



A series by the African
Private Equity and Venture
Capital Association

Achieving the SDGs through African Private Equity and Venture Capital

SDG 7: Affordable and Clean Energy



AFFORDABLE AND
CLEAN ENERGY

Introduction

Over the past 20 years, AVCA has remained committed to tracking, monitoring, and reporting on the wide-reaching positive impact of private equity and venture capital across the continent. The objective of this case study series, **Achieving the SDGs through African Private Equity and Venture Capital**, is to showcase and encourage greater collaboration between fund managers, institutional investors, and entrepreneurs to **drive sustainable growth in Africa.**

It is now seven years since the United Nations (UN) launched a global call to institutions and individuals to commit to creating a future of prosperity and peace for all by 2030, through the Sustainable Development Goals (“SDGs”). The 2030 Agenda for Sustainable Development (“the 2030 Agenda”) established 17 SDGs with 169 targets and 232 indicators to enable progress tracking as key global actors, including investors, businesses, civil society, and governments implement the 2030 Agenda.

According to the United Nations Conference on Trade and Development (UNCTAD), meeting the SDGs in emerging markets will require an investment up to the value of US\$4.5 trillion annually, primarily for infrastructure, education, healthcare, and agricultural development. Globally, the private sector is responsible for most investments and has played a historic role in addressing structural, social, and environmental challenges in Africa.



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The SDGs provide a practical framework to achieve inclusive growth on the continent, and the private sector has a vital part to play in mobilising African countries to achieve the 2030 Agenda while strengthening the economy. Africa-focused fund managers and institutional investors have risen to the challenge as they continue to deploy and allocate capital to support the businesses driving long-term economic growth across the continent.

Recognising the importance of businesses and investors in realising the 2030 Agenda, the UN Development Programme (UNDP) launched the SDG Impact Standards for Private Equity Funds to outline a clear system to support private equity (PE), venture capital (VC) and other private market funds to achieve impact and contribute towards sustainable development through their investments.





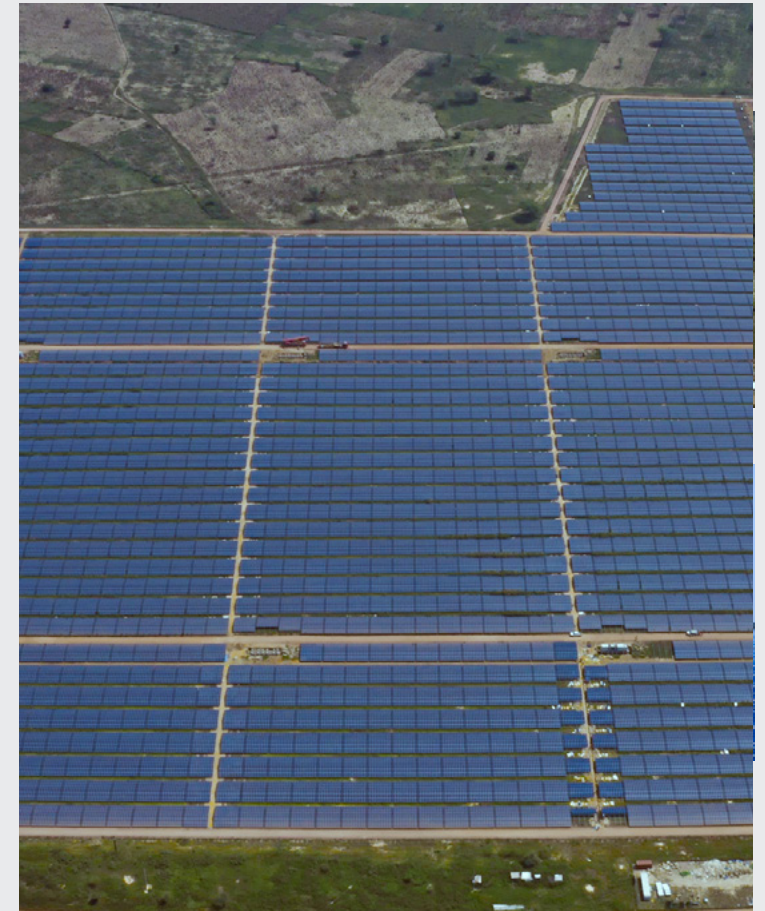
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Sustainable Development

Goal 7 – Affordable and Clean Energy

This case study showcases Meridiam's investment in Solarsen platform, which comprises 4 power plants located in Senegal, and explores the investor's commitment to deliver positive impact by contributing towards SDG 7.

SDG 7 has been one of Meridiam's main pillars with investments in energy transition projects such as renewables being at the heart of the company's investment strategy.





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Investor & Company Profile



Investor:

Meridiam

Sector:

Power / Solar

Platform Name:

Solarsen

Year of Initial Investment:

2016

Country (HQ):

Senegal

Total Investment / Capex:

EUR25mn / EUR132.7mn

Investor Engagement with the SDGs



1. What are the key drivers for integrating SDG 7 into your investment approach?










Meridiam specializes in the development, financing, and long-term management of sustainable public infrastructure in three core sectors: mobility, energy transition and environment, and social infrastructure.

Meridiam was founded on the principle that infrastructure investment should be on a long-term responsible and sustainable basis with clear benefits to local communities and has been operating on the principles of its Sustainable Development Charter as well as its Approach for a Responsible ESG Management right from the start.

In September 2019, Meridiam became one of the first French companies to change its by-laws to become a *société à mission* (French-equivalent Certified Benefit Corporation), confirming its commitment to delivering both profits and concrete positive impact. Following its change of status to a French Benefit Corporation, Meridiam reinforced its sustainability strategy by defining 5 pillars based on the SDGs most relevant to its role as a long-term infrastructure project developer, investor, and manager.

These 5 pillars, presented in the table below, set the long-term, measurable key objectives of Meridiam’s long-term sustainability strategy.

SDG 7 related to Clean and Affordable energy is one of those pillars, since investments in energy transition projects such as renewables have been at the heart of Meridiam’s investment strategy.

	Resilient infrastructure and Sustainable Cities	Clean and affordable energy	Climate action and strategy	Decent work, inclusion and gender	Biodiversity
Targets	“ Deliver resilient infrastructure and develop sustainable cities ”	“ Accelerate energy transition ”	“ Avoid and reduce emissions ”	“ Promote good work conditions, inclusion, diversity and gender equality ”	“ Protect and enhance biodiversity ”
3-year objectives	Projects in operation consolidated SDGs 9&11 score of 3.1 Projects in construction consolidated SDGs 9&11 score of 2.9	Projects in operation SDG 7 score of 3.2	For MIAF: carbon neutrality between induced emissions and avoided emissions (per €M invested) For other funds: maximum portfolio temperature of 2°C	SDG 5: consolidated score of gender-related performance indicators in the Sustainability Assessment of 63 SDG 8: score of 3.5 SDG 17: score of 3.0	Consolidated SDGs 14 & 15 score of 2.8
SDGs	 			  	 
Overall governance objective: improve current score from 64 to 70 based on the sustainability assessment ⁽¹⁾					



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2. How did you integrate SDG7 into your investment strategy and decision-making processes for your portfolio company?

SDG 7 is core to both Meridiam's objectives and expertise of a leading developer, investor and manager of energy transition infrastructure. Meridiam has over EUR5.1bn of AUM translating into EUR16bn Capex in the sector globally.

Meridiam funds in Africa have clear ESG and SDG targets in their investment strategy, are categorised as Article 9 under the EU SFDR (the highest ESG standard) and are committed to be aligned with a 2°C climate trajectory, as defined in the Paris climate agreement. In that context, investments in infrastructure targeting SDG 7 play a key role in ensuring such funds deliver on their climate objectives, which has in turn a positive effect on SDG 13 (Climate action).

This strategic positioning and expertise meet with the demand of countries across Africa for cleaner and more affordable electricity. In the case of Senegal in particular, the Government had developed an ambitious plan to increase the share of renewable electricity from 0 to 386 MW by 2023, a plan which is on track to deliver*, with the support of investors such as Meridiam.

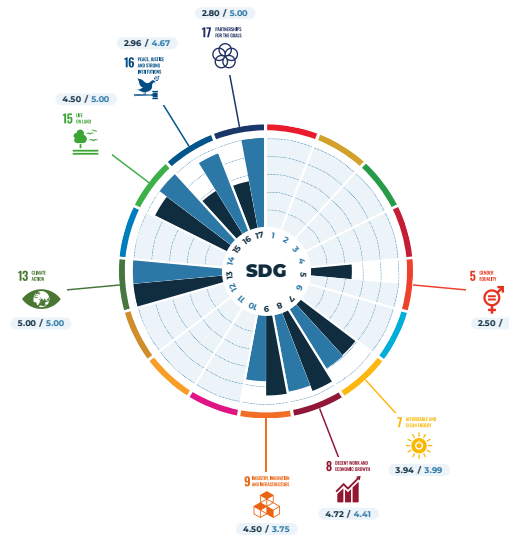
Meridiam ESG and SDG priorities are translated into operational terms by an internally developed ESG/SDG approach to analyse and monitor all investment opportunities. This strategy applies to all funds and throughout the lifecycle of all assets. It is based on a selective filtering ahead of investments, via exclusion and restriction lists, followed by a positive selection of resilient infrastructure projects that answer the needs of local communities. By integrating the UN-SDGs to its procedures, Meridiam is reinforcing the rigorous impact evaluation, assessment, and monitoring of its projects. Additionally, it ensures consistency with Meridiam's other sustainability strategy and objectives, and it captures the positive contribution of these assets on issues such as health, education, water, sanitation, energy, urbanization, environment, and social justice.

Once a project is in Meridiam's portfolio, the Firm uses a tailor-made SDG proprietary survey tool (SIMPL®) to evaluate and enhance projects' positive impacts during their lifecycle. In the case of the Solarsen platform, which comprises 4 power plants, SIMPL® is showing the following results:

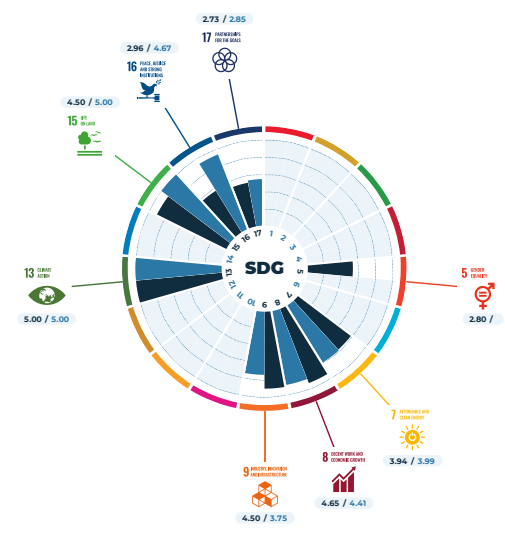
*Source: [BusinessFrance](#), 2021



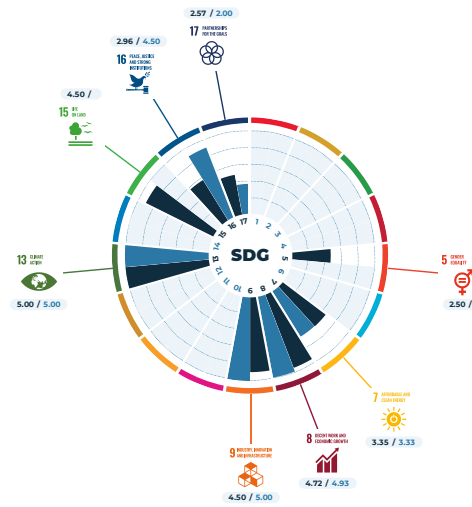
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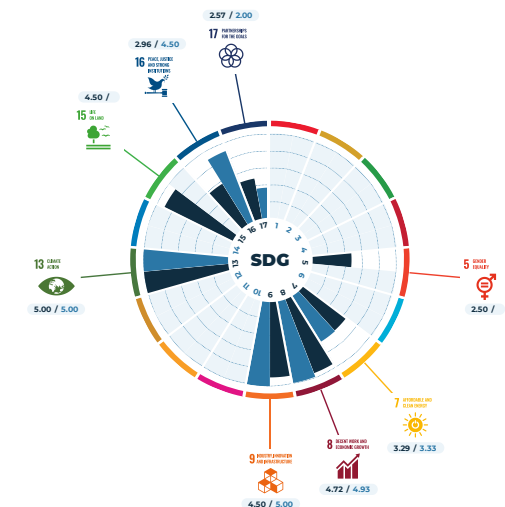
Senery



Ten Marina



Kahone



Kael

2021 results: dark blue; 2020 results: light blue



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3. What are the key challenges you've faced thus far implementing and measuring progress made towards promoting SDG 7 in your portfolio?

Achieving SDG 7, means providing clean and affordable energy at scale. The choice of solar PV in a country like Senegal quite mechanically translates into providing clean energy. Indeed, the country's electricity mix is heavily dependent on HFO and the addition of solar PV is therefore translating into important savings on CO2 emissions, which Meridiam was able to monetise on the CO2 market. Affordability, on the other hand, has mobilised the extensive know-how of Meridiam in the development of infrastructure projects in Africa, including addressing the following:

- Ability to structure an investable PPA and government support framework
- Ability to mobilise a global network of contractors and structure the EPC/O&M contracts to ensure the competitiveness of Capex and Opex
- Access to development finance to ensure competitive financing
- Ability to manage construction and operational risks

This leads the Solarsen power plants to deliver one of the most affordable power in the Senegalese mix, while at the same time meeting the return criteria of our Funds. In the context of the country's strong dependence on imported hydrocarbons and the current soaring prices globally, this component is key to the resilience of the project and affordability of power to Senegalese consumers.





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Investment Impact Profile

No	SDG 7 Goals		Meridiam/ Solarsen's Contribution
	Target	Indicator	
7.1	By 2030, ensure universal access to affordable, reliable and modern energy services.	a) Proportion of population with access to electricity.	1,000,000 people served by the Solarsen power plants
7.2	By 2030, increase substantially the share of renewable energy in the global energy mix	Renewable energy share of the total final energy consumption (i.e. renewable energy consumption as a percentage of total final energy consumption).	a) Share of renewable electricity production in total national renewable electricity production: 25% (Aug 2022) b) Share of renewable energy capacity in total national renewable energy capacity: 56% (Aug 2022)
7.a	By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology.	Capital invested by the fund manager (and co-investors, if applicable) in support of clean energy research and development and renewable energy production, including in hybrid systems.	In 2019, Solarsen companies have developed a training and research initiative with IDCR (International Development Research Centre) Canada and the Polytechnic School of Dakar in order to implement the first renewable energy research programme in the region. The programme delivers short term qualification certificates to students as well as engineers and technicians from the energy sector willing to specialize in renewable energy. PhD students, assistants and technicians were hired as part of the project. Since inception, along with the development of a Solar Systems Testing Centre, a total of 100 technicians and 100 officers were trained. Considering the success of this programme, a Phase 2 is under discussion with potential local partners, with the objective to offer similar training programmes across West Africa

The indicators proposed by the United Nations (UN) for each target are mostly policy oriented. To be consistent with the nature of its activities, Meridiam designed its own indicators for each target, while staying compatible with the UN 2030 Sustainable Development Agenda and the SDGs.



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CLIMATE ACTION

Company View

In line with Meridiam’s portfolio management approach, Solarsen is committed to continuously improving its contribution to the SDGs. Please find below some extracts from the Asset SDG Implementation Plan (ASIP) of the solar farms of the Solarsen platform. Each of these assets has a specific ASIP listing the project-specific strongpoints and areas of improvement. The portfolio company is associated in preparing these documents based on project scores in SIMPL®. and implementing continuous improvement measures throughout the life of the asset.

SDG 13: Climate Action

Solarsen power plants were assessed with a positive contribution of 5/5 for the SDG 13. This development goal captures the project’s contribution in helping to integrate climate change measures into national policies, strategies and planning (target 13.2)

Positive Contributions	Areas of improvement
<p>Solarsen has shown a high degree of commitment towards climate action with the implementation of a corporate-range environmental action plan that is more ambitious than what is formally required (scored 5/5).</p> <p>The four Solarsen plants are expected to reduce GHG by 4,000 tonnes of CO₂ equivalent for their 25-year useful life, which is the equivalent of the removal of 31,000 cars from the road.</p> <p>Additionally, the project’s carbon footprint assessment will be carried out this year with specialized consultant Carbone 4, using a scope 3 methodology. The results will be integrated in next year’s report and communicated to the company once obtained.</p> <p>Since commencement of operations Solarsen has monetized over 200,000 tonnes of CO₂ on the market</p>	<p>The project’s contribution to mitigating its environmental impacts through the establishment of a strong environmental action plan is very positive, especially when considering that no habitat or protected area is located on the project site or within a radius of 500m, and that its immediate area of influence does not include any watercourse or body of water. The project’s performance could, however, be ameliorated by strengthening its mitigating measures of finding opportunities to increase its current voluntary total environmental expenditures.</p> <p>In July 2022, we kicked off the “Greenbelt Restoration project”: a reforestation campaign of the Senergy and Ten Merina plants was launched with the local population. This coincided with the start of the rainy season in Senegal.</p> <p>In total, 3,500 eucalyptus will be planted around each solar plant and 2,000 moringas around the farming lands built by the projects for the benefit of the population. A second phase will concern the surrounding villages where trees will be planted in schools and public places.</p>



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**PARTNERSHIPS
FOR THE GOALS**

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SDG 17: Partnerships for the Goals

Senergy/ Ten Marina: An inclusive approach toward local communities

Market gardening project	Empowering the local community
<p>The construction of Senergy and Ten Merina solar plants required 82 hectares and 64 hectares respectively, comprising agricultural land managed by the local population. Populations received monetary compensation for their land amounting respectively to EUR 350k for Senergy and EUR 391k for Ten Merina.</p> <p>The context of the local farming practice is the one of a Sahelian region were activities heavily dependent on rainfall which lasts on average only 3 months during the year. Once the dry season starts, the population is turning to lower income-generating activities</p> <p>In collaboration with the stakeholders and with the support of the local E&S consultant OISIEC, and to ensure sustainable income to the populations, Sponsors have set up farming perimeters on both sites Senergy / Ten Merina.</p> <ul style="list-style-type: none"> • Senergy provided 14 hectares to the 66 people affected by the project while Ten Merina provided 10 hectares. Water drills were built to make the farming perimeters not dependant of the rainfalls • The farming perimeters have been operational from 2019 and are delivering a sustainable and reliable source of revenue to the local community • A number of locally-consumed vegetables are produced comprising tomatoes, okra, peppers, onions, eggplants and peanuts • Thanks to regular trainings held in favour of the local population, transfer of responsibility with full autonomy should occur at the end of 2020 • In total, the management of the farming perimeters have created 23 local jobs (11 for Senergy and 12 for Ten Merina). 	<p>With the success of the farming perimeters, the local communities of Senergy and Ten Merina became increasingly engaged in regular meetings held with the other stakeholders.</p> <p>A social study performed at the request of the Sponsors came to the conclusion that women and young people were the most vulnerable people within the community affected by the Projects.</p> <p>As a result, Senergy and Ten Merina decided to set up a local credit union in favour of the aforementioned group of population.</p> <p>Meridiam joined forces with the NGO Empow'Her specialized in economic empowerment of women through entrepreneurship.</p> <p>Women affected by the Project have therefore benefited from a dedicated training aiming at providing concepts in financial management, savings and investment.</p> <p>In total, 588 women have benefited from financing by this support programme for Senergy, and 218 women for Ten Marina.</p> <p>Strengthening the health system of the area of the Projects was also a key part of their contribution toward the communities.</p> <p>In the context of a voluntary agreement with the local community and due to the difficulties encountered by the population to reach the nearest hospital, the project companies chose to finance the construction of a maternity unit in Santhiou Mekhé for Senergy and Mbouky for Ten Merina. The workforce comprised more than 50 persons for the two maternity units during the construction period.</p> <p>Since its completion in 2019, these maternity units, managed by 8 public medical persons deployed by the Ministry of Health for each unit, has carried out on average 80 births each month.</p> <p>Based on the success of these initiatives, Solarsen is contemplating putting in place a number of similar initiatives for the Kael and Kahone projects for the benefit of economically displaced people.</p> <p>A credit union in favour of vulnerable persons is envisaged while a farm for breeding and agriculture will be made for the benefit of the Project Affected Persons (comprising almost 50 persons in total on both Kael and Kahone projects).</p>

