

Life Is On

Schneider
Electric

Schneider Electric
Energy Access Asia
(SEEAA)

Impact investing for a
just energy transition in
South & Southeast Asia

Impact Report
2024

Foreword

The energy transition is not solely about the environment, but also about the people.

Despite the advancements in electrification rates in Asia driven by government policies, many rural communities still face challenges due to unreliable access to energy, resulting in economic and social hurdles. It is imperative for us to collectively adopt a people-centric approach to foster energy transition, focusing on expanding and democratizing access to renewable energy while also enhancing livelihoods and socio-economic well-being.

Through our support of early-stage, impact-focused startups, we aim to nurture the innovations necessary to address underserved markets. Together with Schneider Electric and its partners, our impact investing practice offers both financial and technical support, empowering early-stage innovations to evolve into meaningful and scalable solutions.

As a pioneer in corporate impact investing, Schneider Electric stands at the forefront of endeavours to channel financing toward a just and inclusive transition.



Gilles Vermot Desroches
President
Schneider Electric Energy Access Asia (SEEEA)

SEEEA is supported by



Who we are

The SEEAA impact investing vehicle was established in Dec 2019 to invest in companies in South and Southeast Asia. We are supported by four investors: Schneider Electric Industries SAS (SEI SAS), the European Development Finance Institution Management Company ("EDFI MC"), the Norwegian Investment Fund for Developing Countries ("Norfund") and Amundi Finance et Solidarite ("Amundi").

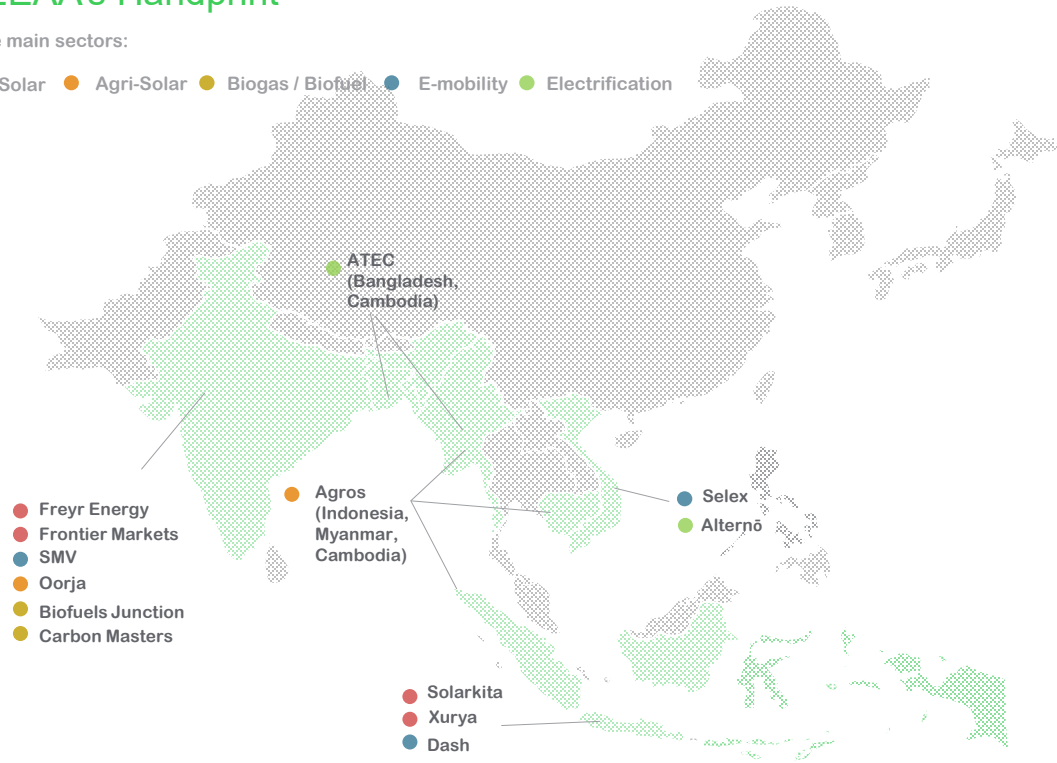
SEEAA focuses on investing in early-stage companies that benefit the disadvantaged populations and contribute to the Sustainable Development Goal (SDG) 7 – Ensure access to affordable, reliable, sustainable and modern energy for all. Through our activities and portfolio, SEEAA invests to achieve two primary objectives: (1) to improve access to affordable and reliable energy, and (2) to accelerate the transition towards renewable energy and net zero.

As of now, SEEAA's portfolio consists of 13 companies across the sectors of Solar, Agri-solar, Biogas / Biofuel, E-mobility and Electrification.

SEEAA's Handprint

Five main sectors:

- Solar
- Agri-Solar
- Biogas / Biofuel
- E-mobility
- Electrification



Why impact investing?

The UN's 2023 global SDG stock take unveils a stark reality: only 15% of our 17 targets are currently on track¹. As climate change poses an existential threat, it disproportionately affects underserved communities, exacerbating pressing social issues such as inequality and poverty. SEEAA is in the position to mobilize private capital and to direct it purposefully towards our sustainable development objectives.

SEEAA supports companies that contribute primarily to SDG 7. We firmly believe that energy access is not merely a target, but a fundamental human right. Access to energy acts as a catalyst that unlocks myriad opportunities that significantly elevate one standard of living and overall quality of life.

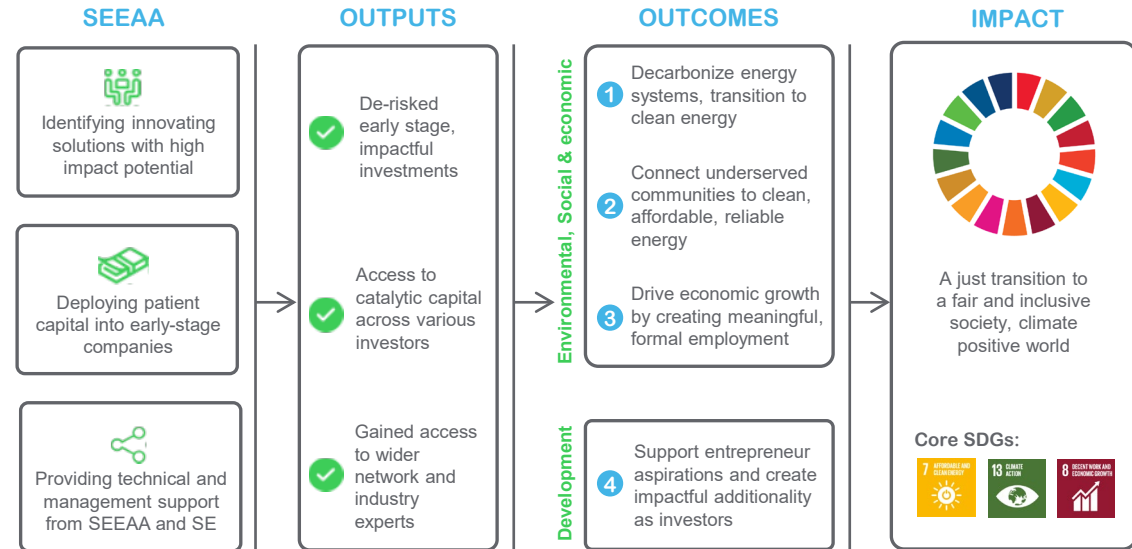
Presently, over 685 million people globally², approximately one in ten, lack access to electricity. Furthermore, renewable energy sources on a global scale account for a mere 13% of total energy consumption³.

The pressing issues of energy poverty and inequality, compounded by the climate crisis, underscore the urgent need for accelerated efforts in advancing SDG 7.

As we progress on SDG 7, we believe that advancement across other development agendas will also follow suit.

SEEAA Theory of Change

As an impact investing vehicle, SEEAA results in two levels of outcomes. The first level involves nurturing and growing startups or businesses, fostering their development and expansion. The second level pertains to the positive impact on society and the environment, contributing to a just transition to a fair and inclusive society, and a climate-positive world. This dual outcome approach is captured in our fund-level theory of change, which outlines 4 key outcomes, across two main pillars that we want to achieve.



Our approach to impact measurement to assess our key outcomes

OUTCOMES

1 Decarbonize energy systems, transition to clean energy

2 Connect underserved communities to clean, affordable, reliable energy





3 Drive economic growth by creating meaningful, formal employment

4 Support entrepreneur aspirations and create impactful additionality as investors

INDICATORS OF PROGRESS

- In assessing our progress on outcome 1, we are using the metric of ‘CO₂ emissions avoided through the substitution of fossil fuels with clean energy’
- This allows us to consolidate the total climate impact across the diverse sectors and business models in our portfolio
- We monitor the number of beneficiaries that each of our companies reach through their products and services and aggregate on a portfolio level.
- Taking **conservative assumptions** of household sizes, no. of users etc.
- Our portfolio have operations in **ODA recipient countries**, and they are committed to **hire locally** – this ensures that the start-ups develop local capacity and provides meaningful jobs.
- SEEEA also support our portfolio companies in improving internal labor welfare and policies.
- SEEEA intentionally extend non-financial support to our portfolio companies. This includes support such as technology and technical expertise from Schneider Electric, branding and fundraising.
- We conduct an annual survey to understand the satisfaction of our portfolio companies, and areas we can further help them in.

CORE METRICS

	No. of beneficiaries
	CO ₂ emissions avoided
	No. of meaningful, formal jobs created
	Satisfaction score by investees

Connecting different company and sector specific metrics to our core metrics

We have designed 3 different metric tiers, taking references from IRIS+:

Core metrics



Number of beneficiaries with access to clean energy



CO₂ emissions avoided



Number of meaningful and formal jobs created

+ SEEAA's additionality as investors

On a fund level, we have selected core metrics that are universal across all companies, regardless of their activities and sectors.

These core metrics are fundamental to measuring how we have progressed on the 4 key outcomes outlined in SEEAA fund's theory of change.

Sector level metrics

Solar		Agri-Solar	Biogas/biofuel	E-mobility		Electrification
Renewable capacity installed	Clean electricity produced	No. of Solar pumps/mills installed	Agricultural wastes avoided	Distance travelled	No. of e-vehicles deployed	kWh equivalent

Sector-level metrics illustrate the positive impact of different sectors we have in our portfolio.

Company level metrics



Company level metric captures the unique impact of each company, but they are not core to SEEAA's mandate.

End-to-end impact management

At SEEAA we employ an integrated approach to impact management – this means that impact management occurs in parallel with Environmental & Social, and financial performance management throughout the entire investment lifecycle, from pre-investment due diligence to post-investment engagements.

We believe that Environmental & Social risk management is fundamental for businesses that wants to create impact. We have implemented a stringent Environmental & Social Management System (ESMS), embedding the core principles of the IFC performance standards and UNGC.

In measuring impact, SEEAA adopts a methodological yet practical approach. We recognize that **impact** encompasses systemic, transformative shifts that cannot and should not be reduced to a single quantitative metric as a measuring tool.

Additionally, SEEAA relies on on-the-ground impact stories as a primary channel to comprehend the depth of impact created by our portfolio companies.

SEEAA is proud to be a signatory of the Operating Principles of Impact Management (OPIM), demonstrating our commitment to high standards and transparency. SEEAA will actively improve and adopt international best practices in sustainability and impact management as we progress.

PRE-INVESTMENT

- Alignment of impact with SEEAA's core mandate and SDGs.
- Due diligence process to analyse: "What is the impact?" and "Who experiences these impact?"
- Onsite evaluation to validate expected impact on key stakeholders.

INVESTMENT

- SEEAA works closely with potential investees to refine the methodologies and assumptions behind each impact metrics.
- We will conduct an impact projection based on discussed business plan and align on mid to long term impact targets.

MONITORING

- Quarterly reporting of all selected metrics, along with commercial and other E&S indicators
- Technical and management support provided by SEEAA
- Periodic on-site assessment to evaluate impact.

EXIT

- SEEAA believes in deploying patient capital for the long-term sustainability of the company.
- Longevity of impact will be considered as a key factor when assessing exit opportunities.

Member of:



Signatory to:



User of:



SEEEA's additionality as investors

As catalytic partners, SEEEA is committed to adding value to our portfolio companies beyond just financial investment. We actively engage by taking a hands-on approach and board seats, providing management, strategic, and technical support. At the same time, enabling our portfolio companies to tap on our extensive industry network.

Regular feedback and survey sessions with portfolio companies are conducted to evaluate the effectiveness of our support and identify areas for improvement. We prioritize bi-directional communication and actively consider their feedback to enhance the support we provide to our portfolio companies.

Key figures from SEEEA's additionality survey:

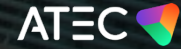
100%

Of respondents consider to have received meaningful support from SE beyond capital investments

75%

Of portfolio companies have received support not just from the impact investing team, but wider SE

"SE has an advisory role; they are actively involved in strategic discussions, contributing to how we can grow the business"



"Observers from SE readily give advice to help Selex perfect the company structure, financial planning, and capital table"

"SEEEA is our first institutional investor. It was a real catalyst. Having the first equity investor on board opened other doors...Schneider put us in touch with other investors."



"SEEEA has been very helpful in introducing Xurya to various divisions within Schneider to assist us in business development"

Our portfolio spans **5 sectors**, creating impact on **communities** and the **environment**



Solar



Agri-Solar



Biogas/biofuel



E-mobility



Electrification

1.7 MT
CO₂e emissions
avoided

2.0 M
Direct beneficiaries

1.2 K
Formal, meaningful
jobs created

8.5
Out of 10,
Satisfaction score
from investees

Accelerating the adoption of solar energy by making solar services accessible to all

Why Solar?

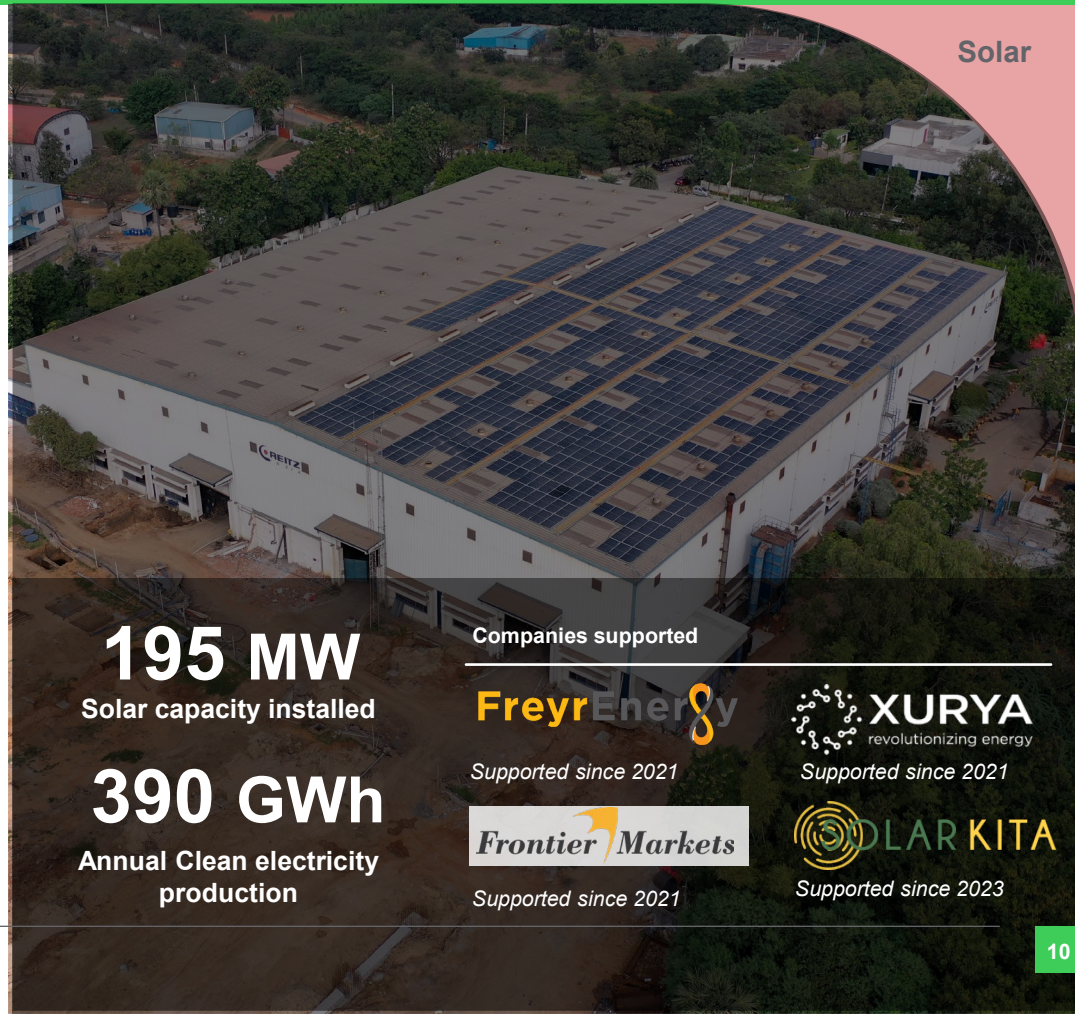
Our portfolio companies operate in Indonesia and India, where coal and natural gas remains the primary source of fuel in the national grid, presenting a significant potential for driving CO2 emissions.

The widespread adoption of solar power as a renewable energy source offers a promising solution to mitigate these emissions. However, the accessibility of solar services is limited for a majority of the population, primarily due to the obscurity surrounding the technology and the lack of public information.

Furthermore, many smaller consumers, including residential and small businesses, face challenges in accessing financing options due to the high capital expenditure associated with the installation of solar panels. While solar energy itself is proven and reliable, these regions lack the necessary models and ecosystems to make solar power an accessible choice.

Our portfolio companies address these challenges by introducing unique business models and tailored solar services, thereby democratizing solar energy for consumers of all scale.

Solar



195 MW
Solar capacity installed

390 GWh
Annual Clean electricity
production

Companies supported

Freyr Energy

Supported since 2021

Frontier Markets

Supported since 2021

XURYA
revolutionizing energy

Supported since 2021

SOLAR KITA

Supported since 2023

SolarKita (Indonesia)

Why is this business impactful?

Solarkita is a solar energy company that offers a comprehensive range of services that guide customers through every step of their clean energy journey, from initial sales and consultation to seamless installation and dedicated after-sales support.

Solarkita specializes in serving the small-scale commercial and residential sectors, where challenges related to financing, technical expertise, and access to information are particularly pronounced. Solarkita effectively enhances access to clean energy for these sectors that are previously underserved by solutions primarily tailored to larger-scale customers. Its innovative approach includes user-friendly mobile applications and accessible financing options, thereby playing a pivotal role in driving the adoption of clean energy and facilitating the transition from coal-based power to sustainable renewable energy sources in Indonesia.

Impact beyond the headline KPIs

Solarkita has entered into a Memorandum of Understanding (MoU) with Schneider Electric's Access to Energy team to explore the deployment of solar solutions for off-grid communities in Indonesia. Leveraging their expertise in small-scale solar systems, Solarkita aims to expand its impact by delivering essential energy solutions to underserved communities. Moreover, the company is dedicated to fostering the growth of the local Indonesian solar ecosystem through strategic collaborations with indigenous Engineering, Procurement, and Construction (EPC) companies.



Amarendra Lubis,
Founder

[Company website](#)
[Company video](#)

Core SDGs



Company specific SDGs:



Xurya (Indonesia)

Why is this business impactful?

Xurya is a clean energy company offering comprehensive solar solutions, spanning installation, monitoring, maintenance, and construction. The company's eventual goal is to establish decentralized energy assets and form 'virtual' mesh-grids, while also delivering energy services such as battery storage and power trading.

Through innovative and affordable leasing models facilitated by partnerships with asset investors, Xurya extends financing to its clients, effectively reducing costs and enhancing access to solar services. This approach aligns with SDG 7.2, contributing to the accelerated global adoption of renewable energy, particularly within economies heavily reliant on fossil fuels, such as Indonesia.

Impact beyond the headline KPIs

Xurya actively contributes to the skills development of the Indonesian solar sector by collaborating with educational institutes and training centers, organizing trainings, creating green jobs. More importantly, it is committed to work closely with local Engineering, Procurement and Contractor (EPCs) to enhance technical capabilities. To date, it has trained over 150 local EPC companies.



Eka Himawan,
Co-Founder



Edwin Widjonarko,
Co-founder

Core SDGs



Company specific SDGs:



[Company website](#)
[Company video](#)



Freyr (India)

Why is this business impactful?

Freyr is a tech-enabled company that specializes in designing, procuring, and installing rooftop solar systems ranging from 1kW to 200kW for private homes and small businesses.

Freyr Energy plays a crucial role in driving the transition towards sustainable energy by reducing the technical and financial barriers for individuals and small businesses to adopt solar systems. Its services accelerate the shift from coal-based power to clean solar energy in India. The company also assists its customers in securing financing and subsidies to reduce the initial costs associated with owning solar systems, it provides an attracted zero EMI instalment plan to its customers.

Additionally, Freyr has developed an innovative app for customers across different scales. Its app enables customers to access end to end services easily, from pre-ownership services like access to sales teams and ordering, to services after installation like monitoring of performance. Through working with third-party vendors, Freyr contributes to the creation of job opportunities as they scale their operations.



Saurabh Marda,
Co-Founder



Radhika Choudary,
Co-founder

Core SDGs



Company specific SDGs:



[Company website](#)
[Company video](#)



Frontier Markets (India)

Why is this business impactful?

Frontier Markets is dedicated to tackling the last mile distribution challenge in rural India by leveraging investments in women and technology to enhance connectivity. The company achieves this by establishing and empowering a network of local rural women entrepreneurs, referred to as Sahelis.

This approach enables Frontier Markets to effectively deliver impactful solutions to rural households, encompassing agriculture, clean energy, digital finance, healthcare, and commerce. Through its pioneering model, the company provides affordable, high-quality clean energy products to low-income households, thereby elevating their standard of living and contributing to improved health and productivity. In addition to addressing the last mile challenge, Frontier Markets' application incorporates advanced data analytics and algorithms to extract insights for new product launches.

Impact beyond the headline KPIs

Frontier Markets' dedication to female empowerment is clearly demonstrated by its initiatives. To date, the organization has empowered over 20,000 rural women to become digital entrepreneurs. Furthermore, it has recently launched the "She-leads-Bharat" initiative in collaboration with like-minded partners such as the Mastercard Foundation. This initiative is aimed at expanding its influence by equipping 1 million women to make an impact on 100 million households across 25,000 villages.



Ajaita Shah,
Founder

[Company website](#)
[Company video](#)

Core SDGs



Company specific SDGs:



Driving sustainable agricultural practices through the integration of clean energy

Why Agri-Solar?

Agriculture is intricately linked to our climate challenge. The agriculture sector not only emits significant greenhouse gas emissions but also faces substantial vulnerability to the physical impacts of climate change.

Traditional farming and agricultural practices, often dependent on fossil fuels and inefficient methods, are unsustainable and inequitable, placing tremendous strain on ecosystems such as water systems, land, and soil.

In rural regions of India, Indonesia, Cambodia, and Myanmar, small-holder farmers make up the majority of the agriculture sector. These farmers often lack access to financial services and loans for upgrading machinery and may not be fully aware of the health and income benefits associated with transitioning to cleaner energy sources. There is an opportunity to create a significant social impact while mitigating the negative impacts of agriculture on the climate.

Within SEEEA, we collaborate with impact-driven agri-solar companies to replace traditional fossil fuel processes and assist small-holder farmers in accessing financing for modern clean energy.

Investing in clean energy for agriculture presents a unique opportunity to positively impact both the environment and the livelihoods of small-holder farmers, paving the way for a more sustainable and resilient future.



Agri-Solar

5.3 k
Solar pumps / mills
installed for agricultural

Companies supported



Supported since 2023



Supported since 2021

Agros Global (Indonesia, Cambodia, Myanmar)

Why is this business impactful?

Agros operates at the intersection of climate change and agricultural progress, offering solutions that prioritize both people and the environment.

In countries like Cambodia, Myanmar, and Indonesia, the agricultural sector is primarily made up of small-holder farmers who depend on traditional irrigation methods. The use of diesel-powered irrigation systems is not only fuel inefficient and costly, but also results in substantial CO₂ emissions. Furthermore, access to clean energy for powering agricultural operations is hindered by high capital requirements.

Through the provision of efficient solar-powered irrigation solutions, Agros contributes to the reduction of agricultural GHG emissions, alleviates pressure on water resources, mitigates the risk of soil degradation, and promotes sustainable farming practices with reduced reliance on pesticides. Additionally, Agros plays a pivotal role in creating social impact among smallholder farmers by fostering financial inclusion, empowering women, and facilitating access to increased crop sales and income.

Impact beyond the headline KPIs

- Agros has embraced a circular business model, integrating circularity throughout its product line. Their flagship product, Agrosolar, is eco-designed for repairability and durability. Additionally, they've established a takeback channel for faulty products, refurbishing and upcycling them.
- Furthermore, Agros has fostered strong local ties with small farmers, establishing a wide network of farmer partners in their referral program to provide additional revenue for small-scale farmers.



Max Nelen,
Founder

Core SDGs



Company specific SDGs:



[Company website](#)
[Company video](#)



Oorja (India)

Why is this business impactful?

Oorja, offers an innovative pay-per-use solar-powered farming solution encompassing irrigation systems and milling. Specifically designed to cater to underserved, off-grid smallholder farmers who often grapple with limited access to clean and affordable energy sources, Oorja's intervention is a game-changer. By replacing the reliance on rented or old diesel pumps with a sustainable approach focused on water efficiency and clean energy, Oorja not only drives significant cost savings for these farmers but also leads to remarkable improvements in crop yield.

This transformative impact underscores Oorja's vital role in driving positive social and environmental change in the farming community.

Impact beyond the headline KPIs

- Oorja is actively promoting gender equality in agriculture by empowering women across its operations, impacting both customers and employees. The company also provides training to women farmers, aiming to enhance their agency within their communities and improve their economic well-being. To achieve this, Oorja has established a comprehensive 5-year roadmap with clear milestones and strategies to achieve these goals. Refer to this report for more info: [Oorja Gender Mainstreaming plan](#)
- Oorja received \$300,000 USD grant funding from Swiss Re Foundation to further its mission for regenerative farming. The grants will be used to develop innovative soil and farming advisory services to help farmers diversify to high-value crops and reduce dependency on chemical fertilisers.



Amit Saraogi,
Co-Founder



Clementine Chabon,
Co-founder

[Company website](#)
[Company video](#)

Core SDGs



Company specific SDGs:



Substituting fossil fuel with a circular, low-carbon alternative

Why Biogas and Biofuels?

Biogas and biofuels represent a crucial frontier in sustainable energy, offering low-carbon solutions derived from organic and agricultural waste. This intersection of circularity and climate action presents a promising opportunity to address environmental challenges.

In India, for instance, the abundance of municipal and agricultural waste can serve as a valuable feedstock for producing these low-carbon fuels.

Carbon Masters and Biofuels Junction are local start-ups that managed to capitalise on this opportunity. Biogas and biofuels have strong potential to substitute diesel and LPG in diverse applications such as cooking, heating, and transportation, presenting a compelling opportunity both commercially and environmentally.

Our portfolio companies not only drive environmental progress but also pioneer impactful initiatives that benefit local farmers and small businesses, aligning with our mission to foster social and economic impact through sustainable practices.

Biogas,
Biofuel

240 kT

Waste avoided
(Primarily agriculture)

Companies supported



Supported since 2023



BIOFUELS JUNCTION
Partners in Greener Tomorrow

Supported since 2023

Carbon Masters (India)

Why is this business impactful?

Carbon Masters has introduced a circular solution to address India's waste challenges and contribute to the decarbonization of essential activities such as cooking, heating, and transportation.

The company has developed a proprietary technology for converting food and municipal waste into Bio-CNG and organic fertilizer. The Bio-CNG produced is suitable for cooking and can seamlessly replace gasoline in vehicles, providing an effective alternative to fossil fuels.

Through the upcycling of food and municipal waste, Carbon Masters' solution addresses the social and environmental challenges associated with India's waste problem, reducing the release of highly polluting chemicals from landfills that adversely affect the environment and human health. Additionally, the organic fertilizers produced support natural soil and water cycling, thereby reducing potential chemical impacts on our environment.

Impact beyond the headline KPIs

Carbon masters has recently launched a Carbon Masters training institute, in collaboration with the Indian Federation of Green Energy (IFGE).

The training institute was established with the aim to create and train professionals for the compressed biomethane gas (CBG) economy in India. It is the first of its kind, extending mentoring and upskill of professionals across the compressed biomethane gas value chain.



Biogas,
Biofuel



Kevin Houston,
Co-Founder



Som Narayan,
Co-founder

[Company website](#)
[Company video](#)

Core SDGs



Company specific SDGs:



Biofuels Junction (India)

Why is this business impactful?

Biofuels Junction offers an innovative solution to farm wastes and climate change by converting farm waste into solid biofuels (bio-briquettes) that can replace fossil fuels in various industries.

Large amount of crop residues like husks and stubbles are often burnt by farmers in the open. By adopting this circular approach, Biofuels Junction facilitates the elimination of waste burning by farmers, leading to reduced emissions and air pollution. Furthermore, the company creates an additional revenue stream for local smallholder farmers, benefiting them directly. The company also manufactures bio-pellets, upcycled from wood-waste generated in sawmills.

Biofuels Junction has established an end-to-end value chain locally, connecting feedstock supply to processing and manufacturing, and ultimately to end consumers. This approach has also led to the establishment of small biofuel processing businesses, fostering the local clean energy ecosystems.



Ashvin Patil,
Founder

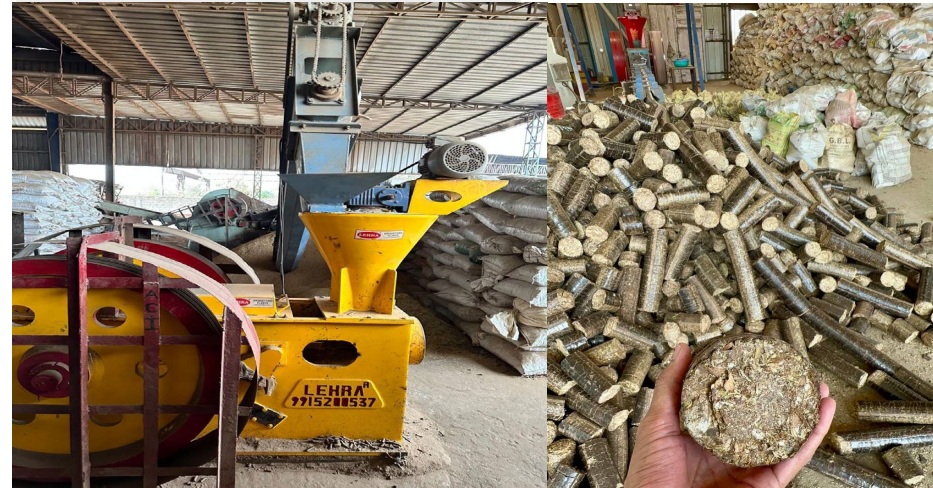
Core SDGs



Company specific SDGs:



[Company website](#)



Decarbonizing transportation while providing access to decent work

Why E-mobility?

Electrifying mobility represents the pivotal first stride towards ascending the clean energy ladder in the transport sector. Electric 2 and 3 wheelers when integrated with renewable energy, provides large emissions reduction. Notably, our portfolio company Selex, spearheads the integration of solar power in charging infrastructure to bolster the deployment of low-carbon fleets in Vietnam.

The impact of electric 2/3 wheelers in decarbonization and societal advancement is substantial. This is especially, when employed for productive purposes such as last-mile delivery or passenger transport, owing to their high frequency and volume of use. By replacing old and poorly maintained vehicles, we contribute to a cleaner working environment, reduced emissions, increased efficiency, and enhanced earnings for vehicle drivers.

Within our portfolio, our companies are pivotal drivers of innovation in this sector - a comprehensive presence across the entire value chain encompassing design, manufacturing, sales, services, and maintenance. Furthermore, they actively foster job creation and local empowerment by promoting vehicle ownership, improved financing options, and lowering ownership barriers.

E-mobility

Companies supported

3,500

Electric 2- and 3-Wheelers
deployed



SMV
Green Solutions

Supported since 2022

DASH

Supported since 2024

240 M

Km travelled with electric
vehicles



Supported since 2023

SMV Green Solutions (India)

Why is this business impactful?

SMV is dedicated to tackling the prevalent social and environmental challenges in Uttar Pradesh, where issues such as inequality, poverty, and poor air quality persist amidst a burgeoning Indian economy.

Beyond simply introducing e-rickshaws to the market, the company plays a crucial and personalized role in educating local drivers and facilitating their transition from manual or diesel rickshaws to clean electric vehicles. Through SMV's assistance, these drivers gain access to financing for their vehicles and can avoid excessive rickshaw rental and fuel payments.

Furthermore, SMV has successfully secured a significant local market share by strategically establishing e-rickshaw hubs across various states in Uttar Pradesh. This widespread proliferation of e-rickshaws, facilitated by SMV, actively contributes to the decarbonization of the local transport ecosystem and effectively mitigates transport-related air pollution.

Impact beyond the headline KPIs

SMV, in collaboration with Shell Foundation, launched the "Vahini" program, aiming to empower women as owners and drivers of e-rickshaws in Uttar Pradesh, India. The program seeks to enhance the economic independence and social standing of women. SMV facilitated training, financial support, and equipped the rickshaws with cameras as part of this initiative.



Naveen Krishna,
Founder

Core SDGs



Company specific SDGs:



[Company website](#)
[Company video](#)



Selex (Vietnam)

Why is this business impactful?

Selex Motors is dedicated to decarbonize Vietnam's transportation sector, by encouraging the shift from traditional fuel-powered two-wheelers to electric ones. Additionally, Selex has implemented a network of battery swap stations across key cities in Vietnam, not only to promote the adoption of electric vehicles but also to contribute to the transformation of the country's energy infrastructure

Its battery swap stations are designed intentionally to be interoperable with other brands, highlighting the company's commitment to collaborating with other stakeholders and pushing the adoption of electric two-wheelers in Vietnam. Moreover, the stations are equipped with advanced charging, monitoring technologies to improve battery energy efficiency and minimize power losses.

Impact beyond the headline KPIs

- With support from UNDP, Selex has implemented a pilot project to develop carbon credits for electric vehicles. The project is now in the process of being registered with Gold Standard and it is aligned with Article 6.32 of the Paris Agreement. This is the first carbon credit project for electric motorbikes in Vietnam.
- Selex is deeply invested in nurturing local talent through its Selex Future program, which provides comprehensive training and essential engineering expertise to young graduate



Nguyen Nguyen,
Co-Founder



Hai Nguyen,
Co-founder



Quang Nguyen,
Co-founder

Core SDGs



Company specific SDGs:



[Company website](#)
[Company video](#)



Dash Electric (Indonesia)

Why is this business impactful?

In Indonesia where over 5 million new ICE two-wheelers are sold annually, the electrification of this segment presents a compelling opportunity for emission reduction. Renewable sources currently account for around 20% of Indonesia's grid today and electrifying two-wheelers is a first step towards enabling further decarbonization as more renewable capacity comes online. Despite the current national push for E2W, the adoption rates remain low due to financing and technical challenges – highlighting the untapped potential to drive decarbonization.

Dash offers a cost-effective proposition that holds significant potential to drive the decarbonization of Indonesia's transport sector, creating strong positive environmental impacts.

Impact beyond the headline KPIs

- The gig economy is among the least protected working sectors based on current national legislation. However, Dash holds itself to high labour and welfare standards, aiming to empower local Indonesian drivers with improved opportunities. Dash not only offers drivers the potential for higher earnings and job stability but also ensures reasonable work hours and extended protection through insurance. Notably, within its first year of operations, Dash successfully facilitated the transition of one driver to a full-time analyst role within the company, showcasing its dedication and thoughtful approach to managing individuals within its ecosystem



Aditya Brahmana,
Co-founder



Robert Mulianto,
Co-founder

[Company website](#)

Core SDGs



Company specific SDGs:



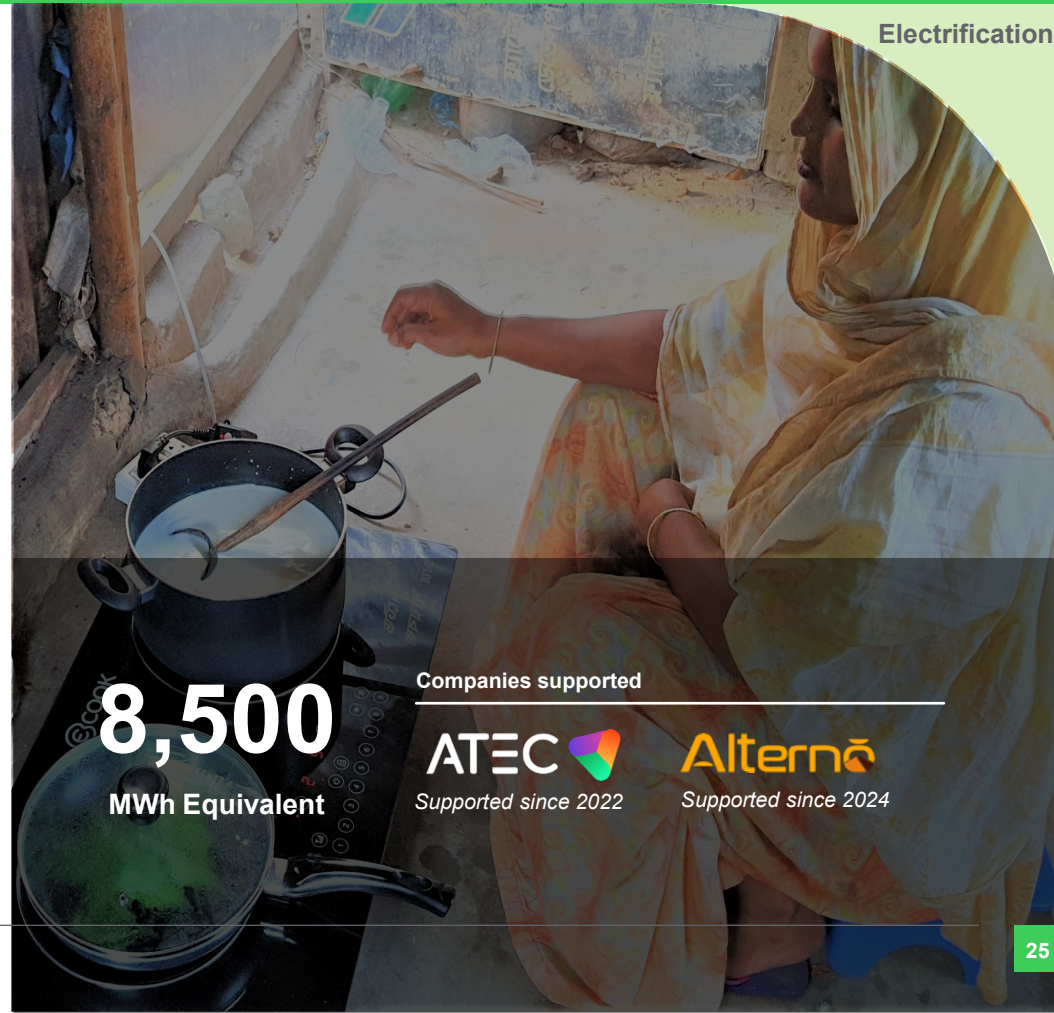
Electrification as a key enabler for further decarbonization

Why Electrification?

Electrification plays a crucial role in decarbonizing hard-to-abate sectors and processes, serving as the initial step toward further decarbonization through integration with renewable energy sources. By replacing traditional fossil fuel-based systems with electrified processes, not only does it enhance energy efficiency, but it also mitigates the pollution resulting from the inefficient combustion of fossil fuels.

This is particularly significant in the sectors our portfolio companies operate in, such as clean cooking and agriculture, where traditional processes are highly polluting and time-consuming. Our portfolio companies are actively promoting solar integration with electrification to expedite the reduction of emissions associated with the grid.

Furthermore, there are notable social benefits in providing modern, clean, and cost-effective equipment, especially in rural or underserved areas.



Electrification

8,500
MWh Equivalent

Companies supported

ATEC
Supported since 2022

Alternō
Supported since 2024

ATEC (Cambodia, Bangladesh)

Why is this business impactful?

ATEC is dedicated to addressing clean cooking and climate change by leveraging disruptive technology to offer affordable modern cooking solutions.

The company offers two products: the ATEC Biodigester, which converts cow and pig manure into safe cooking gas and organic fertilizer, and the ATEC eCookstove, an e-cooker providing safe and affordable cooking options for underserved households through Pay-as-you-go (PAYGO) instalment plans. These solutions effectively drive the adoption of clean cooking, replacing traditional, inefficient, and highly polluting biomass options.

Furthermore, ATEC's proprietary IoT technology for digitizing clean cooking has received verification by Gold Standard as a reliable method for auditable, digital verification of carbon credits. ATEC's technology was also endorsed by the University of California, Berkeley. This recognition enables ATEC to unlock the potential for carbon financing, ultimately benefiting underserved communities.

Impact beyond the headline KPIs

ATEC has been effective in driving costs down for its customers, leveraging the support from grants funding. This has enabled the company to expand its impact beyond Asia into new markets in Africa and Nepal, bringing its clean cooking products to underserved communities. The IEA reported over 2.3 billion¹ people worldwide that do not have access to clean cooking as of 2022. ATEC's global expansion plan to deploy an effective and cost-efficient clean cooking product, will be crucial to this global problem.



Ben Jeffreys,
Co-Founder

Core SDGs



Company specific SDGs:



[Company website](#)
[Company video](#)



Alternō (Vietnam)

Why is this business impactful?

Alternō, a thermal energy storage start-up in Vietnam, is revolutionizing agriculture with its sand batteries designed for heating and drying crops. These batteries store heat using electricity from renewable sources or the grid during non-peak hours, promoting sustainable agricultural practices while reducing costs for agri-businesses and farmers. With the agricultural sector in Vietnam contributing to more than 30% of the country's GHG emissions, there is a critical need for innovative technologies to decarbonize heat intensive processes post-harvest.

By effectively electrifying traditional manual processes in agriculture, the company supports the sector to ascend the energy ladder. Additionally, Alternō has begun piloting solar panels alongside its sand batteries, entirely displacing CO₂ associated with using power from the grid. This not only contributes to the decarbonization of agriculture but also reduces indoor pollution and smog, improving overall health.

Alternō also contribute to the wider innovation landscape in the agriculture sector, particularly through its R&D process for a smart system that optimizes charging against varying renewable and grid energy profiles, supporting SDG 9 by enabling accurate data collection and remote monitoring of operations.

Impact beyond the headline KPIs

Alternō is dedicated to driving sustainable development, extending its commitment beyond the innovation of thermal sand batteries. As an early-stage company, it has allocated a portion of its grant funding from P4G to enhance its internal sustainability performance and to secure international certifications such as ISO and B-Corp

Alternō



Hai Ho,
Co-founder



Nam Nguyen,
Co-founder

[Company website](#)

Core SDGs



Company specific SDGs:



Disclaimer and Endnotes:

All data and information in this report are prepared by Schneider Electric Energy Access Asia (SEEAA) and are presented for informational purpose only. All impact figures, unless stated otherwise, are calculated from the respective portfolio companies' inception to June 2024, based on data from the portfolio companies. Dash Electric and Altemo are new investments made in Q2 2024, and are therefore excluded in the calculations of impact figures

Source(s):

- (1) Pg 5 – The Sustainable Development Goals Report 2023, UN unstats.un.org
- (2) Pg 5 – Offgrid Solar Market Trends 2024, World Bank https://www.gogla.org/wp-content/uploads/2024/10/MTR-Design_Oct8-web.pdf
- (3) Pg 5 – IEA Renewables 2024 Global Overview <https://iea.org/reports/renewables-2024/global-overview>

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