Just Energy Transition Skilling for Employment Programme (JET SEP)

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Policy Power People

NBI's four dedicated programmes drive our impact



1 Environmental Sustainability

Climate change, water, energy, nature, green finance and the just transition

2 Economic Inclusion

Skills development, youth employability, job creation, SMMEs and township economies

3 Social Transformation

Gender, race, inclusion, diversity, transformation and intergenerational equity

4 Institutional and Government Capacity

Improved service delivery and state capacity building

We have 90+ member companies spanning every major South African sector

Financial Services and Insurance

Mining, Energy & Resources

FMCG, Food, Beverages and Retail

Industrial, Manufacturing and Transport

Professional Services, Consulting and Legal

ICT and Telecoms

Sustainability, Climate and Development Partners

Other / Multi-sector

Intentional action is required to leverage opportunities created by the Just Energy Transition to address South Africa's unemployment crisis in an inclusive manner

SA's JET has a challenging starting point

- **11.5 million people**
  are unemployed or discouraged
- **55% of youth [18-34 years]**
  are unemployed or discouraged
- **30% new entrants**
  in labour market every year are unlikely to find work

The JET, presents an opportunity to address these challenges

- **120-150GW**
  expected to be installed by 2050
- **400-600K changing and new jobs**
  by 2050 across renewable/green energy sectors, *Powering Futures*
- **~20% of SA's GDP**
  in funding to potentially be unlocked for green initiatives

The JET potentially unlocks significant opportunities in the broader green economy and ensuring these opportunities are inclusive is what will make the **transition truly Just**

Source: 2023 Draft Integrated Resource Plan; Eskom Shutdown Plan 2035; JET SEP Analysis

South Africa's private sector has a crucial role, and responsibility, in JET Skilling

- Drives **JET-related industry growth** which stimulates green job demand
- Will **increasingly require green skills** and are already starting to feel skills gaps most acutely
- **Knows most practically** the types of skills needed
- Is **investing significant resources in skilling** with little coordination and returns
- Bears a **social responsibility** to upskill, reskill and newly skill

Responding to the need for coordinated and accelerated private sector action, NBI launched the **JET Skilling for Employment Programme (JET SEP) in April 2024…**



… with the **formal endorsement of the JET PMU, BUSA and PCC** for NBI to formally lead private sector's contribution to JET Skilling

Source: JET PMU; JET SEP

JET Implementation Plan identifies five interventions to activate a JET skills ecosystem

1. **Establishment of a JET Skills Ecosystem** - JET Skills Ecosystem and JET Skills Forum focusing on a coordinated approach to skills anticipation, development and utilisation

2. **Establish Skills Development Zones focused on three core value chains (NEV, GH2, RE and transmission)** - focused on applied skills anticipation, development and utilisation

3. **JET Skills development needs assessments** for three core value chains

4. JET skills **planning and support for government** and key government institutions

5. **Foundational skills development support** to teachers and educators

Source: JET Implementation Plan Skills Chapter, 2023

The JET Skilling for Employment Programme (JET SEP) provides the basis for an ecosystem approach to scaling of Green Jobs

Steering Committee

JUST ENERGY TRANSITION Skills Portfolio · BUSA Business Unity South Africa · higher education Department: Higher Education Republic of South Africa · Presidential Climate Commission · Presidential Youth Employment Intervention

31 CEO Champions mobilised

25+ Advisory Board members

35+ Working Group members

JET SEP CEO Champions

Lead CEO Champions


Nolitha Fakude
Anglo American


Dan Marokane
Eskom


Simon Baloyi
Sasol


Lungisa Fuzile
Standard Bank


Charles Russon
ABSA


Dean Murray
AECI


Theo Boshoff
AgBiz


Nkululeko Magadla
Air Liquide


Brian Dames
AREP


Stuart Kent
Aurex Constructors


Zanele Mavuso Mbatha
Bambili Energy


Taelo Mojapelo
bp Southern Africa


Khulekani Mathe
BUSA


Deidré Penfold
CAIA


Hennie Heymans
DHL Express


Mohammed Akoojee
DP World


Konehali Gugushe
FirstRand Foundation


Phuthi Mahanyele-Dabengwa, **Naspers**


Shameela Soobramoney, **NBI**


Cas Coovadia
NBI Board Member


Dorah Modise
PCC


Gqi Raoleka
Pele Green Energy


Shirley Machaba
PwC


Paul Hanratty
Sanlam


Graeme Wild
Sappi


Mike Teke
Seriti


Peter Venn
Seriti Green


Aluwani Museisi
Shell


Gavin Dalgeish
Tongaat Hulett


Michelle Phillips
Transnet

Building on progress to date, JET SEP is ready to transition into its next phase

Phase 1: Design



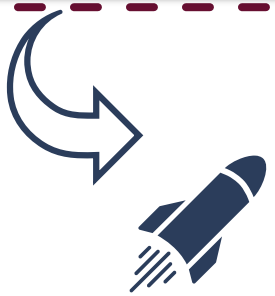
- Rigorous evidence base, aligned **view on needs** of a national skilling Programme and roll-out plan
- Pipeline of projects and interventions with implementation roadmap
- Draft framework for Skills Development Zone (SDZ) design

Current phase



Phase 2: Implement

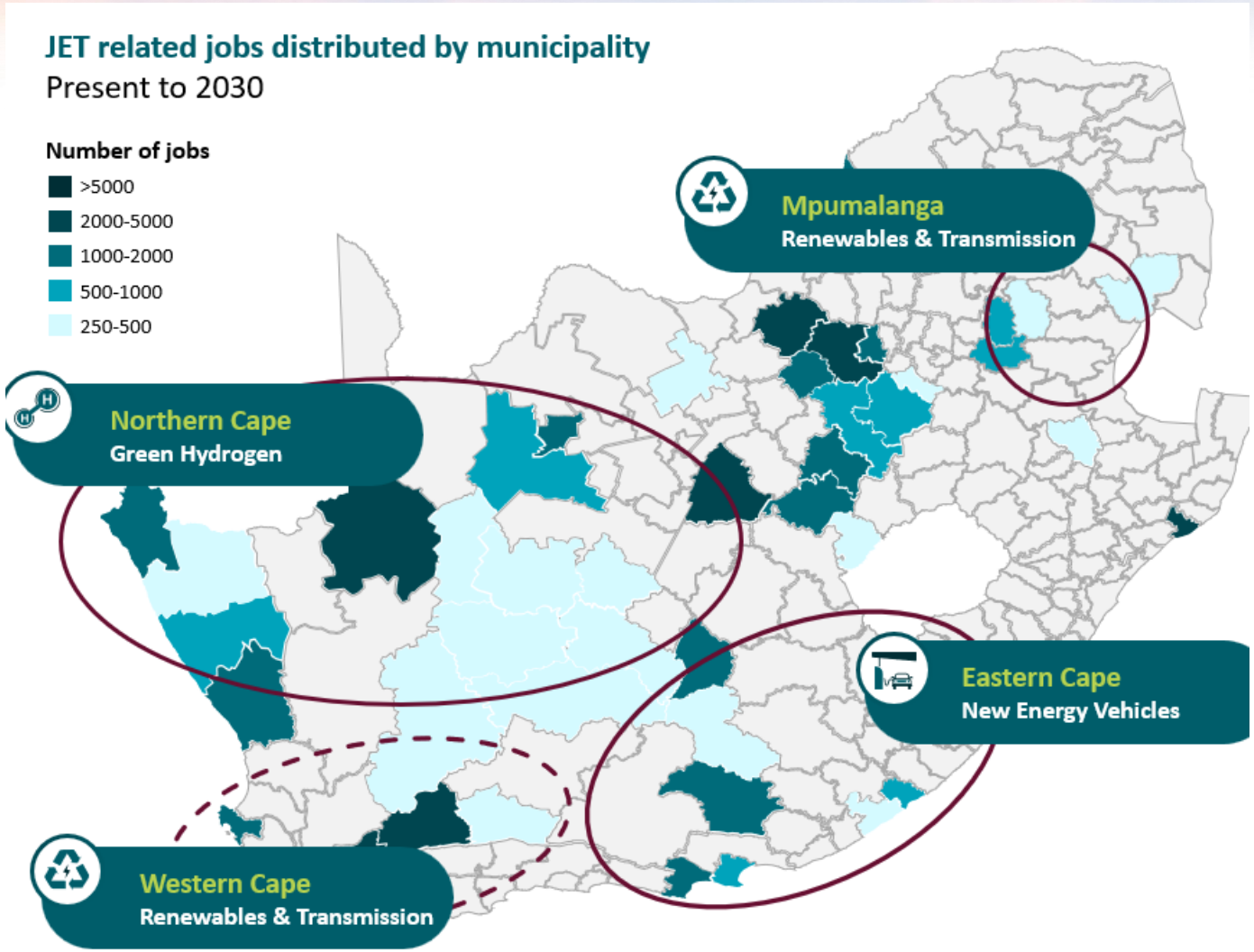
- Support strategic interventions and generate lessons and set foundation for scalability
- Collaborate with DHET JET Skills Desk and other Skills Ecosystem partners to roll out JET ATLAS and SDZ concept
- Support capacitation of government and teachers around the JET



Phase 3: Scale

- Support the scaling of strategic interventions and ensure system ownership
- Monitoring and evaluation systems in place to ensure tracking and measurement of impact

Skills Development Zones (SDZs) can strengthen linkages between JET priorities, skills development, industry demand, and regional growth



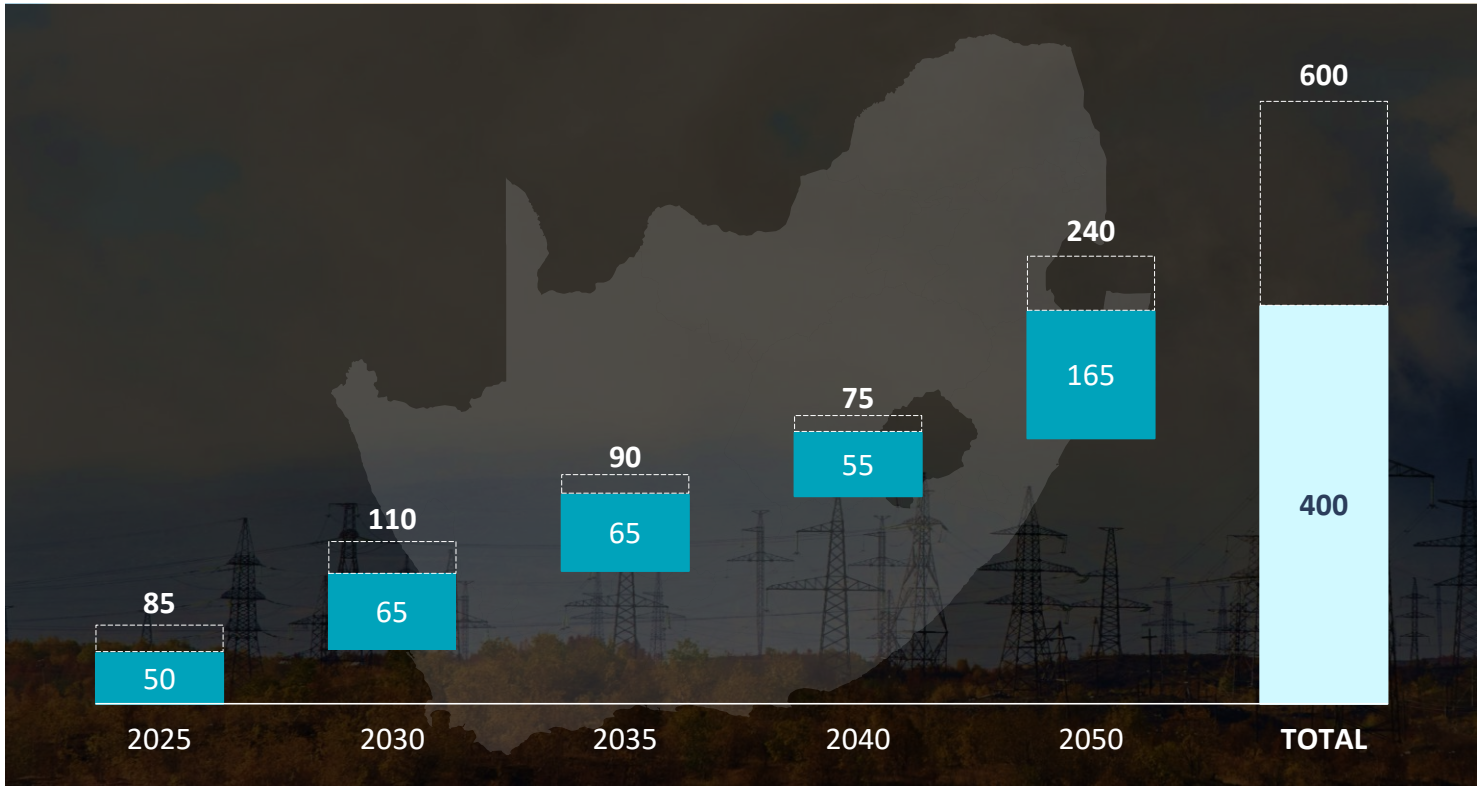
JET IP designated SDZ

Additional proposed SDZ due to high RE skills demand

Adapted from Skills JET Desk, 2026

400-600K gross jobs needed by 2050 across 200+ municipalities; with ~120-200K within the next 5 years

Gross jobs needed based on projects coming online in that year ('000); assume "high" scenario for projects and projections; "base" scenario for localisation of manufacturing jobs and no changes in labour productivity



By 2030, based on current project pipeline

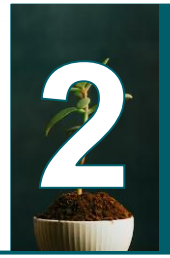
- **44K – 74K** of jobs in construction phase and **9.5K – 16K** in manufacturing and assembly
- High demand for semi- to highly-skilled people **– 21K** artisans, **25K** engineers, and **25K** technicians
- Greatest demand is for low-semi-skilled labourers, at **72K**, especially during the construction phase

Note: All numbers rounded | Source: Solar, Wind and BESS project pipeline from Eskom Renewable Energy Survey and NERSA; Transmission based on TDP 2023-2032; EV based on current car park reported by NAAMSA and CAGRs based on OEM plans; Energy Efficiency (EE) based on current stock of green buildings and industry forecasts; Localisation based on current production in South Africa; 2050 Forecasts based on 2023 Draft IRP (Solar, Wind, BESS, Hydrogen Commercialisation Plan, OEM plans and benchmarks. All sources and assumptions refined with sector working groups

Strategic interventions | JET SEP is focused on supporting these interventions



Support sustainable repair and maintenance of public infrastructure to improve service delivers



Reduce technical, offtake, and financial barriers for MSMEs to increase their hiring capacity in JET fields



Facilitate placement of Energy Efficiency candidates for in-service training post certification



Accelerate skilling for High-Voltage (HV) electricians and grid planning to enable Tx grid expansion



Appliance Repair and Recycling (e-Waste) Programme to promote SMMEs in the Township Economy

Leverage off demand for infrastructure and property maintenance to create large-scale skilling and work integrated learning

- **Target: 10,000 youth skilled and placed** in public infrastructure maintenance in municipalities, provinces and property companies
- **Partners:** DPWI, Munics, SAPOA, TVET Colleges

Provide local MSMEs with enterprise development, upskilling, mentorship and support for market entry

- **Target: 1040 township MSMEs** supported to access market opportunities in the green economy
- **Partners:** IPPs, Corporate ESD, BDS intermediariess, Financial Institutions, TVET Colleges

Expand pool of Energy Performance practitioners to support the increasing demand for Energy Efficiency services

- **Target: ~380 EPC practitioners** across 4 provinces with potential to scale
- **Partners:** IEPA, SANEDI, ESCOs, DPWI, TVET Colleges

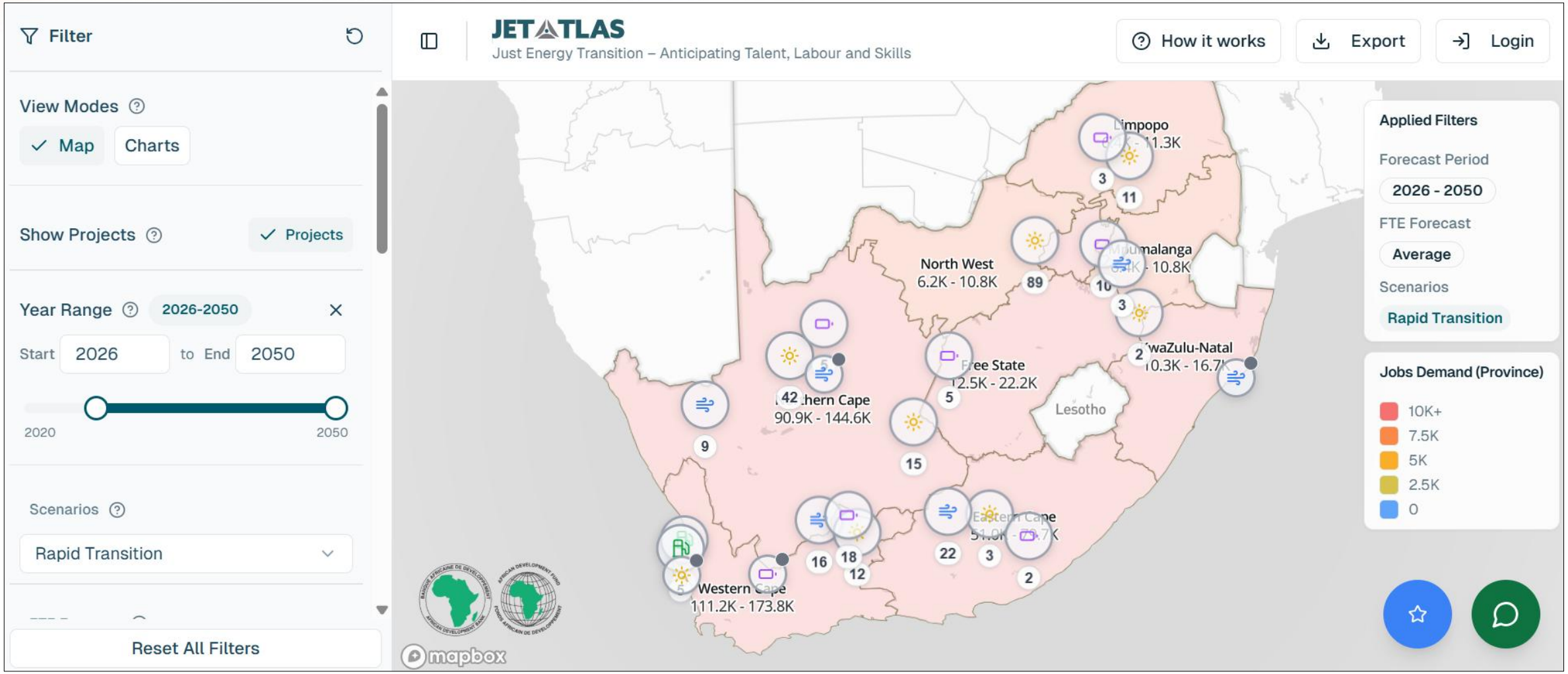
Establish a skilled training taskforce for Transmission Grid rollout

- **Target: 120-200** Eskom HV electricians and technicians upskilled
- **Partners:** Eskom Academy of Learning, NTCSA

To catalyse employment, self-employment and entrepreneurship through the sustainable management of the lifecycle of appliances.

- **Target: ~150** trainees in Appliance Repair and Recycling (e-Waste) through TVET Colleges
- **Partners:** Appliance OEMs, ERA, TVET Colleges, and EWSETA

Building a centralised geospatial tool and database through the JET-ATLAS (Just Energy Transition – Anticipating Talent, Labour and Skills)



Broad industry engagement continues to strengthen the JET SEP evidence base

- **20+** bilateral engagements and multi-stakeholder workshops conducted with IPPs, industry bodies and private sector partners
- Over **60 - 80 hours** of stakeholder engagement
- Engagements spanning developers, industry bodies, government and skills **ecosystem partners**
- **Stakeholder insights** informing the Ecosystems Reports and strengthening the JET ATLAS as an evidence base for Skills Development Zones

Anthem
ENERTRAG
enel
noa
DLO ENERGY RESOURCE GROUP (PTY) LTD
mulilo
ENGIE
RED ROCKET
PELEGREEN ENERGY
JUWI
MAINSTREAM RENEWABLE POWER
SERITI Green
Scatec
EW SETA
SAWEA South African Wind Energy Association
SAPVIA South African Photovoltaic Industry Association

Two flagship knowledge products advancing South Africa's green skills transition

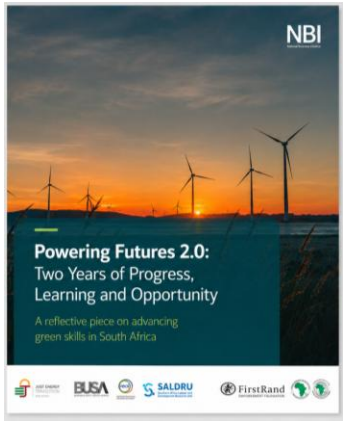
Powering Futures: Lessons from the Transition
Two Years of Progress, Learning & Opportunity

Deliverables

- Two-year reflection on progress, lessons and emerging priorities
- Green skills demand with place-based and analysis of priority occupations and emerging green skills demand
- Consolidated findings and priorities to guide the next phase of green skills work

Next steps

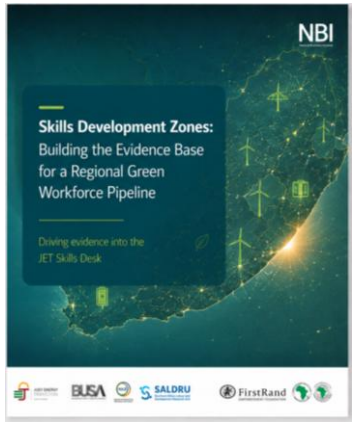
- Strengthen the evidence base and findings through JET Atlas data and analysis
- Use JET Atlas insights to deepen the evidence base and inform future green skills priorities



Skills Development Zones:
Building South Africa's Green Workforce Pipeline

- Skills Development Zone implementation framework – Designing of a place-based Toolkit, framework for provincial SDZ plan
- Mapping of regional opportunities aligned to green industrial growth – EC, NC and MP
- Findings and recommendations for region specific technologies feeding directly into the JET Skills Desk

- Test and refine findings through the Wits REAL validation Workshop
- Consolidate findings into recommendations to inform the SDZ approach and JET Skills Desk- Regional strategy to end in March 2027



South Africa's JET opportunity is expanding, but turning ambition into impact will require stronger delivery, data and coordination

Powering Futures: Lessons from the Transition
Two Years of Progress, Learning & Opportunity

- Progress is real but uneven: rooftop solar has surged in commercial and industrial sectors while utility-scale remains grid-constrained. Demand for skills is not growing.
- Looking deeper into energy value chains, beyond the numbers, to understand where the jobs are likely to emerge
- Data gaps are highlighted as a finding in themselves, feeding directly into JET Atlas to sharpen demand and planning
- Ambition is outpacing delivery capacity; unlocking the transition requires stronger coordination across infrastructure, investment and implementation*

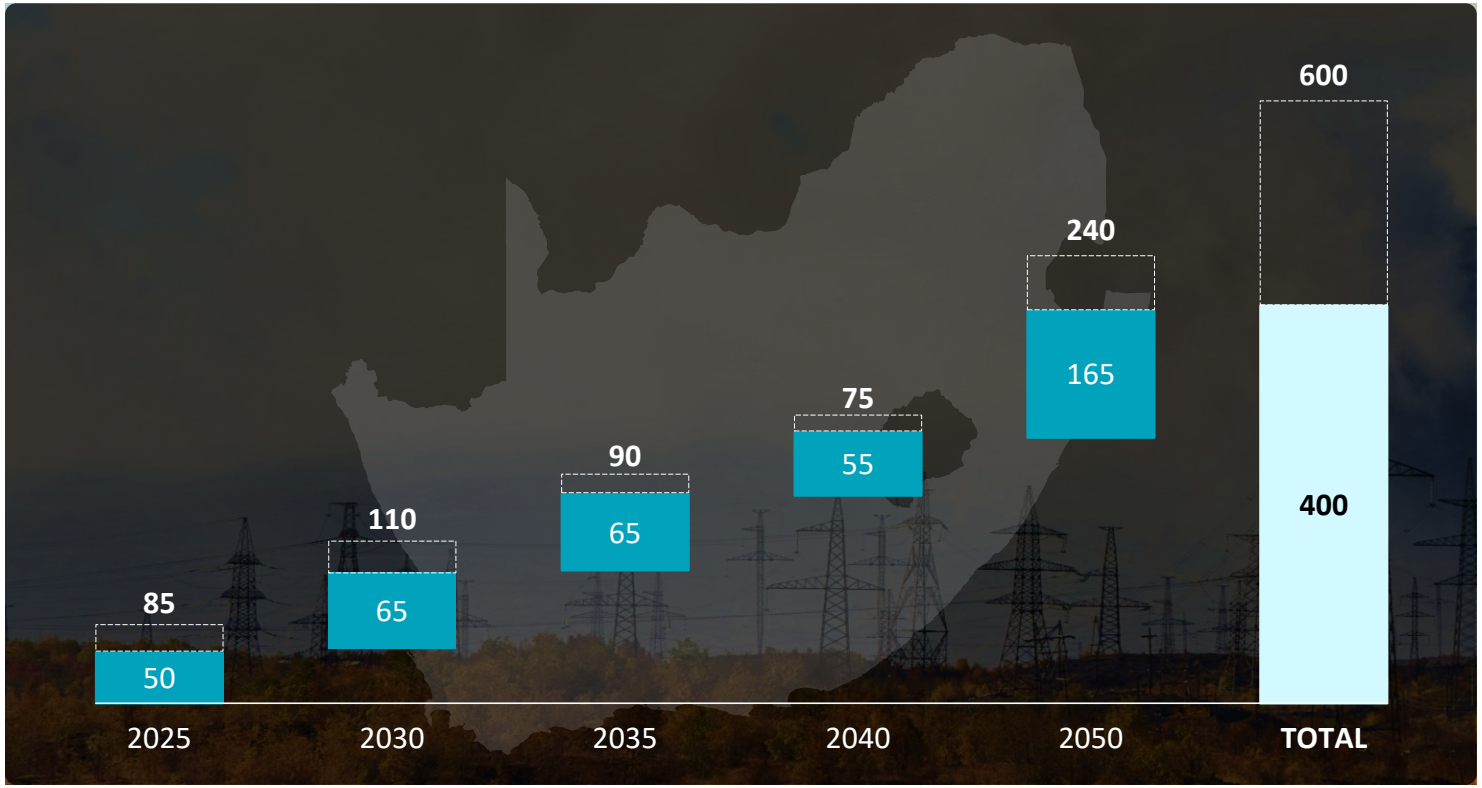
Skills Development Zones:
Building South Africa's Green Workforce Pipeline

- Accelerating implementation by moving from SDZ concept and design to funded, coordinated delivery
- Strengthening the data and evidence ecosystem to enable better planning, coordination and measurement of impact
- Building stronger collaboration and institutional capacity to embed and replicate the SDZ approach
- Targeting resources where need and opportunity are greatest while creating a pathway for sustainable scale

*Both feed the same evidence pipeline: Ambition has outpaced delivery capacity at two levels — national infrastructure (Powering Futures) and provincial consideration and execution (SDZs).

Discussion | What has shifted in the ecosystem and are we on pace to hit these numbers faster or slower than expected?

400-600K gross jobs needed by 2050 across 200+ municipalities, with ~120-200K within the next 5 years



By 2030, based on current project pipeline

- **44K – 74K** of jobs in construction phase and **9.5K – 16K** in manufacturing and assembly
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THANK YOU

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