

Electricity Distribution Networks Conference 2024

21-22 November 2024 Southern Sun, Rivonia Road, Sandton

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CONFERENCE OVERVIEW

South Africa stands at a critical juncture in its energy landscape, grappling with the challenges of load shedding while simultaneously striving to meet its commitments under the Paris Agreement to transition to low-carbon energy generation by 2050.

The draft Integrated Resource Plan outlines the national electricity strategy, providing a roadmap for electricity provision until 2050. Against this backdrop, the Electricity Distribution Networks Conference 2024 serves as a vital platform for industry stakeholders to explore innovative solutions and strategies to navigate this energy transition effectively.

AUDIENCE

The conference brings together representatives from Distribution Network Operators (DNOs) and Distribution System Operators (DSOs), technical managers, distribution and planning engineers, innovation managers, regulation and strategy experts, power grid engineers, and researchers from academia and industry. It provides a unique opportunity for collaboration, knowledge sharing, and networking among key players in the electricity distribution sector.

CONFERENCE HIGHLIGHTS



Energy Storage: Exploring advancements in energy storage technologies to enhance grid flexibility and reliability.

2

Generation: Discussing the integration of renewable energy sources and their impact on power generation.

3

Home Energy: Examining strategies for optimising home energy management and promoting energy efficiency.

4

Industrial Decarbonisation: Addressing challenges and opportunities in decarbonising industrial processes.

5

Heat: Exploring innovative solutions for heating systems and their role in the energy transition.

6

Grids: Analysing the evolution of power grids towards smarter, more resilient systems.

7

Innovation: Showcasing cutting-edge technologies and initiatives driving innovation in electricity distribution networks.

CONFERENCE KEY THEMES

- 7 Enhancing hosting capacity through network planning and design.
- Network operation and control to support increased hosting capacity.
- Regulation, business models, and customer involvement in enabling increased hosting capacity.



21 - 22 NOVEMBER 2024



CONFERENCE VENUE

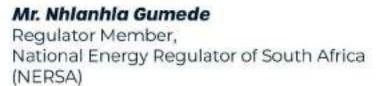
Southern Sun, Rivonia Road, Sandton



WHO SHOULD ATTEND?

- Senior Managers Energy Management
- Senior Advisors Energy Losses
- · Chief Electrical Engineers
- Executive: Power Plant Management
- General Managers: Strategy & Planning
- General Managers Transmission Engineering
- General Managers Production Engineering
- General Managers Generation
- · Investment Houses & Hedge Fund Managers
- Board Members
- Project Managers: Renewable Energy Initiatives
- Energy projects development and funding
- Directors: New & Renewable Energy
- Senior Trade Advisors- Energy & Green Economy
- Technical Advisors: Green Hydrogen
- Sustainability and Just Transition Technical Leads
- Project Managers- Renewables and Cleaner Fossil Fuels
- Chief Engineers: Solar PV & Battery Storage
- · HOD's: Energy Performance
- · CEO's
- Finance Directors
- Banks
- Climate & Energy Counsellors
- · Managers- Distribution UPM
- Power System Protection Technicians
- Electrical Engineers
- Managers- Transformers & switchgears
- Project development
- Installation and operations
- System design
- Manufacturing
- Solar PV installers
- · Environmental lawyers
- Software engineers
- Senior Economists







Mr. Gumede is a highly experienced engineer, with extensive knowledge and understanding of the energy industry. He has held various executive positions, including Executive Chairperson of the Fifth View (Pty) Ltd, an advisory and Investment Company operating in the oil and gas energy sector. He is the former Chairperson of the Board of PetroSA and the former CEO of the South African Farmers Development Association. He has served as a Technical Advisor to the Minister of Energy, as well as an Associate Director at Deloitte. He was also the Deputy Director General of Hydrocarbons and Energy Planning, as well as Chief Director Hydrocarbons at the erstwhile Department of Minerals and Energy, between 2003 and 2008. Before joining the Department of Minerals and Energy, he served as Executive Director and Senior Consultant at SAD-ELEC (Pty) Ltd, an energy consulting company. Mr. Gumede has advised a number of large international oil companies and governments on regulatory frameworks, as well as energy policy and strategy



Christoff Lombard Director, Motla



I am part of the core leadership in the company (Motla) and played a leading role in our cloud migration in 2020. I was the project lead on our first ever Solar PV EPC project in 2015 and have been the driving force behind the business unit ever since. Today as Technical Director I oversee all technical decisions and internal standards as well as pricing confirmation.

During 2020 I was afforded the freedom to co-find a new EPC company, Gronn, as a spin-off form Motla's EPC business. Now I am involved in several R&D projects with the goal of developing innovative products and solutions for the Southern African energy market. I am directly responsible for supplier relationships, technology choices, logistic oversight, marketing, and business strategy within Gronn.

I am also still actively involved as engineering consultant as technical lead in IPP services and part of multi-disciplinary teams delivering high-spec commercial buildings. I have a good knowledge of lightning protection, lighting design, architectural requirements, and services co-ordination.



Santosh Sookgrim
Senior Technical Advisor
SAWEA (South African Wind Energy Association)



Santosh Sookgrim is a Senior Technical Advisor at SAWEA (South African Wind Energy Association) in Rosebank, Johannesburg. His technical experience as a PV Design engineer, project manager and transaction advisory consultant within the renewable energy, industrial, and financial sectors provides a strong basis for the advocacy of Wind Energy in South Africa. Santosh is committed to drive the wind industry forward through critical engagements with key stakeholders and solutions-based thinking as well as providing policy direction on technical, operational, environmental and socio-economic issues, amongst others (faced by the wind industry) to government thus accelerating the adoption of Wind Energy in both the commercial energy generation and utility scale markets.



Ruse Moleshe Development Finance Specialist RUBK Pty Ltd



Ruse Moleshe is a Development Finance Specialist with over 20 years of experience in energy and infrastructure in Sub Saharan Africa. Her experience spans a diverse range of skills and activities in energy planning, policy development, strategy formulation, project development, appraisal, implementation and monitoring. She has been involved in a broad range of projects including coal, gas, hydro, wind, solar, biogas, biofuels, bioelectricity, transmission, distribution, telecoms and logistics infrastructure.

Ruse has worked in leadership positions at the Department of Minerals and Energy, Department of Trade and Industry, Development Bank of Southern Africa (DBSA), Basil Read Matomo (an Engineering, Procurement and Construction contractor), Standard Bank, and the Industrial Development Corporation (IDC) and founded a Consulting business.

As part of the DBSA, she was involved in the development of the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP) since inception in 2009/2010. She took part in initiation of a bankable Power Purchase Agreement and selection of Transaction Advisors to support government to develop the world-renowned programme.

Ruse was the Head of the Industrial Infrastructure Unit at the IDC, with a capital allocation of R4 billion) and responsible for energy, logistics, telecoms and water sectors. Ruse led a team of fifteen professionals to formulate and execute strategy, source, develop, structure, finance and monitor power, water, telecoms and logistics projects. She championed transformation through appropriate structuring interventions to enable participation of black industrialists, youth and women.

Ruse is an Independent Investment Committee member of private sector entities and a former Non-Executive Director of Consolidate Wire Industries (Pty) Ltd. She has served as a panellist in numerous climate and infrastructure funds, identifying risks and providing thought leadership insights on investment decisions. Ruse worked with multilateral institutions to source concessionary funds and technical assistance to enhance project bankability. She holds a Bachelor of Commerce (University of Fort Hare) and Bachelor of Science Honours: Energy Studies (University of Johannesburg).



Vincent Kok
Senior Technical Advisor
SAWEA (South African Wind Energy Association)



Vincent Kok is a Senior Technical Advisor at SAWEA (South African Wind Energy Association) in Rosebank, Johannesburg. He has a background in mining and mineral processing – services and major projects as well as EC&I (Electrical, Control and Instrumentation) consultancy in the oil and gas sector. He has experience in Smart Grid technology and grid topologies which contributes to his role at SAWEA.



Boitumelo Molete Social Development Policy Coordinator Cosatu



Boitumelo Molete, 34, is the social development policy coordinator for labour federation Cosatu. Among her many responsibilities is to lobby in Cosatu policy negotiations with the National Economic Development and Labour Council and government departments.

She has also represented Cosatu at the United Nations Framework Convention on Climate Change, the Conference of Parties (COP). Boitumelo develops material for Cosatu's social development with regard to health, education, social security, climate change and the just energy transition. She coordinates research on climate change and adaptation and mitigation strategies, and the implementation of Cosatu's climate change projects. Boitumelo said one of her challenges has been to navigate being a woman in a male-dominated environment — for example when she was running just energy transition worker education sessions with people from the coal-mining and fossil-fuel power stations. Boitumelo is proud of her work on the just energy transition project for Cosatu's structures. After workshops were held with the structures, they developed toolkits from the issues emerging from their particular structures. These toolkits will be used to assist Cosatu lobby for an inclusive just energy transition.



Etienne Rübbers Managing Partner Renew-e



Etienne is a strong conceptual thinker, and has a valuable combination of technical, business and financial skills and experience. He has more than 25 years of experience in the energy sector and has experience in several African countries. He is a management committee member of SAIPPA (South Africa Independent Power Producers Association) and is a former board member of SANEA (South African National Energy Association). He is passionate about the 'Just Energy Transition' and in particular the strengthening of SA's transmission grid and expedite adding additional electricity storage. This will enable to accelerated penetration of RE into SA's electricity mix, and the retirement of our aging coal-fired power stations.



Lesego Moshikaro-Amani Senior Economist TIPS



Lesego Moshikaro-Amani joined TIPS in July 2019. Lesego earned a Master's degree in Economics specialising in Development Economics from the University of Cape Town (UCT). Prior to joining TIPS, Lesego worked as a Crisis Response Fund (CRF) researcher and data analyst at CIVICUS and as a graduate research assistant at the Land Restitution Evaluation Study (LRES), launched by SALDRU. Her expertise lies in industrial policy, battery energy storage value chains and the emerging sector of new energy vehicles (NEVs) in South Africa, including a strong emphasison skill development within the NEV industry. Other areas of focus include skills development for industry and promoting employment in the development of SMMEs.



Alboricah Tokologo (TK) Rathupetsane Researcher Stellenbosch University



Alboricah Tokologo (TK) Rathupetsane is a junior researcher and works on various projects related to Just Transitions and Infrastructure for sustainability. She is the CST-based project manager for the Southern Africa – Towards Inclusive Economic Development (SA – TIED) project in the workstream, Water-Energy-Food in the Context of Climate Change. This initiative is in partnership with National Treasury (NT), the National Planning Commission (NPC), the Development Bank of Southern Africa (DBSA) and the Presidential Climate Commission (PCC), and identifies investment requirements for infrastructure in the water, energy and food sectors whilst accounting for climate change impacts. TK supports Prof Mark Swilling in his coordinator role in the NPC's Finance Task Team. Outside of these, TK's involvement in Just Transition work is primarily focused on the energy sector. She led the grid expansion leg of the 2023 Just Energy Transition Platform project and is one of the researchers involved in green economy industrialisation, reskilling and employment creation.

TK holds a BSc in Mechanical Engineering from the University of the Witwatersr and and a Master's in Sustainable Development from Stellenbosch University. She is an avid creative writer and enjoys writing climate and Africa-focused science fiction. In 2023, she was a guest lecturer for the Sustainable Cities module, writing the African Future She is a co-founder of the Africa Week Network which convenes local artists and entrepreneurs to connect and start imagining a unified, desirable Africa for all.



Riaan Meyer Founder GeoENERGY Group





Mr. Riaan Meyer is the founder and managing director of the GeoENERGY group of which GeoSUN and GeoWIND are subsidiaries. His work-focus is on solar and wind resource assessment and PV module testing and inspections. GeoENERGY offers a wide variety of services to developers, operators, owners and funders of utility scale solar and wind projects. These include solar and wind resource measurement, PV module tests and inspections and the calibration of solar and meteorological instruments.

CONFERENCE AGENDA

DAY 1: ENERGY TRANSITION AND MODERNISATION

8:00 AM - 9:00 AM: Registration and Welcome Breakfast

- · Networking opportunity
- Opening remarks by the conference organizers

9:00 AM - 9:45 AM: Keynote Address

"Accelerating the Energy Transition via Digitisation and Collaboration"
 Overview of digital technologies and collaborative strategies driving the energy transition.

9:45 AM - 10:30 AM: Keynote Address

 "Investment Criteria for the Energy Transition"
 Analysis of investment strategies and criteria for supporting the transition to renewable energy.

10:30 AM - 11:00 AM: Morning Break

11:00 AM - 11:45 AM: Keynote Address

 "Optimising the Grid: Enabling the Efficient Management of Renewables" Strategies for optimizing grid management to integrate and manage renewable energy sources effectively.

11:45 AM - 12:30 PM: Panel Discussion

"Equity in Energy Transition: Ensuring a Just and Inclusive Path Forward"
 Discussion on ensuring equitable access and inclusivity in the energy transition.

12:30 PM - 1:30 PM: Networking Lunch

1:30 PM - 2:15 PM: Technical Session

 "Development of Distribution Networks"
 Insights into modernizing and expanding distribution networks to support renewable energy integration.

2:15 PM - 3:00 PM: Technical Session

"Fiscal and Monetary Policy Framework"
 Examination of the fiscal and monetary policies impacting the energy sector.

3:00 PM - 3:30 PM: Afternoon Break

CONFERENCE AGENDA

3:30 PM - 4:15 PM: Case Study Presentation

"Nuclear Energy-Bharat (India): A Case Study"
 Detailed analysis of India's nuclear energy sector and its role in the national energy strategy.

4:15 PM - 5:00 PM: Technical Session

 "Batteries (BESS) and Pumped-Storage Hydro (PSH)"
 Overview of battery energy storage systems and pumped-storage hydro as solutions for energy storage.

5:00 PM - 6:00 PM: Networking Reception

· Informal discussions and networking with peers and experts.

DAY 1: GRID MODERNISATION AND FUTURE TECHNOLOGIES

8:00 AM - 9:00 AM: Breakfast Briefing

Informal networking and discussion of the day's agenda.

9:00 AM - 9:45 AM: Keynote Address

 "Electricity Amendment Bill 2024"
 Overview of the key provisions and implications of the new Electricity Amendment Bill

9:45 AM - 10:30 AM: Technical Session

"Power Systems Smart Power Engineering"
 Advances in smart power engineering and their impact on power systems.

10:30 AM - 11:00 AM: Morning Break

11:00 AM - 11:45 AM: Technical Session

"Energy Transportation"
 Exploration of energy transportation methods and their role in the energy supply chain.

11:45 AM - 12:30 PM: Technical Session

"Distribution Generation Optimisation and Energy Management"
 Techniques for optimizing distributed generation and managing energy resources effectively.

12:30 PM - 1:30 PM: Networking Lunch

CONFERENCE AGENDA

1:30 PM - 2:15 PM: Technical Session

"Powering the Future: Exploring the Future of Power Distribution Technologies"
 Discussion of emerging technologies and innovations in power distribution

2:15 PM - 3:00 PM: Panel Discussion

"Modernisation and the Smart Grid"
 Conversation on modernizing the grid and the role of smart grid technologies.

3:00 PM - 3:30 PM: Afternoon Break

3:30 PM - 4:15 PM: Technical Session

"The Future of Power Distribution Technologies"
 Insights into the next-generation technologies in power distribution.

4:15 PM - 5:00 PM: Panel Discussion

 "From Infrastructure to Integration: Addressing Challenges on the Renewable Generation Journey"

Discussion on overcoming challenges from infrastructure development to integrating renewable generation.

5:00 PM - 5:45 PM: Presentation

"Grid Constraints and Flexibility Solution Based on Local Control Architecture"
 Presentation on solutions for grid constraints and flexibility through local control architecture.

5:45 PM - 6:00 PM: Closing Remarks and Conference Wrap-Up

Summary of key takeaways and acknowledgments.

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TERMS AND CONDITIONS

A substitute delegate is always welcome with written notification. No substitution fees will be charged provided notification is provided at least one week prior to the event. For standard registrations, in the event you wish to cancel your registration more than 20 days prior to commencement of the event, you agree to pay a cancellation fee of 10% of the event fee. If you cancel your program registration less than 20 days before commencement of the Program, you agree to pay a cancellation fee of 30%. Registrations made at an "early bird" or otherwise discounted rate are non-refundable. If you wish to cancel your registration more than 20 days prior to the event, you will be provided credit towards an alternative event and you are liable to pay 100% of the fee.

Due to circumstances outside of our control, it is possible we may need to cancel, reschedule, or change the venue of an event. We will make all reasonable efforts to inform attendees of any such changes with as much notice as possible. Should your Program be rescheduled or cancelled by us, all fees you have paid will be credited towards an alternative event or refunded to you.

You acknowledge and agree that, to the extent the law allows, our liability is limited to the event fee and we will not be liable for any costs, damages or expenses incurred by you as a result of a cancellation, deferral, reschedule or change of vienue. None of the above is intended to compromise your rights under South African Consumer Law. Photos and/or video may be taken by us at the event and as required.