

# Energy Crisis

## NSTF Discussion Forum

DAY 2: 25 April 2024

### Speakers' Biographies



**09:10-09:25**

***Institutionalising the skills ecosystem for a Just Transition***

**Mr Devandran Pillay (Devan)** has over 22 years' experience in the field of Policy analysis and development. He holds a master's degree in social policy and has further training in, amongst others, risk and strategic management; public sector financial management; Coaching, Leadership and Staff Motivation; People Management & Emotional Intelligence, Change Management; etc.

He has published several papers and articles on topics ranging from African Social Observatory; Mining Africa; Union Power in Pension Fund Investment, etc during his tenure (2002-2006) at the National Labour and Economic Development Institute (NALEDI).

He has 18 years of experience in the policy environment of Government, including the Expanded Public Works Programme where he focused on job creation, empowerment and transformation. Some of his key achievements and roles include the development of various policies, legislation and regulations; established and led the Secretariat of the Inter-Ministerial Committee on Public Employment Programmes; led the Government Delegation in the Development Chamber of NEDLAC; Government lead representative in the Construction Sector Charter Council; Departmental representative to Government's Economic Sector, Investment Employment and Infrastructure Development Cluster; and the Department lead representative at the NATJOINTS Command Centre during COVID-19.



**09:25-09:40**

***Power systems analysis, designs and innovation applications in BESS & Microgrids***

**Mr Mfundu Erasmus Songo** is a Senior Manager in Substations & Lines, in Technology & Engineering at the Eskom Distribution Division.

His areas of responsibilities are Power systems planning, HV Plant, Substations and Lines, lead in Battery Energy Storage Systems (BESS), Microgrids technologies, and Geographical Information Systems in the Distribution Division.

He is a qualified electrical engineer with over 25 years' experience in the energy sector. He has held various leading engineering roles within Eskom Transmission and Distribution Divisions in power systems planning studies and for power stations integration studies.



**09:40-09:55**

***Sustainable energy sector skills development in South Africa***

**Ms Robyn Vilakazi**, currently in charge of overseeing quality assurance and coordinating skills development in South Africa's energy and water sectors, plays a pivotal role in ensuring these sectors possess the necessary skill sets to thrive. Her responsibilities extend to various facets of skill development, including strategy implementation, fostering partnerships, and maintaining quality standards. This strategic role underscores her commitment to advancing the sectors by nurturing talent and facilitating continuous professional growth.

Robyn Vilakazi is an experienced professional who served as the Chief Financial Officer at the Energy and Water Sector Education and Training Authority (EWSETA). Her background in financial management and skills development has been evident in her career. During her time at EWSETA, Robyn held various roles related to skills development, strategy development, quality assurance, and building partnerships for over 2.5 years, including her tenure as CFO. She played a key role in implementing national skills delivery interventions to further EWSETA's mission. Robyn's commitment to continuous self-improvement is highlighted by her attainment of a Master of Business Administration (MBA) from the Gordon Institute of Business Science, affiliated with the University of Pretoria. This educational achievement underscores her dedication to staying current in financial management and skills development. Vilakazi's professional

achievements, mentorship efforts, and dedication to ongoing learning are valuable contributions to the EWSETA. Her expertise in strategic financial management and unwavering commitment to skills development and professional growth continue to inspire others to reach their potential and drive excellence in the field.



09:55-10:25

*Energy in Eco-Industrial Parks*

**Mr Bernd Oellermann** is senior programme manager at the NCPC-SA, heading up the eco-industrial parks programme for South Africa, which he started in the Department of Trade, Industry and Competition (the dtic) to support the Just Transition for industry to a circular economy.

His areas of expertise cover management consulting, project and programme management, stakeholder management, policy, strategy, planning and sustainability. He has worked in diverse fields covering sustainable development, renewable energy, water, health, agriculture, engineering, R&D, education and training, ICT, mining and the financial sector.


He is passionate about people and sustainable development, driven by the belief in the restoration of Creation and every person to their original purpose and identity. His approach is systemic and integrated towards working with others to find solutions to the multidimensional challenges faced by the world.





10:25-10:40

**Mr Adrian Stone** has worked in various technical capacities in industry, academic, non-profit and government organisations mostly around energy and its externalities. He played a leading role in the climate change action plan for Cape Town, including setting Paris-compliant mitigation targets for the city under the C40 Deadline 2020 Program. He currently works as Manager of Data Management and Integration Platforms (DMIP) in the Sustainable Energy Markets Department of the Energy Directorate of the City of Cape Town to technically support, amongst other programs, the expansion and availability of renewable energy and improvement of energy security. As well as supporting the climate function through the greenhouse gas inventory, DMIP supports the

<p><b><i>Event Horizon at the Load Centres: Dealing with load shedding accelerated business disruption at Cape Town's electricity distribution utility</i></b></p>	<p>energy function of the City of Cape Town through expanding integrated energy planning modelling capacity and outputs, analysing customer metering data to produce load curves and developing and maintaining the building energy performance system, SmartFacility.</p>
<div data-bbox="252 510 735 1039" data-label="Image"> </div> <p><b>10:40-10:55</b></p> <p><b><i>Municipal new energy business model to meet the demand</i></b></p>	<p><b>Dr Silas K. Mulaudzi</b> has substantial experience in the energy sector (renewable energy, energy efficiency, Just Energy Transition) in South Africa. He has served in management positions at the Department of Energy, City of Tshwane and University of South Africa (UNISA), and he occupies a Specialist position responsible for Sustainable Energy at the South African Local Government Association (SALGA) and provides specialist advise and support on municipal power procurement projects, Just Energy Transition, embedded generation, Standard Transfer Specification (STS) Token Identified (TID) rollover prepayment meter reset project, amongst others. He holds a PhD in Renewable Energy (Newcastle University, United Kingdom), MSc Environmental Sciences (Wits University) and BENVSc Hons (University of Venda). He is a registered Professional Natural Scientist (Pr. Sci. Nat).</p>
<div data-bbox="280 1249 707 1890" data-label="Image"> </div> <p><b>10:55-11:10</b></p> <p><b><i>A proposal for supplying energy to urban informal communities using a blend of old and new technology</i></b></p>	<p><b>Mr Paul Vermeulen</b> (City Power Johannesburg). Paul joined the Johannesburg City Council Electricity Department in 1980 as a trainee technician, qualifying with a Higher National Diploma in Electrical Engineering, Light Current, in 1984. Starting as a Telecommunications Technician, his career progressed to include substation tele-control with its evolution into SCADA systems. He managed the full SCADA function for a period of ten years, with the inclusion of load management in the form of centralised ripple control systems into his portfolio.</p> <p>This was his introduction to demand side management. DSM, EE, alternative energy sources and energy storage have since become key aspects of electricity distribution systems and are driving the evolution of the industry. In 2014 he completed the BSc (Hons) degree in Energy Studies at University of Johannesburg (UJ). He currently holds the new post of</p>

	<p>Specialist, Feasibilities and Independent Power Producers (IPPs) at City Power.</p> <p>He is also presently the Chairman of the AMEU Gauteng Branch and a board member SAESA, the Southern African Energy Storage Association.</p>
 <p><b>11:30-12:00</b>  <b><i>Loadshedding past present and future, and the state of South Africa's electricity supply industry</i></b></p>	<p><b>Mr Chris Yelland</b> obtained a Bachelor of Science degree in electrical engineering from the University of Natal in 1976, and was founder and managing director at EE Publishers (Pty) Ltd, the publisher of EngineerIT, Energize, Vector and PositionIT magazines. After the closure of EE Publishers on 29 November 2019, Chris started a new company, EE Business Intelligence (Pty) Ltd, to focus on important strategic issues facing the electricity, energy and ICT sectors in South Africa and the region.</p> <p>In February 2020, Chris was appointed associate consultant for leading financial services and capital markets research group, Intellidex, and energy advisor to OUTA (Organisation Undoing Tax Abuse).</p> <p>Chris was the winner of the 2002 South African Bureau of Standards (SABS) Media Award for exceptional contribution to increasing the awareness of standardisation and related issues through the media. In 2003, he won a merit award in the Energy category of the 2003 Siemens Profile Awards, “recognising journalistic contribution to excellence in the field of science and technology”.</p> <p>At the 2004 ABB Excellence in Technology Reporting Awards, Chris received the ABB Technology Journalist of the Year Award for 2004. In 2009, Chris won the South African National Energy Association (SANEA) Journalism Award for “special efforts within the field of journalism to promote greater understanding of energy and its role in sustaining human endeavours”.</p> <p>In 2018, Chris was awarded the prestigious South African Institute of Electrical Engineers (SAIEE) President’s Award “in recognition of his outstanding contribution to the South African electrical engineering industry”.</p>

	<p>Chris is a fellow of the SAIEE, a senior member of the IEEE (USA), and a member of the IET (UK). He is also a registered Chartered Engineer with the Engineering Council in the UK.</p>
 <p><b>12:00-12:30</b> <b><i>Strategic approach to skills development for JET and Energy Crisis</i></b></p>	<p><b>Ms Aradhna Pandarum</b> is currently the Head of Department for Just Energy Transition at The Impact Catalyst. She holds a BSc Engineering and an MSc Engineering. She serves as a technical board member of Cigre South Africa and represents the country in the international C6 study committee. She is also a registered Professional Engineer with ECSA. She is a global expert on just transition, energy economics, grid impact analysis of distributed energy resources and green hydrogen economy. She has gained immense experience from working at both Eskom and CSIR.</p>
 <p><b>12:30-13:00</b> <b><i>Power to the People: Harnessing Decentralized Renewable Energy to Combat South Africa's Electricity Crisis in Marginalized Areas</i></b></p>	<p><b>Mr Mpho Kendy Madisha</b> embodies a unique blend of expertise spanning engineering, business, and innovation. With a background in mechanical engineering at the University of Pretoria (UP), Madisha has honed his skills in various fields, from project management to nuclear energy systems design.</p> <p>Madisha's professional journey began at Eskom's Pebble Bed Modular Reactor (PBM) project, where he was part of a team designing energy power systems. He then went overseas to continue energy systems research with a Dutch energy company, KEMA-ECN. For almost a decade, he taught at the UP's Faculty of Engineering, where he also earned a laureate award for Education Innovation. His professional journey includes roles that highlight his versatility and commitment to excellence. As a Business Development Manager at Whoosh, a Fintech startup, he spearheaded initiatives on smart utility metering solutions and student payment</p>

solutions, showcasing his prowess in driving innovation and fostering strategic partnerships.

Moreover, Madisha's entrepreneurial spirit shines through his role as Founder and Director of Bluepile Engineering, where he ventured into the realm of additive manufacturing. His achievements in this domain, including recognition as a Leadership in Innovation Fellow at the Royal Academy of Engineering and winning prestigious awards like the Scale out for Impact (SOFI), underscore his capacity for innovation and business acumen.

Madisha's contributions extend beyond the corporate sphere. As a Ministerial Committee Panel Member for the Department of Higher Education (DHET) & Department of Science and Innovation (DSI), he led a comprehensive review of South Africa's Higher Education, Science, Technology, and Innovation landscape. His hands-on approach and strategic insights culminated in a highly acclaimed report, demonstrating his ability to navigate complex initiatives and drive impactful outcomes.

Furthermore, Madisha's commitment to education and community development is evident through his involvement in various initiatives, such as serving as the SGB Treasurer for Rietondale Primary School and establishing training structures for learners in critical subjects such as coding and robotics. He also offered his time to BSTEP, an NGO dedicated to the economic development among black engineers and scientists through science and innovation. He has been a member of the NSTF Awards Adjudication Panel, where he currently serves as the main representative of the Civil Society and Labour Sector.

With a rich tapestry of skills encompassing strategic planning, project management, and stakeholder engagement, Madisha has made himself available for selection as part of ActionSA's team FixSA on Energy and Mineral Resources. The party aims to place knowledgeable members of society in parliament to help solve South Africa's challenges. His unwavering dedication to excellence and passion for innovation make him

	an invaluable asset to any organisation or cause he supports.
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