

The Electrification Financing Initiative

# A year in review · 2020



www.electrifi.eu



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**EDFI Electrifi is an EU-funded impact investment facility that invests in early-stage companies and projects in the access to energy sector. EDFI Electrifi focuses on creating new and improved connections and on increasing generation capacity from sustainable energy sources. EDFI Electrifi invests in the private sector in emerging markets.**

**The facility is managed by FMO and the EDFI Management Company on behalf of the 15 European Development Finance Institutions (DFIs).**

The EDFI Management Company (EDFI MC) was established in 2016 to serve as a common platform for developing innovative partnership models between the European institutions and European DFIs. EDFI MC delivers development finance solutions that enable European DFIs and private sector investors to increase the scale and impact of their work. These solutions allow them to focus on those business models, technologies and geographies where they have not been able to operate at the desired scale, given their resources and investment criteria. It places a particular emphasis on sectors that are critical to sustainable development, such as access to energy and sustainable agriculture.

At EDFI Electrifi, we share EDFI's vision: Investing to make a difference. To improve people's lives in countries where the need is greatest, by enabling the private sector to invest more, and in higher-risk projects, thus creating growth with strong development impact.

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→ [www.edfimc.eu](http://www.edfimc.eu)



# Our mandate

## Contribute to ensuring access to affordable, reliable, sustainable and modern energy for all

### Access to energy is fundamental for development and poverty reduction, particularly in developing countries.

In order to achieve goals of the 2030 Agenda for Sustainable Development and the Paris Agreement on climate change, it must be a priority to develop sustainable energy approaches that lay the foundations for resilient, low-emission economies and societies around the world.

789 million people don't have access to electricity, 72% of them live in Africa and 27% live in Asia<sup>1</sup>.

### The EU has been pioneering efforts to support private sector-led sustainable energy investments

and address the needs identified by developing countries. The Electrification Financing Initiative (EDFI ElectriFI) is one of the EU's key innovative financial instruments for this purpose. Launched in 2015 during COP 21, the facility is now demonstrating full alignment with the EU Green Deal and is a key instrument in realising those ambitious targets.

“EDFI ElectriFI’s additionality is based on its mandate to invest in smaller amounts and at an earlier stage. This makes EDFI ElectriFI uniquely placed to provide much-needed, but scarcely available, early-stage funding. Consequently, the facility is able to provide a pipeline of scalable projects for the European DFIs. EDFI ElectriFI is a striking example of public-private partnership between the EU and European DFIs to facilitate and enable access to energy in those countries where it is much needed. We only have ten years left to reach the 2030 Sustainable Development Goals. To accelerate progress towards Clean and Affordable Energy for All (SDG7), we desperately need funds such as ElectriFI”.

MARINA PANNEKEET,

Energy/ Southern and East Africa at FMO  
and Chair of ElectriFI's Investment Committee

1. <https://www.seforall.org/data-stories/seforall-analysis-of-sdg7-progress-2020>.



# Our strategy

## Increase access to clean energy in developing countries

Following five years of operation, EDFI ElectriFI currently manages EUR 253m on behalf of the EU. This funding has increased over the years, and combines two facilities offering a global reach and a tailor-made approach for increasing access to clean energy in developing countries.

- **ElectriFI Global (EUR 121m)** - launched in 2016 and including contributions from Power Africa (targeted at sub-Saharan Africa) Italy and Sweden.
- **ElectriFI Country Windows** – offering dedicated funding for selected countries. Country Windows are established in close collaboration with EU delegations and with the support of national governments. The first set of Country Windows (launched in 2018) was allocated to Zambia (EUR 31m), Nigeria (EUR 30m), Côte d'Ivoire (EUR 10m), Benin (EUR 5m) and Pacific (EUR 8m). The second set of Country Windows (contracted at the end of 2020) will deploy specific funding for Kenya (EUR 24.7m), Burundi (EUR 9.3m), Eswatini (EUR 5m) and Uganda (EUR 5m).

IMPACT- DRIVEN

ENABLING

ENTREPRENEURIAL

ACCOUNTABLE

INCLUSIVE





## OUR MARKET

focuses on renewable energy access investments that are additional to those from European DFIs or commercial investors.



## OUR CLIENTS

build sustainable, for-profit businesses that target long-term impact and repayment of the investment capital.



## OUR INVESTMENTS

are made with patient capital designed to address the specific needs of early-stage businesses and their associated risks.



## OUR TEAM

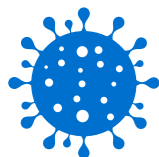
is composed of dedicated, experienced professionals who specialise in investing in early-stage ventures in emerging markets dedicated to contributing to the SDGs.



## OUR GOVERNANCE

engages the European DFIs, the EU and local EU Delegations throughout the investment cycle, including strategy design and investment approval.





## COVID-19 pandemic brings millions of people back into energy poverty



# 30 million

people who had access to electricity in sub-Saharan Africa in 2019 may no longer be able to afford basic electricity services by the end this year.



**Reversing progress on energy access. An increasing number of citizens are no longer able to afford basic electricity services.**

**Most-affected countries:**

Nigeria | Ethiopia | Kenya  
Tanzania | Cote d'Ivoire

**Capital investment in the energy sector is anticipated to fall by 18% in 2020.**



# 20 billion

USD 20 billion of annual investments would be needed 2021-30 to achieve universal electricity access in Africa.

## Over the last decade, the number of people without access to electricity had steadily decreased.

Thanks to the progress made by governments in implementing ambitious electricity access policies and in supporting off-grid initiatives, the electrification rate has become an encouraging element in the quest to reduce GHG emissions (SDG13) and ensure access to affordable, reliable and sustainable energy (SDG7).

The COVID-19 pandemic has severely hindered developments in energy access, while lockdown measures have placed off-grid developments at risk. In many countries, we noted decreasing public and private finance levels, declining purchasing power along with various operational challenges faced by clean energy providers (including disrupted supply chains, rising financing/borrowing costs...). As a result, the number of people in Africa without access to electricity rose to some 600 million people in 2020 (a 2% increase on 2019).

Delays caused by lockdowns and their economic consequences continue to affect renewable energy markets today, particularly in developing economies. Yet in these disruptive times, access to reliable and clean electricity is vital. It is not only needed for households, schools and companies to continue to operate but also for the healthcare centres working at the forefront of the pandemic.

Together with its numerous partners and stakeholders, EDFI ElectriFI is determined to ensure access to reliable, uninterrupted and sufficient energy production for all. Now is our chance to act for a more sustainable economic recovery.

# Our achievements

**GEMMA VERHOEVEN & JEAN-DENIS COLLIN,**  
EDFI ElectriFI Managers

**DOMINIEK DECONINCK**  
EDFI MC Chief Investment Officer

## Resilience and adaptation

The COVID-19 pandemic, and the various restrictions it has provoked, has significantly impacted the front office team in EDFI ElectriFI. Unable to travel and facing difficulties in engaging with its potential investees, the team faced challenges in its daily operations.

**While EDFI ElectriFI did not reach its initial target, it has adapted successfully to these difficulties and has contracted EUR 17 million in eight new investments.**

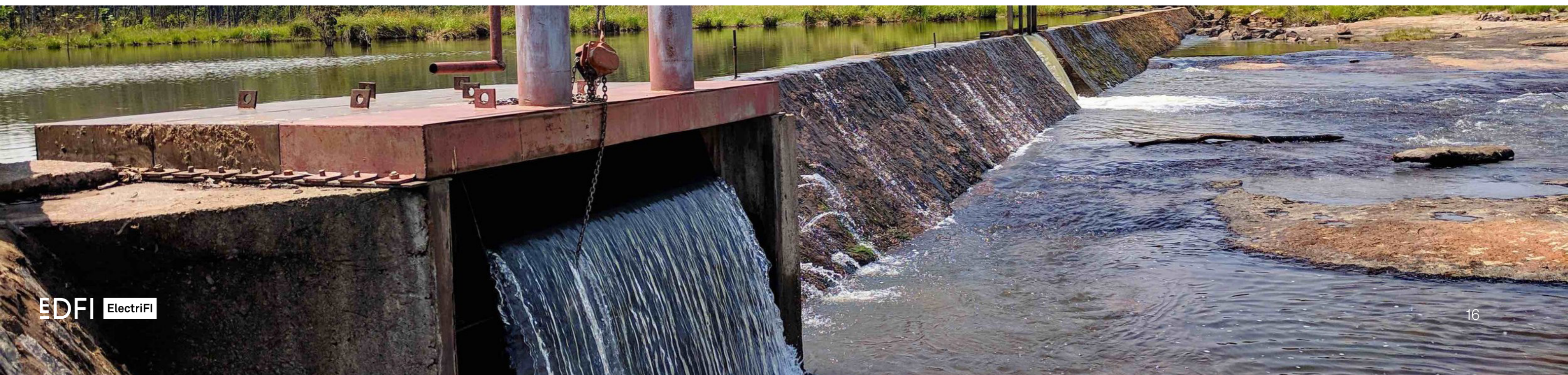
Our clients have also adapted their strategies and ambitions to face the crisis; some have even expanded into new opportunities or business segments (such as Redavia's move into the pharma sector thanks to its Relief fund programme). Our team has continued to support existing investees by finding innovative ways to replace in-person due diligence processes and by developing new channels to provide support and share information. In addition, we monitored the effects of the pandemic on our investee companies' cash flows, to identify the need for temporary waivers and/or deferrals of their debt obligations to accommodate the circumstances.

Finally, half of the new projects are follow-on investments, showing our ongoing determination to stand together with our investee companies. For example, we invested again in Solarise, two years after contracting our first Series B round along with other private investors and DFIs. Based on the strong existing relationship and successful operations, we felt sufficiently comfortable to increase our commitment with a follow-on investment in August 2020.

## Keeping the pandemic from reversing progress

Our booming development in 2019 has prepared us for the next stage of EDFI ElectriFI's expansion and for making an impact in the renewable energy sector in developing countries. Following a promising year, the facility was ready to scale up its operations and portfolio, combining high rates of small-scale investments delivering strong environmental and social impacts in fragile environments.

However, the reality was different as external events intervened. The year 2020 has been a challenging one for us all. As the world continues to adapt to the lasting impact of the pandemic, so do the EDFI ElectriFI's expansion plans. Our team have had to comply with international travel restrictions and to adapt our financing strategy to reflect the economic situation faced by the SMEs operating in emerging countries. While strong pipelines were developed, these restrictions prevented us from carrying out due diligence processes and from contracting most of our investments. In parallel, the team successfully closed four follow-on investments with existing clients. For some investee companies, these follow-on investments are to be considered as 'bridge' funding, to provide support as they were more-severely impacted by the COVID-19 crisis and hence faced some operational and financial difficulties. For other clients, the follow-on investment was already planned at the moment of initial investment, as a logical next step for EDFI ElectriFI MC to continue supporting the growth of the company.





## Growing the catalytic effect and the launch of Country Windows II

In comparison to 2019, we considerably increased our leverage ratio (from three to five), catalysing a further EUR 90m from other investors in those same companies.

In addition, the second set of Electrifi Country Windows was signed, adding EUR 44m to the facility and offering earmarked amounts to Burundi, Eswatini, Kenya and Uganda. The total of EDFI Electrifi funding has now reached EUR 253m (compared with EUR 75m in 2015). The consolidation of the Country Windows' extension is the result of a highly effective collaboration with the European Commission and a fostered coordination with the EU Delegations on the ground. It also reinforced the mandate given to the EDFI MC by the European Commission to support European DFIs in accelerating energy access for millions of people.

Throughout the year, we continued to diversify our portfolio by financing a spread of business models in a range of sizes. We again increased our involvement in SHS, mini-grids and C&I offering new access to electricity, notably in Cameroon, Côte d'Ivoire, India. We also provided strongly catalytic capital to private- and publicly held institutional investors by subscribing to a junior equity tranche of a large fund dedicated to access to electricity. Finally, we continued to support innovative business models by investing capital in a project company leveraging big data analysis and AI for easing access to finance for energy access companies.



## A collaborative journey to evidence impact



In line with our high-impact mandate, we continue to strive for the greatest social impact. While continuing to implement careful (virtual) due diligence and sound risk management practices, we also encourage and support our investees in their journey to sustainability. We continue to surpass our impact targets, we have diversified our delivery channels through intermediated investments and we have worked to expand our global reach.

None of this would have been possible without the competence, expertise and commitment of each team member and their remarkable adaptability. I wish to thank them all, not only the EDFI ElectriFI team but also all colleagues performing specialised support services at EDFI MC - including E&S, legal, communications and reporting amongst others.

While increasing our efforts to develop a strong pipeline for 2020, we are once again optimistic for 2021, where we have set targets for EDFI ElectriFI to contract over EUR 30m and to develop country-specific strategies for the new Country Windows.

Let us all continue to work hand-in-hand and make 2021 a success for the benefit of our clients and customers in those regions around the world where the need is greatest.

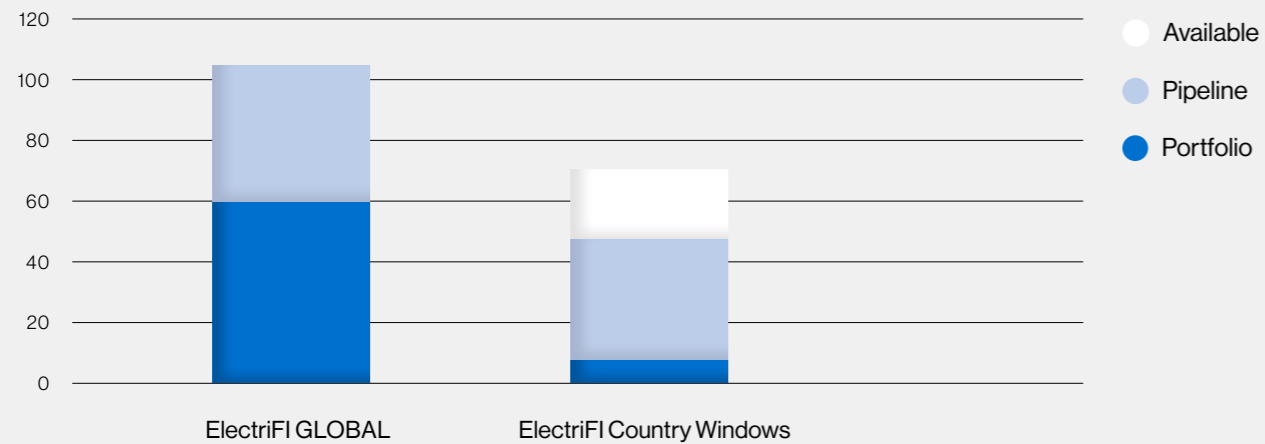


# Our portfolio

## Overview

ElectriFI combines two facilities offering global reach and a tailor-made approach for increasing access to clean energy in developing countries.

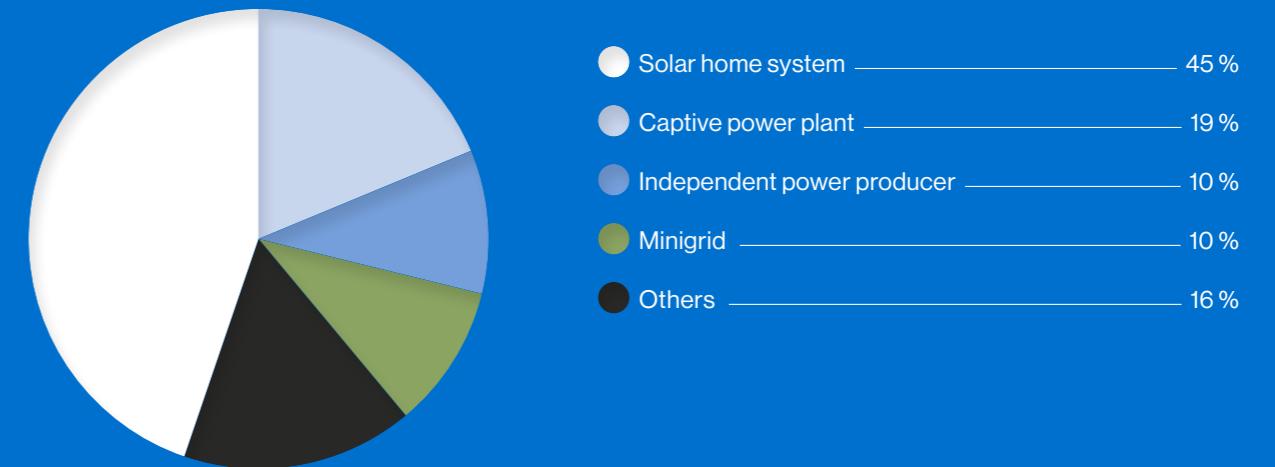
ElectriFI facilities (€ million)



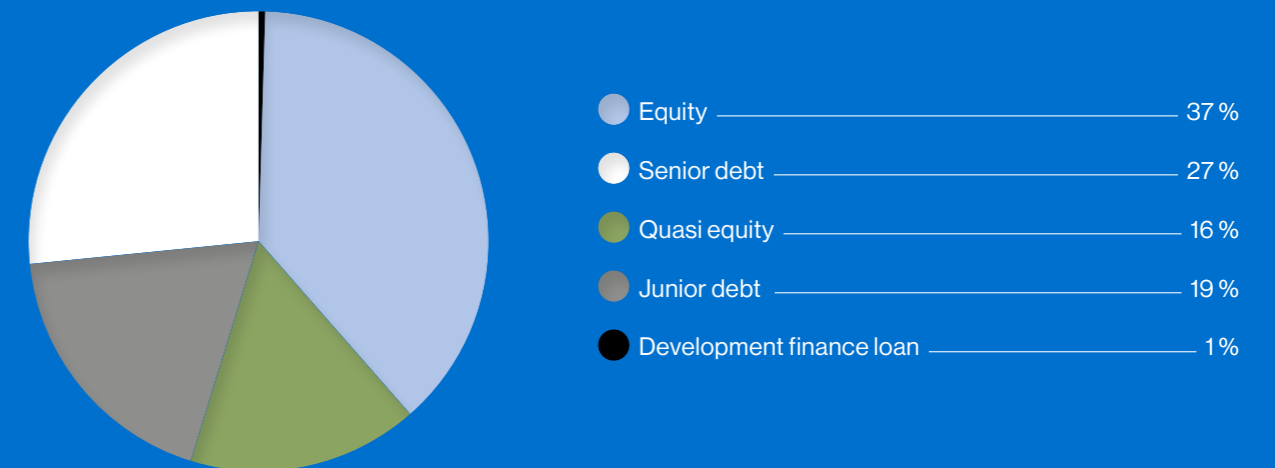
**86%** of the portfolio meets the 2X Challenge to invest in women criteria



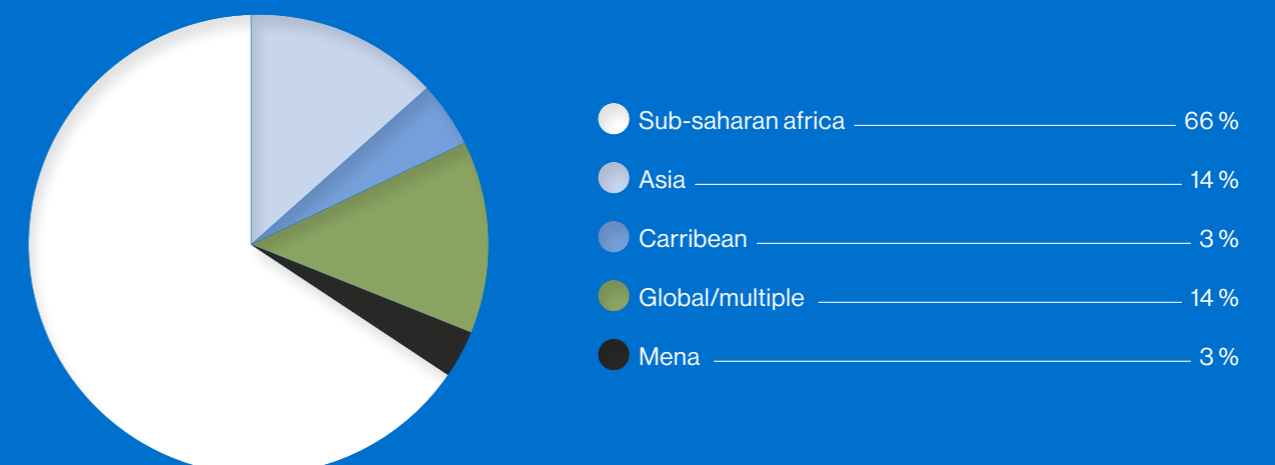
Breakdown by business model (EUR million)



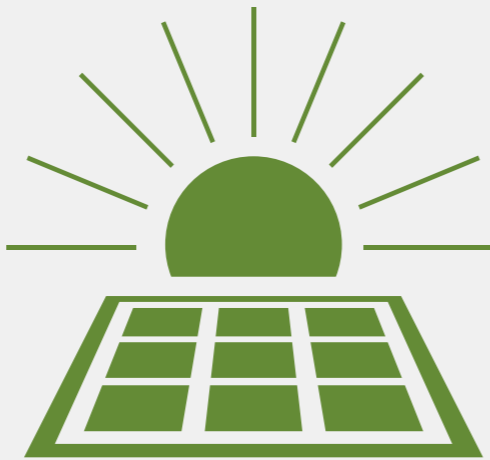
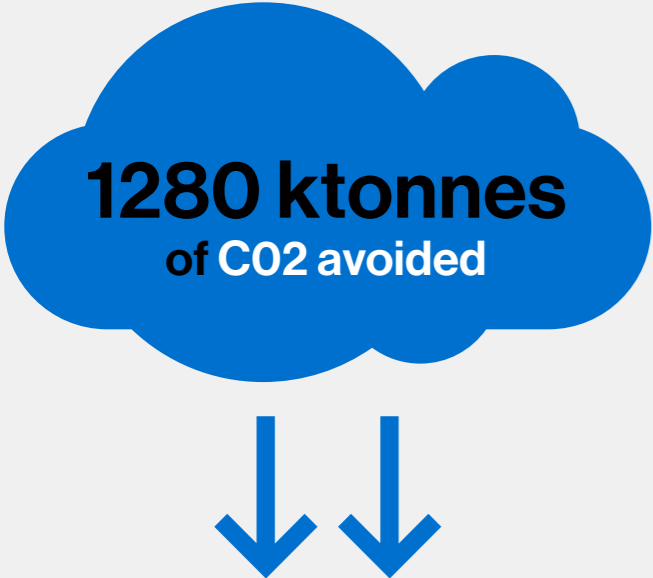
Breakdown by instrument (EUR million)



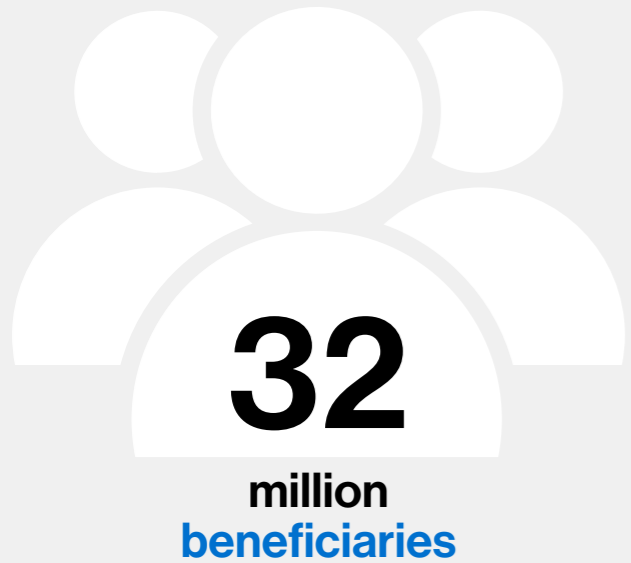
Breakdown by region (EUR million)



# Contribution to impact targets



**1 900 GWh**  
renewable energy  
produced per year

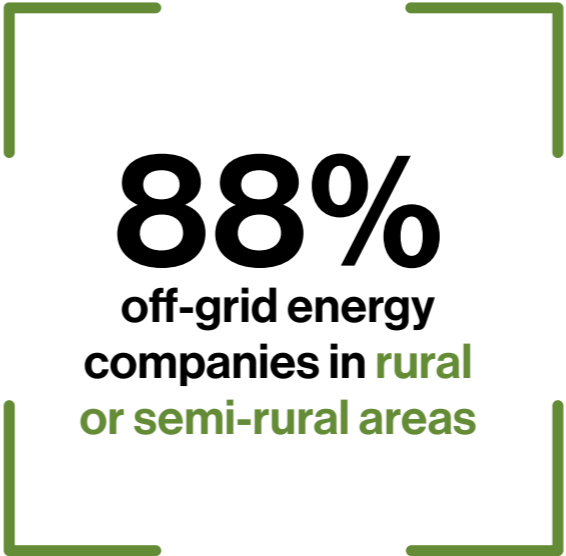
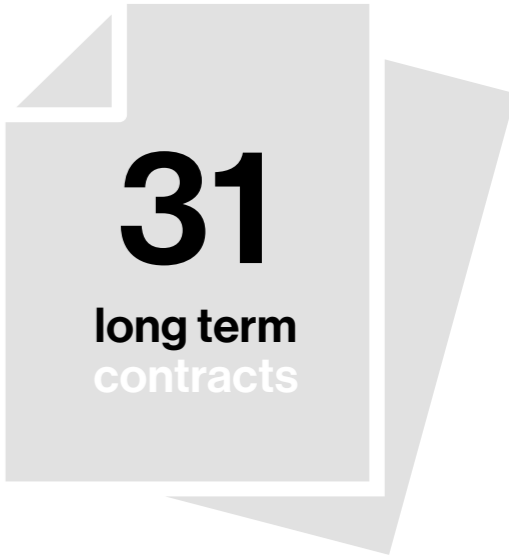


cumulative impact of EDFI Electrifi investees since the inception of the facility.

# Achievements



Average ticket size  
**EUR2.9m**



**5x leverage**



**5**  
development  
finance loans

# ↳ An innovative and catalytic blending instrument

## Impact first

INVESTING IN CLEAN ENERGY ACCESS FOR DEVELOPING COUNTRIES

More than 50% of the EDFI ElectriFI's portfolio is invested in least developed countries and fragile states

EDFI ElectriFI directly contributes to reducing GHG emissions (SDG13) and to ensuring access to affordable, reliable and sustainable energy (SDG7). Through its investments in private companies and projects, the facility aims to accelerate the development of businesses by providing access to clean energy for hundreds of millions of people by 2030.

EDFI ElectriFI clients have to meet pre-defined impact targets, high standards of business integrity and are expected to reach profitability within three years following ElectriFI investment.

## Additional & collaborative

BUILDING AND ACCELERATING MARKETS THROUGH PARTNERSHIPS

41% of the portfolio value is co-financed with DFIs.

EDFI ElectriFI works closely with the European Union, DFIs and private investors to develop strategies for offsetting risks and maximising private sector leverage in sustainable energy financing.

By developing Country Windows in collaboration with EU Delegations and host governments, EDFI ElectriFI is able to offer customised approaches to meet the needs of specific markets.



## Go-to-place for catalytic investments

INVESTING WHERE OTHERS CANNOT

EDFI Electrifi's total investments have leveraged an extra EUR 280m

EDFI Electrifi makes investments that are additional to those from other investors. These investments rely on a strategic and entrepreneurial approach to attracting additional financing for promising early-stage businesses. They comply with EU development finance objectives by reducing their exposure to risk and allowing them to grow and gain access to traditional financing methods. All investments are assessed using strict additionality criteria and leverage ratios.

## Fit for purpose and scalable

OFFERING FLEXIBLE PRODUCTS  
THAT MEET THE SECTOR'S NEEDS

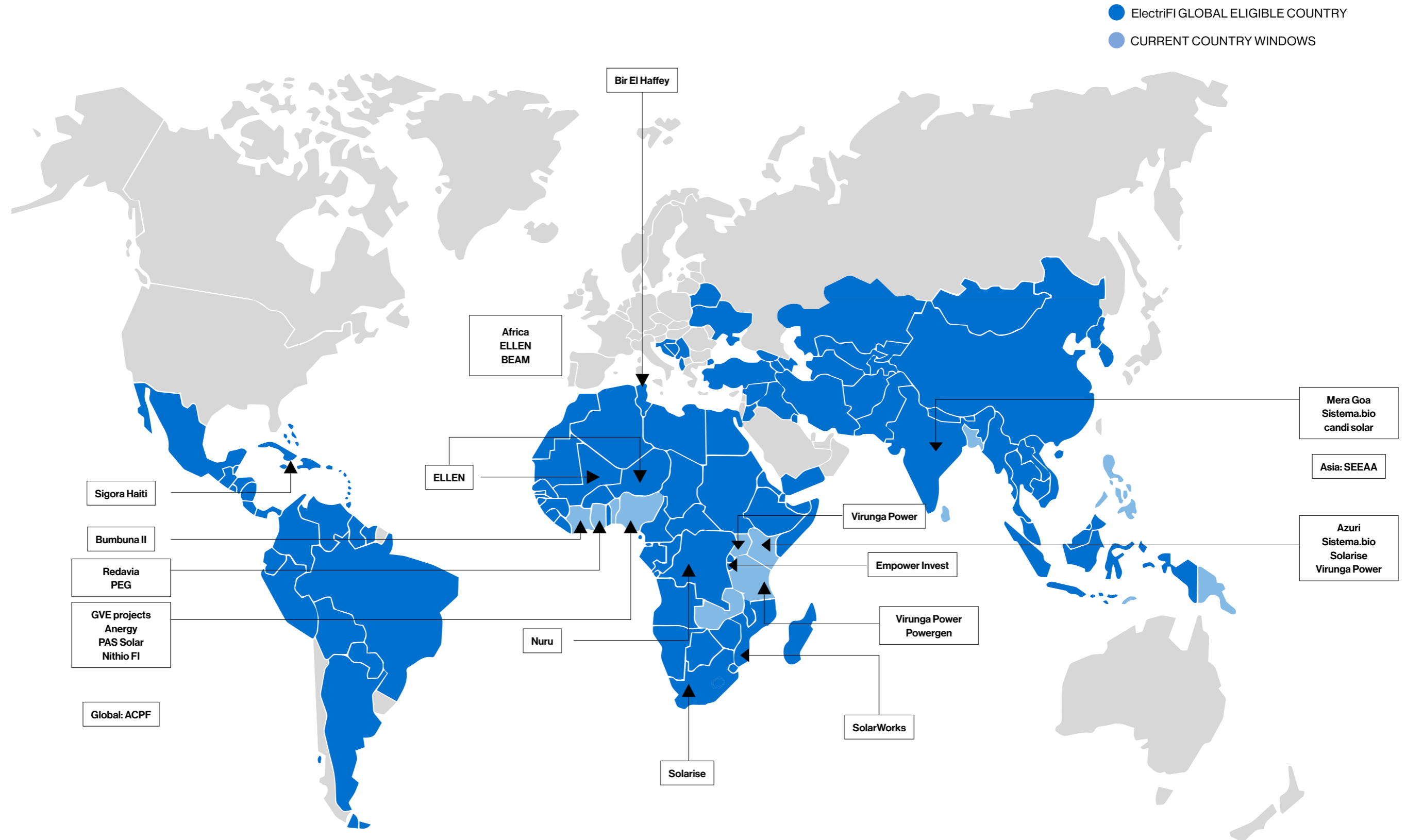
60% of EDFI Electrifi's investments are equity and quasi-equity

Working closely with its clients, EDFI Electrifi develops long-term financing solutions tailored to each specific project, the current economic and financial situation of the country as well as its risk profile.

EDFI Electrifi invests debt, equity and quasi-equity investments from EUR 0.5-10m (or the equivalent in USD or local currency) through various instruments such as equity, quasi-equity and junior and senior debt. This allows the facility to invest early in innovative companies and to support entrepreneurs' needs.

# A global footprint

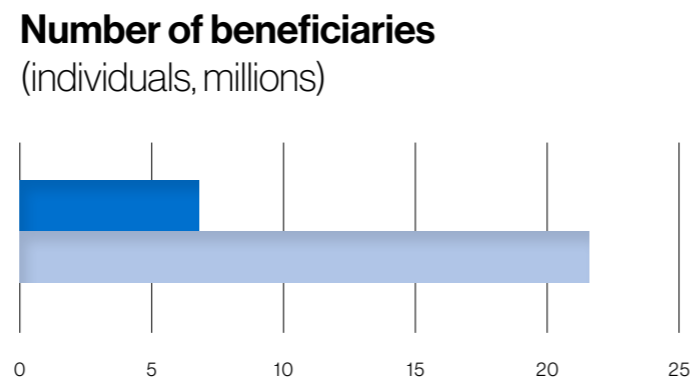
EDFI Electrifi operates globally. In addition to its global mandate across the OECD DAC (Development Assistance Committee) list, it has developed customised investment strategies that target specific countries and regions. To date, Electrifi has committed investments in **25 countries**, of which **75%** of the projects are located in **sub-Saharan Africa**.



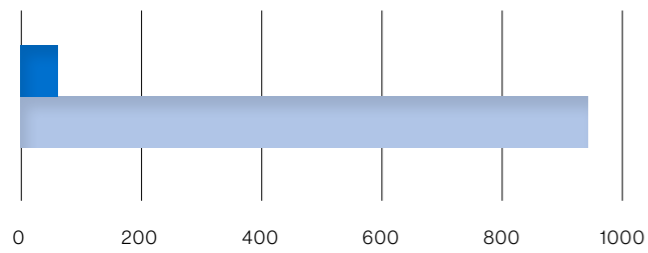
# Our clients' impact

As an impact-driven initiative aligned with development finance standards, EDFI ElectriFI strives to unlock extraordinary social and environmental returns from growing businesses. EDFI ElectriFI applies stringent sustainability standards; as well as conducting in-depth due diligence, it requests that its clients achieve high social, environmental and fiscal standards. For each project, EDFI ElectriFI monitors the following impact targets:

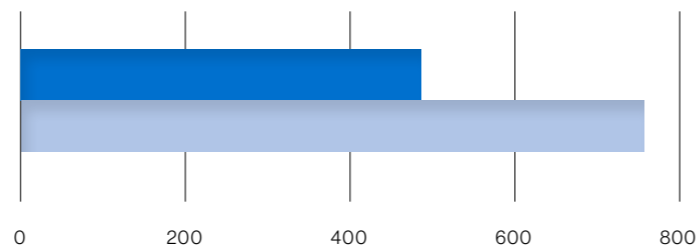
- CONTRIBUTION**  
 EDFI ElectriFI's expected impact once current investments are fully operational
- TARGET**  
 targeted amount when investments in the portfolio become fully operational and considering the financing that is made available to such companies in this round where ElectriFI is participating



**Capacity generation of renewable energy**  
(GWh per year)



**GhG emissions avoidance**  
(ktons CO2-eq per year)



## Selected case studies



### Clean electrification of SMEs

**candi solar:** India alone has an estimated 70GW of rooftop potential, yet only a tiny fraction of this has been developed to date. By installing, financing and operating solar PV assets, candi can harness the power of the sun and takes advantage of this its untapped potential. This will free up capital for small- and medium-sized businesses (SMEs) by lowering the effective price of their power; in so doing it will drive positive change in the environment and the wider economy. The company offers a unique business proposal of clean electrification for SMEs with a 10-12-year power purchase agreement that allows the customer to become the owner of the plant at the end of the contract period. They specifically target SMEs in India that are usually outside the scope of 'renewable energy service companies' because they are too small. They also plan to enter the African market once the business model has been proven in India.

*"Given the asset-intensive nature of our business model, reliable institutional financiers are crucial for turning candi into a global success story. With EDFI ElectriFI, we found a partner with whom we enjoyed a professional and pragmatic collaboration throughout the investment process. We therefore hope that this was only the first step in a long-term relationship."*

**Fabio Eucalipto**, Chief Financial Officer at candi.







## Rural electrification through solar home systems



**UpOwa** is a modest but ambitious Solar Home System (SHS) player in Cameroon, given that SHS is currently the only option for rural electrification in Cameroon. The company supports the near-term electrification of last-mile customers (households and productive users) in Cameroon - who will not be served by the main grid for many years - with a sustainable, reliable and affordable energy source. The arrival of electricity in a new neighbourhood has numerous positive impacts on the local economy. A charged mobile phone enables communication, while shop lighting extends opening hours and results in increased sales and wages. Access to electricity at home creates new streams of revenue and, indirectly, jobs, not to mention the training and employment opportunities that UpOwa offers to the local population.

*“The partnership with EDFI ElectriFI intensifies our market penetration in the Cameroon, a challenging and complex market. We will significantly improve the lives of people in rural areas through access to an affordable, reliable, and sustainable energy in often distant and isolated locations. This is the basis of a better social and economic environment.”*

**Loïc Descamps**, managing director of UpOwa Cameroon.



## Creating value from waste

**Sistema.bio** is a Mexican-born company dedicated to make sustainable farming a reality for families all over the world. Their state-of-the-art biodigesters take animal waste and turn it into biogas, a clean & renewable energy, as well as biofertiliser, a liquid organic fertiliser that can be used to enhance crop production.

In fact, to Sistema.bio there is no such thing as waste: there's only resources. Managing animal waste is a daily reality for farmers, a reality that implies not only work but potential contamination and diseases. With biodigesters, manure that would gather mosquitoes and potentially end up in rivers is now utilised for better things like cooking, fertilising crops and even milking cows!

Mr Stephen and Mrs Mary own an 8-acre farm in Nyandarua and a small butchery. They are owners of a Sistema.bio biodigester, which has helped them displace firewood from their kitchen. Their biodigester produces enough biogas for 10 hours of cooking every day. Eliminating firewood for cooking not only helps the family to reduce their daily workload, it also contributes to improve their respiratory health. Indoor pollution caused by firewood smoke is a huge issue for rural populations and a public health challenge that causes more premature deaths than HIV, malaria, and tuberculosis combined.

*“There is no comparison between biogas and firewood when it comes to health.”*

**Mr Stephen Mbugua**, Nyandarua, Kenya.



# 2020 investments

Over the past 12 months, alongside our partners we have invested to accelerate access to clean energy in seven countries in sub-Saharan Africa and Southeast Asia.

ElectriFI Global

## Access to Clean Power Fund (ACPF)



68 250m beneficiaries | 1 351m tons CO2 eq/year | 369 000 MWh/year

Global | Captive Power Plant | EUR 2.65m

EDFI ElectriFI provided additional first-loss capital for a responsAbility-managed energy debt fund targeting universal access to clean power. The USD 3m junior capital aims to address the unmet market demand for debt funding from the small but growing number of C&I players (SMEs, schools, hospitals, etc.), mainly in Asia and Africa.

DFIs involved: [Norfund](#), [FMO](#), [OeDB](#) and [EIB](#).

ElectriFI Global

## Bir El Haffey



98,000 beneficiaries | 9900 tons CO2 eq/year | 18,000 MWh/year

Tunisia | Captive Power Plant | EUR 1.93m

EDFI ElectriFI's debt investment unlocked belgian DFI's BIO debt financing, allowing the first project financing for a renewable energy independent power producer in Tunisia. It will pave the way for other, similar projects to be financed on a no- or limited-recourse basis.

DFIs involved: [BIO](#).

ElectriFI Global

## candi solar



152,320 beneficiaries | 19 264 tons CO2 eq/year | 22 400 Mwh/year

India | Minigrids | EUR 2.65m

EDFI ElectriFI's funding will contribute to financing the expansion of candi solar's customer base in India and its deployment of up to 36 MW of photovoltaic solar modules. This system will run under a "save-to-own" power purchase agreement over the next two years, allowing customers to own the plant for free at the end of the contract period.

ElectriFI Global

Country Window

## Nithio FI



262 500 beneficiaries | 101 116 tons CO2 eq/year

Nigeria | SHS and Minigrids | EUR 4.10m

Nithio FI offers data science services that enable the SHS operators to access cheaper capital and to learn how to allocate it more efficiently. EDFI ElectriFI's investment is part of the initial funding round that will unlock up to USD 15m senior debt and help the company prove the viability of its concept.

# Sistema.bio



21 543 beneficiaries



265 000 tons CO2 eq/year

**Kenya, India | Waste to Energy | EUR 0.49m**

A year after ElectriFI investing USD 2m in Sistema.bio - a company manufacturing, distributing, installing and financing biomass digesters for small- and medium-scale farmers - EDFI ElectriFI invested USD 600,000 in a convertible note. Alongside existing and new investors, EDFI ElectriFI financing will enable the company to continue its scale up and international expansion.

# Solarise



209 678 beneficiaries



18 953 tons CO2 eq/year



30 835 MWh/year

**Kenya, South Africa | Captive Power Plant | EUR 1.45m**

ElectriFI financed Solarise's Series A investment round in 2019, which was followed by a USD 2.5m contribution into the Series B round in 2020, alongside the other existing shareholder, EAV, and catalysing Proparco into the total round of USD 9.5m. In 12 months, the company successfully managed to build a portfolio of 2.5MW of solar PV plants to supplement the main grid in Kenya and South Africa.

DFIs involved: [Proparco](#).

# PEG Africa



775 175 beneficiaries



70 875 tons CO2 eq/year



10 495 MWh/year

**Cote d'Ivoire | Solar Home System | EUR 1.26m**

The ElectriFI Country window for Côte d'Ivoire closed a USD 1.5m junior debt as a follow-on investment with PEG Africa. These proceeds will be dedicated to Côte d'Ivoire, where the company value proposition clearly seems to address an unmet demand.

DFIs involved: [CDC](#).

# Upowa



291 500 beneficiaries



7 539 tons CO2 eq/year



102 MWh/year

**Mozambique | Solar Home System | EUR 3.00m**

ElectriFI Global closed a EUR 3m senior debt financing to UpOwa, a company that has been focused on solar home systems for rural electrification in Cameroon since 2014. It is currently the country's leading supplier. ElectriFI will provide around 16% of the total financing required to grow the active customer base up to around 58,000 by 2022, meaning improved access to electricity for more than 250k people (assuming 5pax/connection) and creating 250 jobs.

# Our team

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Dominiek Deconinck  
**Chief Investment Officer - EDFI MC**

Jean-Denis Collin  
**Regional Manager**

Gemma Verhoeven  
**Regional Manager**

Josyane Costa  
**Front Office Assistant**

Quentin Antoine  
**Senior Investment Officer**

Corentin Billiet  
**Investment Officer**

Ruben Boeynaems  
**Investment Analyst**

Géraldine Crosset  
**Senior Portfolio Officer**

Guillaume Cruyt  
**Investment Analyst**

Quentin De Hoe  
**Senior Investment Officer**

Antonieta Delgado  
**Investment Analyst**

Lionel Dieu  
**Senior Investment Officer**

Liesbet Mijlemans  
**Senior Investment Officer**

Natalia Svarinska  
**Senior Investment Officer**

Maud Watelet  
**Senior Investment Officer**

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[The investment team benefits from back-office support from EDFI Management Company.](#)





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