

NERSA approves flagship energy wheeling project for Amazon

A flagship renewable energy project, commissioned by Amazon, is set to demonstrate the flexibility and convenience of procuring independent power through the electricity grid. The project will see 28 GWh of solar energy wheeled via Eskom's utility grid from a solar farm in the Northern Cape to Amazon's facilities each year.

Energy wheeling holds tremendous value in that it enables the supply of energy to urban areas, which has been generated from energy projects in outlying areas, such as a solar farm located in an area where the sun is most powerful and consistent. This is done through the transfer of electrical power via a utility's transmission or distribution system between different grid or network service areas.

Chris Haw, Executive Director at The SOLA Group, explains that although the concept of wheeling energy using Eskom's existing infrastructure has been in place since 2008, certain administrative barriers have hindered the uptake of such services. "This project, which comprises a 10 MW solar PV farm, has also received a sought-after generation license from NERSA, a milestone that other similar projects have struggled to achieve."

The SOLA Group will be responsible for developing the project and will build, own and operate the solar facility.

Haw explains that the NERSA process requires a signed Power Purchase Agreement and fully developed project in order to obtain approval. "This creates contractual challenges because many inputs, such as the foreign exchange rate, are still fluctuating whilst the application process is underway. The high standard of development required for submission means that NERSA are not handing out licenses to projects that won't proceed, which is a very good thing."

The project aligns with the South African Government's intent to open the electricity grid, allowing independent generators of electricity and consumers to enter into bilateral agreements to optimise the cost and sustainability of energy, which has previously been difficult to achieve. The generation license received from NERSA is one of the first granted as part of the recent allocation made for distributed electricity generation in order to plug the short-term capacity gap.

Haw says that SOLA will deliver the energy via the Transmission Network through a Wheeling Use-of-System agreement. "This Wheeling Use of System Agreement is the first of its kind and the largest solar PV wheeling arrangement in South Africa to date."

Haw credits the company's multi-disciplined skillset and 10-year track record of developing, financing and building solar PV projects in South Africa with overcoming the many challenges that were faced.

The SOLA Group has a history of breaking down barriers to enable renewable energy projects in South Africa. The group developed some of the country's first IPP projects, signed the first bi-directional metering agreements with municipalities, and are responsible for innovative solar-plus-storage projects like the microgrid currently powering Robben Island.



The project will be majority black South African-owned, demonstrating a pivotal dedication to transformation in South Africa's energy sector. Mahlako a Phahla Investments, a black women-owned and operated energy and infrastructure investment holding company will own 45% of the project.

Mahlako's executive team, consisting of Makole Mupita and Meta Mhlarhi, has led the company's participation in South Africa's renewable energy sector. Mahlako has been at the forefront of various infrastructure and energy sector projects in South Africa, having advised and invested in several energy projects across various technologies.

"We are proud to be partnering with Amazon on this milestone transaction to bring South Africa its very first solar energy wheeling project," says Mupita.

"We are dedicated to the creation of a more prosperous, sustainable and inclusive world. It is for this reason that we are excited about partnering on a project like this, which values the economic empowerment of previously disadvantaged groups in South Africa," she adds.

Mahlako's vision is to see more projects, with similar participation from underrepresented population groups, brought to fruition in South Africa going forward.

"The active participation of women, specifically African women, in the energy sector is a goal that drives much of our work at Mahlako," explains Mhlarhi.

Other investors into the project include African Infrastructure Investment Managers (AIIM), through the IDEAS Fund, one of South Africa's largest domestic infrastructure equity funds and one of the largest investors in the country's renewable energy landscape, with a total of ZAR 10bn invested into projects producing 2.5GW of power.

"This project is well aligned to IDEAS' investment mandate of targeting infrastructure investments that have tangible social and environmental impacts, as well as the potential to deliver strong long-term returns. We're looking forward to working closely with the SOLA Group and Mahlako teams to help improve accessibility and affordability of clean renewable energy here in South Africa," says Vuyo Ntoi, AIIM's joint-Managing Director and IDEAS portfolio manager.

The project's success could mean that more companies like Amazon will look to procure cleaner independent power through the grid.

"This project is the tip of the iceberg in terms of what the electricity picture in South Africa could look like," says Haw.

"Our pipeline of 650MW of developed projects is attracting interested energy consumers daily and projects like this demonstrate the potential of a truly modernized electricity market where consumers can procure cleaner energy through state-owned grid lines whilst paying for their upkeep in the process," he adds.

The project will begin construction in early 2021.