



Skills Development for a Just Transition

Supporting Youth Employment in a Low-Carbon Economy

General context

South Africa faces two critical challenges: Firstly, the country grapples with one of the highest unemployment rates in the world. In the first quarter of 2025, the official unemployment rate for youth aged 15 to 35 stood at 46.1%. Among the 10.3 million young people aged 15 to 25, 37,1% were not in employment, education, or training (NEET). The situation disproportionately affects women and other disadvantaged groups, deepening social inequality.

Secondly, South Africa is undergoing a major shift from a coal-based energy system to a low-carbon economy. This transition will reshape not only the technological landscape but also the skills and employment demands within the labour market.

Amidst these challenges, the emerging green economy offers a crucial opportunity to address youth unemployment. It is central to South Africa's *Economic Reconstruction and Recovery Plan (ERRP)*, acting as a driver for job creation and

Career Path Development for Employment / South Africa



Project name	Career Path Development for Employment - Skills for a Just Transition
Partner Country	South Africa
Volume	32,7 Mio. EUR (12,5 Mio. EUR of BMZ; 15 Mio. EUR cofinanced by EU, 5.2 Mio EUR cofinanced by SECO)
Duration	June 2022 to August 2028
Implementing Partner	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

income generation. To support this transition, the country established the Presidential Climate Commission (PCC), a formal organ of state. The PCC's *Just Energy Transition Implementation Plan (JET-IP)* includes a dedicated chapter on skills



Students in a classroom at Flavius Mareka TVET college in Sasolburg

development, with priority sectors such as renewable energy, green hydrogen, and electric vehicles.

South Africa also entered the world's first international *Just Energy Transition Partnership (JETP)* - together with Germany, France, the UK, the US, the Netherlands, and Denmark - to accelerate a fair and inclusive transition to a low-carbon economy.

To ensure the transition is just and inclusive, skills development and employment promotion must:

- Improve the effectiveness of Technical and Vocational Education and Training (TVET) systems in aligning skills with the needs of the Just Energy Transition
- Prioritise disadvantaged and affected groups, especially women and persons with disabilities
- Apply a holistic approach for sustainable employment.

Our approach

The Career Path Development for Employment (CPD4E) project applies a holistic and systemic approach based on the German Integrated Approach to Employment Promotion. This multi-dimensional framework addresses both the supply and demand sides of the labour market, integrates active labour market policies, and strengthens the institutional and policy environment for sustainable employment.

At its core, CPD4E brings together the elements of TVET and private sector development, with a special emphasis on the barriers faced by young labour market entrants. The project is closely aligned with South Africa's national and regional priorities,

including the Skills Development Zones and the sectoral focus areas of the JET-IP.

To foster long-term employment and income opportunities, the project operates across four mutually reinforcing intervention areas:

- **Strengthening the enabling environment:** CPD4E provides policy advice and technical support through platforms like the JETP. It builds the capacity of South African stakeholders - particularly public institutions - to coordinate skills ecosystems, develop future-oriented planning tools, and pilot innovative TVET solutions tailored to the Just Energy Transition.
- **Boosting the supply of relevant skills:** The project develops needs-based vocational training programmes and supports lecturer development in key green economy sectors such as renewable energy, energy efficiency, green hydrogen, and electric mobility.
- **Stimulating demand for labour:** By supporting start-ups and Small, Medium, and Micro Enterprises (SMMEs) in low-carbon sectors, CPD4E fosters entrepreneurship and job creation aligned with green growth.
- **Expanding inclusive support services:** The project applies gender-sensitive approaches to help young women overcome barriers to entering the labour market and achieving sustainable livelihoods.



Learners are installing solar panels at a Training Centre in Benoni, Johannesburg

Examples from the field

JET Capacity Building for a Just Energy

Transition: A nationwide capacity-building programme is equipping 140 professionals - 50% of them women - from TVET institutions, government bodies, the private sector, and civil society with the skills and knowledge to support South Africa's Just Energy Transition. Delivered through a combination of in-person workshops and online sessions, the programme covers essential topics such as South Africa's climate commitments, the sectoral implications of the Just Energy Transition, and the strategic role of TVET colleges. Participants are actively developing employment promotion projects in their respective sectors, supported by coaching, mentoring, and expert input.

Installation, Repair and Maintenance (IRM)

Initiative: A prime example of CPD4E's integrated approach is the IRM initiative, implemented in partnership with the National Business Initiative (NBI). The initiative aims to stimulate inclusive job creation in township economies by building local demand for skilled labour, particularly in sectors linked to the green economy. It combines enterprise support with TVET college capacity development, transforming these institutions into entrepreneurial learning hubs that deliver demand-led dual vocational training and effective learner-employer matching.



"The programme itself, it has impacted my life very much. Now I know how to use my hands. I know how to do things on my own. I have a different mindset because the programme also introduced entrepreneurship to us."

Khayanisa Madlol
learner participating in the IRM training programme



"I am a graduate of the Energy Performance Certificate Skills Programme. After completion I have had the opportunity to be placed with my host employer, and I am now the company's EPC practitioner. The programme was a stepping stone in the right direction for my career in the energy industry. It has installed in me a passion for ongoing education in the energy sector."

Reneilwe Mphahlele
former participant in the EPC training programme

Training the next generation of Energy Efficiency

Technicians: In partnership with the Institute of Energy Professionals Africa (IEPA), CPD4E is training students to become qualified Energy Efficiency Technicians (EET) in response to South Africa's Energy Performance Certificate (EPC) regulations. The programme includes practical training on improving energy performance in buildings and systems, alongside the development of assessment tools and a digital platform aligned with the standards of the Quality Council for Trades and Occupations (QCTO) to simplify certification.

Empowering TVET lecturers for the Green

Economy: To strengthen TVET institutions' role in a low-carbon future, CPD4E offers targeted training for lecturers and department heads - with a focus on women empowerment. One initiative trains female academic leaders in mentoring, employability skills, and gender-sensitive teaching.

Partnerships with institutions such as Goldfields TVET college, Motheo TVET college, and the South African Renewable Energy Technology Centre (SARETEC) provide hands-on training in solar, wind, and hydrogen energy technologies.

At Durban University of Technology, 100 female lecturers are undergoing advanced training in solar PV systems and building energy auditing, supported by mentoring to bolster their leadership roles in the renewable energy sector.

Results in Figures

- An Employment and Labour Market Analysis (ELMA) and Learning Pathway Mapping have been developed in collaboration with the University of the Witwatersrand to understand labour demand in green sectors and the gaps in existing pathways for TVET students entering these sectors.
- To date, 1038 young people have been enrolled in targeted training programmes to enhance their employability within the green economy. An additional 3000 participants are expected to benefit from similar training.
- A total of 459 participants, 275 of them female, have so far participated in the IRM initiative, with a further 703 participants expected.
- Seven enterprise hubs are being established within TVET colleges located in Gauteng, Mpumalanga, KwaZulu-Natal, and the Western Cape in collaboration with German Financial Cooperation (KfW).
- A total of 549 SMMEs and start-ups have received support through eight tailored programmes aiming at boosting their competitiveness and enabling job creation in green sectors.
- The MpumaBiz Growth and Support Initiative has trained and guided 450 entrepreneurs, 318 of them women, in the development of their business model. 111 of them, 78 led by women, received further training and mentoring. The initiative targets communities from a region heavily dependent on coal mining and whose labour market will be significantly affected by the transition in the future.



Training participant is testing an electrical installation at Gert Sibande TVET college in Mpumalanga

- A total of 513 in-company trainers and vocational school teachers from TVET colleges, 205 of them female, have been trained in renewable energy technologies, energy efficiency and other subjects relevant to the Just Energy Transition.
- Currently, 1319 young people, 791 of whom are women, are engaged in various support programmes designed to facilitate their successful entry into the labour market, including job placement. 81 TVET graduates, 50 of whom are female, are being trained in energy efficiency. 21 young South Africans, including 13 women, have already completed their training and 6 have been taken on by their employers.
- More than 140 representatives from government, workers unions, communities and business associations participated in two social dialogue workshops in Mpumalanga and Eastern Cape with another workshop planned in the Northern Cape. The aim is to understand the impact of the Just Energy Transition on affected regions and develop pilot projects for re- and upskilling.

Published by	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
Registered offices	Bonn and Eschborn, Germany
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Design/Layout	Alina Loeffler
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The programme is commissioned by the German Federal Ministry for Economic Cooperation and Development (BMZ) and co-funded by the European Union (EU) and the Swiss State Secretariat for Economic Affairs (SECO).

GIZ is responsible for the content of this publication

As at May 2025, Pretoria