

Eskom launches Africa's largest battery storage system



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Eskom on Friday launched the largest Battery Energy Storage System (BESS) project in Africa, marking a significant stride in the continent's energy sector. The Hex BESS site, located in Worcester, is the first completed project under Eskom's flagship BESS initiative, announced in July 2022. This initiative is a direct response to the urgent need to address South Africa's long-standing electricity crisis and aims to bolster the national electricity grid and diversify the existing energy mix. The project utilises large-scale utility batteries with a daily capacity of 1,440MWh and a 60MW PV capacity.



Eskom's Hex battery energy storage system is the biggest in Africa. Source: Eskom

The Hex site, specifically designed to store 100MWh of energy, can power towns such as Mossel Bay or Howick for approximately five hours. This forms part of Phase 1 of Eskom's BESS project, which includes the installation of an additional 833MWh storage capacity at eight Eskom Distribution substation sites across KwaZulu-Natal, Eastern Cape, Western Cape, and Northern Cape.

This phase also incorporates about 2MW of solar photovoltaic (PV) capacity, with the 120 battery banks from Hyosung Heavy Industries said to have cost around R830m.



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"We are grateful to the various funders of the Eskom BESS project, and to our construction partner Hyosung Heavy Industries. This is proof of what we can achieve when we work as a team and in collaboration with industry and local communities," remarked Eskom's group executive for distribution, Monde Bala, in a media statement.

A step in the right direction

Public Enterprises Minister Pravin Gordhan welcomed the launch and said these kinds of projects create hope that sooner rather than later, South Africa is going to overcome the challenge of load shedding.

"If we do more of these kinds of projects in other parts of the country, which is what Eskom intends to do, we will see the end of load shedding pretty soon. Today, after a few hiccups, you see in live form, the launch of this BESS project right in front of us. It is a great achievement for Eskom and the country," said Gordhan.

"Eskom is demonstrating that it can have a sense of urgency, it can have an important quality that we all need in South Africa and elsewhere – which is the ability to innovate and create new ways of doing things. And not just think about them, but concretely deliver them. That is the key."

Eskom says the Hex project has made a significant impact on the local community of Worcester, employing approximately 250 local community members and supporting twelve early childhood centres with playground and educational material.

In addition, the project has facilitated the donation of computers and five hundred full school uniforms. Further corporate social investment projects are planned for completion by the end of March 2024.

'A demonstration of what Eskom can do'

"The Hex project is a demonstration of what Eskom teams can do in finding alternative, innovative and lasting solutions in addressing the country's electricity challenges," said Eskom's group executive for generation, Bheki Nxumalo.

Following the successful completion of Phase 1, Eskom is set to implement Phase 2 of the project, which includes the installation of an additional 144MW of storage capacity, equivalent to 616MWh, at four Eskom Distribution sites and one Transmission site.

This phase will also see the addition of 58MW of solar PV capacity.

The rollout of these technologies, in conjunction with the disciplined execution of our Generation Recovery Plan initiated in March 2023, aims to achieve an energy availability factor of 70% by the end of March 2025. This will provide the country with the much-needed megawatts to address capacity constraints.

ABOUT LINDSEY SCHUTTERS

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