

QUARTERLY NEWSLETTER | ISSUE 22 | MARCH 2023



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MESSAGE FROM OUR CEO



ur President's State of the Nation Address delivered on 9 February 2023 focused extensively on the protracted energy crisis in the country.

During his address, the President said: "Our most immediate priority is to restore energy security. We are in the grip of a profound energy crisis, the seeds of which were planted many years ago. We cannot undo the mistakes that were made in the past, the capacity that was not built, the damage that was done to our power plants due to a lack of maintenance, or the effects of state capture on our institutions. What we can do is to fix the problem today, to keep the lights on tomorrow and for generations to come."

The President further outlined details of the Energy Action Plan announced in July 2022 and what has been achieved to date.

Emphasis was placed on the role of skills in addressing the country's energy challenges.

"We are rebuilding the skills that have been lost and have already recruited skilled personnel at senior levels to be deployed at underperforming power stations. The Engineering Council of South Africa has offered to give as much assistance as required by deploying engineers to work with the management teams at power stations. We have deep skills and expertise right here in South Africa – we just need to use them." President Cyr....

EWSETA will continue to work with the energy sector and other strategic partners to bolster the skills required as Eskom seeks to recover and meet the energy requirements of the country.

We also need to place focus on the skills needs of the renewable, nuclear and gas energy sector, as the IRP2019 energy mix continues to play a critical role in bringing stability to the national energy grid. In the past months, EWSTA has implemented skills development projects in the fossil fuel, renewable energy, hydrogen, biogas and nuclear industry to ensure continual investment in human capacity to meet the energy demands of the country.

Programmes of this nature are important, not only to capacitate the sector with skills, but also to provide young people with opportunities to become active participants in the South African economy.

The Department of Water and Sanitation's (DWS) 2022 National State of Water Report included information on the severe floods in KZN in 2022, as well as the protracted drought in the Eastern Cape. These events highlight the devastating impact of climate change on the country's water resources.

What is notable in the report though is action that has been taken by DWS to address water resources quality across the country. The Eutrophication Management Strategy of 2022 will be used as a tool to address issues related to the degradation of the water resources due to excessive nutrient enrichment in the water resources.

Reports for the Blue Drop (drinking water quality) and Green Drop (design and operating capacity) assessments conducted in 2021 have been published. These reports will guide action required by DWS in securing sustainable water supply, which as we know is also a massive risk facing the country.

South Africa is a resilient nation and it is so important that we work together and work hard to find solutions to the socio economic challenges we currently face. I have used this expression before and use it again now as it is truly relevant – we need all hands on deck! This is a ship that we are all on in rough seas, but I have no doubt we will see our way through this storm.



NOTE FROM THE EDITOR

s I write this article, the EWSETA is very quickly approaching the end of the 2022/23 financial period that has seen the SETA exceptionally busy in the pursuit of its mandate and strategic objectives.

For a few years now, we have been on a drive to increase our industry presence and I am pleased to say that since the beginning of this financial year we have really upped the ante. A review of this and the last few editions of the EWSETA Chronicle, as well as our digital communication activities provides an overview of the many opportunities provided to EWSETA by the energy and water sector to participate as a keynote speaker (our CEO in particular is a lady in demand), panellist, subject matter expert, exhibitor and, where possible, a valued partner through sponsorship. The Return on Investment for us is evident in the influx of new stakeholders to EWSETA and we are incredibly excited about the new opportunities these partnerships will bring.

Moving onto this edition specifically, we have once again highlighted the importance of the submission of WSPs and ATRs and definitely want to see more of our registered employers participating in the process, the submission deadline of which is 30 April 2023. On page 6, we have provided information on new qualifications that have been developed by EWSETA and approved by QCTO, the most anticipated being the newly registered and approved Hydrogen Fuel Cells System Practitioner Skills Programme, an eagerly awaited programme by those driving our Hydrogen SA journey.

The artisan graduation ceremony hosted by Dr Blade Nzimande, Minister for Higher Education and

Innovation, for young people who have successfully completed their artisan training through one of the Centres of Specialisation was a happy affair and EWSETA is proud to have funded 18 artisans who participated in this event that is featured on page 7. Congratulations to these young graduates whose futures look ever brighter.

To those stakeholders who joined us either physically or virtually at our 2022 AGM held on 9 December 2022, thank you for your continued support and commitment to working with EWSETA. If you missed out on the AGM deliberations, we have included a snapshot of our 2021/22 performance and some highlights on pages 10 – 13.

We are encouraged by the positive response to our infographics produced which generally is shared on our social media platforms. Take a look at our overview of decarbonisation technologies for a Just Energy Transition, with a specific focus on skills development on pages 14 and 15. Another great infographic on COP27 and the topic of renewable energy skills development can be found on pages 20 and 21.

This issue is once again filled to the brim with content that highlights the amazing work being done by EWSETA and in most instances together with our valued partners. There is also coverage of The WorldSkills Competition, Solar Power Africa, SAWEA Internship programme, CSIR SMME Development Programme and an update on our Career Guidance activities of which there were many.

We wrap up this edition with a report I prepared after my trip to Europe for the 9th edition of the RES4Africa Advanced Training Course, which I attended with three lecturers from TVET colleges in Mpumalanga. I was incredibly humbled to have been awarded such an opportunity from RES4Africa and felt immensely privileged to attend class in the company of some of the brightest energy minds in Africa. I remain motivated to give back to SA and the EWSETA through my learnings on the ATC to help plan for an energy secure future.

I am sure you will agree that the EWSETA is placing its authority stamp on the sectors we serve. We will continue to collaborate and innovate with the numerous sector stakeholders to ensure that the skills needs of the sectors we serve are addressed both in the short and longer term. Until then, take care and enjoy the read.

APPOINTMENT OF MINISTER OF ELECTRICITY

EWSETA congratulates Dr Kgosientsho Ramokgopa on his appointment as Minister of Electricity. Minister Ramokgopa's position has been created specifically to coordinate efforts to tackle the "severity and frequency of loadshedding as a matter of urgency".

EWSETA remains committed to working with strategic partners to deliver on the shared vision of securing stable energy for South Africa through building a capable energy workforce. Let us do all we can to continue to support National Government's vision.



WSP/ATR SUBMISSION DEADLINE FAST APPROACHING

In 2022, only 18.8% of EWSETA's levy paying employers submitted Workplace Skills Plans (WSPs) and Annual Training Reports (ATRs). Low uptake by employers in this process means that not enough employers are providing input on skills needs within the energy and water sectors. What's more, failure to participate means that levy-paying employers are not able to access mandatory or discretionary grant funding.

This remains one of the EWSETA's biggest challenges on an annual basis and levy paying employers are urged to submit their WSPs and ATRs by 30 April 2023 to ensure that they are part of skills development in the sectors served by the EWSETA.

WSP/ATR CAPACITATION SESSIONS HOSTED ONLINE FOR SDFS

On 7/8/9 February 2023, EWSETA hosted online capacitation sessions for Skills Development Facilitators so that they gained the knowledge required to submit WSPs and ATRs by the end of April. EWSETA's Planning & Reporting Manager, Kabelo Masilo, and ICT Manager, Koena Khumbane, along with the rest of the WSP and ATR team took guests through the process.

Employers who missed these sessions that require assistance with their WSP/ATR submission are urged to make contact with Glorie Mnguni who can assist. Contact Glorie on e-mail gloriem@ewseta.org.za









ENERGY SECTOR

In response to the Integrated Resource Plan (2019) and the drive towards decarbonisation, the EWSETA has developed South Africa's first skills programme specifically targeted at understanding the background and displaying technical knowledge in the operation of Hydrogen Fuel Cells.

The EWSETA is pleased to inform stakeholders that the NQF5 Hydrogen Fuel Cell System Practitioner skills programme has been evaluated and approved by the QCTO.

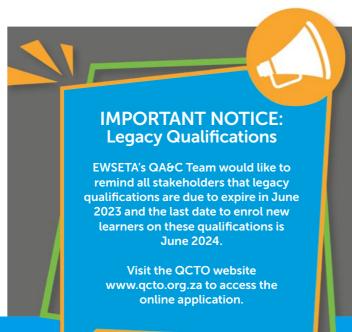
Hydrogen has a pivotal role to play in the energy sector as it is storable, energy-dense and produces no direct emissions of pollutants. The successful incorporation of Hydrogen in the generation of energy will assist in ensuring clean, secure, and affordable energy in the future.

A further two qualifications have been registered by QCTO:

- Occupational Certificate: Cable Jointer (Electric Cable Jointer) NQF 6
- Occupational Certificate: Low Voltage Electric Cable Jointer NQF 6

Suitably qualified skills development providers are urged to register for accreditation with the QCTO for the three qualifications approved recently as these have been identified as key in the sector. Visit www.qcto.org.za to register.





ARTISANS FUNDED BY EWSETA BOOST COUNTRY'S ARTISAN POOL

As much as South Africa needs doctors and engineers, it also requires qualified artisans for the country to thrive and build a strong economy. The country should produce at least 30 000 new artisans annually to meet the need, but currently, only 20 000 artisans are entering the workplace each year.

Since 2018, the Department of Higher Education and Training (DHET) has been driving the growth of artisan training through Centres of Specialisation established at TVET colleges around the country.

These Centres of Specialisation aim to promote quality teaching and learning, facilitate responsiveness and provide a model for the implementation of Quality Council for Trades and Occupation's (QCTO's) trade qualifications. It also develops artisanal skills in demand for economic growth, starting with the Strategic Integrated Projects (SIPs).

Recently, 360 artisans from various Centres of Specialisation (CoS) across South Africa, representing 12 of the 13 prioritised trades, graduated at a ceremony hosted by Dr Blade Nzimande, Minister of Higher Education Science and Innovation.

At the event, 18 of the students who graduated were funded by the EWSETA, representing the plumbing and electrical trades.

The EWSETA takes the severe lack of technical skills and artisans in the country very seriously and is one of the SETAs that has worked closely with DHET to drive Centres of Specialisation and the quality of Artisans. The partnerships that EWSETA has with employers in the energy and water sector are key to ensuring that the young artisans graduate with well-rounded skills, covering theoretical, practical and work-based

Being a qualified artisan in South Africa today means that you help sustain industries and support economic growth of the country. As the DHET's Decade of the Artisan campaign says – "It's cool to be a 21st Century Artisan," and we couldn't agree more!





EWSETA CHRONICLE - DECEMBER 2022 EWSETA CHRONICLE - DECEMBER 2022

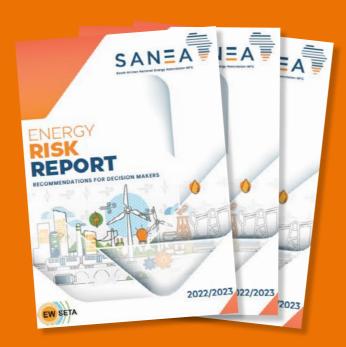
EWSETA CEO FOREWORD IN 2022 SANEA ENERGY RISK REPORT

This year's risk report again highlights the importance of people in the just energy transition as skills and talent were identified as the main drivers of the energy ecosystem. Some may argue that skills are an outcome of the system driven by the needs of the sector, but I think they are a driver as without the right skills at the right time and in the right place, energy risks will never be addressed, be they positive or negative.

As the report outlines, there is a great deal of uncertainty around technology trends, the pace of change, South Africa's ability to attract investment, new value chains and whether the policy environment is appropriate to facilitate the just energy transition. So how do we do skills planning in such an uncertain environment? At the EWSETA we have defined several critical steps to ensure we have the right skills, but that we also do not leave anyone behind on this journey. The first step is around good planning at all phases in the skills development process. This means that employers need to clearly articulate their skills requirements not only to address current burning issues but also future skills. Workforce skills plans are one part of this process, but given the crosscutting nature of the energy transition, it also requires coupled sectors and SETAs to work together to identify needs and then utilise limited resources for the biggest impact.

The next step to ensure that we do not develop skills and still have high numbers of unemployed graduates or learners. Our skills planning needs to have agility and flexibility built into it so that "no regret" skills can be built that will be required no matter which future scenario plays out. At the same time, skills need to be able to easily pivot into new areas as developments occur. So, building in base content into current qualifications and developing bridging courses or top

Finally, we also need to build flexibility into our people. Gone are the days where a career was in one narrow discipline. People are switching to new areas of work or even completely new careers, no longer expecting a job for life, and moving globally when opportunities arise. The growing gig economy requires planning for these shifts in ways of work and career paths and



ensure skills like critical thinking, problem solving, and strategic foresight are the foundation of all skills programmes. If this is built into formal and informal qualifications and training processes, people can manage uncertainty and deal with complexity, as well as manage their own careers and prospects better.

WE NEED TO BUILD FLEXIBILITY INTO OUR PEOPLE

This puts a great responsibility on the skills professionals and organisations to get these skills and talent in place, it requires an enabling environment, innovation, a laser focus on planning and implementation and co-creation at a new level never seen before.

A new leadership approach that is not parochial, but collaborative, is needed. A leadership that recognises that we work in an ecosystem and that if we do not recognise that and work together, there may be unintended consequences, more uncertainty, lost opportunities, and an even higher level of negative risk to deal with. The EWSETA will therefore continue to identify required skills for the short and longer term and develop them within its scope of authority and in partnership with all relevant role players.

We are committed to facilitating the ability of South Africa to take full advantage of the many opportunities outlined in this report through transformative learning, to grow our economy and uplift all our people.



SKILLS FOR A JUST CLIMATE TRANSITION INDABA

The concept note for the Presidential Climate Commission's 'Skills for a Just Climate Transition Indaba' held in Johannesburg on 7 December 2022 stated: 'Much like South Africa's Just Transition journey, the debate on skills and jobs in South Africa's just transition is in its nascent stages. This is mostly related to the fact that there is no robust and clear understanding on the jobs and skills that will be required in the low carbon economy.'

The event sought to explore the implications of the climate transition for future labour market and skills requirements; understand what current or planned research is being undertaken in relation to climate transition induced shifts in labour market; explore effective ways to integrate climate transition into existing skills planning system; and agree on a future work programme.

The EWSETA was an important participant in the event that hosted key industry experts and stakeholders tasked with unpacking the challenge and steps required to make the necessary headway in the skills implications of a just energy transition.

EWSETA's CEO, Mpho Mookapele, joined Dr Rebecca Maserumele, Chief Director for Hydrogen and Energy at the DSI, to discuss how to factor climate induced economic shifts into skills planning at national and provincial levels. Their discussion formed part of the programme on 'integrating climate transition into skills planning.'

Wendy Poulton, Board Member and Secretary-General of the South African National Energy Association (SANEA), also featured on this agenda item, having presented an 'energy skills roadmap'.

Steve Nicholls, Head of Mitigation at the Presidential Climate Commission, facilitated the programme that concluded with a robust discussion on a 'future work programme' that discussed what further work is needed by stakeholders, how stakeholders should collaborate and future engagements.

Post event feedback, a recording of the event and copies of presentations delivered are available on the Presidential Climate Commission website at https://www.climatecommission.org.za/events/skills-for-a-just-transition-indaba

2021/22 ANNUAL GENERAL MEETING

At the EWSETA AGM held on 9 December 2022, the Chairperson of the EWSETA Accounting Authority, Dr Limakatso Moorosi, EWSETA's CEO, Mpho Mookapele, and EWSETA's CFO, Robyn Vilakazi provided an overview of EWSETA's performance during the 2021/22 financial period.

During the event, the EWSETA received the Youth Employment Award for 2022 from the South Africa Council for Graduates in recognition of EWSETA's investment in graduate workplace training.

Images from the event and key information presented at the AGM is captured on the next few pages of this publication.













PERFORMANCE OVERVIEW OF 2021/22 FINANCIAL PERIOD

Programme One: Administration 16 of 18 TARGETS

ACHIEVED

Corporate Services / Strategic

- Management •
- Governance, Audit and Risk •
- Human Resources •
- Marketing & Communications •

Information Technology •

Budget Allocation (R'000)

20/21: R83 379 21/22: R85 409 22/23: R93 997

Programme Four: Quality Assurance

2 of 4 TARGETS ACHIEVED

Updated qualifications that are aligned to

the current skills training needs

Budget Allocation (R'000)

20/21: R6 580 21/22: R11 650 22/23: R8 215

PERFORMANCE AGAINST APP TAR-GETS FOR 2021/22



Programme Two: Skills Planning

10 of 11 TARGETS ACHIEVED

- · Work Skills Plans and Annual **Training Reports**
- Sector Skills Plan
- Monitoring and Evaluation

Budget Allocation (R'000)

20/21: R61 215 21/22: R83 076 22/23: R80 396

Programme Three: Learning Programmes and Projects 43 of 63 TARGETS ACHIEVED

- Increased access to occupations in high demand within the energy and water sector by 2024
- Increased skills capacity through workplace-based learning
- Increased economical participation of CBOs/NGOs/NPOs/SMMEs within the energy and water sector
- Increased support for the growth of college system
- Labour force that is updated with current skills required for the sector

Budget Allocation (R'000)

20/21: R131 199 21/22: R171 147 22/23: R204 387

ICT SYSTEMS DEVELOPMENT

The Operating Model has placed ICT as a critical "business enabler" and as such, EWSETA has invested in the development of our own Integrated MIS-ERP system

HWSETA SOURCE CODE FOUNDATION FOR BESPOKE SYSTEM:

ICT DISASTER RECOVERY AND GOVERNANCE CONTROLS STRENGTHENED THROUGH THE FOLLOWING ACTIVITIES:

- Reviewed back-up and restore processes (MOU with SASSETA to establish 'hot site' co-hosting)
- ICT Governance strengthened through review and development of several ICT policies

QUALIFICATIONS DEVELOPMENT: WATER SECTOR



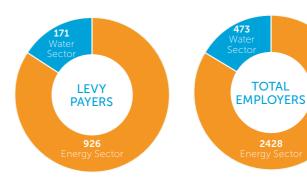
NQF 8 Specialised Occupational Diploma: Water Resource Management

NQF 4 Occupational Certificate: Borehole

NQF 5 QAS Addendum: Industrial Water

Process Controller

SUBMISSION OF WSPs AND ATRs



206 WSPs/ATRs submitted in April 2021

1 097 Total Levy Payers

18.8% **Participation**

TOTAL

2021/22 DG STATISTICS



Budget Allocated: R189 million

Number of beneficiaries: 4 310



Number of projects: 83

Public and Private Organisations: 51



Higher Education Institutions: 15

Partnerships: 28

QUALIFICATIONS DEVELOPMENT: ENERGY SECTOR



Advanced Occupational Diploma:

Higher Occupational Certificate:

QAS Addendum: Radiation
Protection Practitioner

KEY PROJECTS

- 4IR Aquatech: Capacitation of SMMEs in water sector to address food-energy-water nexus with a focus on drought in EC - involved a hackathon
- Proconics: Intern project that comprised a variety of interns that have completed a range of qualifications in the infrastructure environment
- SAWEA: Intern project that saw graduates placed in a variety of positions within the wind sector
- Water Boards Bursaries: Amatola Bloem -Lepelle Northern - Mhlatuze - Rand Water (combination of undergraduate and postgraduate bursaries for qualifications in the water sector)
- WRC: Postgraduate bursaries for 30 beneficiaries in the water sector
- Eskom: 90 learnerships 50 artisans 67 bursaries for a variety of skills development initiatives in the energy sector
- Pele Green Energy: Bursaries for studies related to skills required by IPP projects
- SARETEC: Skills Programmes for 300 learners in the renewable energy sector
- Wits Business School Executive Development Training: First group comprising women in energy and water concluded their training and second intake for women in nuclear
- WISA: Candidacy programme for 20 learners in the water sector
- The Innovation Hub: Placement of ten interns with various qualifications
- Technology Innovation Agency: CETC management and lecturer development for 20 beneficiaries



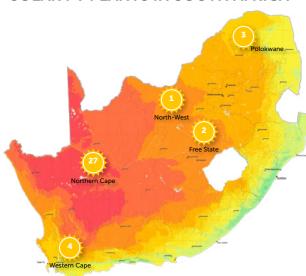
EWSETA CHRONICLE - DECEMBER 2022 EWSETA CHRONICLE - DECEMBER 2022

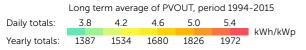
DECARBONISATION TECHNOLOGIES FOR A JUST ENERGY TRANSITION

WIND AND SOLAR: A COMPELLING CASE

- South Africa has some of the best solar and wind resources in the world
- Solar and wind plants can be built in less than two years
- Running costs are very low as there are effectively no fuel purchases
- Their extremely low carbon emissions mitigate global warming and make solar and wind energy attractive to investors

SOLAR PV PLANTS IN SOUTH AFRICA







WHY HYDROGEN?

- Zero emission output at point of application
- Secure domestic energy supply
- Export opportunities will contribute to economic growth SA could secure 10% of export market

SA'S COMPETITIVE EDGE IN HYDROGEN PRODUCTION

- Expertise in production of liquid fuels
- Availability of Platinum Group Metals
- Port infrastructure
- Potential of depleted gas fields to store hydrogen
- Existing trade partnerships will boost exports as part of ERRP

CONTRIBUTION TO ENERGY MIX: 2010

Wind Other RE Other

CONTRIBUTION TO ENERGY MIX: 2019

Wind Other RE Other

CONTRIBUTION TO ENERGY MIX: 2019

Wind Other RE Other

Limpopo

Limpopo

Mpumalanga

North West

Free State

North West

Nor

THE ROLE OF BATTERY STORAGE

- SA has many of the minerals required for battery production depending on the materials utilised.
- Battery storage is increasing in both small and large applications
- Battery storage to support the roll out of renewable energy, smart grids and electrical vehicles has been identified as a major growth area
- Utility scale storage is required to ramp up the supply of renewable energy in response to the net zero ambitions from the Paris agreement.
- Electrification is also a significant trend with many systems converting from solid or liquid energy fuels to electric systems, in particular transportation

Infographic compiled by EWSETA

A SKILLS DEVELOPMENT PERSPECTIVE

South Africa's Just Energy Transition Investment Plan (JET IP) for 2023 – 2027 highlights key skills development focus areas as the country seeks to reduce its carbon footprint

FOUR SKILLS DEVELOPMENT DIMENSIONS

■ RESKILLING AND UPSKILLING

- Focus on existing adult workers
 - · Conduct skills analysis to identify demand
 - Establish substantive short- and longer-term training programmes
 - Recognition of prior learning
 - JET transition labour market policies
 - Creation of new job opportunities
 - Pay attention to foundational skills, digital innovation, and more.

2 ALIGNING THE SKILLS DEVELOPMENT SYSTEM WITH THE ANTICIPATED LABOUR FORCE NEEDS OF THE FUTURE

- Gather labour market intelligence to determine skills development needs that respond to demand
- Strengthen skills system innovations across the JET value chains and its associated ecosystem
- In-depth engagement and collaboration with industry, the provision of bursaries, the upskilling of trainers and lecturers, and a flexible approach to skills development from both demand and supply perspectives

ENSURING FOUNDATIONAL SKILLS THROUGHOUT THE EDUCATION SYSTEM

- Improve the adaptative capacity of the broader workforce
- Curriculum transformation and teacher capacity development in the schooling and post-schooling systems (especially TVET educators' competencies)
- Expansion and diversification of learning pathways
- Addressing gender, inequality, and social exclusion in both the provision of education and training opportunities, as well as access to employment

TRANSITION WOMEN, YOUTH, AND OTHER VULNERABLE GROUPS INTO DECENT WORK

- Equal access to promotions in management and leadership roles
- Give impetus to mechanisms that can successfully and proactively bridge the skills system, its planning and implementation mechanisms

KEY ACTIONS TO BE TAKEN

- Formation of a national-level strategic skills hub or platform' to inform, anticipate, coordinate, and integrate skills needs and plans for a just energy transition in South Africa.
- The development of new models for place-based skills planning, provision, and integration with value chains impacted by energy transitions or offering linked opportunities for employment and livelihoods in these localities
- The development of relevant transition-related skills and associated employment and livelihood opportunities will be catalysed by the development of a national skills hub / platform and local level SDZs



SKILLS DEVELOPMENTS IN THE HYDROGEN SECTOR

- EWSETA/Bambili Energy/DSI/UP collaborated to train unemployed TVET graduates on installation, operation and maintenance of Hydrogen Fuel Cells
- Multi-partner project implemented to boost capacity of TVET colleges to train GHE workforce
- HySA programme support for research through funding of MSc and PhD students
- EWSETA funded hydrogen economy platform mapping exercise with CUT Innovation Services
- Hydrogen fuel cell technician skills programme submitted to QCTO by EWSETA
- EWSETA partnered in DSI-led research and funded by UKPACT into readiness of TVET colleges along hydrogen valley to deliver on training required for hydrogen industry

SKILLS DEVELOPMENTS IN THE WIND SECTOR

- SARATEC offers a wind turbine technician qualification aligned to German best practice
- Strategic partnership between EWSETA and SAWEA
- SAWEA, through funding provided by EWSETA, placed 13 interns in wind industry across the country – plans in place to host a further 35 in 2023
- Other wind sector skills development activities in the pipeline

SKILLS DEVELOPMENT IN THE BATTERY STORAGE SECTOR

- SA has existing skills in this area, but focus needs to be placed on 'which' skills and 'when' are they needed to really ramp up activity in South Africa and become a global player
- Skills will be needed across the entire value chain including operations and maintenance
- Electrical and chemical engineering, technician and artisan technical skills will be needed and a number of universities and colleges around the world are offering post graduate degrees in battery storage as well as shorter online courses.
- As is the case in most sectors today, skills development in the battery storage sector will require both formal education, vocation and upskilling initiatives and enabling policy skills.
- Other skills, such as problem-solving abilities, systemic thinking and complexity analysis will also be needed



In November 2022, EWSETA travelled to Lahr, Germany to support Siphesihle Masina in the World Skills Plumbing and Heating Competition.

Siphesihle, who hails from Mpumalanga, was accompanied by Ryan Marsh who trained him and put him through his paces in preparation for the competition. In addition, Dr Lester Goldman, an EWSETA Board member and Candice Moodley, EWSETA's Corporate Services Executive were there to cheer Siphesihle on.





world skills

APPLY NOW FOR 47TH WORLD SKILLS COMPETITION IN 2024

Applications are now open for the 47th WorldSkills International Competition that will take place in Lyon, France from 10-15 September 2024. Interested students and stakeholders are encouraged to apply before the closing date of 20 March 2023.

If you meet all the requirements, apply now and do not miss out on this life changing opportunity to be part of the South African team that travels to France next year to compete with 1,500 Competitors from over 65 countries and regions.

Find out more: http://www.worldskillsza.dhet.gov.za/

EWSETA HIGHLIGHTS IMPORTANCE OF SKILLS DEVELOPMENT AT **SOLAR POWER AFRICA**



The second annual Solar Power Africa conference that took place from 8 to 10 February 2023 at the CTICC under the theme 'Innovating under the African sun' set out to engage participants on innovative, practical and tangible steps essential to deliver increased solar PV capacity to meet the country's energy needs.

Attendees, at the Cape Town International Convention Centre, benefited from insights by leading international and local specialists and the opportunity to network and collaborate.

Mpho Mookapele, EWSETA's CEO, delivered a keynote presentation and also served as the moderator of a panel that discussed 'a resilient energy future'. Khetsiwe Dlamini-Mthiyane, Acting Energy Manager at EWSETA, also added her voice to the discussions by providing insights on the role of skills development in the solar power sector.

According to the South African Photovoltaic Industry Association (SAPVIA), solar power has the potentia to mitigate some of the debilitating effects of South Africa's energy crisis. Government and industry are looking to capitalise on the country's ample sola resources.

"South Africa's Integrated Resource Plan targets 8.3GW of solar PV in the country's future energy generation mix by 2030. This, alongside the increasing number of corporate solar PV projects due to regulatory reforms that have removed licensing thresholds for embedded generation of any size, should catalyse deployment of PV projects," says Dr Rethabile Melamu, SAPVIA CEO.

"We need to unleash solar PV generation capacity for an energy secure, resilient and sustainable future whilst ensuring that both the country's climate commitments and national development objectives are achieved. Solar PV, combined with storage, has the potential to play a transformative role in this transition," adds Dr Melamu.

Participation in industry events such as this one is an important vehicle by which the EWSETA can interact with stakeholders in the sector to garner interest in and support for the critically important role of skills development in securing a stable energy supply in South Africa.

EWSETA CHRONICLE - DECEMBER 2022 EWSETA CHRONICLE - DECEMBER 2022 17

CJC TVET COLLEGE CAPACITATED TO PARTICIPATE MEANINGFULLY IN RENEWABLE ENERGY

"South Africa's Just Energy Transition plans are designed to drive inclusive participation that leaves no one behind and communities are capacitated to play a meaningful role in the transition. TVET colleges are at the centre of developing occupational skills to respond to industry needs and it is therefore important that TVET management and lecturing staff are capacitated with relevant knowledge and skills if they are to develop and implement TVET skills strategies to enable a just transition."

A partnership agreement concluded by the Energy and Water Sector Education and Training Authority (EWSETA), Central Johannesburg TVET College (CJC) and Universities South Africa (USAf), will see five CJC lecturers undergo training in renewable energy and twenty middle managers from the college participate in an intensive management and leadership development programme.

"South Africa's focus on a transition to a low carbon economy and sustainable economic growth requires a coordinated approach to skills development to ensure that the sector is capacitated with timely and relevant skills," comments EWSETA CEO, Mpho Mookapele. "And key to this, is capacitation of lecturers, particularly in the TVET College system that requires significant expansion to develop South Africa's workforce, both for sustainable economic development and for inclusive economic participation."

Whereas capacitation of lecturers is an important development activity for TVET Colleges, research and related publications have revealed that the TVET sector is beset by challenges associated with leadership, management, governance and institutional lack of capacity.

By implication, the governance and management of academic institutions has become far more

complex today than it was in the past. The new demands and pressures placed on academic institutions requires a constantly agile and dynamic leadership. In the past few months, the College has migrated from ITS version 3.1 to 4.1; developed, reviewed and implemented over 60 policies; and reviewed the college governance model. This process has inevitably set the college on a new trajectory.

As a consequence, "We have approached the EWSETA for funding to support our capacity building and training initiative for our management cohort. The training outcomes are designed to enable managers to perform in a changing and complex organisation with a focus on driving innovation and technology, third stream income, enhanced management of teaching and learning environment and project management of CJC and Industry partnerships for the enhancement of programme delivery," according to CJC's Administrator.

The CJC Administrator added that "We are grateful to the EWSETA CEO for her foresight and support". The management and leadership development training will be provided by Higher Education Leadership and Management (HELM) that is housed within Universities South Africa (USAf).



The EWSETA, Central Johannesburg TVET College and Universities South Africa have partnered to promote meaningful TVET College participation in Renewable Energy. See at the signing today of the agreement are: Ms Michelle Buchler, Senior Manager: HELM; Dr. Oliver Seale - Director:HELM; Dr Phethiwe Matutu new USAf CEO; Mr. Mpho Diago, CJC administration; Ms. Mpho Mookapele EWSETA CEO and Dr. Linda Meyer - Director: Operations and Sector Support at USAf.

HELM has a track record of providing leadership and management development to the public university sector for over two decades.

According to Dr Oliver Seale, the Director of HELM: "The management and leadership development programme will assist the leadership team to understand and address the challenges of managing a complex, contemporary TVET college in a changing global and national technology and innovation system, and its key purpose is knowledge and skills acquisition, with a focus on practical application within the college, that will contribute towards establishing a responsive, coherent,

collegial and effective leadership team at CJC."

The support provided by EWSETA to CJC for lecturer development, as well as management and leadership development, highlights the holistic approach EWSETA is required to take in addressing skills development in the energy and water sectors.

"We need to review and consider a variety of touchpoints and make discretionary grant funding decisions based on achieving optimal impact. Our support for this programme with CJC will result in much-needed capacitation within the TVET sector," concludes Mookapele.

EWSETA JOINS CONVERSATION ON BENEFITS OF A DUAL APPRENTICESHIP SYSTEM

The EWSETA, represented by its CEO, Mpho Mookapele, joined the Deputy Minister of Higher Education and Training, Buti Manamela, and Ambassador to Austria, Rapulane Molekane, at the Salzburg Economic Chamber for discussion on The Dual Apprenticeship System in Austria.





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Science has established beyond doubt that the window for climate action is closing rapidly. The 27th session of the Conference of the Parties to the UNFCCC (COP27) seeks to build on previous successes and pave the way for future ambition. This event is an opportunity for all stakeholders to rise to the occasion and tackle effectively the global challenge of climate change facilitated by Egypt on the African continent.



6 – 18 NOVEMBER 2022

90
HEADS OF STATE





I deeply believe that COP27 is an opportunity to showcase unity against an existential threat that we can only overcome through concerted action and effective implementation.

- Egyptian President, Abdel Fattah El-Sisi



568 million

people in Sub-Saharan Africa have no access to electricity

900 million

have no access to clean cooking fuels and technologies



Vast resource potential in wind, solar, hydro, and geothermal energy to meet its energy needs. Abundant mineral resources essential to the production of electric batteries, wind turbines, and other low-carbon technologies to support the global transition while creating local value.

- The Energy Progress Report 2022



16 November 2022

LAUNCH GREEN JOBS FOR YOUTH PACT: ACCELERATING YOUNG SKILLS AND TALENT FOR GREEN JOBS

This event will enhance collaboration between governments, youth, employers' and workers' organisations, and educators working together to promote a just transition by strengthening capacities and skills, for youth, needed to deliver an economic and social transformation in a 1.5 degree world.

https://unfccc.int/cop27

This infographic has been compiled by the EWSETA

COP27 INITIATIVE: A JUST & AFFORDABLE ENERGY TRANSITION IN AFRICA



Implementing a global clean energy transition will not be the same everywhere and will require different pathways, archetypes, and phases for energy transitions that are flexible, country/ region specific and sustainable. Africa is extraordinarily diverse, and no single approach will advance its energy future.

Efforts must be made to build modern, resilient, and sustainable energy systems across the continent to avoid trapping economies and societies in obsolete energy systems that burden them with stranded assets and limited economic prospects.



COP27 AND AFRICA INITIATIVE

- Represents an opportunity for Africa's energy transition to be bold and long-lasting
- Develop a new model of cooperation to meet the commitment to universal access by 2030 and energy demands of Agenda 2063
- Establish a solid, broadly supported trajectory for the just and equitable energy transition in Africa
- Become a reference point for African countries as well as **global partners** who will be needed to support this transition effort



OBJECTIVES

- Secure access to affordable energy for at least **300 million** Africans
- Transition **300 million people towards clean cooking** out of the 970 million who do not have access to clean cooking fuels and technologies
- Increase the share of renewable electricity generation by 25 percentage points
- Obtain a power sector based on renewables by 2063, in line with the "Africa We Want" Agenda.



3 KEY ELEMENTS NEEDED TO ACHIEVE THESE OBJECTIVES

- A collective leadership voice to promote a holistic approach to energy and advocate for the needs of just and affordable energy transitions and provide a peer mechanism that will monitor progress and enhance the objectives
- 2. Access to technical assistance, as well as advisory support and policy advice on infrastructure development, enabling frameworks, energy market structure, energy transition plans, project facilitation, development of local and regional supply chains, human capacity and skills enhancement, retraining of labour and SME development, and inclusiveness of communities to promote equitable approaches.
- Facilitate access to and the transfer, application, and development of new technologies and innovative solutions



PLAN OF ACTION

- Launch the Initiative with a group of African countries who will provide political leadership
- Map out, consolidate and align existing programmes and initiatives
- Engage IEA and IRENA to provide possible pathways and scenarios for African countries
- Invite development partners to support technical assistance and capacity building across different aspects of the Initiative
- Define the implementing modalities
- Establish a monitoring and review system that would convene partners twice a year



Creating a Sustainable Tomorrow – Today

EWSETA CHRONICLE - DECEMBER 2022 EWSETA CHRONICLE - DECEMBER 2022

FEEDBACK:

LAUNCH OF GREEN JOBS FOR YOUTH PACT AT COP27

On 9 November 2022, the ILO, UNEP, and UNICEF/Generation Unlimited launched the ambitious "Green Jobs for Youth Pact" at the 2022 United Nations Climate Change Conference (COP27) in Sharm El Sheikh, Egypt. As the legacy of Stockholm+50, the Pact is a bold partnership with the aim to increase commitments and accelerate action towards green job creation for young people as they face an uncertain future driven by the climate crisis.

The event focused on accelerating commitments to secure green jobs and green, employable skills in key countries and high-impact sectors. Attendees ranged from representatives of member states, employers, workers organisations to young people - an important ingredient of the Pact being the collaboration of stakeholders on different levels and a focus to work WITH and FOR youth.

Moustapha Kamal Gueye, Global Coordinator of the Green Jobs Programme of ILO, opened the meeting by reminding the participants of the link between the climate crisis and youth employment and presented the ambitious goals of the Pact:

- To create 1 million green jobs,
- To support the greening of 1 million existing
- To advance 10.000 green entrepreneurs and support the job creation through their growth journey.

The keynote address was given by the Director-General for Employment, Social Affairs and Inclusion of European Commission, Joost Korte. His address was followed by Urmila Sarkar, Global Head of Programmes, Generation Unlimited, UNICEF who emphasised the looming challenge of climate change and youth unemployment into a unprecedented opportunity for ambitious action.

Allen Blue, co-founder of LinkedIn and one of the early adopters of the Green Jobs for Youth Pact explained how LinkedIn data indicates that very soon the demand for green skills will outgrow the supply.

Norine Kennedy, SVP Policy and Global Strategy, United States Council for International Business (USCIB) pointed out how the catalytic effect of working with every sector is key in the Pact, which is a timely initiative to engage with youth and address climate change and youth employment simultaneously.

Boitumelo Molete, Social Development Policy Coordinator, Congress of South African Trade Unions (COSATU) touched upon the importance of engaging with workers and labour unions as young people must get into jobs that are meaningful and decent as a part of the just transition

Quinn Runkle, Director of Education, Students Organizing for Sustainability - UK (SOS) congratulated the Pact on the inclusion of youth in the Pact, as youth engagement is key not only in the education system itself, as is the case with SOS, or in development cooperation as the Pact.

Michael Alexander, Communications and Advocacy Expert, UNEP reflected on the injustices and inequalities on career pathways and how the Pact must work to break down such barriers to finding green jobs for youth in the future.



WIND SECTOR OVERVIEW:

NOVEMBER 2013 - DECEMBER 2021



Onshore wind



Solar PV



Concentrating

solar power







Biogas



Landfill gas

Small hydroelectric plants

71 073

Biomass

GWh contributed to national grid



from wind contributed to national grid



34 Number of wind projects procured by end Dec 2021

31 Number of wind projects operational by end Dec 2021



- electricity for 3.6 MILLION households Number of wind projects operational by end Dec 2021



38.8 MTONS R0.94/KWH CO. reduction Price for wind from wind power: April 2021 projects

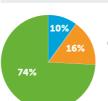


state



863 DAYS Average lead time for a project to reach commercial

18 813 Job years created by end December 2021 on wind projects

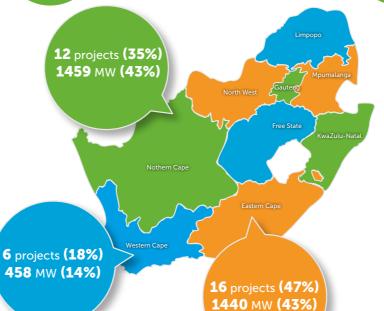


Infographic compiled by EWSETA

CONTRIBUTION TO ENERGY MIX: 2010 WindOther REOther



CONTRIBUTION TO ENERGY MIX: 2019 WindOther REOther



SKILLS DEVELOPMENT UPDATE

- SARATEC offers a wind turbine technician qualification aligned to German best
- Strategic partnership between EWSETA and **SAWEA**
- SAWEA, through funding provided by EWSETA, placed 13 interns in wind industry across the country - plans in place to host a further 35 in 2023
- Other wind sector skills development activities in the pipeline

Information sourced from REIPPP Focus on Wind – December 2021 - https://www.ipp-renewables.co.za/

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SAWEA AND EWSETA PARTNER TO CAPACITATE GRADUATES

The South African Wind Energy Association (SAWEA) will for its 2023 Wind Industry Internship Programme (WIIP) double its placements and offer supplementary work readiness training for the first time. The programme supports the development of specialist skills needed to facilitate the exponential growth of the industry, to support the country's growth.

Funded primarily by the Energy and Water Sector Education Training Authority (EWSETA), in partnership with the South Africa Wind Energy Association



Niveshen Govender, CEO of SAWEA.

(SAWEA), the programme is expected to place 35 interns, selected from over 90 applications, this year. These interns are being placed across approximately 30 renewable energy companies – illustrating a growth of over 100% in just one year.

"We are encouraged by the uptake of this programme and the huge increase of placements, knowing that young professionals are being absorbed by our sector and are receiving the mentorship and practical experience that they need," said Niveshen Govender, CEO of SAWEA.

The WIIP provides young professionals who have recently completed a degree or those undertaking graduate programmes, with the opportunity to gain practical work experience in line with their studies or interests, whilst exposing them to works related to sustainable energy solutions.

This year, for the first time, the programme will include a 10-day work readiness training segment facilitated by an external service provider, that will coach the graduates in the soft skills necessary to enter the workplace, for example, email etiquette, communication, working as a team etc. Whilst the WIIP provides capacity building for the students, it equally benefits the commercial wind power industry seeking to source qualified students specialised in various professional fields.

"Equally important, the programme is recognised as a major contributor to social, environmental and economic security in the country," explained Govender.

The demand for qualified and skilled talent is growing and the South African industry, like its international counterparts, needs a rising pool of qualified candidates to draw from.

SAWEA anticipates jobs in manufacturing, logistics, finance, construction, and operational phases becoming available as Bid Window 5 and Bid Window 6 projects come online. These comprise professional services, business services and sales. Requirements include, engineering, project management, project development, and skills in environmental authorisations, amongst others.

Direct jobs can already be seen through the employment drives that have been undertaken by various companies operating in the renewables sector.

WINDABA 2022

Described as the 'annual must-attend wind energy event', Windaba took place on 12-13 October 2022 at the Cape Town International Convention Centre (CTICC) with the theme of: "Wind Power Spearheading the Energy Transition for Accelerated Growth.

The event brought together industry experts, thought leaders, and wind energy stakeholders to provide the most relevant and current wind sector information. Among the speakers who presented at the event was Mpho Mookapele, EWSETA's CEO. She presented on the important role that skills will play in South Africa's rapidly developing wind sector.

Windaba's purpose is to aid in strategic decision making, whilst offering several opportunities to engage with customers, stakeholders and peers to ensure a strengthened African wind industry. The South African Wind Energy Association (SAWEA) called on players in the wind sector to work together to deliver more for South Africa through the just energy transition.

The conference started with a keynote address from Minister Gwede Mantashe, Department Mineral Resources and Energy, followed by local and international speakers who discussed the importance of rolling procurement, how to deliver a thriving local manufacturing sector, wind energy finance, impact, implementation, market and policy. Experts weighed in on how to leverage the current policy environment to deliver a sustainable, secure energy supply.



SAWEA's coffee table book '10 Years of Wind, South Africa' was launched at Windaba. It is a beautifully curated celebration of a decade of wind energy achievements in the country.

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TO GROW MUCH-NEEDED SKILLS IN THE RENEWABLE ENERGY SECTOR



The EWSETA (Energy and Water Sector Education and Training Authority) and the CSIR (Council for Scientific and Industrial Research) recently entered into a funding agreement with a value of just over R9 million, over the 5-year period, to launch the Energy Industry Support Programme (EISD)

The Programme launch event was held on 17 November at CSIR International Convention Centre, and was attended by SMMEs and other Programme stakeholders.

The EISP will equip 75 SMMEs with the relevant skills and knowledge, technology know-how and necessary resources to participate in the demanding energy sector, as well as encourage innovation and empower innovators to contribute to the country's economic development through the energy sector.

It is expected that the EISP will also drive the use of developed intellectual property (IP), through commercialisation of identified technologies that are relevant and that will bring solutions to the current social challenges.

"We are honoured to partner in such an impactdriven capacitation programme that will provide the much-needed skills and support in the energy sector and drive inclusive economic participation of SMEs in the energy value chain. The Programme will also provide an opportunity to empower women and persons living with disabilities, to realise our inclusion objectives," said Mpho Mookapele, Chief Executive Officer of the EWSETA.

Unemployment remains a big challenge among youth and one of the key solutions to addressing the high unemployment rate is through the creation of sustainable SMMEs. It is through building and supporting job creators that the country will see increased economic activity that will create employment opportunities and better livelihoods for our people. However, the current challenges many SMMEs face when entering the energy industry, are inadequate skills and support (predominantly renewable technologies) and the EISP will seek to address these challenges.

Said Bernard Magoro, Head of Independent Power Producers Office, a procurement vehicle for delivering on the national renewable energy capacity-building objectives, "This exciting EWSETA/CSIR initiative, aimed at developing SMMEs to participate in our country's energy transition, is timely and welcomed. It was wonderful to see so many SMMEs in attendance today and to see first-hand the benefits of this new initiative, one that the IPP Office would be proud to partner with in the future."

This collaboration between CSIR and EWSETA will undoubtably have far-reaching effects of providing capacity-building opportunities and access to technical capacity in the renewable energy sector. This will assist with South Africa meeting its commitment to reduce its carbon emissions under the Paris Agreement on Climate Change.

With 11GW of coal-fired power stations expected to be decommissioned by 2030, the EISP will contribute to the energy generation plans and contribute to economic activities in the areas affected by the decommissioning.











WOMEN IN NUCLEAR CAPACITATED FOR LEADERSHIP ROLES

In 2022 EWSETA partnered with NIASA and Women in Nuclear South Africa (WINSA), to capacitate women from the nuclear sector with skills and knowledge to take up and grow in leadership roles in the industry.

The programme, that is fully funded by the EWSETA, follows the success of the EWSETA/Wits Business School 2021 Women in Energy Executive Development Programme and was once again hosted by Wits Business School.

It is aimed at senior women leaders in the nuclear industry and specialists who need to transition to managerial or executive roles and is framed around the requirements of the new world of work. It seeks to upskill candidates, as well as develop self-mastery and leadership skills.

The intensive programme concluded with Group Action Learning Presentations. The judging panel, made up of EWSETA and WBS, had a difficult task selecting the overall presentation winner, but the hounours went to Mpumi Diphoko, Johanna Mabitsela, Thandeka Maphazi, Ntsoaki Tlape and Akhona Tshangela.

EWSETA congratulates all 23 ladies who successfully completed the Women in Nuclear Executive Development Programme and wishes each of them all the best in their future career endeavours as leaders within the Nuclear sector.

EPC PRACTITIONERS TO HELP DRIVE ENERGY EFFICIENCY



EWSETA in partnership with the Institute of Energy Professionals IEPA, SANEDI, GIZ and other partners launched the KZN pilot for the Energy Performance Certificate (EPC) Practitioner Skills Programme and Internship for 20 learners in 2023.

TVET capacitation has been embedded in the programme with five lecturers and five mentors also participating in the training. The intervention seeks to respond to the Energy Performance Certificate Regulations by providing skilled EPC Practitioners to ensure compliance for private and commercial building owners.

Upon completion of the EPC Practitioner Skills Programme, students will be able to contribute to reducing energy demand, driving energy efficient buildings and reduction of carbon emissions. The EPC programme has attracted graduates from TVETs, Universities of Technology and Universities in the fields of Electrical and Mechanical Engineering as well as Environmental Management, who will assist existing ESCOs in the energy industry that are currently contributing to the country's goals for Just Energy Transition (JET).

Together with the Energy Audit Technician, the EPC Practitioner is a way for younger professionals to start their journey in the green economy towards international Certification programmes.



GRADE 12 LEARNERS TAKE ON MATHS AND SCIENCE

WHO?

194 Grade 12 learners from 7 schools

WHAT?

Capacitation in Science and Maths

WHEN?

3 - 10 October 2022

WHERE?

Galeshewe - Frances Baard District - Northern Cape

WHY?

To help the learners prepare for 2022 Matric Finals

HOW?

Six highly qualified tutors in maths and science

The EWSETA places extensive focus on the importance of maths and science as part of its career guidance mandate. This programme was designed to capacitate Grade 12 learners in maths and science in preparation for their final exams at the end of 2022.

After initially assessing the learners' existing knowledge, the learners were put through their paces under the careful guidance of the tutors selected for the programme. The learners were given tips on how to better understand what is required from them and how to confront potential exam questions.

The programme was a great success and the young learners were grateful for the opportunity to gain additional assistance in time for their exams.





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CAREER **GUIDANCE**



At the FutureME career festival held on 15 September 2022 in Cape Town, EWSETA kicked off its poster competition that required high school learners to create a poster on one of eight selected careers in the energy and water sectors.

Out of all the entries received, the research and creative abilities of our winners stood out from the crowd in how they approached the challenge.

- The first prize went to the hand-drawn Electrical Engineering poster done by Lwandile Xorile from Bridgetown High School in the Western Cape. Lwandile walked away with R3,500 and R15, 000 for his school.
- Thandolwenkosi Ngobese's poster about the importance of plumbers took second place. Thandolwenkosi is from Hamptons High School in KZN and walked away with R2 500 and R7 500 for his school.
- The third prize winner was Koyinsola Ilesanmi from Vista High School in the Wstern Cape who focused on Hydrology as a career. Koyinsola walked away with an EWSETA hamper and two JoJo tanks for Vista High School.

Congratulations to the winners!







JOURNEY TO ATLANTIS SEZ

On 3 February 2023 twenty top maths and science learners from five schools in the Western Cape were exposed to the real world of work during EWSETA's first learning journey that took place at the Atlantis Special Economic







In November 2022 Candice Moodley, EWSETA's Corporate Services Executive travelled to Europe for the 9th edition of the RES4Africa Advanced Training course held in Europe. This is an account of her experience.

Energy is one of the most critical resources globally, water being the other, and both are at serious risk. Across the globe governments are re-assessing their Energy Policies, Regulations and Frameworks to ensure that the increasing rise in energy demand can not only be adequately responded to, but that it is done in an environmentally responsible manner that allows for all parties' to achieve their Green House Gas (GHG) emission goals as outlined in the Paris Agreement which was adopted in 2015.

The nature of the climate change challenge is one characterised by the overuse of common global resources in an unequal world. Along with other developing countries, South Africa is especially vulnerable to its impacts, particularly in respect of water and food security, as well as impacts on health, human settlements, and infrastructure and

ecosystem services. In this regard, South Africa has committed to cooperative efforts to adapt to the unavoidable adverse impacts of climate change.

South Africa's Intended Nationally Determined Contribution (INDC) was formulated in the context of, inter alia, the environmental right set out in section 24 of the Constitution, and its National Development Plan (NDP) which provides a '2030 vision' to guide the country's sustainable development trajectory where poverty is eliminated and inequalities are reduced by 2030. The implementation of the 2030 NDP vision is further elaborated in its climate policy (the 2011 National Climate Change Response Policy (NCCRP)), climate-compatible sectoral plans and its National Sustainable Development Strategy. Good progress has been made in implementing climate compatible sectoral plans, such as the integrated energy and electricity plans (IEP and IRP), industrial policy action plans (IPAP) and the new growth path (NGP).

The full implementation of these policies and plans will bend the curve of South Africa's GHG emissions towards a peak (anticipated to be in 2025), plateau and decline trajectory. South Africa is putting in

place a mitigation system to realise the opportunities of a low-carbon economy while being mindful that an inclusive and just transition requires time and well planned low-carbon and climate resilient development.

The Just Energy Transition and Decarbonization plans will ultimately see new renewable and alternative energy sources and technologies being introduced into the Grid and economy, which ultimately, require the relevant and appropriately skilled resources to manufacture, build, operate and maintain these technologies. It is also evident that with the increase of renewable energy the opportunities for entrepreneurs, cooperatives, communities and other stakeholder groups will rise exponentially. However, we must note that 77% of the energy needs of South Africa is currently provided by coal, so the increasing role of renewables carries major employment challenges given that more than 92,000 professionals are currently employed in South Africa's coal sector. EWSETA's response to JET therefore, is twopronged. The first would be to ensure that internally we are capacitated around the latest global and continental developments in the area of renewable energy so that we are able to better respond to the sector. This entails strengthening our capabilities through training of current staff and attracting the specialist skills needed through our Operating Model Implementation process. The second is to focus on initiatives that support the following three areas:

To achieve this, EWSETA's 2020/2021 – 2024/2025 Strategic Plan has placed increased focus on partnerships. Acknowledging that the sector demand and supply is unbalanced and that our mandate cannot be achieved through our own isolated initiatives, EWSETA has secured a number of strategic partnerships within the sector to assist us in meeting our strategic objectives and stakeholder expectations.

One of the partners we have entered into an Agreement with is the Res4Africa Foundation.

RES4AFRICA FOUNDATION

As per their profile (https://www.res4africa.org) RES4Africa (Renewable Energy Solutions for Africa) is a Foundation that was established in 2012 and that works in support of Africa's just energy transition in order to achieve the SDG7, ensuring access to affordable, reliable, sustainable and modern energy for all. It functions as a bridge between Europe and

Africa: gathering a network of members from all over the clean energy sector from both continents and high-level international partnerships to ensure constant dialogue between the most relevant energy stakeholders willing to mobilise investments in clean energy technologies.

In 2022, RES4Africa and EWSETA signed an anticipated Memorandum of Understanding, which outlines a collaboration in implementing the training initiative "RE-Skilling LAB". The agreement focusses on joint efforts in terms of education, training and skills development dedicated to professionals employed in South Africa's coal sector, the facilitation and implementation of training and capacity building activities, data and information exchange, outreach and stakeholder engagement, community advocacy and communication campaigns.

Furthermore, by signing the MoU, the two parties agreed to closely cooperate on the Re-Skilling LAB initiative, which was officially launched on the 18th of November at Nkangala TVET College, located in Emalahleni, South Africa.

It was therefore, in the spirit of the MoU that EWSETA was extended an invitation and full sponsorship for an EWSETA representative to attend RES4Africa's Advanced Training Course 9th Edition from 21 November 2022 – 2 December 2022 in Milan, Italy. As EWSETA's JET focus includes TVET Capacitation, EWSETA further funded three Mpumalanga TVET Lecturers to attend to expose and capacitate them on the technical, economic and regulatory developments within the RE sector. These lecturers represented Nkangala TVET College (the home of the Re-Skilling LAB) and Gert Sibande TVET College.

THE ADVANCED TRAINING COURSE

RES4Africa Foundation, in partnership with Enel Foundation, the Italian Ministry of Foreign Affairs and International Cooperation, and the European Investment Bank (EIB), and in collaboration with MIP, the Graduate School of Management and SDA Bocconi, held the ninth edition of the ADVANCED TRAINING COURSE (ATC).

Since the ATC's 1st edition in 2014, the ATC training programme is entirely dedicated to providing training participants with a set of technical, economic and regulatory core competencies

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From left to right: Victoria Nonyane, Mpho Mookapele (EWSETA CEO), Sibongile Sibonyani, Thamsanqa Langa, Candice Moodley (EWSETA Corporate Services Exectuive)

and advanced tools to assess and deploy the most appropriate solutions in different energy contexts for an efficient and effective integration of renewables in emerging electricity markets.

The structure of the course includes different modules that amounted to 80 hours of lectures on the main technical, regulatory and economics features of electricity markets and associated topics given by qualified international experts, academics and highly skilled technicians.

The training is structured to favour the exchange of experiences among participants by means of their direct involvement through fruitful interaction in group study activities and communal site visits.

The Advanced Training Course encourages participants to explore multidisciplinary approaches covering:

- theoretical and academic sessions;
- market perspective and industrial view.

COURSE OVERVIEW

The ATC is addressed to institutional and high-level managers and professionals operating in the RE sector in Africa (serving in public institutions, energy companies, energy centers, universities and research agencies). In addition, a new category of participants was added to cover Ph.D. or Master level students or Researchers from Italian Universities.

The synergy among professionals from different countries and with a different professional and educational background greatly contributes to the development of a fruitful and positive training outcome.

This year the course was delivered to 55 African professionals with an impressive balanced gender mix in the selection of participants. Over and above, 10 professionals from RES4Africa Foundation members and stakeholders and 10

Ph.D. or MD students and Researchers from Italian and International Universities attended.

Whilst week one covered context and more technical aspects of RE, week two was more focused on providing delegates with a high level economic and regulatory focus of RE project planning and financing.

Overall, I was completely engaged from the start and appreciate that week one was a very thorough overview of where the Renewable Energy sector is heading and the new technologies and concepts that are driving the electricity markets in Europe currently, as it laid a solid foundation for Week two. The exceptional quality of the presentations and the expertise of the presenters added immense value to the experience.

Despite the information over-load which was intense to say the least, it was eye-opening to note how much potential Africa has from a RE resource perspective, but more especially, in terms of being a huge transporter of Hydrogen to the rest of the world. This is an advantage that we cannot afford to give away to international investors. As Africa we may need to consider a unified approach to our RE potential as a continent.

It was clear that South Africa is in many instances lagging behind other African countries when it comes to our RE strategies and adoption of new technologies into the Grid. North and East Africa delegates specifically spoke to numerous innovative projects that are being undertaken within their countries.

From a regulatory perspective, delegates were able to understand the huge role that an energy regulatory body plays in revising regulatory codes, developing guidelines and policies for specifically new concepts such as Energy Communities, which already in SA is on the rise due to the lifting of thresholds for SSEG as a means to address the energy crisis action plan.

It was also apparent that from a skills perspective we should give more focus to building skills required across the RE value chain, EE value chain, capacitating communities around circular economy potential and the Hydrogen Economy. Just few ideas would be:

- Drone / Unmanned Aerial Vehicle skills upskill engineers based on levels
- New skills would be inspection training

- Energy Storage is huge and it is clear that a qualification is required. For now embed a module in current curricula – awareness now, capacity in next 3 years
- Capacitation on South African Energy Modelling
- Municipalities require a skills programme to analyse the network for small scale generation (Technical Grid Integration)
- Municipalities also need a programme on how to price electricity for RE (Tariff Structuring for RE)
- Wind Sector has the potential to create a huge number of jobs and we need to ensure we have established partnerships with the Wind IPPs so that we can tap into the growing sector and potential in SA
- Agrosolar parks could be a "Green field" for cooperatives and NGO's and a possible InterSETA project with AGRISETA could pilot the first AgroSolar park
- EV market is growing and perhaps not that big in SA yet, but we need to start thinking of the skills requirements for when the market does take off due to more affordable EV options for consumers

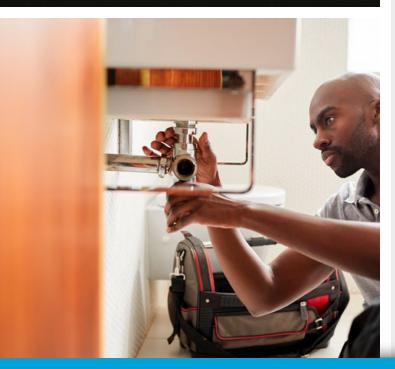
TVET College lecturers attending were also keen to engage EWSETA further to see how we can support their RE programmes understanding now that it goes far beyond the narrow ambit of what is currently being taught at a tertiary level.

Excellent networking and engagement opportunities were realised and follow up discussions will be planned for the new Financial Year with the attending SA delegates to take some of the initial ideas forward.









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