SPEAKERS AND PANELLISTS

An overview of the specialists taking part



Nkosinathi Zwane – IDM / Sankofa (Moderator)



Nkosinathi is the Director of Business Development and Marketing at the IDM Business Academy (Pty) Ltd. He is a seasoned training, workshop and programme, facilitator. Specialising in enablement consulting and advisory, sales training, sales enablement and coaching, Nathi equips organisations with the tools and skills to successfully operate in the new VUCA economy. He is passionate about leadership development and high-performance habits. Nkosinathi has an academic background in business management, focused on project and risk management. He is an ICF Transformational Coach in training and a co-founder director of the Impact Network Foundation NPO, overseeing fundraising and partnerships. Nkosinathi has over 15 years of corporate sales, customer experience and marketing experience within the ICT sector, having worked with some of the largest I.C.T and S.I organisations in South Africa.



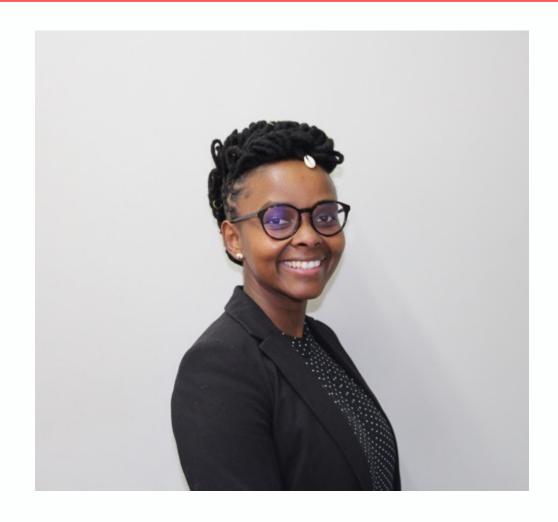
Naim Rassool - Green Cape



Naim has a career spanning over 20 years having worked in a number of industries ranging from engineering to venture capital to the clean energy sector. In 2015 Naim entered the renewable energy sector taking on the role of founding director of SARETEC which he operationalised over a period of 5 years. During this time he was also a member of the GreenCape Board. Since then Naim has been involved in various advisory roles in the renewable energy skills development sphere both in South Africa and Australia. He holds a Masters Degree in Engineering from Wits University and an MBA from University of Pretoria's Gordon Institute of Business Science.



Tshwanelo Rakaibe - CSIR



Tshwanelo is currently a senior researcher in the Energy Industry team in the Energy Centre of the Council for Scientific and Industrial Research (CSIR). She began her career as an intern operationalizing cross border energy trading agreements at Eskom and stayed on as a project coordinator in Eskom developing cross border generation and transmission projects. After Eskom, she went to further her studies at the University of Dundee in Scotland where she obtained her Masters in Energy Studies on a Chevening Scholarship and Oppenheimer Memorial Trust Postgraduate study award. Upon completion of her studies, she returned to South Africa and joined the Presidential Infrastructure Coordinating Commission (PICC) Technical Unit as a Researcher. She later joined the USAID funded Southern African Energy Program (SAEP) as a deputy lead working with numerous partners in the region to harmonize cross border trade regulations. Prior to joining the CSIR she was a project lead for numerous national strategic integrated projects (SIPs) at the IDC and at the CSIR, Tshwanelo's work focusses on the socioeconomic impacts of the Just Energy Transition.



Devan Pillay – Presidential Climate Commission



Mr Devan Pillay has over 22 years of experience in the field of Policy analysis and development. He holds a Masters 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 article 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.



Phil Beach – CEO, Energy and Utility Skills

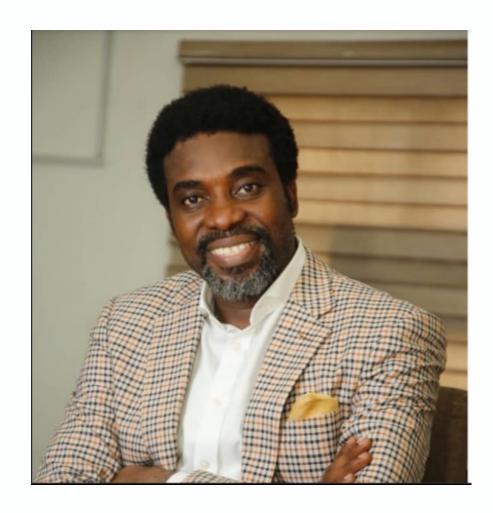


Phil joined Energy & Utility Skills in September 2020, bringing with him experience in regulation, skills and education. In his previous role as Executive Director for Vocational and Technical Qualifications at regulator Ofqual, Phil led the reforms for all vocational and technical qualifications, assessments and apprenticeships including the development of T Levels and Higher Technical Qualifications.

Prior to joining Ofqual, Phil served in the Royal Air Force for 30 years, with much of his career focused on command, leadership, strategy, policy and capability. Phil received an MBE in the 2000 New Year's Honours List, a Queen's Commendation in 2004 and his CBE in 2014 for operational leadership.



Mr. Ayo Ademilua



Mr Ayo is the CEO of A4&T Power Solutions, a renewable energy development company providing access to electricity through SHS distribution and Minigrid development. He also serves as the President of the Renewable Energy Association of Nigeria. He is a climate change awareness ambassador with a resilient passion towards partnerships that supports the SDG goals. His background is in Finance and Strategy, with specialisation in organisation strategy, growth planning, and process reengineering. He is the founder of A4&T and under his leadership, the organisation won the USADF off-grid challenge in 2018, qualified as a grantee in the REA/World Bank NEP programme in Nigeria as the first organisation to qualify in the two categories for Solar Home Systems distribution and Minigrid development providing access to electricity across Nigeria, and was one of the seven qualified participants in GIZ/EU IMAS programme focusing on delivering Interconnected minigrids in Nigeria.



Alana Kruger – Global Alliance Africa



Alana is a knowledge transfer manager in South Africa as part of the Global Alliance Africa project, providing incountry support to solve social, environmental, and economic issues through building Global Innovation Networks, and fostering collaboration and knowledge exchange through Open Innovation Challenges.

She was one of the first graduates in Africa in innovation and business management and has been part of innovation initiatives across many industries including agriculture, education, mining, health, space-technology, and energy. She has experience in setting up investment funds, building innovation roadmaps, entrepreneurial advisory and development, and fostering and enabling cross-border collaboration between multiple stakeholders. Alana is passionate about enabling Africa to reach its full potential, and achieve socio-economic equity.



KNOWLEDGE EXCHANGE WEBINAR ACTIONING SKILLS DEVELOPMENT IN
SOUTH AFRICA VIA A JUST TRANSITION
FOR A BRIGHTER FUTURE.

September 2023





Agenda

- 1. Welcome, Introductions and Session Overview IUK KTN
- 2.Part 1: Current context and overview
- CSIR
- GreenCape
- 3.Part 2: Learning from other contexts
- EU Skills, UK
- REAN, Nigeria

Part 3: Panel – exploring implementation options

Feedback survey

Wrap-up and Closing Remarks



Overview and Objectives

Overview:

The Global Alliance Africa team, part of IUK KTN will be facilitating a knowledge sharing workshop between the Council of Scientific and Industrial Research (CSIR) and the Presidential Climate Commission (PCC) to discuss what needs to be done to develop the necessary skills for a future green economy in South Africa. These discussions will be held with their counterparts in the UK and Nigeria, and others who have experience in skills development within the energy / adjacent industry space.

Objectives:

- Understand and communicate the barriers for skills development in a South African context; and compare these to the UK, and global skills environment.
- Learn how skills needs are determined what has worked and not worked in the past, with key lessons learnt. (Both perspectives)
- Uncovering implementable opportunities for skills development and retention for a Just Energy Transition.
- Identify new collaborative opportunities for skills development initiatives.



Speakers



Welcome, Introduction and Session Overview

Alana Kruger, Knowledge Transfer Manager, Innovate UK KTN



Who are we?



Positive Change Commitments

Positive Change

We create diverse connections to drive positive change

Deep Expertise

We have wide-ranging expertise and convene the expertise of others

Powerful Connections

We drive powerful connections with businesses at the heart of what we do

Future Shaping

We shape the innovation communities of the future

We will collaborate globally to create valuable international connections for innovators.

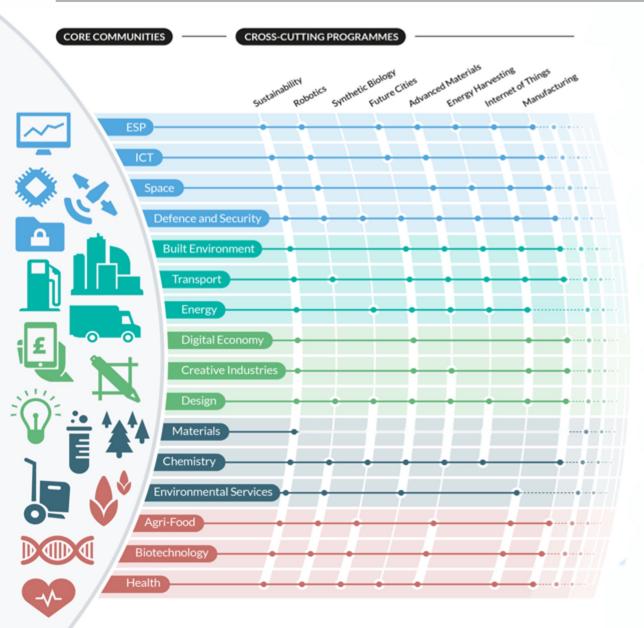
We will extend our activity beyond economic prosperity to also deliver sustainable societal & environmental benefit.

Our People We provide an exceptional place of

We provide an exceptional place of work for our exceptional people



Simplifying Complexity



We are truly cross-cutting, to simplify complexity

- Deep sector expertise across 20 key economic sectors
- Comprehensive cross-sector programmes, including Global Innovation
- Working across complete innovation ecosystem
- A network of +45,000 unique organisations,
 c.80% SMEs,
 +234,000 innovators
- In the UK and with over 30 countries



Global Alliance Africa





UKRI

UKRI convenes, catalyses and invests in close collaboration with others to build a thriving, inclusive research and innovation system.

Innovate UK

Innovate UK is the UK's national innovation agency. We support businessled innovation in all sectors, technologies and UK regions.



Knowledge Transfer Network

At Innovate UK KTN our mission is to connect ideas, people and communities to respond to these challenges and drive positive change through innovation.



Global Alliance Africa

Global Alliance Africa is a six-year project designed to strengthen and scale local innovation and business environments in Kenya, Nigeria and South Africa.







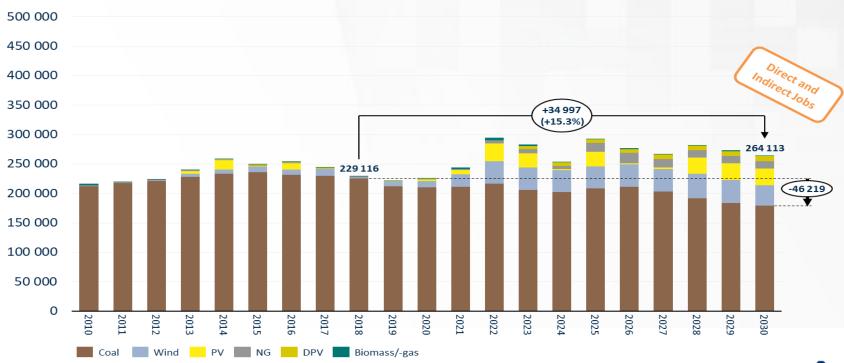


Outline

- Background
- Re-skilling project
- CoBenefits
- Social protection plan for Mpumalanga
- EISP 5-year programme
- Conclusion
- Take away

Background

IRP 2019 sees a decline coal sector employment to 2030 but a net increase as other technologies (particularly solar PV and wind) supplement the energy mix







Re-skilling project Collaboration with Res4Africa

Objective:

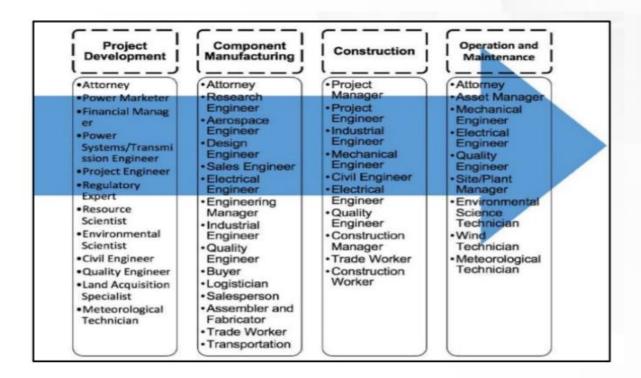
To determine what skills are required for renewable energy value chains (solar PV and wind), quantify job gains that can be achieved from these technologies and finally develop a reskilling framework for coal to renewables.

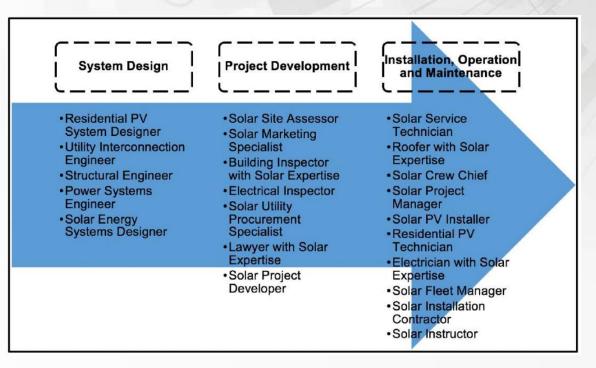
The **results of the study informed**:

- The skills development to be targeted in Mpumalanga and
- Requirements for skills training.



Wind & Solar PV skills assessment







Recommended reskilling framework

Skills in the coal sector should be retained – proposed reskilling framework should therefore focus on both upstream and downstream wind and solar PV opportunities to ensure no one is left behind!

Outline focus

- Identify the coal sector employees with skills gaps (job analysis of skills available)
- Identify the coal sector employees requiring reskilling or upskilling
- Identify the approach to reskilling or upskilling and closing the skills gaps
- Develop an action plan (reskilling program)

Implement

 Implement reskilling strategies and policies in coal regions using an action plan with measurable timelines

Evaluate

• Evaluate and monitor the reskilling effort using a timeline that shows progress against milestones. Assess and revise for continuous improvement and adjust as necessary.

Communicate

• Communicate clear goals, progress, strategies and engage with key stakeholder departments to ensure continuous and ongoing improvement on reskilling the workforce.

Collaboration between key stakeholders.

Co-Benefits project

Objective:

Calculate and quantify the socio-economic benefits of potential renewable and clean energy projects on the re-purposing sites of Eskom coal plants in Mpumalanga, namely employment effects, skill development/gender needs and industrial opportunities.



The results of the study aim to:

- Inform policymakers about the socio-economic implications of RE deployment in Mpumalanga,
- Highlight important framework conditions how these benefits can be fully harnessed,
- Be an important contribution to the ongoing policy development in the fields of national climate, energy and development policies.



7

CoBenefits Skills and gender considerations

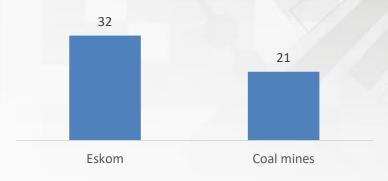
Upskilling & higher education are pre-requisites for a successful energy transition in Mpumalanga.

 Job creation in RE within highskilled labour group (estimated as 68–80%) The current educational level among coal workers is much higher than the provincial average



- Eskom and coal workers acquire technical skills on the job
- Skills could be utilised in the RE sector—especially during project construction phases.

Women are presently underrepresented in the energy sector



- 32% and 21% of staff in MP are female for Eskom and coal mines respectively
- Female underrepresentation is currently far worse in South Africa's RE sector, where women account for only 10% of employees.



CoBenefits High impact actions

Frameworks for deployment in Mpumalanga

A clean energy industry policy for Mpumalanga

Skills development and gender inclusivity:

- High impact action 7: Renewable energy skills development programmes through TVET colleges
- High impact action 8: Childcare facilities by training centres
- High impact action 9: Entrepreneurial development for women



Social protection plan for Mpumalanga - Evaluated Economic diversification options *UK Pact*

Objective:

• To develop a social protection plan for the coal regions by assessing possible economic diversification options.

Mining sector

- Alternative uses for coal
- PMGs
- Iron ore/manganese mining
- Minerals for RE components

Energy sector

- Renewables
- Green hydrogen
- Storage
- Gas
- Nuclear

Other sectors

- Agric & Agro-processing
- Tourism
- Aquaponics
- Agri-voltaics
- Manufacturing
- Wholesale/retail

DIVERSIFICATION REQUIRES NEW SKILLS



EISP 5-year programme

Partners: EWSETA, SAICA ED

SMME's need to be equipped to pursue opportunities in renewable energy

1 Capacity building

Course details (CSIR)

Training announced on various platforms

Applications received and candidate grouping

Facilitation of training

Certificate of attendance

2 Incubation

Advertising

Applications received

Proposal review and selection for interview process

Selection of SMMEs

Project scoping and costing

Allocation of correct expert

Technical Incubation





Conclusion

- Policy certainty is KEY
- Establish specialised training programmes and institutions dedicated to renewable energy technologies
- <u>Skills development partnerships:</u> Collaborating with RE companies to offer internships, apprenticeships, and on-the-job training
- <u>Gender inclusivity:</u> Promote clear gender inclusivity in the sector through targeted outreach and support programmes for women
- Awareness campaigns to inform individuals about career and business opportunities in the sector
- Reskilling frameworks:
 - Low hanging fruit: Cross cutting skills must be considered

Take Away

No Training/Reskilling/Upskilling – *No workforce*

2019 CHINA

H2 degree programs to be developed in ALL Polytech universities in China

March 2022 CHINA

China published its Medium- and Long-Term Plan for the Development of the Hydrogen Energy Industry (2021-2035)





Skills Demand Projects

Innovate Uk Webinar

20 September 2023





Desktop Work/Research



Mpumalanga Green Economy
Cluster Agency Memorandum:
Skills to Support the Mpumalanga
Green Economy

Skills needs to unlock the green economy investment opportunities outlined in the 2021 Mpumalanga Market Intelligence Opportunity Briefs

September 2021



Assessment of local skills for the South African renewable energy value chain





Photo: Mainstream Renewable Power

Development of local skills that will support the objectives of the Integrated Resource Plan (IRP 2019) and the Implementation of the envisaged renewable energy Independent Power Producer (IPP) projects

Final Report: April 2022

Engagement Framework

Multiple parties, multiple engagements (virtual, independent)

Low maintenance (once established)

Impact - depends on level of engagement

- sectoral level, national, geographically inclusive
- possibly difficult to monitor & measure

Multiple parties, multiple engagements (matchmaking workshops)
Requires some human capacity

(one-to-one brokerage of high potential synergies)

Impact - guaranteed at scale

- sectoral level, regionally, but replicable and scalable
- active measurement & monitoring of impact

One-to-one engagements

Very human resource and time intensive

Impact - guaranteed

- company/institution level
- active measurement & monitoring of impact

Online Platform



Facilitation Service

Demand-Led Skills Projects

IPP/OEM & PSET Workshop



Individual Brokerage

Demand-Led Skills Projects

Mpumalanga
 Green Economy
 Cluster Agency

Battery manufacturing









NATIONAL ASSOCIATION OF AUTOMOTIVE COMPONENT & ALLIED MANUFACTURERS

"When the educational aligned with system industry, it has the potential to significantly reduce youth unemployment whilst also generating a stronger, more dependable skills pipeline for a vital South African industry"





EW SETA



















Facilitated WISP Workshops

- 1. Wind & Solar IPP/OEMs & Universities/TVETS (February 2023) technical skills
- 2. Battery Manufacturers & Universities/TVETS (August 2023) technical skills
- 3. EV Mobility & Universities/TVETS (August 2023) technical skills
- 4. Wind & Solar IPP/OEMs & Universities/TVETS white collar skills
- 5. Wind & Solar IPP/OEMs & Universities/TVETS construction skills
- 6. RE Manufacturing value chain technical skills

Mpumalanga Skills Demand Projects

Agriculture

- Extension Officers (MP Commercial Farmers Association, UMP, DoA MP, AgriSeta)
- Plant Crop Specilists (MP Commercial Farmers Association, UMP, ARC, AgriSeta)
- Water
 - Water Process Controllers (Silulumanzi Pty Ltd, Gert Sibande TVET College, EWSeta)
- Renewable Energy
 - Solar PV Mounters & Installers (Nashua Solar MP, Gert Sibande TVET College, Nkangala TVET College,
 EWSeta)





Thank you



Energy & Utility Skills



Skills for a greener world

Delivering a safe, skilled and sustainable workforce with energy and utility industries



Skills Voice of Industry

As specialists, we work with industry & govt to define skills needs and the impact of the greener economy, providing an authoritative skills voice



Convene & Collaborate

We set Industry
standards, drive best
practice and innovate to
meet existing & future
skills needs and
emerging green priorities

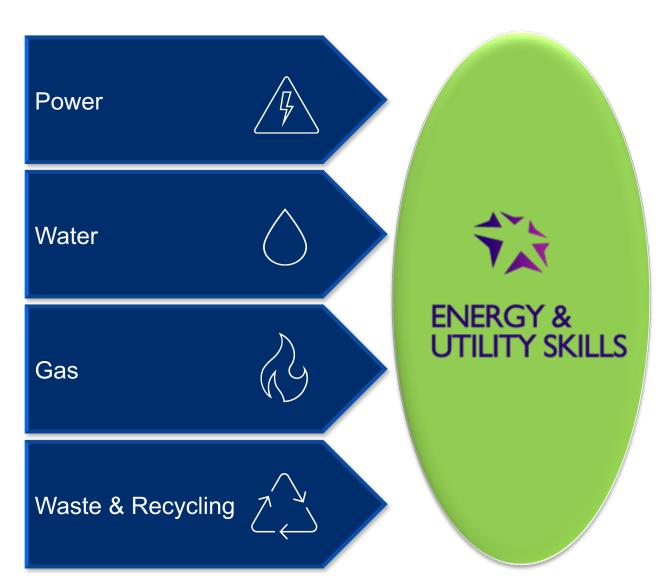


Industry Services

We provide high quality, industry-focused, specialist services that are recognised for their relevance, consistency and reliability

Energy & Utility Skills







The policy landscape – energy and environment





Policy environment – skills





Skills and Post-16
Education Act

Employers in the heart of the skills system. A legal requirement on colleges and providers to work with employers to develop skills plans, so training meets local needs.

Pupil Choice. Making sure all pupils meet providers of technical education to understand all career routes (apprenticeships, T Levels or traineeships) not just traditional academic options;

Prioritising green skills. Training meets the needs of the growing green economy and helps gets more people into jobs

Transformation of student loans system. From 2025 learners can access a flexible loan for higher-level education and training at university or college, useable at any point in their lives;

A unified skills system. Building on quality gains achieved with apprenticeships and T Levels by ensuring all technical qualifications match up to employers' high standards.

2022

The skills and workforce picture



Employers are already engaged on a number of priority workforce issues:











Losing existing talent

20% of sector workers reach retirement age this decade

Competition for new talent

40% of physics graduates entered banking, finance or tech

Lack of diversity

Women account for 16% in "professional occupations"

Workforce agility

The time it can take to develop reskilling courses

The STEM pipeline

Lack of people with the qualifications needed for green jobs

Policy implications – power and networks example



To achieve net zero ambitions, every industry, workplace and home will need clean energy. **We need to transform our national infrastructure**.

This decade alone, the power industry will need to:

- Increase low carbon electricity generation by around 50%
- Install low carbon heating to about 3 million homes
- Install charging points for 10 million electric vehicles

The British Energy Security Strategy (BESS) has since introduced:

- A 25% increase in the 2030 goal for offshore wind generation
- A five-fold increase in solar generation by 2035
- The creation of a new nuclear sector

There is a need to focus on connectivity as well as power generation and enabling consumer access: **net zero needs networks**.

Future Skills – Government



The Green Jobs Delivery Group

Co-chaired by Climate Minister and Chair of Energy and Utility Skills Partnership

Ministers from:



Department for Business, Energy & Industrial Strategy



Department for Education



Department for Work & Pensions



Department for Environment Food & Rural Affairs

Senior leaders from:

Industry
Further and Higher Education
Local Councils

Unions
Industry bodies
Government agencies

Skills delivery – Green Jobs Delivery Group remit



Group objectives

- Ensuring we have the skilled workforce to deliver net zero and wider environmental goals in line with the UK's levelling up agenda.
- Ensuring workers and communities in high carbon sectors are supported with the transition in the wider context of the UK's levelling up agenda.
- Better understanding and addressing barriers to recruitment, retention and progression in green jobs (incl. quality of work, pay, conditions, image, etc.).
- 4. Ensure green jobs are open to all.
- Building on the work of the Green Jobs Taskforce to develop a clearer understanding of the green economy and how to define and measure it – including understanding what we mean by a "green job"

What the Group will do

Drive change in the green economy in the near-term (up to 2024), medium term (up to 2030) and, where possible, the long-term (up to 2050), by:

- Agreeing shared goals/objectives and success factors;
- Developing a shared understanding of labour supply and demand mismatches/challenges for key occupations and sectors, and cross-cutting employment issues in sectors and places most crucial to the green economy;
- Agreeing, progressing and monitoring actions across industry, government, local partners, the skills and education sector and trade unions to address challenges and maximise opportunities identified by the Group; and
- Sharing 'on the ground' intelligence among the Group's membership to help realise the Group's objectives.

GJDG focus areas



Green Jobs Delivery Group

Priority sectoral Task and Finish Groups*

Power & Networks (incl. nuclear)

Heat & Buildings (incl. retrofit)

Manufacturing

Hydrogen, CCUS Waste, recycling and circular economy

Nature Skills

Transport

Cross cutting lenses

Workforce skills, curriculum, pipeline

Local capacity development

Engagement with devolved administrations

Transitioning sectors & workforce transition

HMG (led by DfE, DWP, Defra, HMT and Department for Energy Security and Net Zero, etc.) to review and consider appropriate levers as sectoral assessments progress throughout 2023

Green Jobs Delivery Group – power industry deep dive



Example deductions (examples of problem statements)

Policy Certainty. A lack of long-term policy certainty and consistency will impact investor confidence to commit; reticence of employers to move first on training; employee fear of shifting to a career with limited longevity; and problems for contractors to train sufficient numbers in time.

Awareness of national net zero opportunities. We lack a national campaign for green jobs and how these contribute to net zero to engage individuals effectively at a local level. And we need better careers advice in schools, FE and HE to reflect opportunities in the sector, and how these contribute to net zero and climate change solutions.

Gap analysis and prioritisation. We need to understand the types of skills areas and qualification levels required to grow the sector, when these skills will be needed and the size of the gap with the current offer. We need to map this against existing and future pools of labour – connecting supply and demand.

Actions (power and networks)



Principles of intent:

- Summer 2023, industry: assess workforce demand and skills gaps and use this to map and identify gaps in routes to competence.
- Autumn 2023, government and industry: identify how best to overcome barriers to getting sufficient numbers of people into key occupations in the sector.
- 2024, government and industry: set out how progress towards these actions will be monitored.

Head-Start Actions:

- 2023: Industry identify workforce and skills demand.
- 2023: Industry identify gaps in routes to competence and opportunities to address them
- 2023: Government and industry will identify how to overcome barriers to entry
- 2023: Industry and government will explore modular and agile training routes
- 2023: Industry pilot an approach to maximizing the employer training estate.
- 2024: Industry, government and IfATE explore flexible apprenticeships and qualifications
- 2024: Industry explore skills passporting

Wider actions – across working groups



Themes:

- Recruitment, retention and progression in the power and networks industries.
- Improving on Equality, Diversity and Inclusion (EDI).
- Policy certainty and coherence.

Emerging actions to address:

- The imperative to attract more people into the industry.
- How do we recruit in an increasingly global market.
- Can careers advice be improved, to attract people to join the sector.
- Tackling the issue of an aging workforce.
- Enabling the transfer of workers from other sectors.
- Identifying and addressing the barriers to diverse and inclusive recruitment and retention.
- How to provide sufficient policy certainty to incentive investment in skills and training.
- Ensuring local skills provision (LSIPs) take account of national demand.

Workforce demand and skills gaps - illustrative



Design Tech Systems Eng	Plant operator Trade supervisors	Welding Mech Trades
Surveyor Pipefitter	Electrical fitter Cable jointer	Turbine Engineer Plant mechanic
	Procurement Electrical Eng	Tech support Project manager

- Uses common taxonomy (SOC Codes)
- Role specific
- Differentiated by skill or qualification level
- Informs review of 'routes to competence' and subsequently;
- Prioritised action plan

Deductions and observations



- Skills and workforce issues are complex, involving several government departments and policy areas.
- It is important to strike the right balance between representative engagement and manageability.
- Prioritisation is key where can most impact be made for the greatest number of roles.
- But remember those low-volume niche but critical roles too
- Most skills are needed by more than one sector; aggregating demand across sectors is crucial
- Think broadly about how to fill skills and workforce gaps; school leavers, unemployed adults, transitioning from other sectors, armed forces veterans etc and;
- Consider how you create or tailor routes to competence to match supply and demand, making sure that short upskilling courses are coherent with apprenticeships and qualifications for new entrants.
- Support this with coordinated government and industry targeted interventions.



THE LEADING RENEWABLE ENERGY ASSOCIATION IN SUB-SAHARAN AFRICA

Mr Ayo Ademilua (President, REAN)



DRIVING ENERGY TRANSITION PLAN THROUGH RENEWABLE ENERGY SOURCES

- The Renewable Energy Association of Nigeria (REAN) is an independent, nonprofit Industry association founded by stakeholders in the Renewable Energy sector in Nigeria.
- We are an industry association of Renewable Energy professionals, project developers and practitioners that promotes the interest of the private sector in Nigeria's Renewable Energy sector.
- REAN is dedicated to the promoting the growth and development of the industry in Nigeria by engaging with the public and private sector to guide advocacy, policy formulation and investment in the sector.



Our Mission

To be the umbrella association for all Renewable Energy promoters enabling and encouraging the sustainable development of the Nigerian economy through Renewable Energy". Our vision is "to promote strategies that will improve the contribution of renewable energy up to forty percent (40%) of the National Energy Mix by 2030. This will be reviewed after as we journey towards achieving the Nigeria Energy Transition Plan 2060



Our Mission

- To promote Nigerian Local content in the renewable energy industry.
- To promote the interests of members of the Renewable energy industry among Government, Donor organizations, Non-governmental organizations, General Public and any other organizations that may impact on the development and general well-being of the industry.
- To create a forum for the dissemination and exchange of information and ideas on matters relating to renewable energy development and utilization in Nigeria.
- To create increased public awareness in renewable energy through publications, advertisements, endorsements, seminars, conferences, advertising and promotional campaigns of any nature.
- To assist the Government and industry on all issues related to renewable energy technologies including energy policy formulation, standards, taxation etc and speak as one body for Renewable Energy Technologies in Nigeria.
- To identify and keep up to date contacts of all members, government policy makers, and other renewable energy interest groups, associations and a database of projects.
- To promote professionalism in the industry by encouraging the adoption of good engineering practices, standards and certification systems(quality products, design, installation and maintenance) among the members of the renewable energy industry.



Our Mission

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- To encourage better business practices and tendering procedures by maintaining good ethical and moral standards among the members of the renewable energy industry.
- To undertake or assist in mediation of disputes between the members of the association, the public in general and consumers of renewable energy as well as any organizations directly or indirectly affected by renewable energy utilization.
- To act as a link between the industry, the government, consumer groups, international organizations, and other renewable energy associations.
- To protect the consumers of renewable energy products and services in all aspects especially by encouraging the standardization of renewable energy equipment, components and services such as installation and maintenance.
- To apply for, acquire and hold charters, legislation, privileges, monopolies, licenses, concessions, patents or other rights or powers from the Nigerian Government or local authorities or any other statutory body and to exercise, carry on and use, any powers, rights or privileges so obtained.

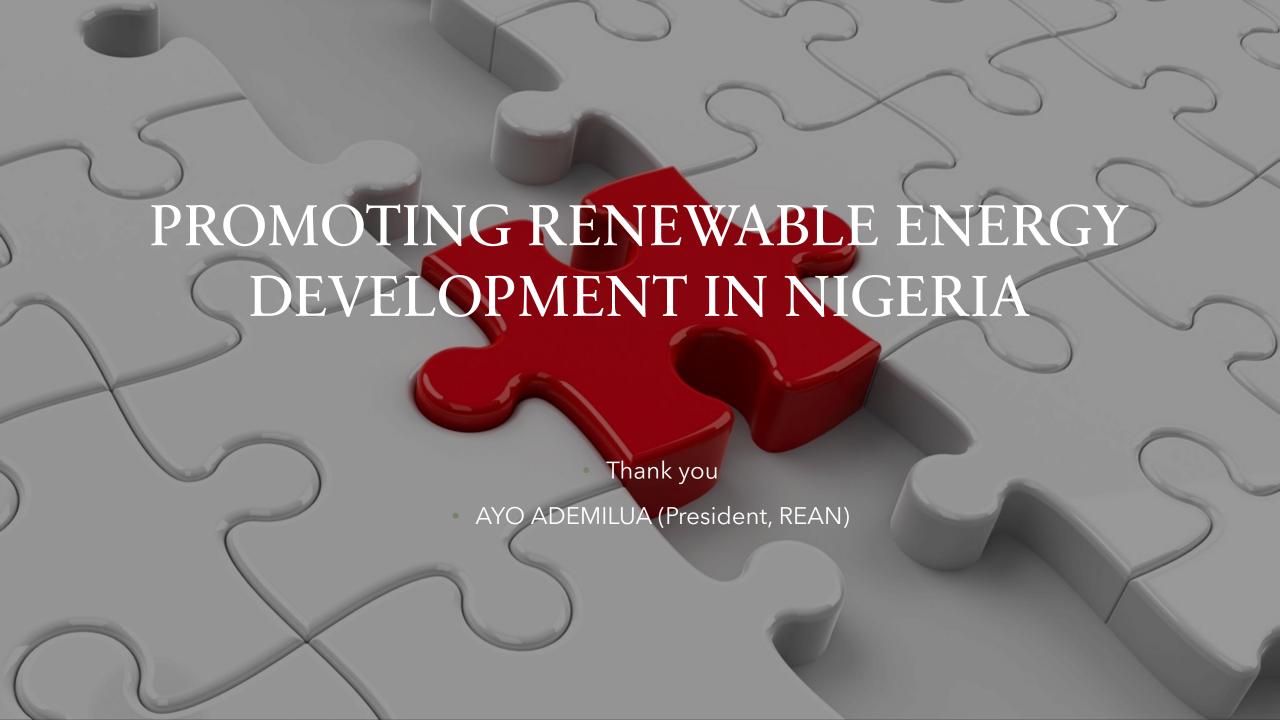


Our Activities

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- Engaging the government on policies and frameworks to enhance industry growth.
- Promote Capacity Building in the industry through our members and partners
- Catalyse investments and towards project implementation
- Promote Quality and other professional standards.
- Reporting, Monitoring and Evaluation of Projects and industrial growth





Our little beginning...



Ideation -2009



2nd Minigrid (15kwp with PIND)-2018



Research & Developmen-

6yrs



3rd Minigrid (30kwp) 2019



Incorporation (Started with rooftops/SHS)-2015



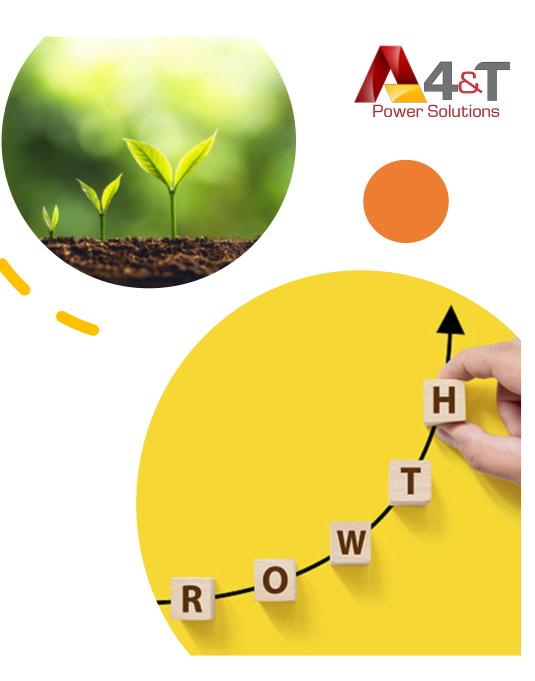
Total built/operated MGDS- 15 Minigrids: C&I Projects 2023



First Mini-grid (6kwp)-2017/2018



Launching our Emobility by end of Q4 2023









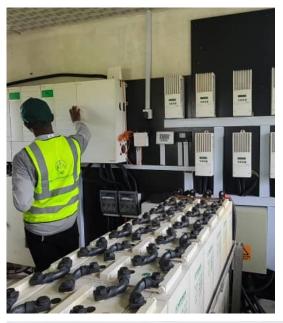


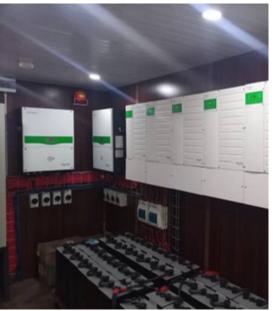






Minigrids on the Islands











Ugbonla/Lomileju/Laoso/Fagbo and others

- Powering one community at a time...
- Currently powered 15 communities
- Impact: over 60,000 people
- Women 43%, Commercial 35%, residential 60%, Public 5%.









Solar Home Systems Distribution

Through the years...

Population – 60,000+

Women – 43%

Business – 35%

Residential – 60%

Public – 5%

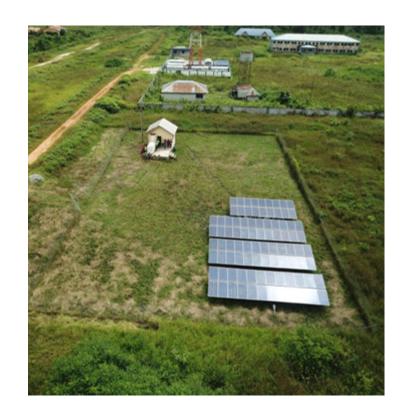
Direct Employment 2015 – 10 people



Direct Employment 2023 – 102 people

Microgrid/Minigrid Applications : A step in the right direction

- Considering the climate and other related benefits from Renewable Energy powered generation plants, its certainly the right direction to apply as solutions to the current power challenges in Nigeria
- Most of our communities are in clusters, some far from each other while some are close. Microgrids/Minigrid applications allowing decentralised generation and distribution models makes a perfect fit.
- It presents a modular platform of investment appraisal to investors, increasing appetite based on analyzed Rol.
- New generation of smart meters allows data driven analysis to ensure collection rate is high with tampering innovations to reduce revenue losses. This gives confidence to RE project investors, bringing growth in the industry.
- A high percentage of current losses in transmission which affects revenue generation directly is one of the current grid predicament. This is mitigated through decentralized transmission and distribution



Market Outlook: Potential for growth

 The Energy Sector Management Assistance Program (ESMAP)—a global knowledge and technical assistance program administered by the World Bank—estimates that globally almost \$220 billion will be needed to connect 490 million people to 210,000 mini-grids by 2030.

(https://www.ifc.org/wps/wcm/connect/news ext cont ent/ifc external corporate site/news+and+events/new s/insights/africa-mini-grids)

 At least 25% of the above amount will be invested in West Africa



