



ENERGY AND WATER SECTOR EDUCATION AND TRAINING AUTHORITY

Strategic Plan 2020/25 and Annual Performance Plans 2022/23

Portfolio Committee

MAY 2023

EWSETA ACCOUNTING AUTHORITY



Adaptability
through
DISRUPTION

AGENDA

- Mandate ,Vision & Mission
- Strategic Scope (Sectoral)
- Strategy Consideration
- Medium Term outcomes
- Resource Considerations



ENERGY AND WATER SECTOR EDUCATION AND TRAINING AUTHORITY

Mandate and Strategic Scope



Our Mandate

To anticipate, build and strategically plan and manage Skills Development and Training needs in the Energy and Water Sectors as directed by the National Skills Development Plan 2030



EWSETA Mandate & Vision



OUR MANDATE: To anticipate, build and strategically plan and manage skills development and training needs in the energy and water sectors as directed by the National Skills Development Plan 2030



OUR VISION: Creating a sustainable tomorrow today, through skills

UNDERPINNED BY

OUR MISSION: The EWSETA will achieve its Vision through:



- **Research** to determine the skills demand
- **Facilitation** and **coordination** of skills development programmes to respond to sectoral challenges
- Driving **excellence** through **quality assurance**
- Fostering an ecosystem in energy & water that creates **inclusive economic development**.



OUR VALUES



Respect



Integrity



Teaming



Excellence



Adaptability
through
DISRUPTION

Mandate and Strategic Scope

STRATEGIC SCOPE

ENERGY SUBSECTOR

SIC CODE	INDUSTRY	SDL REGISTERED EMPLOYERS	% OF GRAND TOTAL
41111	Generation of energy	473	18,96%
41112	Distribution of purchased electric energy only	141	5,65%
41114	Generation of renewable energy	271	10,86%
41115	Transmission of energy	39	1,56%
41116	Project management, maintenance and operation of electrical generation, transmission and distribution plants, networks and systems	555	22,24%
41118	Marketing of electricity	143	5,73%
41200	Manufacture of gas; distribution of gaseous fuels through mains	254	10,18%
50222	Construction of pylons for electric transmission lines	54	2,16%
87141	Industrial research for electrical energy	106	4,25%
41300	Steam and hot water supply	28	1,12%
TOTAL		2064	83%

WATER SUBSECTOR

SIC CODE	INDUSTRY	SDL REGISTERED EMPLOYERS	% OF GRAND TOTAL
42000	Collection, purification and distribution of water	175	7,01%
42001	Public water enterprises: collection, purification and distribution of water, including potable water supply, domestic waste and sewage services, refuse and sanitation services	13	0,52%
42002	Private water companies: collection, purification and distribution of water, including potable water supply, domestic waste and sewage services, refuse and sanitation services	25	1,00%
42003	Irrigation boards: collection, purification and distribution of water, including potable water supply, domestic waste and sewage services, refuse and sanitation services	14	0,56%
94003	Water and sanitation services (potable water supply, domestic wastewater and sewage systems)	204	8,18%
TOTAL		431	17%

SKILLS DEVELOPMENT ACT

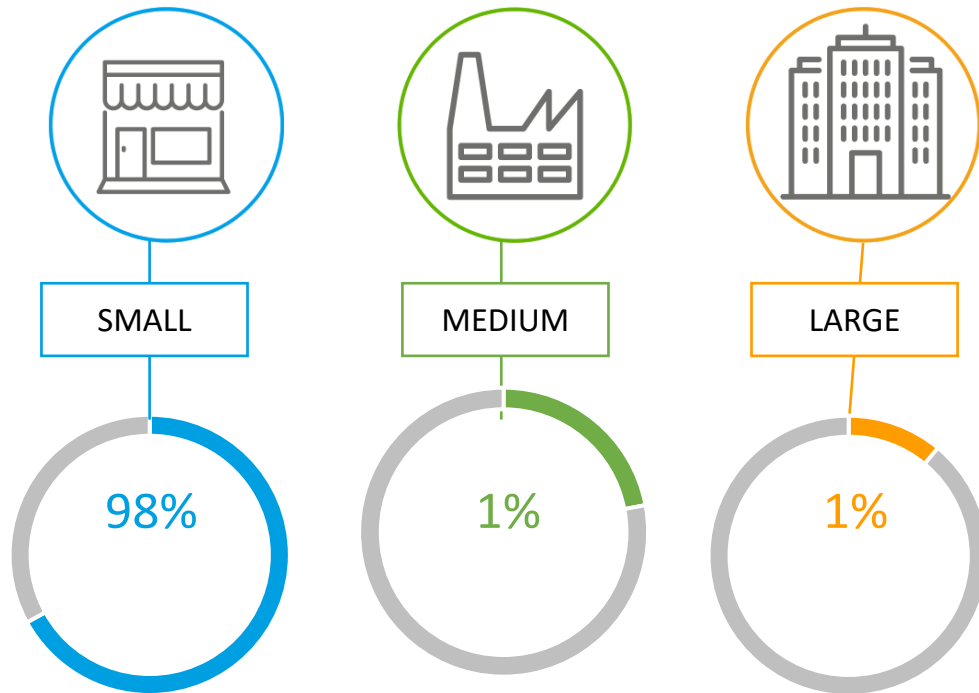
NATIONAL SKILLS DEVELOPMENT PLAN

WHITE PAPER FOR POST SCHOOLS EDUCATION AND TRAINING

NATIONAL DEVELOPMENT PLAN

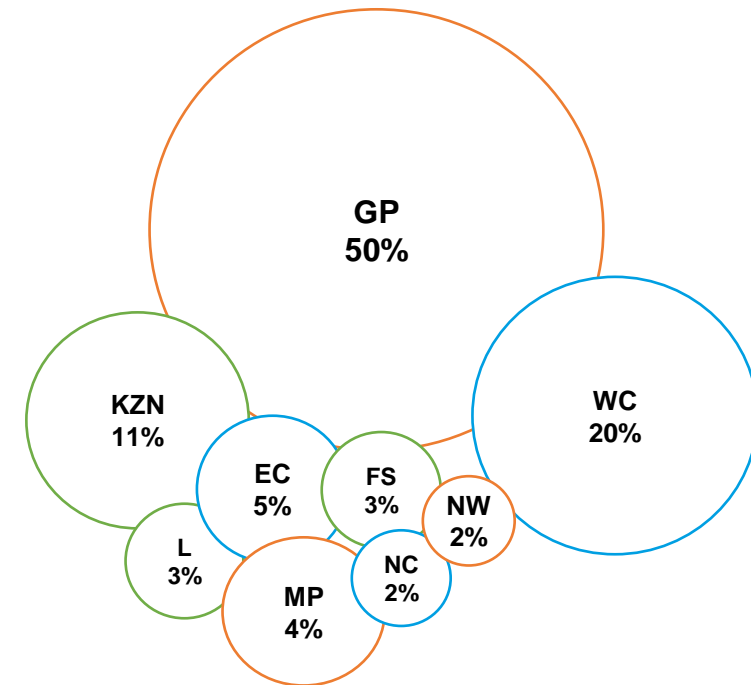
Mandate and Strategic Scope

Employer distribution by organisation size



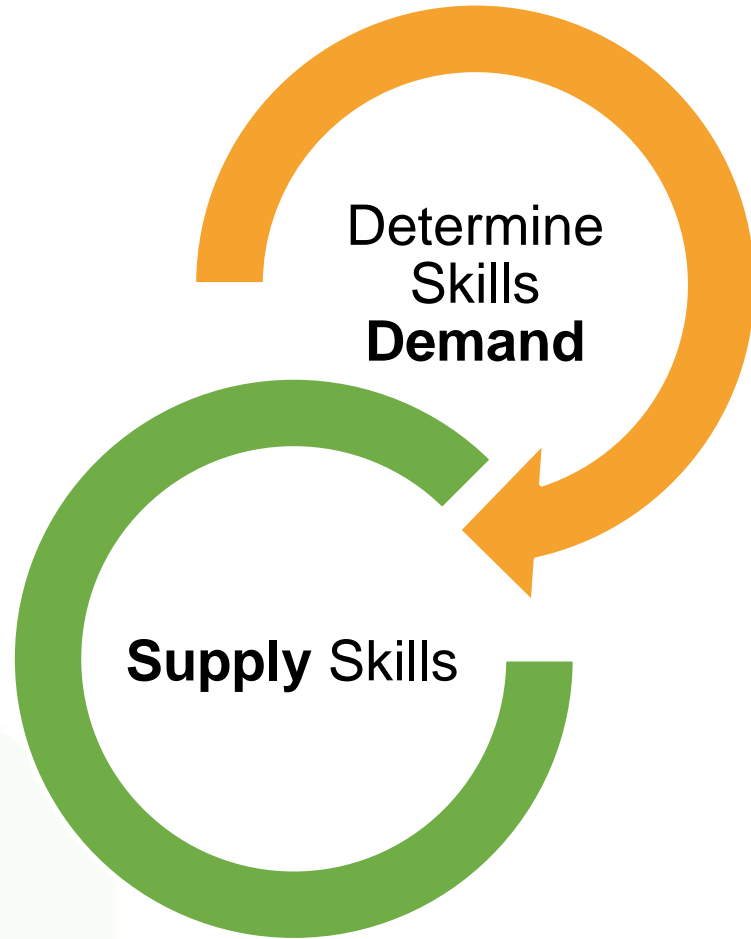
Source: EWSETA SSP 2022/23

Employer distribution by province



Source: EWSETA SSP 2022/23

EWSETA Mandate and Strategic Scope



- ✓ Credible skills planning and delivery data
 - ✓ Industry-led skills planning
 - ✓ Current & Future skills
-
- ✓ Industry-led qualifications development
 - ✓ Relevant and timely Learning programmes
 - ✓ Accreditation of skills development providers
 - ✓ Approval of workplaces
 - ✓ Facilitate sector training

- Water & Sanitation Master Plan
- Integrated Resource Plan 2019 (DMRE)(Energy)
- Economic Recovery & Reconstruction Plan
- Just Energy Transition
- District Development Model
- Climate Change Agenda
- Hydrogen South Africa (HySA)



STRATEGY CONSIDERATION : INTERNAL & EXTERNAL



Triple Burden

Unemployment
Poverty
Inequality



Urgent pressure to fund de-carbonization (global)



Rapid Technological Advancement (global)



Limited Revenue



Geopolitical conflict (global)



Unrest and instability (Basic Services)

National Skills Development Plan

- Increased access
- Quality and relevance of training (impact)
- Industry Led Skills Development
- Enhanced Public College System
- Employer driven skills development
- Small business support / venture creation
- Focus on intermediary & High level skills
- building career and vocational guidance

STRATEGY CONSIDERATION Local Key Drivers



OUR MANDATE: To anticipate, build and strategically plan and manage skills development and training needs in the energy and water sectors as directed by the National Skills Development Plan 2030



OUR VISION: Creating a sustainable tomorrow today, through skills



Energy crisis



Water scarcity



Climate change



Slow economic growth

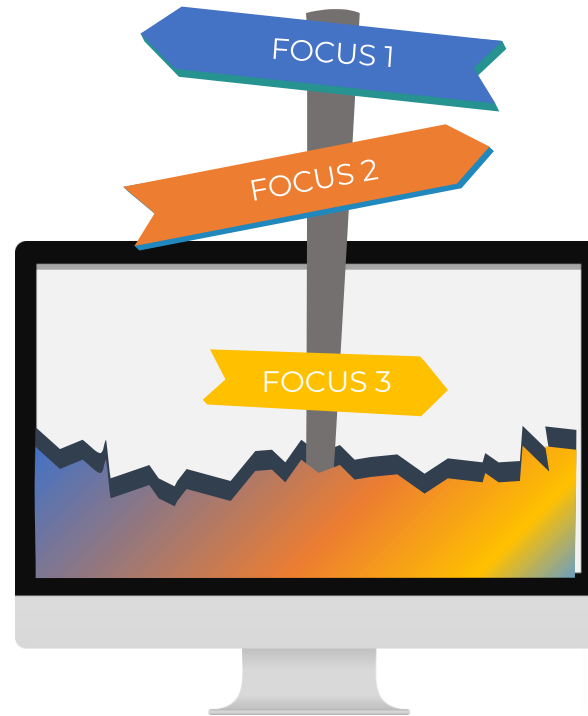


High unemployment rate

Research, Tracer and Impact Study Consideration

SMME and Co Ops

- Skills Programmes and incubation opportunities provided for SMMEs and Co-Ops
- Research for SMMEs & Co-Ops: **3 research projects**
- Funding increased for SMMEs & Co-Ops including tools
- Partnership fostered specifically for SMME support
- SMMEs funded at conferences and summits to share their innovations: **Women in Energy**
- CUT Research SMME in Hydrogen Economy



Career Guidance

- Higher Level skills increased funding when compared to lower level
- Policy reviewed to fund research and innovation programmes: **PhD and Masters – WRC**
- **Training of Career Practitioner**

WBL Programmes

- Targets for WBL programmes increased
- Young people targeted for WBL programmes
- Increased focus on apprenticeships



ENERGY AND WATER SECTOR EDUCATION AND TRAINING AUTHORITY

Strategic Focus



INCLUSIVE ECONOMIC PARTICIPATION



Establish a High Performance Culture



Develop credible data for skills demand and supply



Close the PIVOTAL skills gap



Intensify Continuous Professional Development and Career Guidance




Positively contribute to an inclusive economic development

EWSETA's Strategic Pillars



ESTABLISH A HIGH-PERFORMANCE CULTURE

- An enabling industry partner
- Active stakeholder management
 - Adaptable to contextual change
- Customer-centric approach
- Match capabilities to gaps
 - Cost-saving interventions




DEVELOP A CREDIBLE MECHANISM FOR IDENTIFICATION OF SKILLS SUPPLY AND DEMAND

- Energy, Water & Food Nexus
 - Strengthen relationships with Industry (local & international)
 - Leverage on industry research



CLOSE THE SCARCE AND CRITICAL SKILLS GAP

- High-impact skills-on-demand: increase learning opportunities
 - Adaptable to contextual change
- Occupations in high demand
- Blended learning
- Focus digital skills integration



INTENSIFY CONTINUOUS PROFESSIONAL DEVELOPMENT AND CAREER GUIDANCE

- Map skills to stages
 - Career pathing
- Role of Professional Bodies
 - Increase commercial and innovation outputs



POSITIVELY CONTRIBUTE TO AN INCLUSIVE ECONOMIC DEVELOPMENT

- Right and relevant skills to drive economic growth
 - Promote Green Economy
 - Timely Inclusive economic participation

INCLUSIVE ECONOMIC PARTICIPATION

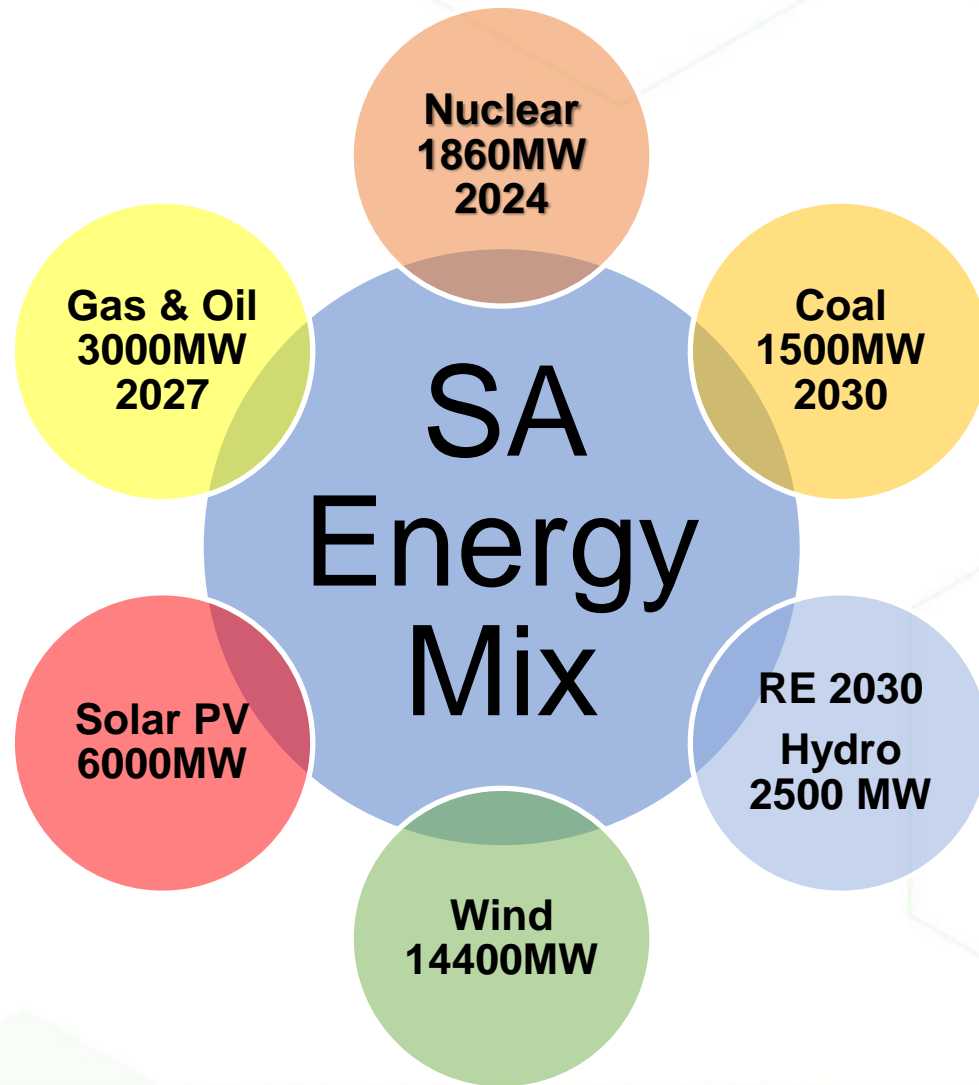
SKILLS DELIVERY





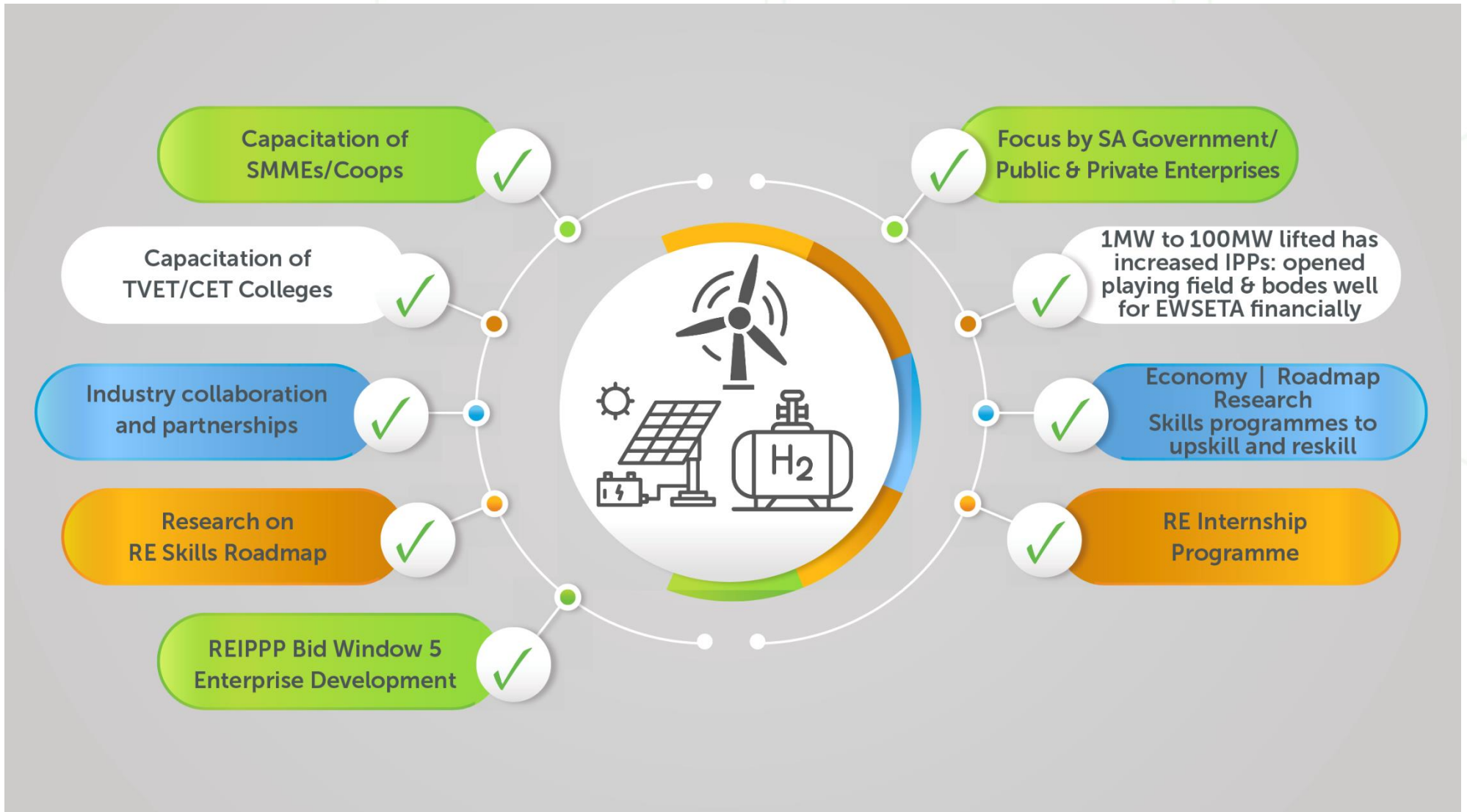
ENERGY Strategic Focus

South Africa Energy Mix (IRP 2019)





FOCUS AREA: ENERGY



Building Skilled Workforce for Energy Transition: PSET Readiness

- Industry Collaboration and partnerships in skills development interventions
- **Accelerate accreditation of SDPs** against existing Skills Programme and Workplaces
- Accelerate registrations of Skills Programmes for Green Hydrogen (upskill & reskill)
- Increase funding for short courses
- **Alignment of Skills Development interventions with REIPPPP deployments**
- Ensuring adoption and **capacitation of TVET/CET** Colleges:
 - Infrastructure support for technical training centers
 - Exposure of industry for lecturers
- Increasing **reskilling and retraining for SMME/COOP** to enable their sustainability and uptake of opportunities in the renewable energy value chain



HYDROGEN ECONOMY: MAJOR SECTORS



Research on skills needed and TVET role
Hydrogen Hubs (Skills Centre) along the hydrogen Valley
Drive inter SETA Collaboration

Water & Sanitation Strategic Focus



Water Strategic Focus

Water access and Use
Climate change
Disaster Management
Ground water
Professionalisation
Water technology
Water & Sanitation standards
Water infrastructure
Water Management

National Water & Sanitation Master Plan

Water Strategic Focus: NW&SMP Key Priorities

- ▶ Reducing demand and increasing supply
 - ▶ Redistribution for transformation
 - ▶ Managing effective water services and sanitation
 - ▶ Regulating water and sanitation
 - ▶ Improving raw water quality
 - ▶ Protecting and restoring ecological infrastructure
-
- ▶ Creating effective institutions
 - ▶ Managing data and information
 - ▶ Building capacity for action
 - ▶ Ensuring financial sustainability
 - ▶ Legislation
 - ▶ Enhancing research, development and innovation



Water Strategic Focus

Collection, purification and distribution of water

Waste water treatment/reticulation

Process Controllers

Plumbing

Hydrologist

Ground Water

Sanitation

Water Boards

Municipalities

Technological Advancement in Water Sector

- Current technologies in use to address water scarcity / water security:
 - membrane technology
 - electrochemical technology
- **Public owned / managed water facilities** have not adopted the advancements mainly due to:
 - limited budget
 - lack of knowledge to incorporate the innovations into existing systems (investment & compatibility)
- EWSETA qualification and skills programme development:
 - based on sector needs
 - dependent on available **workplaces for practical exposure** to these technologies, which is very limited
- The water sector has not indicated the need to develop programmes on new technologies (due to no uptake),
New partnerships with **HEI's, CSIR and WRC leverage on research and development on technology solutions**



ENERGY AND WATER SECTOR EDUCATION AND TRAINING AUTHORITY

- Medium Term Outcomes



2023/24 Outcomes, Outputs, Targets

Outcome	Output
Enhanced learning programmes for occupations in high demand	<ul style="list-style-type: none">• WSP and ATRs approved• Sector research for TVET growth occupationally directed programmes• Topical research projects
Increased access to occupations in high demand within the energy and water sector by 2024	<ul style="list-style-type: none">• Established or emergent cooperatives trained on sector and national priority occupations or skills• People trained on entrepreneurship supported to start their business
Increased access to occupations in high demand within the energy and water sector by 2024	<ul style="list-style-type: none">• Artisan learners enrolled/completed• Unemployed learners granted/completed Bursaries• Learners enrolled/completed RPL/ARPL

2023/24 Outcomes, Outputs, Targets

Outcome

Output

Increased skills capacity through workplace-based learning

- TVET and University students requiring Work Integrated Learning to complete/completed their qualifications placed in workplaces
- Unemployed learners enrolled/completed Internships.
- Unemployed learners enrolled/completed Learnerships programmes
- Number of learners enrolled/completed for Candidacy programmes.

Increased skills capacity through workplace-based learning

- Workers enrolled/completed in learnership programmes
- Workers granted/completed bursaries
- Workers enrolled for skills programmes

Increased support for the growth of college system

- Centres of Specialisation supported
- TVET Managers/Lecturers exposed to the industry through Skills programmes
- TVET colleges Lecturers awarded Bursaries
- TVET colleges infrastructure developed

STRATEGIC STAKEHOLDERS/PARTNERSHIPS (2023/24)

NSDP Indicators/Priorities/Interventions	Initiative /Industry Partner	Strategic focus Area
Building career and vocational guidance	SANEA/WITS REAL (JET Skills roadmap) Department of Science & Innovation (Hydrogen Economy) DMRE (Energy Mix) Community Constituencies (Nedlac)	Research: Current & Future Skills. Hydrogen, Renewables. Digital skills, Career Practitioners capacitation. Lecturer capacitation. Bursaries. Rural Development
Gender Mainstreaming	Energy & Water Utilities Women In Nuclear NECSA DWYPD	Management & Executive Development Bursaries & Short courses SMME
Enhanced Public College System	TVET Colleges Community Colleges Industry	JET, Lecturer capacitation. Industry linkage. Research Infrastructure support WIL Support

STRATEGIC PARTNERSHIPS (2023/24)

NSDP Indicators/Priorities/Interventions	Initiatives/industry Partner	Strategic focus Area
Number of unemployed learners enrolled Internships	Internships: SACPO, SAWEA, SAPVIA Innovation HUB, EWSETA Employers & Mines	Wind, Solar, 4IR, Water reticulation
Entrepreneurship enterprises and cooperatives developed.	CSIR , STANDARD BANK, MTN, INNOVATION HUB, CUT Community Constituencies (Nedlac)	Solar, Hydrogen, Eskom Social Compact, water & Energy innovation & technology
Focus on intermediary & High level skills	Wits Business School, ESKOM , Water Research Commission, SALGA, IRMSA & TVETS & Trade Unions	Masters & Phd Bursaries, Executive Development, Councillor capacitation, Policy & Regulation & TVET lecturer capacitation
Number of artisan learners enrolled	ESKOM ,TVET Colleges; Trade Unions , Municipalities	Upskilling (ARPL) in Renewable Energy Unemployed TVET graduates



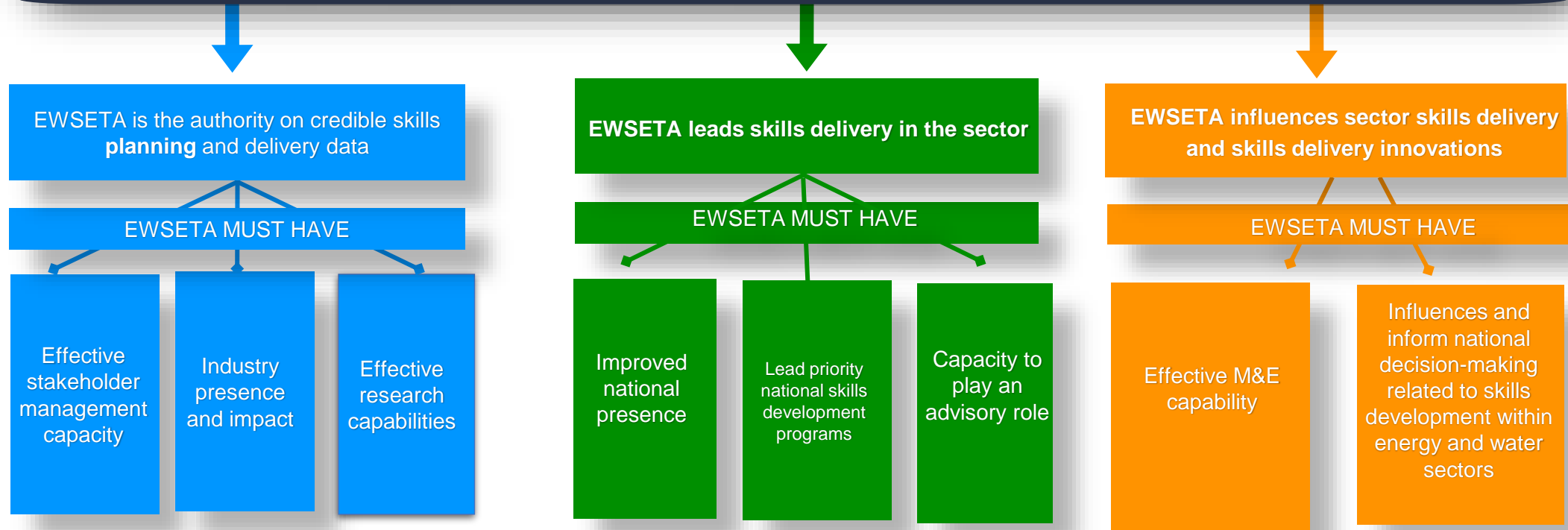
ENERGY AND WATER SECTOR EDUCATION AND TRAINING AUTHORITY

Resource Consideration



Internal Capabilities

EWSETA AS A SECTOR AUTHORITY



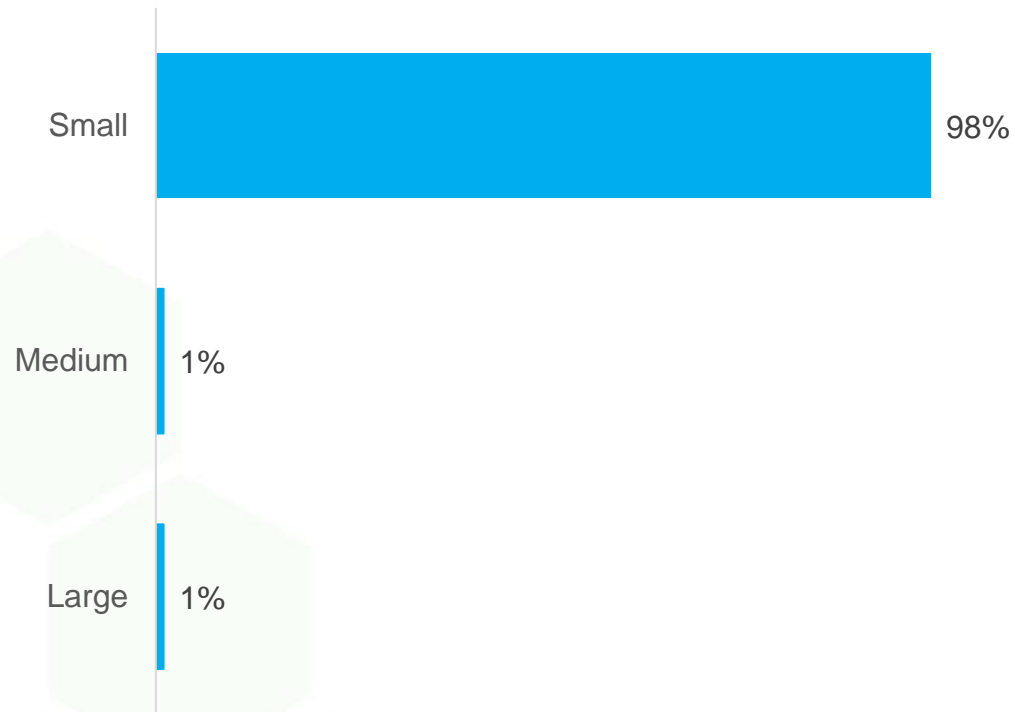
HUMAN RESOURCES

SYSTEMS

BUSINESS PROCESSES

Financial Resources

Employer distribution by organisation size



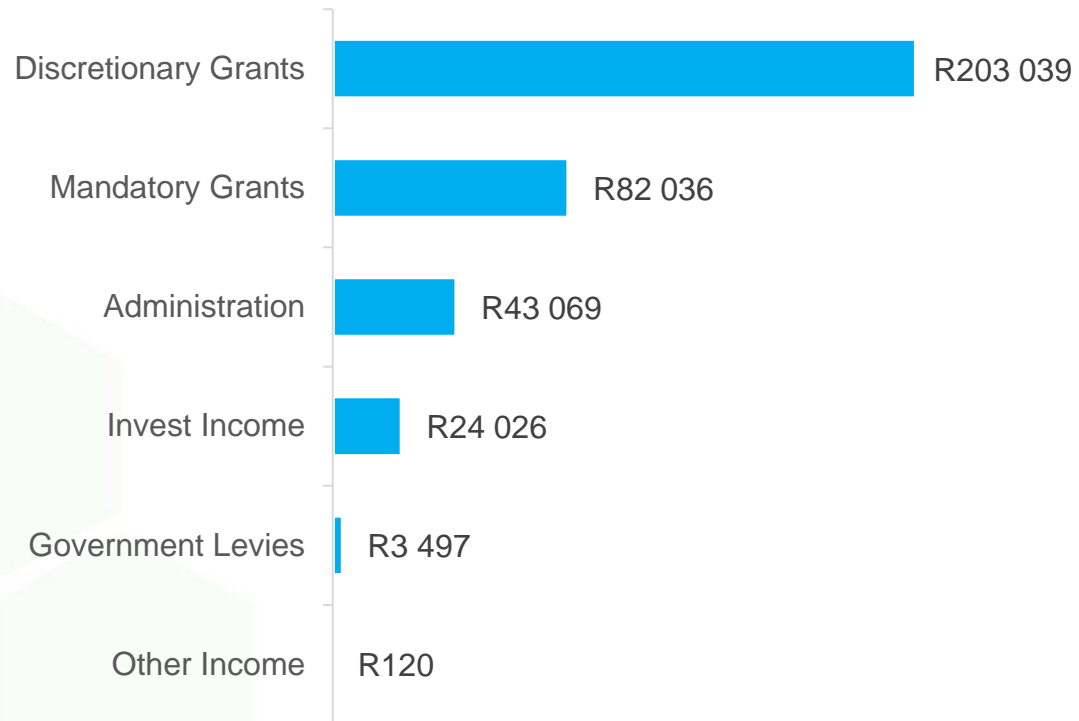
Sector composition:

- 99% **small and medium** registered employers
- Sector largely consistent of small employers
- Total number of employers 2,495
- Only 40% employers are levy paying
- Contribution to skills planning **limited**
- Legislative limitation of employer participation. (Threshold)
- EWSETA is the second-smallest SETA in terms of levy income

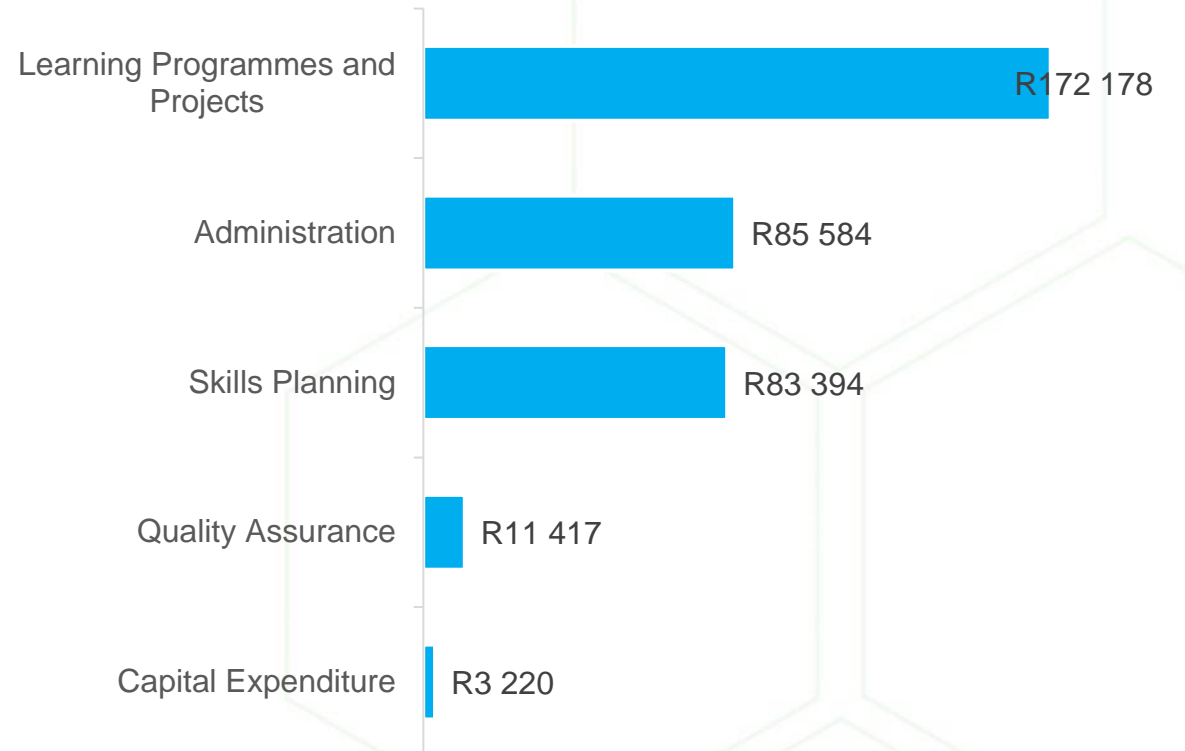
Financial Resources

Budget (R'000)

Income

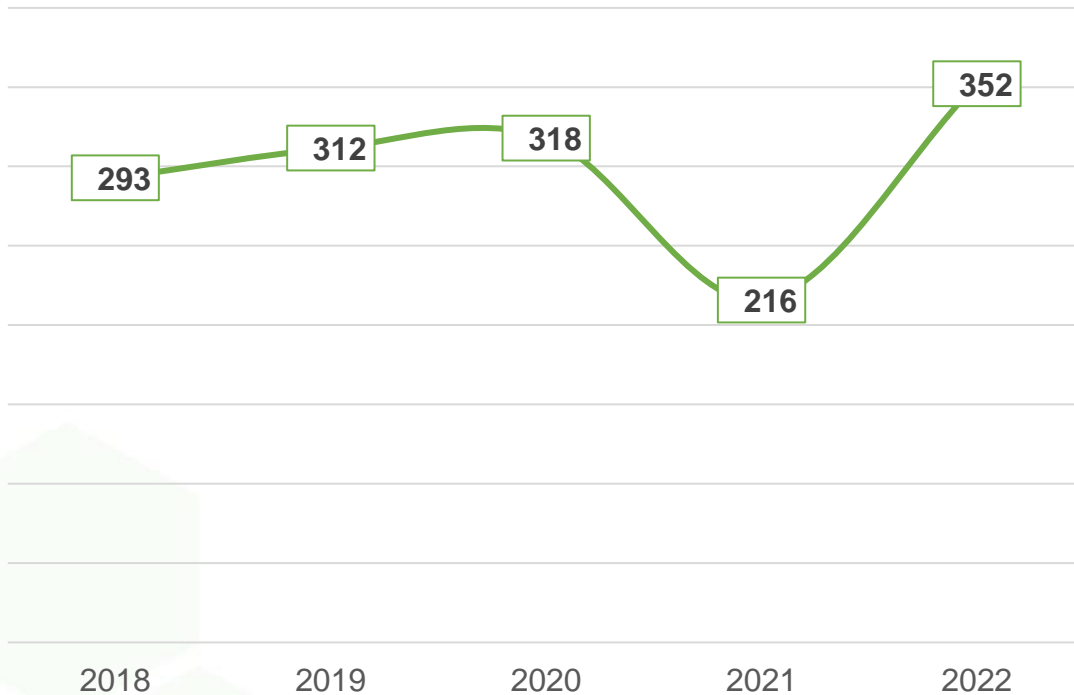


Expenditure



Financial Resources

5-year levy income trend (R'm)



Relatively low levy income to respond to significant demand for energy and water sector skills:

- Loadshedding: Energy crisis
- Water and sanitation: Impending water and sanitation crisis, driven in part by climate change
- Climate change: Energy sector key contributor towards climate change response
- COP 26: Transition from carbon-based economy to net-zero carbon emissions by 2050

Financial Resources

Addressing Financial Constraints: Key Strategic Risk

- **Enhanced stakeholder engagement**
 - to grow levy base
 - to leverage on industry training and reduce duplication of efforts made by industry and government
 - to identify strategic funding and co funding opportunities
- **Implementation of Partnership model**
 - to attract fully funded and co-funded interventions
- **Cost management measures**
 - Critical analysis and prioritisation when allocating funds
 - Operating model and organisational design towards articulating efficient and effective organisational design



THANK YOU

