



**ENERGY
ACCESS
VENTURES**

//////
**B R E A K I N G
F R O N T I E R S**

EAV's Inaugural Impact Report

“

I'd put my money
on the **sun and
solar energy**. What
a **source of power!**
I hope we don't have
to wait till oil and
coal run out before
we tackle that.
I wish I had more
years left!

”

Thomas Edison, 1931

About EAV

Energy Access Ventures is a leading early-stage investment fund in Africa. With over 40 years of investment experience in Africa, EAV is uniquely positioned to take advantage of the emerging smart, distributed, cost-effective infrastructure market segment. EAV has carved out a reputation as a hands-on investor that works closely with its portfolio companies to capture the significant opportunity in Africa. EAV's first fund ("EAV I") was raised in February 2015 and is €75,000,000 in size with 9 investment professionals. The fund is sponsored by the leading French multinational Schneider Electric and is

managed by Aster Capital in Paris. Its investors are CDC Group (UK), managing funds for the UK Department for International Development, the European Investment Bank, the Fonds d'Investissement et de Soutien aux Entreprises en Afrique (FISEA) held by Agence Française de Développement (AFD) and managed by Proparco, the Fonds Français pour l'Environnement Mondial (FFEM), administered by AFD, Financierings-Maatschappij voor Ontwikkelingslanden (FMO), the Netherlands Development Finance Company and OFID, the OPEC Fund for International Development.



Cover image: Nuru's 1.3MW mini-grid installation in Goma



Our Team



10

team members



50%
women



9

languages spoken



6

different nationalities

Welcome

to EAV's first Impact Report!



EAV's vision has always been to catalyse clean energy access across Sub-Saharan Africa. The first step in this journey was taken in 2015, when EAV was first formed, thanks to the support of our investors and partners. Since then, we have evolved into a pioneering platform that has invested in unique investment opportunities - or 'diamonds in the rough' - and helped to scale these up. We have built an industry-leading portfolio of 15 companies operating across Africa's energy access value chain with an initial target to impact 1 million lives, but have so far improved the lives of 22 million people and avoided 144 million tonnes of CO2 to date.

Whilst this sounds very rosy, the reality is that the past 6 years have been filled with turbulence across the continent with commodity crashes, recessions, coups and now a global pandemic. The challenges have been shared on the fund side too given we started as a first-time fund with a first-time team that was looking for companies that provide electricity, without much subsidies, to disadvantaged beneficiaries in rural and peri-urban areas, all whilst seeking market-like returns within a 10-year period. Throw in the significant difficulties of doing business across much of Sub-Saharan Africa and the nascency of the energy access space, and you have yourself a very challenging operating environment for startups. Finding such 'diamonds' and keeping them shining is no easy task!

Despite the challenges, EAV has persevered and the energy access space has



continued to grow, displaying its sustainability and growth potential.

EAV has been one of many actors in this exciting space, and we have been lucky to partner with fantastic entrepreneurs and meet their own customers, who bring real context to why we do what we do. We are proud of the value we have created and look forward to continuing to de-risk new teams and business models, which have often been dismissed by conventional players. We are excited to secure further exits alongside our profile exit, and were happy to have made a profitable exit from - d.light - the leading pico-solar and pay-as-you-go solar company.

Like any impact investor, we wanted to write a report to display the achievements of our portfolio and explain why the energy access space is so enticing in Sub-Saharan Africa. Building some publicity for EAV in the process might have been a reason too...

However, what could have been a mere marketing exercise has since evolved into a project of self-reflection.

Given that a core value we strive for at EAV is Humility, we have constantly questioned ourselves: Do we actually add value? Why us? Why now? What's our purpose? Is our vision correct?

We still have some self-reflection to do, but our conclusions for now are simple:

- 1.** The energy access gap continues to remain a fundamental yet towering obstacle to development
- 2.** Now, more than ever, there is an opportunity for market shifts from dirty fuels and centralized infrastructures to smart, inclusive and decentralised infrastructures
- 3.** The impact driven to date is a good start, but is not enough. We must be honest and self-critical when questioning the sustainability of the impact we deliver
- 4.** Yet, we truly believe the right teams coupled with smart capital can drive change
- 5.** We have learnt a tremendous amount but we have many more things yet to measure and learn from

So, read our report and engage with us. Whilst a good starting point to learn about EAV, there is a lot more to our team and our portfolio than what is within these pages. During this period of isolation and uncertainty, it is fundamental to really break past the surface. So get in touch, let's chat.

Paras Patel
Managing Partner, EAV

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Our Vision & Mission

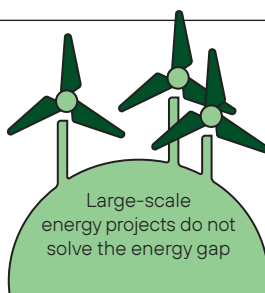
Challenges in a Centralised World

Sub-Saharan Africa

1 Infrastructure Roadblocks



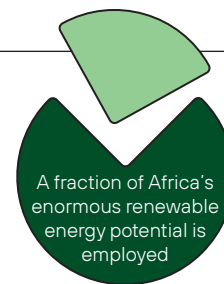
At least
\$93_{bn}
needed yearly over next decade
to overhaul SSA's infrastructure
vs. \$25bn year currently spent



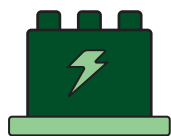
Large-scale
energy projects do not
solve the energy gap


90%

of infrastructure projects in
Africa fail at the feasibility
and business-plan stage



2 The Energy Gap



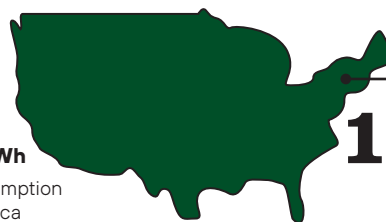
600m

Africans (40%) have
no access to energy



180_{kWh}

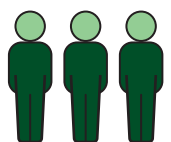
per capita energy consumption
in sub-Saharan Africa



13,000_{kWh}

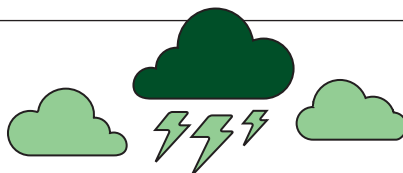
per capita energy
consumption in the USA

3 Climate Change



100m

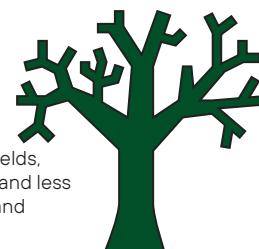
people to be pushed
into extreme poverty
by climate change



Climate change will affect the world with
heatwaves, droughts, flooding and storms
becoming frequent and severe



Lower crop yields,
less biodiversity and less
habitable land



Africa requires a radically different way of democratising and decarbonising access to energy

Disrupting with Decentralised solutions

Our Mission

We believe that early-stage equity capital willing to look at the frontiers (geography, technological and business model) remains a missing link in the energy access ecosystem.

At EAV we invest our capital, time & resources into catalysing and scaling up low-carbon, affordable solutions across Sub-Saharan Africa. Our portfolio companies are displacing 20th century solutions with green, lean business models and innovative technologies.



Our Purpose

We are working towards an energy transition in Sub-Saharan Africa that we believe will help to create a more equitable, clean, safe and productive world. We see our impact as an investment fund occurring in four domains.

1 **Socio-Economic Development**

Greater energy access drives improvements in productivity, entrepreneurialism and all human well-being indicators. By promoting energy access, especially in frontier markets, **we aim to improve material, subjective and relational well-being.**

2 **Climate Change Mitigation**

We all call Nairobi our home and experience the drivers and effects of climate change firsthand, including pollution, volatile weather and uncertain harvests. By proving out cleaner business models, **we aim to help displace 'dirtier' ways of doing things.**

3 **Expanding 'Energy Access'**

Energy is core to all we do, but not all we think about. Our investees in the connectivity, agriculture, and cold storage spaces all **use clean energy to help deliver key services to those in areas without reliable, affordable electricity.**

4 **Building the Ecosystem**

Although a small player in a large system, we are one of Africa's first early-stage energy access funds. We believe we will continue to play a crucial role in **helping to build the still-nascent energy access space.**

Contributing to the SDGs

Energy. Enables. Everything.

Sustainable Development Goal 7 aims to 'Ensure access to affordable, reliable, sustainable and modern energy for all'.

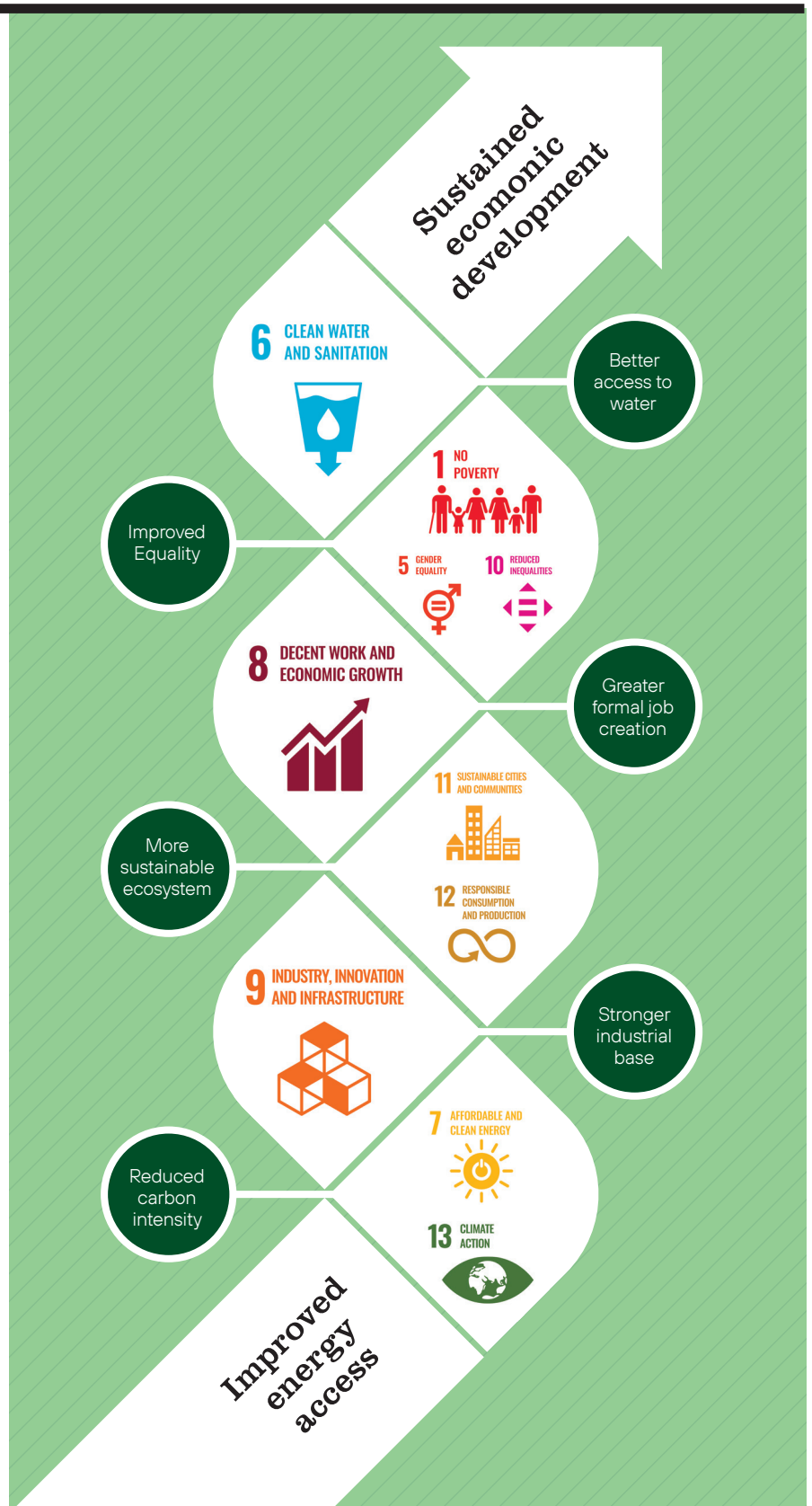
But the energy challenge in Africa is not simply about fulfilling SDG 7. **Access to sustainable and modern energy services is a prerequisite for meeting basic human needs and for economic and social development** across Africa. Access to energy is crucial for the attainment of health and education outcomes, reducing the cost of doing business and for unlocking economic potential and creating jobs. Insufficient energy access manifests itself in hundreds of thousands of deaths annually due to the use of wood-burning stoves for cooking; handicaps the operations of hospitals and emergency services; compromises educational attainment; and drives up the cost of doing business.

Energy access for all is therefore one of the key drivers of inclusive growth as it creates opportunities for women, youths and children, both in urban and rural areas.

In short, **we truly believe that energy enables everything.**

Did you know...

In September 2015, the General Assembly adopted the 2030 Agenda for Sustainable Development that includes 17 Sustainable Development Goals (SDGs). Building on the principle of "leaving no one behind", the new Agenda emphasizes a holistic approach to achieving sustainable development for all.





“

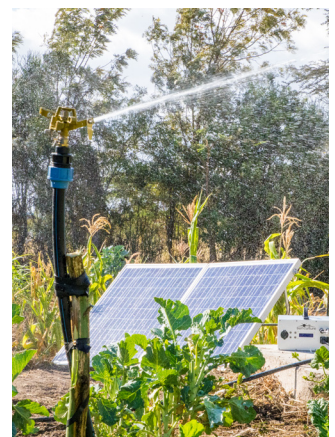
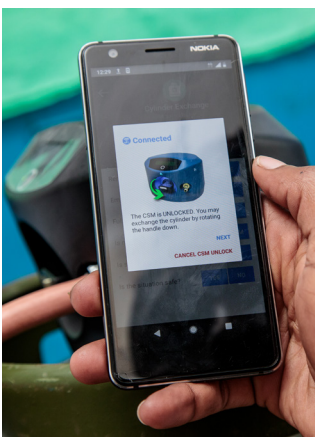
EAV’s portfolio is not only promising from a financial results perspective, but also reflects better than any other path of the transition to universal energy access in Africa in the past 5 years.

The team have anticipated and then followed significant developments such as the evolution of distributed utilities (Nuru and ZIZ) and the rapid growth of offgrid commercial and industrial power providers (Solarise, Candi Solar, SolarX and Manocap Energy).

This portfolio also includes businesses offering impactful “productive use” of energy (Sunculture, InspiraFarms), as well as clean cooking (PayGo) and the better known “Pay as you Go” household rooftop solar systems (Zola and PEG Africa).

If you want to see what the future of energy looks like, this portfolio is the best signpost available. ”

Andrew Reicher
Member of EAV’s Investment Committee



Our Portfolio Impact

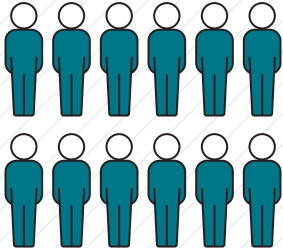
EAV at a Glance

Our Impact Numbers



15

Portfolio Companies



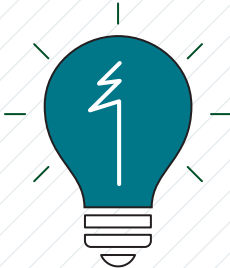
21,517,697

Number of beneficiaries



4,303,540

Number of households



1,637

Businesses powered



1,274

Direct jobs created



16

MW of energy generated (MWp)



609,032

Number of unique women beneficiaries



27% vs 73%

Rural vs Peri-Urban/Urban



144,000,000

tonnes CO2 avoided (CO2eq)

Overall number representation of the impact of the fund since inception (As of end of 2020)



Our footprint

15 portfolio companies
in **17** countries across
Sub-Saharan Africa

Impact themes

1. Households and micro-entrepreneurs

The reality

Across Sub-Saharan Africa, there are over 600 million people and micro-entrepreneurs with no or limited access to energy. Access to energy is not just seen by us as a basic human right, but it is fundamental to giving people more productive hours, enabling children more hours to study, and helping create safer environments in households. In short, access to safe and reliable energy is a key component in people's ability to raise themselves out of poverty and towards prosperity.

Our role

Leapfrogging is by no means a novel concept, but there is real potential for households and micro-entrepreneurs in areas with no or limited access to energy. At EAV we supported this by investing in companies providing access to solar home systems (SHS), solar-water pumps and cooking gas using pay-as-you-go (PAYG) technology. These technologies drive access to clean, affordable energy for solutions for households and entrepreneurs across the continent. Therefore, this story is about much more than just providing electricity but about developing business models and solutions that enable people to access essential services such as lighting, clean cooking, digital content, cold storage, connectivity and water solutions. In short, energy enables everything.



Above: PEG customer
Bottom left: PayGo Energy Customer



Investments



Zola Electric
Provides solar & smart storage power systems to African homes and businesses that deliver 24/7 power, anywhere



Zonful Energy
Solar energy experts bringing affordable and reliable off-grid green energy solutions to the people of Zimbabwe



Paygo Energy
Next-generation provider of digital solutions for unlocking clean cooking for the next billion



Palgo
Innovative fintech platform providing Point-of-Sale installment services for off-grid energy and other products



PEG
West Africa's largest, fastest-growing independent provider of distributed energy products and services



SunCulture
Leader in solar power systems, water pumps, and irrigation systems for smallholder farmers



d.light
Pioneer of pico solar and leading pay as you go platform that has impacted over 100 million people

1. Households and micro-entrepreneurs (cont.)

Impact Highlight



21,418,476

Number of direct beneficiaries



4,283,695

Number of households and micro-entrepreneurs



916

Direct jobs created



608,785

Number of unique women beneficiaries

Sponsor Feedback

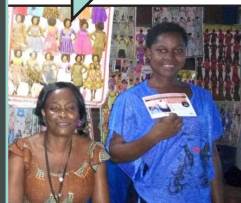
“Schneider Electric believes that access to energy is a basic human right. EAV, Schneider’s fund investment in Africa, empowers all to make the most of their energy and resources. EAV’s portfolio companies are bridging the energy access gap for households and SMEs across the continent.”

Gilles Vermot Desroches,
VP of Sustainable Development,
Schneider Electric



Testimonials: PEG Africa Client

Name
Helen Tetteh
Profession
Dressmaker
Lives Big Ada,
Ghana



“With over 12 years of experience as a renowned dressmaker, one of the challenges I faced was having time to work and deliver to clients on time. With lots of orders coming in, I sometimes have to work deep into the night which is often cut short because of outages. Now with PEG, no more dumsor so more work is completed for my clients. This has helped to increase profit for my business and improve my deliveries to customers. I am able to charge my phones and stay connected with clients, suppliers, family and friends. No need to pay anyone to charge my phone daily. This has changed my economic life and that of my children as well.”

Insights

1

Maturing Space

Clean energy companies serving low-income individuals were seen as non-viable one decade ago, yet now we have a space bursting with companies and significant capital inflow into the sector. In general, players have specialised by focusing on specific parts of the value chain, shifted to larger systems as manufacturing costs decline, offered complimentary sets of energy-related products and gone beyond energy with offerings of loans, insurance and even phones.

2

Consolidation

A company’s long-term success depends on how it progresses through stages of industry consolidation. Speed is everything. Though we remain in the earliest stage, companies must aggressively defend first-mover advantage by building scale, creating regional footprints, and establishing entry barriers by protecting proprietary technology or ideas. Consolidation, and potentially even IPOs, will come soon in the next stage, with clear leaders taking shape

3

Investor Ecosystem

Whilst much of the earlier investment in the space was done by impact funds, such as EAV, and development finance institutions, there has been a clear recent uptick in intentionality from strategics and private equity investors. Whilst this has not been matched by commensurate growth in investment volumes as yet, there are enough proof points to feel positive about their involvement in the coming years.

2. Small and Medium-Sized Businesses

The Reality

Across Sub-Saharan Africa, businesses of all sizes face issues with the consistency and cost of power supply due to inadequate grid infrastructure. On average, businesses across the region face 9 outages per month which deeply impacts those reliant on electricity to power things like machinery, equipment and cooling infrastructure, and on ensuring basic connectivity to the internet. As a result, according to the World Bank, electricity outages contribute to 8.6% of lost value during outages which systematically reduces the positive impact of Sub-Saharan Africa's private sector in driving development.






Our Role

Rather than relying on centralised infrastructure, businesses of today can circumvent energy-related issues by leveraging smart, decentralised solutions which have shorter development cycles and fewer regulatory hurdles. At EAV we have invested heavily in the commercial and industrial (C&I) solar space, where companies are partially or wholly displacing clients' consumption from the grid and diesel generators by providing energy through long-term service agreements leveraging solar-as-a-service model. We have also invested in companies that are leveraging clean energy technologies to provide cooling, energy efficiency and internet services in areas without a stable and/or affordable grid.



Above: An employee of InspiraFarms' customer

Active investments

					
<p>Solarise Provider of smart financing solutions for renewable energy technologies across Africa</p>	<p>Candi Solar Dedicated rooftop solar installer, financier and operator for SMEs across Africa and Asia</p>	<p>SolarX West African provider of clean, efficient solar solutions through leasing options</p>	<p>Manocap Financier of clean energy and energy efficiency assets across West Africa</p>	<p>InspiraFarms Next-generation provider of off-grid solar-powered cold rooms and packhouses</p>	<p>Mawingu Affordable internet service provider leveraging solar to target rural and peri urban areas in East Africa</p>

2. Small and Medium-Sized Businesses (cont.)

Impact Highlight



64,982

Number of beneficiaries



12,996

Number of households



209

Direct jobs created



563

Number of business powered



240

Number of unique women beneficiaries



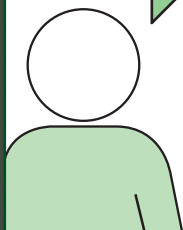
13.5

MW generated

Testimonials: Candi Client

Name

David Barry
Works at
Hi-Tech Inks,
Lives Durban,
South Africa



"It's the first time during my 30 years of working that a company has approached us with an offer to benefit our company which hasn't broken our bank account. An added benefit is that we have the pleasure of letting our customers know that we are proud to be a part of improving the environment by using renewable energy, which in turn gives our customers peace of mind that their demands for our product will not be delayed due to electricity shortages. I, as the Maintenance Manager, can honestly say that the candi solar installation team is the most professional and helpful team I have worked with – their workmanship, neatness and perfection has become a bragging point and we keenly show their work off to our customers."

“
The candi solar installation team is the most professional and helpful team I have worked with”

2. Small and Medium-Sized Businesses (cont.)

Investor feedback

“The commercial and industrial solar market represents another compelling opportunity for Proparco to invest in the off-grid sector. In markets where power outages are common or the grid is expensive, EAV’s portfolio companies have developed pioneering scalable and replicable business models for commercial and industrial clients. This is why we are proud to support such innovative projects and the co-investment opportunities we’ve had with EAV. It’s remarkable how these projects reduce CO2 emissions while enabling African SMEs to shift towards greener energy through the provision of a decentralized renewable energy solution.”

Johann Choux, Head of Equity Investments – Financial Institutions & VC, Proparco

PROPARCO

“
In markets where power outages are common or the grid is expensive, EAV’s portfolio companies have developed pioneering scalable and replicable business models for commercial and industrial clients.
”

Insights

1

Inorganic Growth

With cash flows affected by COVID-19, businesses have been forced to generate short-term liquidity. This has opened inorganic growth opportunities for C&I Solar companies who can refinance systems from EPCs, who have taken construction risk, or from clients, who paid up-front. Not only does this enable C&I Solar companies to acquire assets at a discount but also to maintain speed of scale-up despite lengthened lead times.

2

Broadening EaaS

Energy-as-a-Service (EaaS) is not just about providing customers with energy. It is more broadly about management of a customer’s whole energy portfolio needs in terms of portfolio strategy, program management, energy supply, energy use, load management, and asset management. Companies are engaging with this idea more proactively and taking steps to reduce their clients’ energy use, spend, and risk.

3

Catalytic Capital

For this sector, alongside our equity investment, we provide quasi-equity in the form of mezzanine notes, which plugs the capex financing gap. Despite an annual coupon, cash flow strains are reduced given repayment is in arrears, and it is classed as equity, which supports a debt-equity ratio amenable to lenders. This has enabled founders to avoid excessive dilution, demonstrate initial traction, raise debt and bring in larger investors.

3. Communities

The Reality

Dispersed populations, gaping infrastructure gaps and insufficient grid capacity, leave swathes of the continent without access to grid electricity. Even when in proximity to the grid, connection costs can be prohibitively expensive resulting in 150 million people living in a range of grids but remaining unconnected. The current energy system can no longer be reliant upon just a linear, mono-directional grid. In short, the system needs disruption.

Our Role

We believe that low-carbon, decentralised grids will be needed to deliver energy to communities en masse. Such grids, including mini-grids and - what we call - metro-grids, have generation and storage systems interconnected to a distribution network that supply local customers. These systems are not only vital for local communities but, amidst the scramble for intercontinental connectivity, also for connecting traditional grids across Sub-Saharan Africa. At EAV, we have invested in companies that are positioning themselves as off-grid utilities which are at the forefront of this disruption.

This photo and below: Nuru's site construction in Goma



Active investments



ZIZ

Leading developer, owner and operator of solar-hybrid metro-grids across Chad



Nuru

Working to provide 5 million clients in Congo with rock-solid renewable energy by 2024



3. Communities (cont.)

Impact Highlight



34,239

Number of beneficiaries



6,848

Number of households



149

Direct jobs created



1,074

Number of business powered



7

Number of women-owned business beneficiaries



2.5

MW generated

Testimonials: Nuru Client

Name

Sasita Jospin

Profession

Business man

Lives Ndoshoh, DRC



"I do fish business meaning I have a cold room and do retail and wholesale. What motivated me to start was seeing Nuru had arrived in Ndoshoh, as before it was like a desert with not many activities requiring electricity and small businesses using genset. I am the first person to open a cold room here in Ndoshoh with Nuru's electricity. Besides our fish, our fridges are full of womens' food who used to store their food far away but, since I opened, they don't need to do this. I am happy about Nuru and it gives me ideas about more entrepreneurial ventures. Sometimes I observe as it rains and gets dark, expecting the electricity to drop, but so far, no!"

“ I am happy about Nuru and it gives me ideas about more entrepreneurial ventures ”

3. Communities (cont.)



Above: Nuru's 1.3MW mini-grid deployment in Goma

Investor feedback

“EAV is pushing the needle on how clean, affordable energy is delivered to communities across Central Africa. Through their investments into ZiZ in Chad and Nuru in DRC, EAV has identified metro-grid companies run by deeply embedded local teams that are primed to navigate challenging operating environments and expand energy access for under-served communities. At FMO, we look forward to continuing to support the scale-up of the metro-grid model across Africa with our trusted partner, EAV.”

Marieke Roestenberg,
Ventures Program Manager, FMO



“
EAV is pushing the needle on how clean, affordable energy is delivered to communities across Central Africa.”

Insights

1 Metro-Grids
What is a metro-grid? We define these as megawatt-scale decentralised systems operating in populous urban or peri-urban areas with a mix of households and business offtakers. In countries like Chad and Congo, there is significant potential given the lack of stable, affordable electricity from incumbent utilities, the dependency on dirty diesel gensets, and the very low electrification rates even in urban centres. The impact potential from metro-grids is tremendous in some of Africa’s most under-served economies.

2 Laser Focus on ESG
Despite the importance of environmental, social & governance (ESG) measures, many companies are yet to establish strong ESG frameworks in line with best practices. Such practices are not just a key foundation for sustainable operations, but also provide comfort to investors, particularly where i) large funding is needed, ii) the market is challenging and iii) teams are remote. Companies with insufficient ESG measures will have their valuations significantly discounted. To put it simply, investing in ESG is investing in success!

3 Layering Services
We see mini- and metro-grids as so much more than suppliers of electricity. As a first step, there is significant potential to bundle energy access and other productive use assets increasingly together as new business models emerge, whereby players can unlock additional revenues at marginal incremental cost. Beyond the energy-connectivity nexus, we expect to see integration of additional services such as water and mobility. Essentially, what we are envisioning is not just a metro-grid, but a metro-economy.

**Spotlight
on our
Portfolio**

d.light Exit

Did you know...

More than 2 billion people around the world live without reliable access to electricity. d.light is working hard to change this



Let's talk about d.light. What started out as a class project has blossomed into a leading social enterprise that has provided 100+ million people with clean energy solutions and become the subject of a newly-released book. For EAV, our small part in this big story culminated in our fund achieving its first exit in early 2020.



100+ million
lives empowered



\$4.1 billion
saved in energy expenditures



27 million
school-aged children reached with solar lighting



23 million
tons of CO₂ offset

Our investment

2016 is where our role in the d.light story began. Our inaugural fund - EAV I - had closed the preceding year and we were eager to make investments in the pay-as-you-go solar sector.

d.light was a clear market leader in solar lighting...

- 1 Unrelenting focus on customer-centric product innovation
- 2 Extensive distribution network
- 3 Strong brand awareness
- 4 Unparalleled impact by targeting low-income under-served individuals

We were intrigued

We ultimately decided to invest in d.light in Q2 2016, and we joined renowned investors - Omidyar Networks, Gray Ghost, Nexus, DBL Ventures amongst others - in backing this exciting scale-up.

Profitable growth

Over the next 4 years, we worked with d.light's management and board to drive the growth of pay-as-you-go sales in Africa. We helped d.light raise \$20m in debt funding from European Investment Bank, one of our Limited Partners. Whilst no doubt small, we hope our actions were valuable.

Founder's view

"We would like to thank our early investors, including EAV, who had faith in us from the start. Thanks to their enduring support, they have enabled d.light to enable incredible positive impact in the lives of millions of customers while still achieving strong financial outcomes."

Ned Tozun, d.light CEO

A landmark exit

As the company grew and thrived, interest naturally grew with Shell New Energies acquiring the stakes of several early stage investors, including ours at EAV. This exit was a significant milestone for all:

d.light
Cemented the belief in the company's potential. Tozun put it best when he said, "We have great confidence that we will continue to accelerate and deepen this impact, as we expand our geographic footprint and product portfolio to delight our customers. The future is truly bright for d.light and the off-grid solar industry as a whole."

EAV
First exit for our first-time fund pointing to the team's ability to identify, nurture and exit deals in a challenging environment

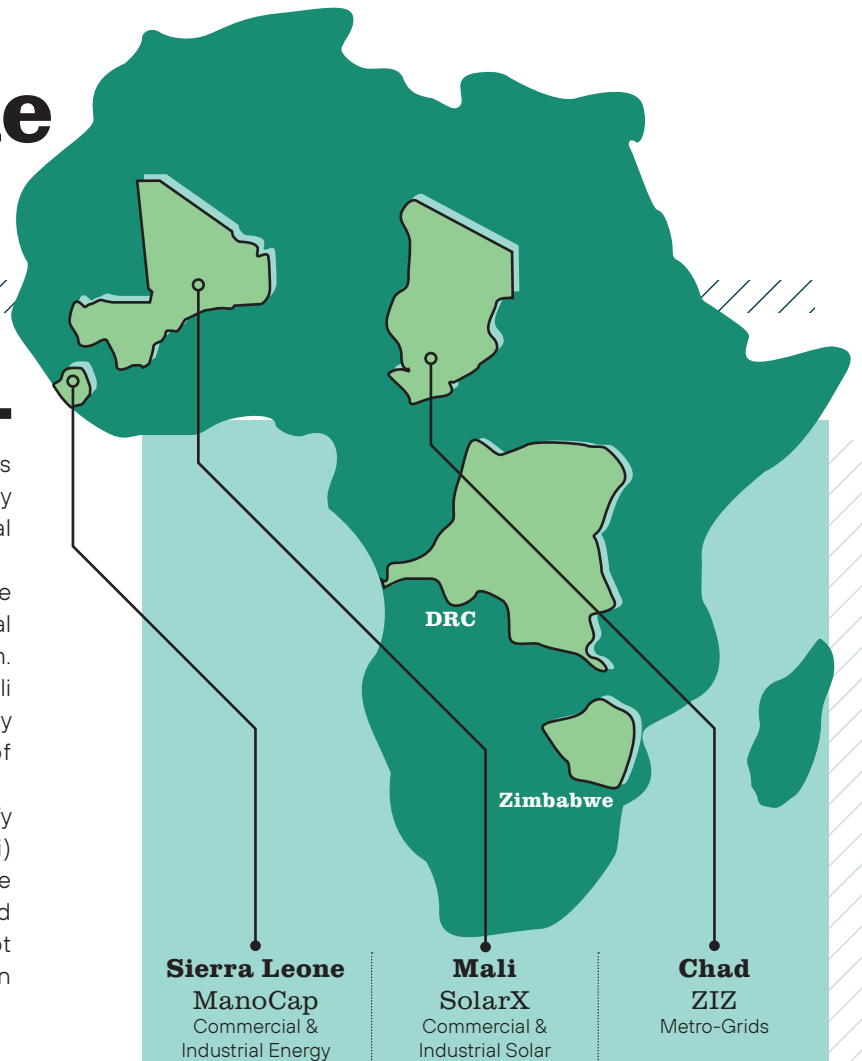
Energy access space
Vindicated the years of effort put in by all, signalling to the world the sustainability of this space

Pushing the Frontiers

Within the energy access space, EAV has invested in companies that have innovated by pushing two key frontiers, namely the technological and business model frontiers.

A third and vital frontier we are focused on is the 'geographical frontier'. We have made an intentional effort to invest in markets that others shy away from. We recently closed three deals in Sierra Leone, Mali and Chad, which adds to the exposure we already had in Zimbabwe, the Democratic Republic of Congo & Ivory Coast.

Our strategy is to focus on the people. We identify master operators, namely founders who have i) bootstrapped and proven their execution expertise or ii) developed exceptional market knowledge and networks. We believe this is fundamental to not only achieve growth but to be able to pivot when challenging times occur.



Sierra Leone
ManoCap
Commercial & Industrial Energy

Mali
SolarX
Commercial & Industrial Solar

Chad
ZIZ
Metro-Grids

The energy access gap at frontier markets



Access to electricity
(% of population)



Number of blackouts
(average monthly)



Installed capacity
(in megawatts)



Ease of business
(ranked out of 190 countries)



Population
(millions)



Electricity tariffs
(\$ per kilowatt-hour)

26	35	12
9.1	4.2	4.5
100	400	125
163	148	182
7.4	17.6	16
0.28	0.23	0.23

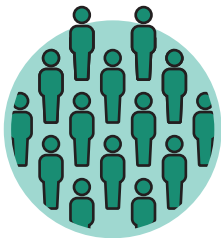
Responding to Coronavirus

Far from being an equaliser, COVID-19 is disproportionately affecting vulnerable people and businesses. Energy is not simply a nice-to-have but is a catalyst for opportunities across the African continent.

Rather than shy away, we doubled down on our commitment to this space and

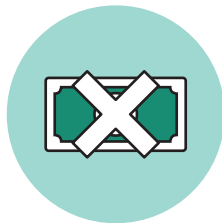
closed two investments during the pandemic, investing in SolarX in Mali and ZIZ Energie in Chad and North Cameroon. Additionally, we have pushed our portfolio to continue to serve and scale their customers whilst also looking at ways to ease the burden during this period.

The impact of COVID-19 has been felt in all aspects of the global economy, including within the energy access sector. As an industry which employs hundreds of thousands of people to deliver essential services, including lighting, cooking, cooling and internet.



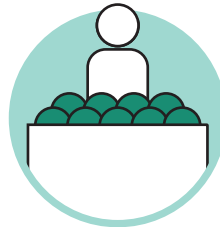
5-29m

people to fall into extreme poverty



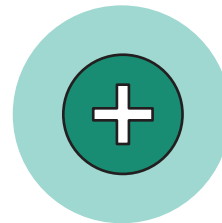
89%

in informal sector living hand-to-mouth



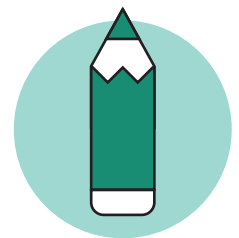
90%

of businesses are SMEs with limited resources to absorb shocks



72%

of healthcare facilities have from unreliable electricity



66%

of schools have unreliable electricity

What our portfolio companies have done to help

Zonful...

developed online shop portal resulting in less customer engagement

1

To reduce the spread of the virus

SunCulture...

extended Pay as you Grow customer repayment contracts

Candi Solar...

offered 6 month free electricity to customers

3

To soften the financial burden faced by customers

PEG...

was sponsored by USAID to provide reliable, affordable electricity to off-grid health clinics in Ghana

Mawingu...

signed deal with the Laikipia county to connect 84 health clinics to the internet, facilitating greater access to healthcare virtually

2

To help rural communities

Zonful...

donated solar panels to 10 clinics in Matabeleland North Province in Zimbabwe, creating better electricity supply to more effectively serve customers

InspiraFarms...

restructured payment terms for customers working with smallholder farmers to ease burden on a vulnerable group

Solarise...

implemented 3 to 6 months capital holiday to accommodate cash position of its clients

More from Zonful Energy

“Rural clinics face a huge challenge of lack of electricity, which means there is no lighting thus health practitioners have difficulties performing their duties at night. As the country fights coronavirus, our health practitioners need all the assistance they can get. That is why we decided to donate solar panels and lighting accessories to 10 clinics in Matabeleland North Province”

Mr Nyasha Hwata,
Business Development Officer,
Zonful Energy.

Sunculture: Supporting Smallholders

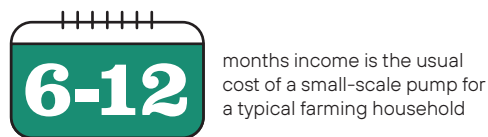
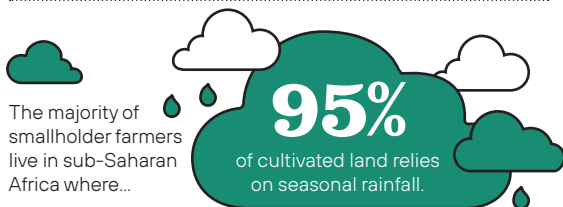


This photo: SunCulture customer in Kenya

Empowering smallholder farmers with solar irrigation

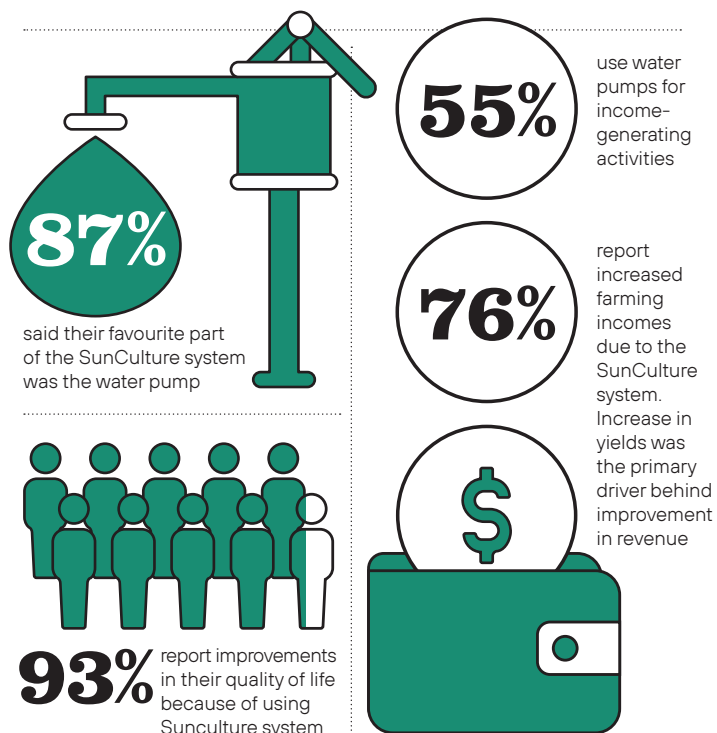
500,000,000

smallholder farmers lack access to modern irrigation solutions



PAYGO solutions are key to overcoming this unaffordability, with SunCulture launching its "Pay as You Grow" model that provides finance and post-purchase support to enable farmers to grow and generate more income

What the farmers think...



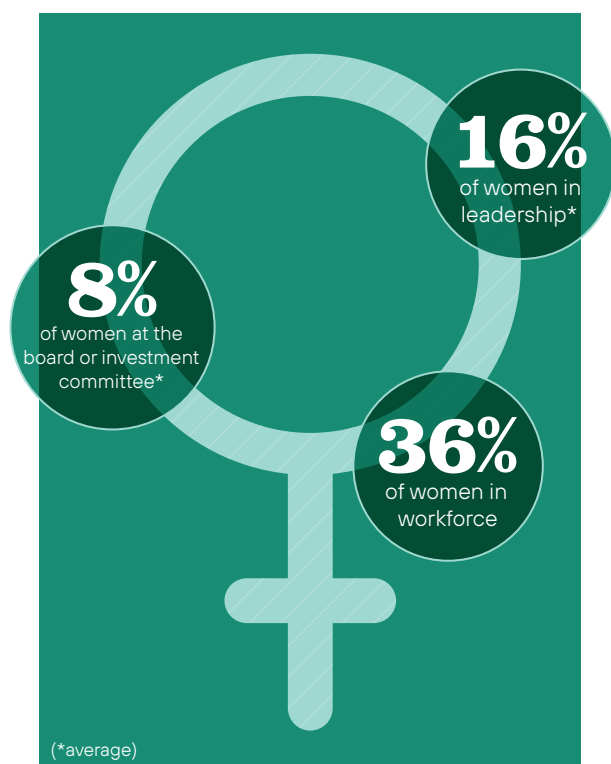
Towards the 2X Challenge

SDG 5: Achieving gender equality and economic empowerment of women



At EAV, we are proud to have a portfolio which is working towards enhancing diversity and inclusion. Currently, our portfolio has:

Our portfolio contributes to inclusion and economic empowerment for women through their products and services:



1 Energy Access & Financial inclusion
Through the pay-as-you-go model, our SHS portfolio companies have provided energy access to underserved groups including women in rural areas. By building their credit history, women can now more readily access credit from financial institutions.

2 Community initiatives
Through street lighting initiatives, our portfolio has improved both security particularly for women and business productivity in the informal sector, of which youth and women make up a significant proportion.

3 E&S compliance
Through E&S compliance in our contractual agreements, our portfolio has formalised community engagement with women and youth groups to build goodwill and derive optimal community involvement in site construction and operation, including through training and subsequent employment.



Success Story of PEG's Gender Action Plan

Women represent half of the world's employment potential but comprise just 32% of the renewable energy sector workforce worldwide. With ambitions to create employment opportunities for women in the sector and to empower more women in rural West Africa, PEG developed a Gender Action Plan with the support of Power Africa.

Over 12 months, PEG achieved a 14% increase in female management positions, bringing the ratio of women leadership to 44%

With data on promotions revealing that female employees at PEG work nearly a full quarter more than men before their first promotion, PEG developed a standardized promotions policy to ensure there are concrete, tangible and equal qualifications for being promoted

To gain 4,000 more female customers, PEG has tested a new sales model in northern Ghana which is developed for women's savings groups and provides more economic opportunities for women

With more female leaders, there has been increased collaboration, more meaningful engagement and more efficient problem-solving. This is propelling both male managers to more readily give greater responsibilities to women and female employees to be more vocal now as they feel there is more opportunity to be noticed. Female leaders are seen both as role models and as evidence of genuine opportunities for progression.



Above: A happy PEG customer in Ghana

Zonful's View on the 2x Challenge

*"Our philosophy as a company is to build a **friendly and caring team of professionals** with a laser focus on customer centricity like mother's love. This formula is not devised by us, and it's not a secret in any form. It's called **CORPORATE Culture**, our only addition is the passion to build the team with women at the centre stage and an environment where people would enjoy coming to, just like the happiness a kid enjoys when the mother is feeding him or her. We have created a **unique environment where everyone would want to work and be happy to see each other smiling, something most women do without difficulties.**"*

William Ponela, CEO, Zonful Energy



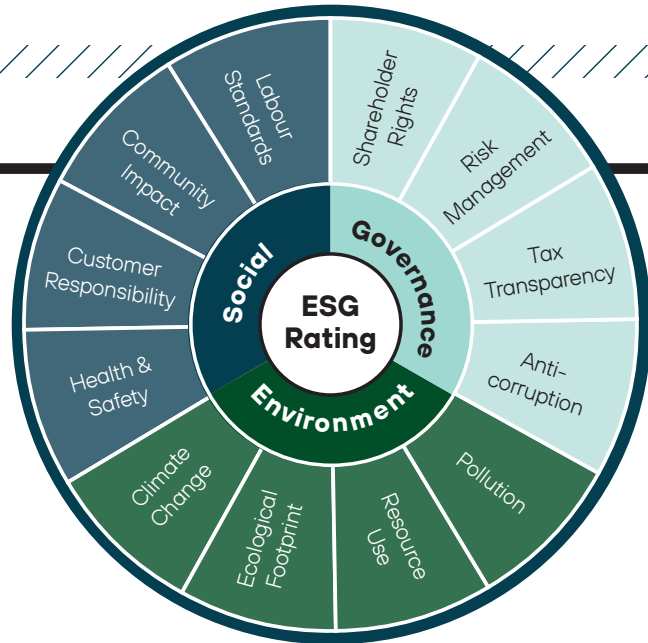
Our Investment Approach

Responsible Investment Approach

At EAV we are proud to call ourselves an Impact Investor. But, what even is impact investing? According to The Global Impact Investing Network (GIIN), "impact investments are investments made with the intention to generate positive, measurable social and environmental impact alongside a financial return".

Basically, we seek to find investment opportunities whose commercial and impact performances are positively correlated and linked. This balance between expected financial returns and Social & Environmental returns in our portfolio is critical for us.

To do this we have a responsible investment approach consisting of three key frameworks:



1 ESG Integration & Engagement

We believe that incorporating environmental, social and governance (ESG) factors into investment and ownership decisions makes good investment sense. When we talk of the Environment, we look at how a company performs as a steward of nature, whilst the Social refers to how it manages relationships with everyone it interacts. The final category covers a variety of factors that relate to good governance. We engage with companies pre-investment on ESG and work with them as they mature.

2 Performance Measurement

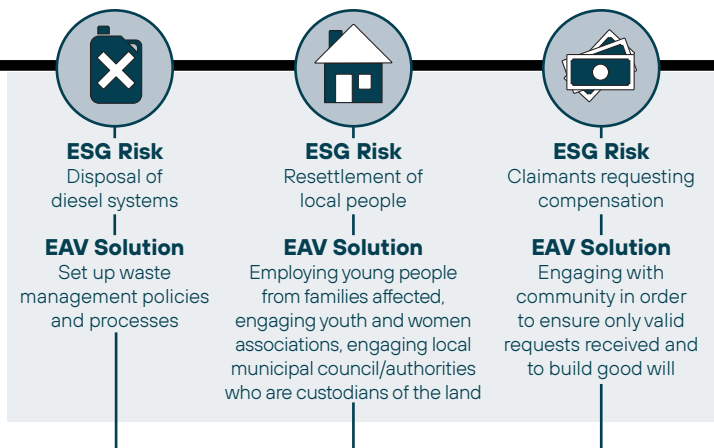
Effective measurement is our goal. We aim to get a clear picture of the financial and impact performance by our portfolio companies whilst, importantly, not being overly burdensome. As investors we must understand that collecting any data comes at a cost. To do this, we have a simplified set of financial, commercial and impact indicators that we collect data periodically throughout the year. We also like to supplement this with real life stories from our investees's customers and partners.

3 Reporting

Good reporting is an essential part of financial and impact measurement. It not only allows yourself and others to learn from your work, but promotes a culture of accountability and transparency, both internally and across the ecosystem. To do this, we provide quarterly and annual reports to our investors with in-depth information on the financial and nonfinancial performance of portfolio companies. We also publish public reports like this to let the wider public know what we do.

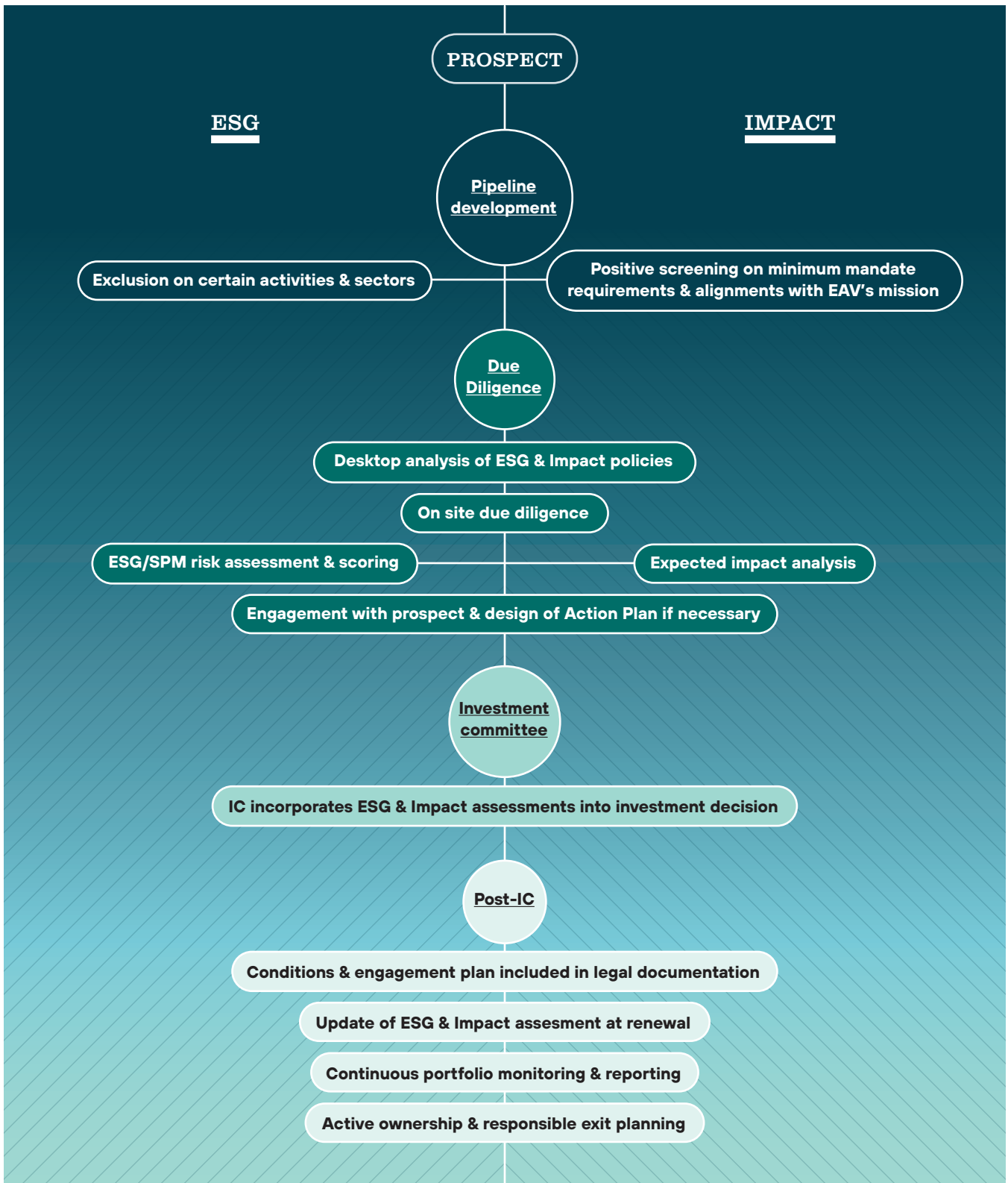
ESG for ZIZ Energie

ZIZ develops, finances, builds and operates metro-grids, which are hybrid plants with an electric urban network for cities of more than 25,000 inhabitants, in Chad. EAV invested in the company in 2020 and has worked with the founders to identify and mitigate ESG risk even prior to our investment. For example, we have looked to mitigate the following risks:



By doing this, EAV believes ZIZ can become a prime example of a sustainable decentralised utility in Chad.

How we embed ESG and Impact into our investment process



Our Formula for Driving Sustainable Growth

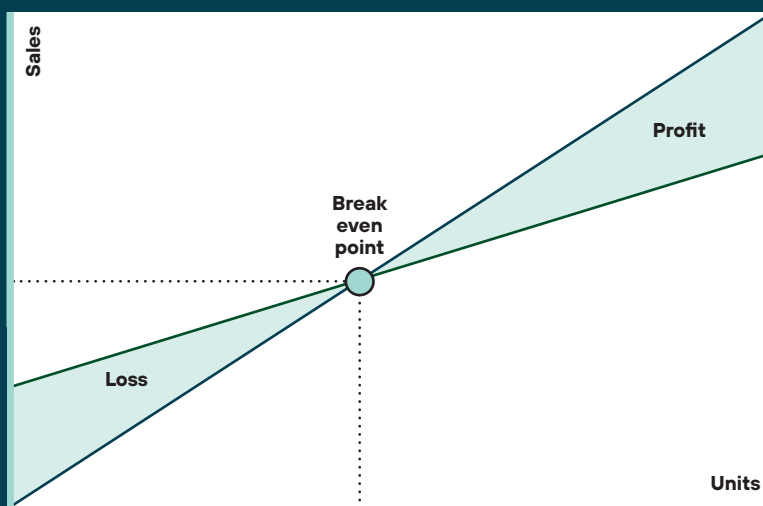
Our portfolio companies do not just look for capital, but also for investors who can add value to them.

At EAV, we leverage the lessons, expertise and networks gained from investing in companies across African economies and other emerging markets. As "hands-on investors", we then aim to drive this value addition through our interactions with our portfolio entrepreneurs in several ways. We have shone a light on three in particular which we feel are interesting:

1 Drilling into unit economics

At EAV, we believe that having a sustainable unit economics model is central for ensuring a path to profitability. Not only should this be the bedrock for forecasting but should be continuously updated as the business evolves. This is particularly important in Sub-Saharan Africa given issues arising from political and macroeconomic risk and longer fundraising cycles

Unit economics measures profitability on a per unit basis. By evaluating direct revenues and costs on a per unit basis, one can answer one of the most important questions: Can I make more profit from a customer than the total cost of acquiring them?



2 'It takes a village': an ecosystem approach

Over the years we have built a wide network of individuals whose expertise and knowledge we rate. Recently, we have brought these people into the EAV setup as Venture Partners who are providing targeted support to our portfolio companies in several key areas including:



Business Development



Finance & Structuring



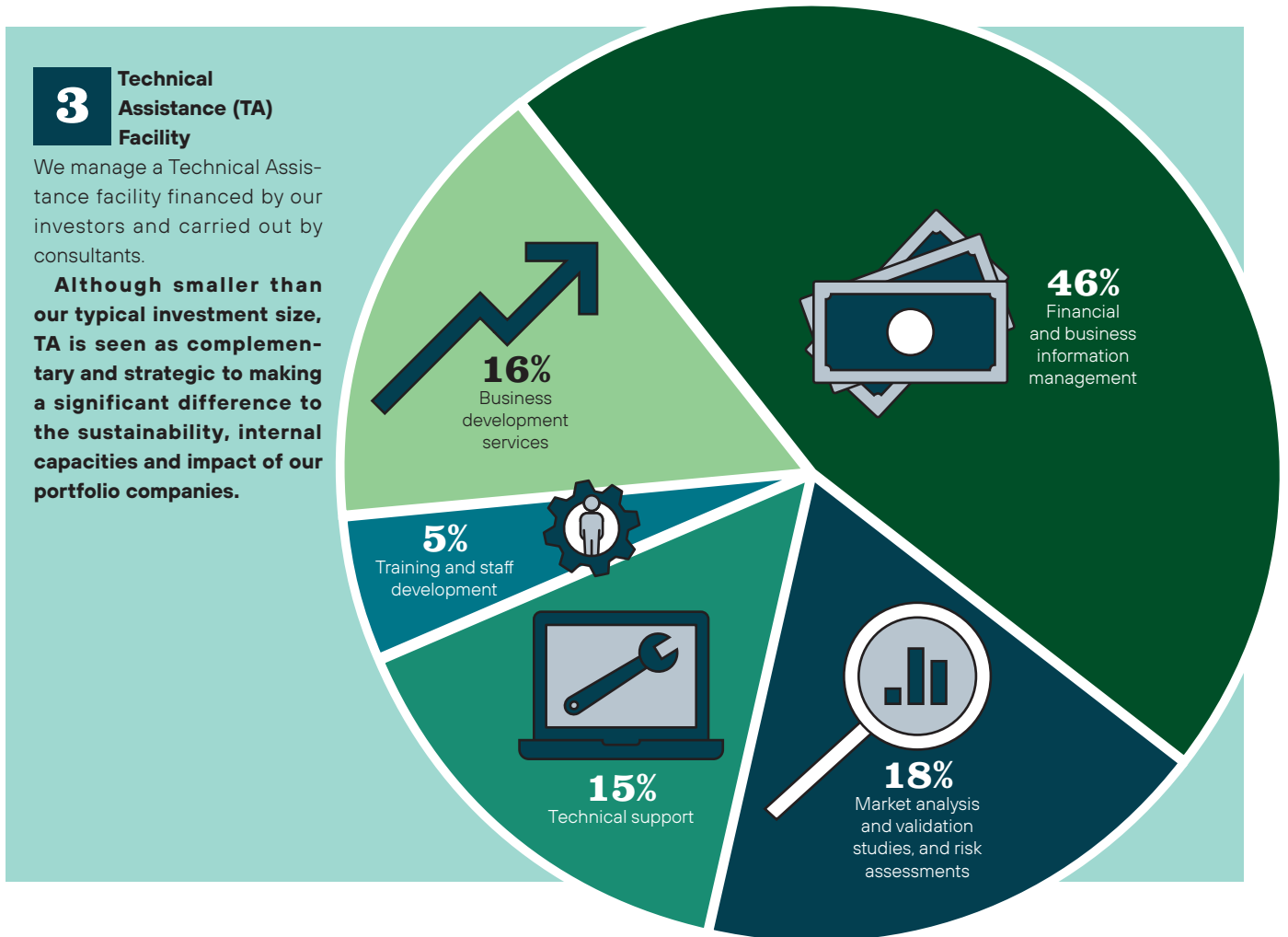
Fundraising

“

ElectriFI and EAV share a vision for developing wider access to modern, affordable and sustainable energy across Africa. Over the years, we at ElectriFI have invested in several companies in which EAV is an investor, including Solarise Africa, Nuru, PEG Africa and candi solar. We believe both organisations play a fundamental role in catalysing and scaling up the energy access space, and look forward to working with EAV on more deals going forward ”

Jean-Denis Collin, Senior Investment Officer, ElectriFI  

Our Formula for Driving Sustainable Growth (cont.)



Spotlight on TA during COVID-19

- COVID-19 has forced management teams to remain resilient amidst decreased cash flows, travel bans, remote working challenges and disruptions in supply chains
- Our TA providers's nimbleness enabled essential support for our portfolio, with TA enabling our portfolio to:



Restructure supply chains



Re-launch business lines that were paused because of COVID



Restructure credit contracts



Provide coaching to management on crisis preparedness and risk mitigation.

InspiraFarms on TA

"The TA financing from EAV has been a great support during the times when we needed it the most. The efficient application and approval process were very valuable for us as a business."

Mina Stiernblad,
InspiraFarms



6 years, 6 lessons learned



As one of the early investors in Africa's energy access space, the past 6 years have been incredibly eye-opening and filled with learning opportunities. To some extent, this is an apprenticeship business. You learn by doing, and from doing alongside experts. During this period, we have experienced ups and downs, missed targets and achieved lofty milestones. Here, we present key lessons learned throughout our journey.



1 Be disciplined, not dogmatic

As investors, we must stay disciplined about our strategy, our time, how we engage with entrepreneurs and how we go about developing our own theses. But being dogmatic and sticking to hard-and-fast rules is not helpful. You need to leave room for exceptions and be receptive to market changes, which are plentiful in our space. For us this has meant evolving our specific energy access focus, **diversifying the instruments** we provide, and broadening the value-add.

4 Plan for the worst

Planning is vital. But, when investing in companies across Sub-Saharan Africa, there are constant market, regulatory and political uncertainties that can scupper your plans. Deals take longer than expected due to extensive due diligence and legal work required, particularly in challenging markets, and startups often **underestimate execution challenges**. The result is startups continuously face cash management issues. Whilst hoping for the best is helpful, make sure you plan for the worst.

2 Push the frontier

Investors tend to focus on more proven markets in Sub-Saharan Africa, like Kenya and Nigeria. Markets **deemed more challenging**, like Chad and DRC, have been avoided due to market, liquidity and currency risk, to name a few. But these markets are exactly where the energy access challenge is so pervasive and under-served. As investors, we need to find the right teams and leverage appropriate structures to push the geographic frontier. Otherwise, we will be doing a disservice to the energy access fight.

5 Add value, intentionally

All investors say they are 'hands-on' and value-add. For us, we have learnt that you need to be intentional about where you add value. For us we have a variety of avenues of value-add including our board involvement, one-on-one calls with entrepreneurs, support of our venture partners, portfolio synergies or Technical Assistance facility. But it all starts with building a strong relationship with entrepreneurs so we can identify risks and issues, and **intentionally focus our time** on finding the right solutions.

3 Honesty is the best policy

The investors that truly have the best interests of their investees at heart are usually those that ask the tough questions and demand more from entrepreneurs. Honesty is the best way to practice this. Whilst you may not always agree, entrepreneurs deserve to know where an investor stands but also to be able to communicate honestly about where they might disagree. This honesty is the only way to build **long-term effective teamwork** between an investor and entrepreneur.

6 Plan exits from the start

Deployment is easy, exits are hard. There are few strong liquidity events in Sub-Saharan Africa and we realised that intentionally working on exits should start from the onset, and feedback from potential acquirers can guide our investments. Our unique approach to financing capital-intensive companies centers on generating liquidity and while our upside is expected to derive from our equity positions, our mezzanine notes in a third of our portfolio provides a clear route to liquidity.

Limited Partners



Industry Associations from Partners



Contact

Paras Patel, Managing Partner

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