

Visions of African super grid at POWER-GEN & DistribuTECH Africa

Urging faster, more innovative power generation and distribution, pan-African power experts attending POWER-GEN & DistribuTECH Africa this week predict that Africa could share infrastructure, knowledge and skills to take affordable, reliable and cleaner power across the continent.

Speaking at the opening at the Sandton Convention Centre today, high-level pan-African power stakeholders said transformation was taking place, but that the pace of change was still too slow. They urged closer collaboration and innovation to take power to the 600 million people in Africa who still had no access to electricity, as well as to support industrialisation across the continent. The South African Minister of Public Enterprises, Lynne Brown, said that in satellite photos, Europe, North America and other regions were lit up like Christmas trees, while Africa remained the 'dark continent'. She called on stakeholders at POWER-GEN & DistribuTECH Africa to network and share information to lay the groundwork for a future in which Africa's infrastructure deficit was overcome and an 'inclusive continental electricity sector'. "When our grandchildren look at satellite images, they should see an Africa that has truly emerged from the darkness: an electrified and industrialised Africa, with infrastructure and skills," the Minister said.

"Africa has a momentous task ahead in the spirit of progress, innovation partnership and integrated and continued advancement of our industry. One day, Africa could unite for a single super-grid that could be the envy of the world," said Eskom's new Interim Chairman, Zethembe Khoza.

But he noted: "In Africa there is a need to balance affordability with reliability and environmental sustainability. We need to think big and act fast. At Eskom, we are currently undertaking the largest build programme in Africa. Our aspiration is to pursue a more diverse energy mix, with the objective of reducing the utility's relative emissions and subsequently to reduce its absolute emissions."

George Njenga, Regional Executive, Steam Power Systems, Sub-Sahara Africa at GE Power South Africa, called for more creative financing and risk sharing to drive further investment in pan-African power infrastructure. New technologies and innovation in generation and distribution could also serve to speed up efforts to make power more affordable and accessible to everyone, he said.

He noted that the past year had been characterised by international developments that had impacted Africa's power sector. However, he said: "We must create a strong ecosystem, where government and private sector are working together to address competitiveness, drive ethical and transparent business practices, to reduce risk and ultimately lower the cost of doing business."

"The disruptions we see in the world today can only be expected to increase. Our challenge is to be proactive, to take courage, and be innovative to bring more power, faster and more sustainably to Africa," Njenga said.

New technologies and the Industrial Internet of Things (IIoT) could spur development and progress in the power sector, said Leon Viljoen, Managing Director of ABB Southern Africa. "Automation took power sector productivity from a baseline of 50% to 65%. Then centralisation and ERP systems took us to 80% in most power plants. We believe that productivity can be increased from 80% to closer to 95% by collaboration in an IIoT environment."

He added that big data analysis also stood to reduce costs, improve profitability and availability in power plants: "The amount of data generated by power plants is overwhelming, but in many cases very little of it is harnessed; it is isolated from subject matter experts and best practices are not always utilised."

Speakers emphasized the importance of innovation in financing and operations, the need to embrace new digital technologies and the importance of reducing carbon emissions in power production in Africa.

During the opening session, the power sector made a concrete move to light up rural areas of Africa, when it supported SolarAid to commemorate Nelson Mandela Day today. PennWell Corporation, organisers of POWER-GEN & DistribuTECH Africa donated R30,000 to SolarAid, with delegates at the event making their own contributions too.

POWER-GEN & DistribuTECH Africa 2017 will run until Thursday 20 July, addressing key power generation and distribution trends, challenges and opportunities across Africa, covering areas such as technology, strategy and legislation in coal-fired, renewables and nuclear power.

The event, attended by 3000 attendees from governments, utilities, power producers, academia, consulting and power industry professionals, engineers and representatives of affiliated private enterprises, features a free-to-attend exhibition and a one-day forum on Africa's Nuclear Future, to be staged on Wednesday 19 July. POWER-GEN & DistribuTECH Africa 2017 is produced in partnership with host utility Eskom.

Says Nigel Blackaby, Conference Director for POWER-GEN & DistribuTECH Africa cent It is our privilege to connect energy professionals to knowledge and to each other, in pursuit of a vital enterprise, namely the development of power infrastructure in a sustainable, affordable and reliable way.

For more information, go to <http://www.powergenafrika.com/index.html>

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