support, and building tools and partnerships that support their work.

### EEP Africa will support its portfolio companies through the on-going challenges and market upheavals.

The EEP Africa Investor Forum is a flagship event that is rated highly by participating companies and investors. In the current situation, however, EEP Africa will place greater focus on facilitating investments and investor relations on an ad hoc basis. The portfolio coordination team is conducting outreach with a range of investors to introduce the EEP Africa pipeline of investment-ready projects and provide tailored matchmaking with portfolio companies.

EEP Africa develops publications and online resources that aim to contribute as practical tools and relevant lessons learned for the sector. Early in 2021, an online e-Waste Toolkit was added to the EEP Africa website, offering project developers a custom package of information about e-waste legislation, facilities and strategies in Southern and East Africa.

In the second half of 2021, EEP Africa will publish an analysis of its portfolio from 2010-2020 that will aim to identify key factors of success, failure and transformation in the clean energy sector in Africa.

Throughout the year, and especially leading up to COP26 in Glasgow, EEP Africa will emphasise and strengthen partnerships with other players in the sector. The fund's principles of engagement will be to collaborate with like-minded financiers, funds, networks and associations in order to leverage resources effectively and amplify impact.

EEP Africa will continue to play an important role as an effective instrument for enhancing energy access and for supporting small and medium sized companies in developing solutions for climate and development challenges.

In this work, partnerships are critical for ensuring that the world builds back better and greener and that the clean energy transition leaves no one behind.



# **ABOUT THE PARTNERSHIP**

# ABOUT THE EEP AFRICA TEAM

## **Fund Manager**

### Nordic Development Fund

The Nordic Development Fund (NDF) is both Fund Manager and funding partner for EEP Africa. NDF is the joint Nordic climate and development finance institution established by the governments of Denmark, Finland, Iceland, Norway and Sweden.

The purpose of NDF is to advance Nordic leadership in addressing climate change and development challenges through financing, knowledge and partnerships. Together with strategic partners, NDF develops, launches and scales high-impact projects to support developing countries and the most vulnerable people affected by climate change.

Headquartered in Helsinki, NDF provides flexible, catalytic financing for climate change mitigation and adaptation in lower income and countries in fragile situations with focus on Sub-Saharan Africa. NDF engages in both the public and the private sector and works in close interaction with its extensive network of strategic partners.



The EEP Africa Team is led by a fund management unit in Helsinki, Finland and operates out of regional hubs in Nairobi, Kenya, Pretoria, South Africa and Harare, Zimbabwe. The team is comprised of a diverse and experienced group of staff and consultants with multisectoral profiles and extensive regional expertise in energy access, clean energy financing, energy policy and partnerships, portfolio management, communications, and monitoring and evaluation.



# **Funding Partners**

### Austrian Development Agency

The Austrian Development Agency (ADA) is the operational unit of Austrian Development Cooperation and has supported EEP Africa since 2010. ADA's goals prioritise reducing poverty, ensuring peace and contributing towards conservation of the environment with particular emphasis on gender equality and climate protection. ADA's focus themes, such as the water-energy-food security nexus and private sector development, are strongly supported by EEP Africa.

Austrian Development Agency

### Ministry for Foreign Affairs of Finland

The Ministry for Foreign Affairs administers Finland's ODA budget and hosted EEP Africa between 2010-2017. Finland's development policy supports the eradication of poverty and inequality and the promotion of sustainable development with particular focus on strengthening the rights of the most vulnerable, promoting gender equality and increasing the climate resilience of local communities. Enhancing access to sustainable energy is crucial in reaching these goals.



**Ministry for Foreign Affairs of Finland** 







EEP Africa team members in the field and at events

# FINANCIAL REPORT

Financial figures represent the full life of the Fund from 26.04.2018 - 31.12.2020.

FUNDS RECEIVED 1		EUR
Funds provided by: Austrian Development Agency	300 500	000,00 000,00
Funds provided, total		
Funds received, total 19	873	651,93

### **USED FUNDS**

Project disbursement, EEP Innovation	,
Project disbursement, EEP Catalyst 1 500	
Administrative expenses 1 140	
Service provider expenses <sup>2</sup> 3 888	
EEP Africa Impact Evaluation	
VAT disbursements <sup>3</sup> 159	561,60
Bank expenses	470,92
Audit expenses 1	085,00
Used funds, total	244,50
REMAINING FUNDS	407,43
Placements <sup>4</sup>	500,00

Funds received represent total cumulative disbursements to the Fund during the Fund life. Total funds committed by the donors amount to EUR 41,9 million, representing EUR 3 million from ADA, EUR 16,9 million from MFA Finland and EUR 22 million from NDF.

 $^{2}\,$  Service provider expenses include portfolio coordination, knowledge production and technical assistance activities linked to business development and investment facilitation

 $^{3}\,$  VAT disbursements reflect net outstanding VAT payments as of 31.12.2020. VAT payments are fully recoverable and return to the resources of the Fund as and when processed.

 $^{\rm 4}\,$  Placements follow the NDF Liquidity and Investment Management Policy with the goal of placing excess liquidity in highly-rated green instruments.

# **REPORT ON THE AUDIT OF THE** FINANCIAL REPORT

### Opinion

We have audited the accompanying financial report of the Energy and Environment Partnership Trust Fund (the "Fund") for the year ended 31.12.2020. Our audit covers the transactions for the period 1.1.2020-31.12.2020

In our opinion, the Financial Report presents fairly, in all material respects, the funds received and used during the period 1 January 2020 to 31 December 2020 as well as remaining funds (EUR 4.553.407,43) at the end of the accounting period in accordance with the accounting principles described therein.

### Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial report section of our report. We are independent of the Nordic Development Fund ("NDF") in accordance with the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants (IESBA Code) together with the ethical requirements that are relevant to our audit of the financial report, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### Responsibilities of management for the financial report

NDF's management is responsible for the preparation and fair presentation of the financial report in accordance with the accounting principles described in the notes to Financial Report and for such internal control as NDF's management determines is necessary to enable the preparation of financial reports that are free from material misstatement, whether due to fraud or error. The financial report has been prepared on cash basis.

In preparing the financial report, NDF's management is responsible for assessing the Fund's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Fund or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Fund's financial reporting process.

### Auditor's responsibilities for the audit of the financial report

Our objectives are to obtain reasonable assurance about whether the financial report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial report.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- · Identify and assess the risks of material misstatement of the financial report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design . audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Fund's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of NDF's management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Fund's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial report or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Fund to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial report, including the disclosures, and whether the financial report represents the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

### Helsinki, 24 May 2021

Ernst & Young Oy Authorized Public Accountant Firm Terhi Mäkinen Authorized Public Accountant

#### Disclaimer

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💳 Austrian Development Agency



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