

CONFERENCE PROGRAMME - DAY 1: Monday 5 November

08:00 – 09:00 Registration and Refreshments Break

09:00 – 10:00 Welcome:

Brenda Martin, Chief Executive Officer – South African Wind Energy Association (SAWEA)

Opening

Dr. Cosmas Chiteme, Director: Hydrogen & Energy - Department of Science and Technology (DST)

Introduction:

Siyabonga Zondi, Project Manager Renewable Energy Initiatives - Department of Energy (DoE) on behalf of DoE & UNDP

Keynote Address:

Masechaba Mabilu, Strategy Director - Forethought Africa

10:00 – 10:30 Refreshment Break

10:30 – 12:10 The Wind Resource: Part 1

Venue:

Watsonia & Bluebell – Level 3, CTICC2

Chairperson: Johan Stander, Senior Researcher, Council for Scientific and Industrial Research (CSIR)

Speakers:

- David Pullinger, Technical Lead – Lloyd's Register
Improving wind resource analysis approaches: lessons learned from Round 1
- Chantelle Y. Jansen van Vuuren, Electrical and Electronic Engineering Department - University of Stellenbosch (SU)
Clustering of Wind Resource Data for one of the South African Renewable Energy Development Zones
- Amaris Dalton, Environmental Officer - Majuba Power Station
Wind power simulation during the passage of cold front
- Hlologelo Kekana, Intern – SAGEZ (GIZ) & South African Wind Energy Association (SAWEA)
Wind Energy Capacity Factor Calculator

12:10 – 13:10 Lunch Break

Daisy, Freesia & Orchid - Level 2, CTICC2

13:10 – 14:50 Wind Power Economics and Finance

Venue:

Watsonia & Bluebell – Level 3, CTICC2

Chairperson: Barry MacColl, Senior Regional Manager – Africa, Middle East, SE Asia & Australia Electric Power Research Institute (EPRI) International Inc

Speakers:

- Esther Mhkwabane, Researcher - Council for Scientific and Industrial Research (CSIR)
Alternative platforms for SMME participation in the Renewable Energy industry
- Ruan Fourie, Energy Economist - South African Association for Energy Economics
Co-benefits of renewable energy deployment in South Africa
- Dr. Udochukwu B. Akuru, Postdoctoral Research Fellow – University of Stellenbosch (SU)
Potentials of Locally Manufacturing a 500 kW Wound-Field Flux Switching Wind Generator in South Africa
- Julian Naidoo, Senior Research Engineer - Council for Scientific and Industrial Research (CSIR)
Pre-Feasibility Case Study-CSIR Wind Power Generation potential

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14:50 – 15:20 Refreshment Break

15:20 – 16:40 Wind Technology (Embedded & Utility)

Venue:
Watsonia & Bluebell – Level 3, CTICC2

Chairperson: Prof. Johan Vermeulen, Associate Professor, Department of Electrical and Electronic Engineering - University of Stellenbosch (SU)

Speakers:

- Akinola Ajayi-Obe, PhD Degree: Electrical Engineering – University of Cape Town (UCT)
Techno-Economic Evaluation of Five-Level Nested Neutral Point Clamped (NNPC) Converter Topology for Transformer-less Connection of High Power Wind Energy Conversion Systems
 - Tolulope Babawarun, Mechanical Engineering – Federal University of Technology (FUT, Nigeria)
Improvement of vibration behaviour of a small scale wind turbine
 - Andre Otto, WASA Project Manager: Clean Energy, South African National Energy Development Institute (SANEDI)
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CONFERENCE PROGRAMME - DAY 2: Tuesday 6 November

08:00 – 09:00 Registration and Refreshments

09:00 – 10:15 Wind Power and Environment

Venue:
Watsonia & Bluebell – Level 3, CTICC2

Chairperson: Abulele Adams, Environmental assessment practitioner- Council for Scientific and Industrial Research (CSIR)

Speakers:

- Kelly Stroebel, Environmental Assessment Practitioner - Council for Scientific and Industrial Research (CSIR)
Lessons Learned from Environmental Authorizations in the REDZs
- Samantha Ralston-Paton, Birds and Renewable Energy Manager, BirdLife
On a collision course? Wind energy infrastructure as a source of bird mortality in South Africa.
- Dr. Rhonda Millikin, President - EchoTrack Inc.
Assessing site risk using bird foraging flight speed Rhonda L. Millikin and Ron Ydenberg EchoTrack Inc. Simon Fraser University

10:15 – 10:45 General Address

Dr. Mok Roberts - JESA Introduction

Steve Sawyer, Senior Policy Advisor, Global Wind Energy Council (GWEC)

10:45 – 11:05 Refreshment Break

11:05 – 12:45 Grid Integration

Venue:
Watsonia & Bluebell – Level 3, CTICC2

Chairperson: Prof. Sampson Mamphwell, University of Stellenbosch (SU)

Speakers:

- Mpeli Rampokanyo, Principal Engineer: Power System Operations - Council for Scientific and Industrial Research (CSIR)
Power System Inertia in an Inverter- dominated Network
- Haltor Mataifa, Part-time lecturer - Cape Peninsula University of Technology (CPUT)
Effective grid integration of wind power generation: technical considerations
- Nhlahla Ntsadu- Power quality engineer in the Plant- Eskom
Using Normalized Cross Correlation and Variance to Determine the Source of Voltage Unbalance Exceedances in Eskom Networks with Wind Farms
- Jarrad Wright, Principal Engineer - Council for Scientific and Industrial Research (CSIR)
Comparing the value of improved wind energy forecasting accuracy in South African and United States power systems

12:24 – 13:45 Lunch Break

Daisy, Freesia & Orchid - Level 2, CTICC2

CONFERENCE PROGRAMME - DAY 2: Tuesday 6 November

13:45 – 15:25 The wind Power resource (Part 2) & Wind Energy Policy

Venue:
Watsonia & Bluebell – Level 3, CTICC2

Chairperson: Andre Otto, WASA Project Manager: Clean Energy, South African National Energy Development Institute (SANEDI)

Speakers:

- Foster Lubbe, Junior Lecturer: Department of Engineering Sciences – University of Free State (UFS)
A Statistical Analysis of Wind Data
- Dr. Gregory Poulos, Chief Executive Officer, ArcVera Renewables
Wind Energy Resource Assessment Benchmark
- Dr. Britta Rennkamp, Senior Researcher: Energy Research Centre (ERC) & Senior Fellow: African Climate and Development Initiative (ACDI) - University of Cape Town (UCT)
Power, coalitions and institutional change in South Africa's climate policy
- Heini Nel - Nel Energy
A roadmap for power sector reform in South Africa

15:25 – 15:45 Refreshment Break

15:45 – 16:45 Wind Power for Communities

Venue:
Watsonia & Bluebell – Level 3, CTICC2

Chairperson: Ntombifuthi Ntuli, Research Group Leader: Energy Industry - Council for Scientific and Industrial Research (CSIR)

Speakers:

- Dr. Ric Amansure- Doctorate in Business Administration candidate at Nelson Mandela University
Successful transformational change in revenue management among beneficiary communities of South African renewable energy construction companies
- Kyle Swartz- Research assistant at the Managing Infrastructure Investment, Reform and Regulation in Africa at the Graduate School of Business, University of Cape Town.
Addressing community energy challenges with utility-scale renewables: A case study of Hopefield Wind Farm (forthcoming)

16:45 – 17:45 New Emerging Markets and Trends in an African context

Venue:
Watsonia & Bluebell – Level 3, CTICC2

Chairperson: Dr. Karen SurrIDGE-Talbot, Centre Manager: Renewable Energy Centre of Research and Development - South African National Energy Development Institute (SANEDI).

Speakers:

Dominic Milazi, Council for Scientific and Industrial Research (CSIR)
Address: Energy Markets and Policy, CSIR Energy Centre

Closing and Remarks:

Greg Landwehr, Principle Engineer - Council for Scientific and Industrial Research (CSIR)
Brenda Martin, Chief Executive Officer – South African Wind Energy Association (SAWEA)