

Africa shows great potential in sustainable energy milestones

Africa continues to show great potential to enhance grid efficiency, energy storage, and resilience, which is why investment in infrastructure and technology should become a major agenda point.



Jean-Pascal Tricoire, global chairman of Schneider Electric, says Africa's energy transition must not only focus on increasing the supply of green energy but also on transforming demand (Image supplied)

2024, in particular, saw some noteworthy growth in the continent's efforts to realise secure and sustainable energy provision.

On a recent visit to South Africa, Jean-Pascal Tricoire, global chairman of Schneider Electric, emphasises the company's continued commitment to South Africa and Africa, highlighting key developments.

Sustainable energy milestones

"South Africa is making significant strides in reaching important sustainable energy milestones.

South Africa's share of renewables is projected to reach 17% by 2032, driven by the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP) and regulatory reforms that allow greater private sector participation.

"South Africa's energy crisis pushed over five gigawatts of renewables into the grid in just a few short year. When it's necessary, it becomes possible," he notes.

Overall, it is projected that as much as 76% of Africa's electricity could come from renewables by 2040 if existing and planned power plants are built and used to their full capacity.

This would be made up of 82% hydropower, 11% solar, and 7% wind.



Prioritising efficiency, electrification, and decarbonisation

Tricoire stresses that Africa's energy transition must focus not just on increasing the supply of green energy but also on transforming demand.

“The world will become electric because technologies like electric cars, data centres, and digital infrastructure are inherently driven by electricity.

“The priority is to save energy through digitisation and efficiency, the second is to electrify, and the third is decarbonise the energy supply,” he explains.

He further adds that up to two-thirds of carbon emissions can be mitigated by using existing technologies.

For example, optimising energy efficiency in urban infrastructure, such as water networks, transport system and buildings, could yield significant reductions in energy consumption.

“We are experiencing a historic development in the field of energy,” says Tricoire, noting the convergence of the Internet of Things (IoT), AI, and big data to drive digitisation, which is now accessible and scalable at a lower cost.

Public-private partnerships

For South Africa and the broader African continent, the energy transition is not just about adopting renewables but also about optimising current systems to be more efficient and sustainable.

“Africa's energy future hinges on collaboration between the public and private sectors,” notes Annabel Bishop, chief economist of Investec, echoing Tricoire's sentiments on the need for integrated solutions.

“By embracing digital technologies and fostering private sector involvement, South Africa can achieve its ambitious goals of economic growth and sustainability,” she says.

PwC's recent [Africa Energy Review Overview report](#) shows that public-private partnerships are essential driving energy-sector reforms and infrastructure development.

Examples from South Africa and Nigeria show how collaboration between the public and private sectors can enhance energy security, attract investment, and support the transition to competitive and sustainable energy markets.

Leading by example

The report also found that Africa is making significant strides in renewable energy, with countries like Kenya, Egypt, and Morocco leading in solar, wind, and geothermal projects.

Across Africa, the drive towards cleaner energy is gaining momentum.

Tricoire emphasises that the continent is undergoing an important shift towards sustainable energy.

A key example is Kenya; the country's energy mix consists primarily of renewable sources like geothermal, hydro, wind, and solar, accounting for 85% to 90% of the country's energy generation.

"Kenya is on a path to a fully green grid by 2030," he says,

The journey ahead for South Africa and the rest of the African continent involves leveraging existing technologies, fostering innovation, and nurturing partnerships between government and industry.

As Tricoire aptly puts it: "We have to be champions of efficiency and sustainability by being smart and green."

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