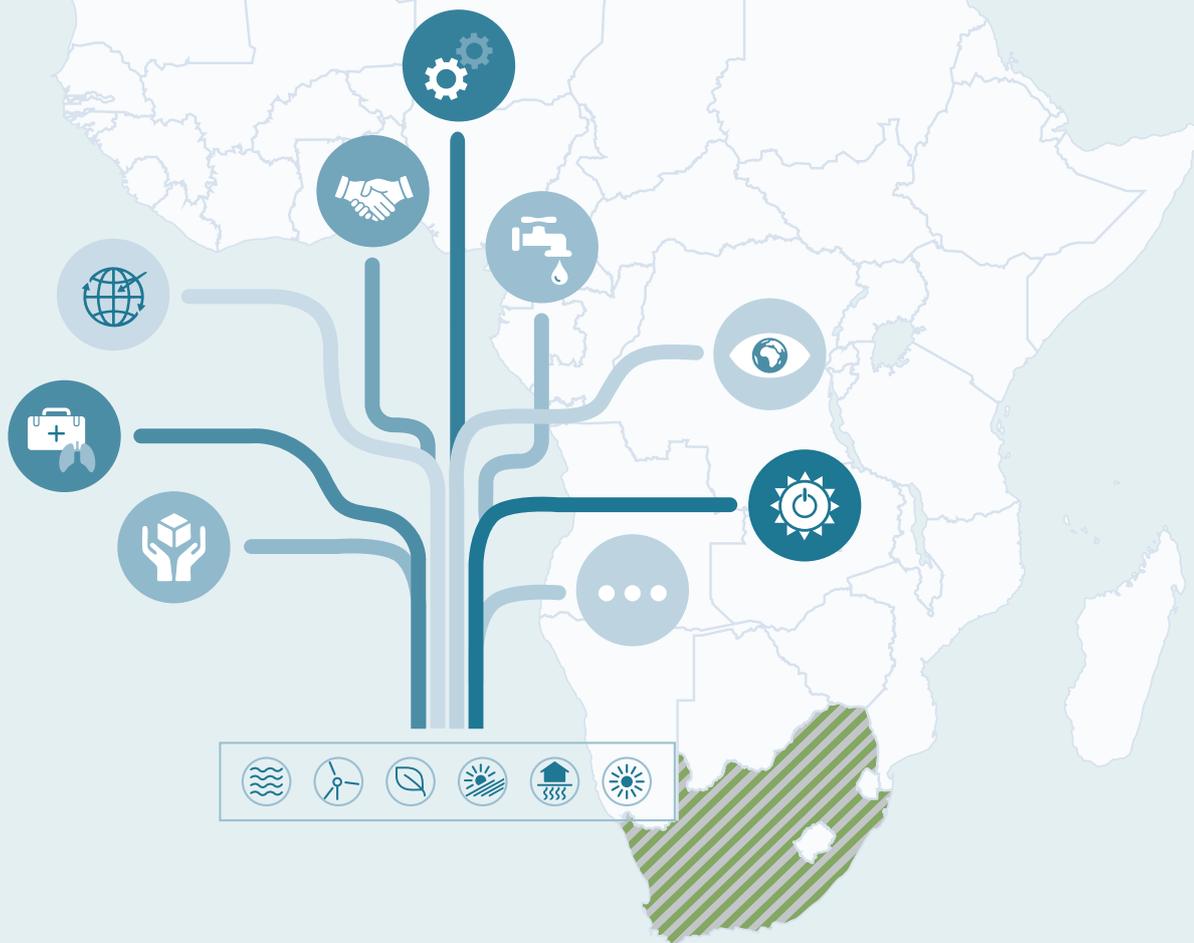

COBENEFITS IMPULSE

Institute for Advanced Sustainability Studies (IASS)
September 2022

Creating an enabling environment to make Mpumalanga a clean energy hub in South Africa





Imprint

This COBENEFITS Report has been realised in the context of the project “Mobilising the Co-Benefits of Climate Change Mitigation through Capacity Building among Public Policy Institutions” (COBENEFITS). This project is part of the International Climate Initiative (IKI). The Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV) supports this initiative on the basis of a decision adopted by the German Bundestag. The COBENEFITS project is coordinated by the Institute for Advanced Sustainability Studies (IASS, lead) in partnership with the Renewables Academy (RENAC), the Independent Institute for Environmental Issues (UfU), International Energy Transition GmbH (IET), and in South Africa the Council for Scientific and Industrial Research (CSIR).

September 2022

Authors: Xolile Msimanga, Ruan Fourie (alumni), Brian Day, Dineo Makate, Mike Levington, Abram Marema, Boitumelo Tlokolo – Council for Scientific and Industrial Research (CSIR), Enertrag, Prime Africa, and Navitas Energy

Editors: David Jacobs, Sebastian Helgenberger, Laura Nagel – IET and IASS

Suggested citation: IASS/IET/CSIR. 2022. Creating an enabling environment to make Mpumalanga a clean energy hub in South Africa. COBENEFITS Impulse. Potsdam/Pretoria. www.cobenefits.info



Supported by:



based on a decision of
the German Bundestag



Creating an enabling environment to make Mpumalanga a clean energy hub in South Africa

This Policy Brief depicts the opportunities for Mpumalanga in becoming a clean energy hub. The jobs that will be lost in the coal sector can be partially replaced by jobs in the renewable energy sector. To fully replace the lost coal sector jobs, industrialisation of the renewable energy value chain is required, while also maximising the associated opportunities in related industries (water, agriculture, tourism).

To make this happen, and to achieve local value-creation opportunities, massive investment in renewable energy capacity is required. The investment should be in combination with initiatives to build associated local industries. In addition, the transition from fossil-based to renewable energy sources presents an opportunity to improve conditions for women working in the energy sector in Mpumalanga.

How can government departments and agencies maximise socio-economic benefits in Mpumalanga and alleviate negative externalities in the province resulting from shifts away from coal?

How can provincial and national stakeholders harness the social and economic co-benefits of building a low-carbon, renewable energy system while facilitating employment opportunities, building a regional industrial sector, and enabling skill development and gender-inclusive career pathways?

This Policy Brief builds on the COBENEFITS Study “From coal to renewables in Mpumalanga: Employment effects, opportunities for local value creation, skills requirements, and gender-inclusiveness” (IASS/IET/CSIR 2022). Building on the study results and the surrounding discussions with both political and knowledge partners, we propose to direct the debate toward the following areas in which policies and regulations could be introduced or enforced to strengthen socio-economic benefits for Mpumalanga and increasing the social performance of renewable energy for communities (see IASS 2021a).



High-impact actions for Mpumalanga

- **High-impact action 1:** Implement policies enabling renewable energy development in Mpumalanga to avoid net job losses.
- **High-impact action 2:** Regional procurement with annual build targets to create sustained employment and continuous transfer of skills.
- **High-impact action 3:** Developing and expanding the transmission grid to facilitate renewable energy investments in Mpumalanga and elsewhere.
- **High-impact action 4:** A coordinated approach for localisation and value creation from renewable energies, to develop a green provincial economy.
- **High-impact action 5:** Diversification of local content to components where South Africa can play on its manufacturing strengths.
- **High-impact action 6:** Dedicate Special Economic Zones (SEZs) for the manufacturing of key components, to push the clean energy industry in the province.
- **High-impact action 7:** Renewable energy skill-development programmes through TVET colleges, to facilitate career opportunities for many.
- **High-impact action 8:** Childcare facilities nearby training centres, to reconcile parenting responsibilities and career development
- **High-impact action 9:** Entrepreneurial development for women, to open access to markets and networks.



Wind and solar will make the largest contributions to job creation in Mpumalanga.
© Dennis Schroeder/NREL



1. Creating employment in Mpumalanga

High-impact action 1: Implement policies enabling renewable energy development in Mpumalanga

Institution to champion the Action	Collaborative bodies to successfully implement the Action	Timeframe of the Action
Department of Minerals and Energy (DMRE)	Department of Forestry, Fisheries & the Environment (DFFE), Department of Trade, Industry, and Competition (dtic), Independent Power Producers Office (IPP Office)	Short term, over the next 1–2 years

Policy interventions are required to increase the share of renewables constructed in Mpumalanga. Without massive deployment of renewables in Mpumalanga, net job losses in the province will be high. The levelized cost of electricity for renewables in Mpumalanga will be slightly higher than in other parts of South Africa due to slightly inferior resource conditions (solar radiation, wind speeds). Consequently, premium payments or dedicated procurement rounds might be required. This could be justified in part by the reduction in externality costs induced by coal-related activities while grasping the benefits of Mpumalanga’s existing grid infrastructure and proximity to load centres.

There should be a concerted effort to understand all the existing enabling policies relevant to the creation of employment opportunities through renewable energy deployment and other clean technology such as green hydrogen. The aim should be to pull together all existing policy and then decide where the gaps may lie, so that whatever new policies are put forward are concise and can address these gaps and are able to further the development of clean technology in the province and broader South Africa more effectively. Existing supportive national policies can also be adapted to the regional and local level. Examples of existing policies that support the development of renewable energy in the province are the National Climate Change Response White Paper, which is a plan to address South Africa’s mitigation and adaptation for climate change in the country. In addition, there has been the establishment of the Renewable Energy Development Zones (REDZ) approved by the Department of Forestry, Fisheries and Environment – the one based in Mpumalanga being in eMalahleni in Mpumalanga, which is one of the local

municipalities that will be hit hardest by the coal transition. Another existing opportunity could be in the Presidential Infrastructure Coordinating Commission (PICC) energy related Strategic Infrastructure Programmes (SIP). The aim of the SIPs is localisation, job creation, promotion of the green economy, R&D, and empowerment which are all in line with the co-benefits of renewable energy deployment. The Mpumalanga Green Economy Cluster has been strategically created to foster the development of a green economy in Mpumalanga and take advantage of the emerging opportunities.

There needs to be enough human capacity development to be able to collate and understand the existing policies that foster or hinder development of RE in South Africa. The outcome of this would be highlighting the existing policies that will help take the just energy transition forward.

The policy framework for the sector needs to include both “push” and “pull” elements. Regional procurement of renewable and clean energy technologies should be considered as a possible “pull” element. This could be introduced as a short-term measure until the renewable energy market in Mpumalanga, including private off-take opportunities, is well established. Establish regional annual procurement rounds consisting of the respective technologies—solar PV, wind, battery storage, and biopower. In addition, annual build targets should be put in place to enable continuity (10+ years) and thereby sustain employment, because once the construction and commissioning of a power plant are completed, the subsequent operational phase provides fewer permanent O&M jobs. Creating a pipeline for

Expected job losses in Mpumalanga’s energy sector under the current policy can be reduced through an ambitious decarbonisation pathway



High-impact action 2: Regional procurement with annual build targets

Institution to champion the Action	Collaborative bodies to successfully implement the Action	Timeframe of the Action
DMRE	dtic, IPP Office	Short term, over the next 2–3 years

capacity development will ensure that the high levels of employment provided by construction can be taken advantage of, as the capacity will be added over the longer term. This will create sustained annual employment in the region through construction companies and allow for the development and transfer of skills over time.

Regional procurement could be implemented as a short-term measure until the private power market is established and matures sufficiently to phase out incentives. Future work could be undertaken to fully understand the cost implications of regional procurement—to gauge the penalty for developing regional renewable energy compared to the advantages

of proximity to load centres (and hence reduced losses between generator and customer) as well as utilising the region’s existing grid infrastructure.

There are legislative considerations for the establishment of the regional procurement rounds which need to be adhered to such as the procurement requirements governed by the Public Finance Management Act (PFMA). The implementation pathways within national government differ from the regional implementation pathways. In addition, national companies operating in South Africa, with operations across the country have their own procurement requirements, and these may conflict with regional procurement processes. This needs to be



considered as the framework for regional procurement is being developed. Bidding requirements may be a hindrance for developers, who may perceive the project development risk as prohibitive as costs are incurred before projects are awarded.

To increase motivation for developing wind projects in Mpumalanga, the Wind Atlas South Africa 3 is putting up wind masts to measure the wind resource availability in the hopes that it will show that there are sufficient wind resources in the province, albeit at

higher altitudes. The outcome of this work will assist in making the business case for building wind capacity in the province. This more tangible technical evidence will prompt IPPs to give the province a chance and develop projects as the perceived risk will be reduced. In addition to this, Eskom has opened land that will be used for RE development in the province, there could be a possibility for IPPs to work with the utility to develop projects on the land, further increasing the business case for development.

High-impact action 3: Grid development is required to facilitate renewable energy in Mpumalanga and elsewhere

Institution to champion the Action	Collaborative bodies to successfully implement the Action	Timeframe of the Action
DMRE, DPE, National Treasury	Eskom, DFFE, IPPs	Medium- to long term, over the next 5-7 years

The Generation Connection Capacity Assessment (GCCA) 2023 Phase 1, released by Eskom in July 2021, shows that certain regions (e.g., Northern Cape) that have more attractive renewable energy sources than Mpumalanga lack any additional transmission grid capacity (Eskom, 2023). IPPs must consider where there is transmission capacity available for connecting their projects, as this is one of the major limiting factors at present. Eskom’s transmission plans do include developing the grid in areas where projects need to be connected, however, this will require significant investment and will take time. This could mean that grid-based auctions may be required to allow for capacity to be built in areas that have a lower resource base but greater transmission capacity, such as Mpumalanga. GCCA 2023 Phase 2 was released on 27 October 2021 and shows that Mpumalanga has (at 6,788 MW) the highest grid connection capacity for IPPs among all of South Africa’s provinces. (Satimburwa et al., 2021).

Grid development is hampered by a lack of institutional capacity at the municipal level, and there are instances where funding is returned as it is not utilised. National government could alleviate this by funding technical assistance to municipalities to assess and implement projects. The National Business Initiative (NBI) is piloting projects in Limpopo province where they are providing technical assistance to municipalities by deploying engineers. Similar projects can be piloted for

Mpumalanga. There are environmental challenges that need to be considered where transmission capacity will be constructed which will present additional costs that are associated with clearing land for development. In addition, land has to be purchased from the local owners.

As the grid is developed to deploy more renewable energy, there needs to be assessments on the suitability of transitioning the grid from the current centralised model to a more decentralised model better suited to the intermittency of renewables. With the increase of distributed generation on the grid, municipalities need to have proper wheeling frameworks and allow for the connection of embedded generation on their networks, which will require the determination of suitable tariffs.

Additional impact actions: Creating employment in Mpumalanga

Mpumalanga’s proximity to export markets such as Mozambique and Swaziland create an export opportunity for renewable energy. Currently, South Africa exports electricity to several southern African countries. Further, several Southern African Development Community (SADC) countries are pursuing renewable energy development – this additional demand for components supports the business case for establishing manufacturing facilities in Mpumalanga.

2. Enabling value creation and localisation in Mpumalanga

High-impact action 4: A coordinated approach to achieve localisation and foster value creation from renewable energies

Institution to champion the Action	Collaborative bodies to successfully implement the Action	Timeframe of the Action
Provincial government	Eskom, DFFE, IPPs, DMRE, Department of Public Enterprises (DPE), Sasol, South African Renewable Energy Masterplan (SAREM)	Short term, over the next 1–2 years and then ongoing

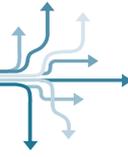
A coherent clean energy industry policy needs to be established for Mpumalanga in order to create job opportunities and a framework for provincial value creation. There needs to be coordination of efforts at all levels—spanning local, provincial, and national tiers of government—with the local and provincial governments driving the initiatives and plans for the province. A coherent strategy is required between the Mpumalanga government, local municipalities, Departments of Mineral Resource & Energy (DMRE), Department of Trade, Industry & Competition (dtic), and Department of Forestry, Fisheries, and Environment (DFFE) on renewable energy value chains to develop the green economy. District-level planning needs to be utilised to move the plans along, which have already been outlined at the national and provincial levels.

Potentially, there should be a roadmap for development, in which each player is assigned a role and milestones to meet, to make the initiatives a reality. This focused approach may also appeal more to international donors. The South African Renewable Energy Master Plan (SAREM) will provide for the development of such a roadmap at the national level. The President also sees a major role for the local level through the District Development Plan, versus just a focus on the national level.

The Just Transition also requires effective and responsive local government. While the national government is to provide the overall framework (and funding to some extent) for the Just Transition, it will be at the local government level where the projects will be implemented. Thus, it is essential to have the local government tier fully on board with plans for their regions, ensuring that they become functional and efficient partners in the implementation process.

Integrated planning and communication are essential to achieve these objectives. The Mpumalanga provincial government has already established the Green Economy Cluster and leveraged support from GreenCape and others in laying the foundations for it. The Green Economy Cluster requires support from all relevant actors and should be sufficiently equipped to meet the demands of the enormous task at hand.

Further collaboration is required between government and other stakeholders – including business, labour, and communities. Such a forum could be modelled on NEDLAC – but focussed on the just transition at a provincial level. The risks of the “do-nothing” scenario are too vast, and the opportunities created even more exhilarating, requiring that significant effort needs to be made to coordinate efforts. Specific alignment is required between such a body, and particularly the



Green Economy Cluster, with the Presidential Climate Commission (PCC). Such integrated planning will enable cascading of the IRP to provincial level, along with specific plans for regional procurement through the Renewable Energy IPP Procurement Programme (REIPPPP) together with the expanding opportunity for private generation projects.

JET initiatives in the province could be consolidated into a shared database, available to all stakeholders. Information sharing of this kind would allow each stakeholder to participate and contribute to the maximum – including government departments and organisations across the full spectrum, as well as business, labour, and communities. The research required can be furthered by the newly established University of Mpumalanga, along with other education and research entities.

Funding mechanisms should be assessed and collaboratively developed. Such funding should include international climate finance, but also focus on cascading levels across multiple focus area. Community ownership funding models are of particular relevance – in order to pull people into tangible ownership participation.

Finally, existing industry activity in the electricity field in Mpumalanga should be harnessed and expanded. Equipment at existing power generation facilities will equally be required by new renewable facilities – including grid connection apparatus, protection equipment, and cabling.

Value creation with renewable energy in Mpumalanga can increase from R118 bn to R340 bn in the next ten years by moving from current policy to an ambitious decarbonisation scenario.



Mpumalanga is the centre of the South African coal industry, accounting for approximately 80% of total coal production.



High-impact action 5: Diversification of local content

Institution to champion the Action	Collaborative bodies to successfully implement the Action	Timeframe of the Action
dtic	DMRE, IPPO, Industry Associations, potentially the National Business Initiative (NBI)	Short-term, over the next 1-2 years

At the same time, local content requirements under REI4P can help to ensure a minimum level of local content, thereby capturing value from the parts of the value chains where South Africa has a competitive advantage. Measures need to be established to ensure increased local content in private project procurement (projects that sell to private off-takers [i.e., energy purchasers], as opposed to procurement through REI4P). The most critical issue is to have consistent, rolling procurement windows confirmed over a 5 – 10-year horizon. This is a pre-requisite for investment certainty to prevail such that capital investment decisions become possible.

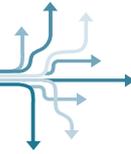
As part of this process, certain global economic realities must be acknowledged: South Africa should de-prioritise those parts of the value chain where it must compete with countries that have cheaper costs of development, or which provide their own local incentives, such that South Africa simply cannot match imported prices. Examples include the manufacture of solar panels and certain components for wind turbines, where countries like China provide imported goods at low prices that make it impossible to create

economically sustainable local manufacturing sectors. There should be a stipulation of local content across all components in the value chain—in order to diversify focus from just large components to include other, smaller components in which South Africa has manufacturing strengths. As seen in the analysis, manufacturing provides high value compared to other parts of the value chain, thus localisation of manufacturing in Mpumalanga will be important for increasing value for investors, in addition to job creation in construction and O&M.

Local content opportunities in private power projects remain undefined, and industry alignment and collaboration are required. Such collaboration could result in an industry charter, but the starting point should be a reporting system that creates transparency and enables internal targets to be attained. Two examples were mentioned that could be followed. Firstly, the Energy Efficiency Accord of 2005, and secondly the Carbon Disclosure Project (CDP) initiated soon thereafter. Both initiatives were facilitated by the

High-impact action 6: Dedicated Special Economic Zones to manufacture key components

Institution to champion the Action	Collaborative bodies to successfully implement the Action	Timeframe of the Action
dtic	National Treasury, DMRE, IPP Office	Short-term, over the next 1-2 years



As indicated above, the policy framework for the sector needs to include both “push” and “pull” elements. To push the provincial clean energy industry, Special Economic Zones (SEZ) can be established. The focus should be on establishing SEZs that specifically provide an attractive environment for companies that manufacture the majority of plant components. These include transformers, switchgear, and cabling, etc., which together account for 60–65% of the value of a typical plant, some of which South Africa already manufactures on a competitive basis. To understand which elements of the value chain should be targeted, it is imperative to have the detailed analysis of components required as mentioned above.

The Nkomazi SEZ in Mpumalanga already provides incentives for the green economy and can ensure that these companies are prioritised. Creating incentives for existing manufacturers to expand their operations or switch to related products would show the fastest results.

The eMalahleni Renewable Energy Development Zone (REDZ) would be complimented by the existence of such SEZs, as it would have a dedicated supply of components for renewable energy development at attractive prices. The manufacture of smaller

components makes more sense for Mpumalanga versus larger (exportable) components for which manufacturers would prefer coastal locations to take advantage of access to global markets.

Virtual SEZs were submitted to the team as a radical idea – removing strict geographical boundaries for such areas, while ensuring inclusivity of existing industries as well as those typically excluded.

Entrepreneurial skills in townships and other previously disadvantaged communities create an opportunity to make a substantial contribution to such industrialisation, and linkages with these areas needs to be created.

Additional impact actions: Enabling value creation and localization in Mpumalanga

Financing requirements are a cross-cutting aspect that is crucial for all elements but not specifically addressed in any. Access to low-cost financing will be vital to harnessing the available opportunities. Creating access will require enabling financial policies and incentives – all the way to international climate funding – to include those who would otherwise not access such capital.



With an ambitious decarbonisation scenario, up to 72,000 people could be employed in construction and O&M in Mpumalanga by 2030. © Shutterstock/sirtravelalot

3. Developing skills and assuring gender-inclusiveness

High-impact action 7: Renewable energy skill-development programmes through TVET colleges

Institution to champion the Action	Collaborative bodies to successfully implement the Action	Timeframe of the Action
Department of Higher Education & Training	Department of Science & Innovation; Eskom, SARETEC, EWSETA	Short term, over the next 5 years
	Private sectors (Manufacturing Circle/BUSA)	

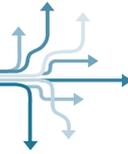
The renewable energy sector requires variety of technical skill levels, with some level of training specific to each technology. The data shows that only 11% of the Mpumalanga population have post-matric qualification; however, 65% of the population have secondary qualification, and it is believed that this group can benefit from a career path through TVET colleges, for which Grade 9 is the minimum admission requirement. The province has three public TVET colleges that provide civil- and electrical engineering-related courses, and trade-related courses (in engineering and construction industries). The TVET colleges in the province provide the following programmes in trade related fields:

- National Certificate Vocational (NCV): The period of this programme is 3 years, with minimum admission requirement being Grade 9. The qualification level is NQF4, which is equivalent to matric level. The programme is 50% workshop/practical based.
- Occupational programmes (skills academy): These are short programmes, and the period is between 6–12 months. The qualification level is also NQF4.

The colleges also offer National certificates in trade related fields and engineering, although the admission requirements are Grade 12 and the qualification level is NQF 6, which is equivalent to National Diploma.

The courses provided by TVET Colleges therefore provide skills relevant to careers within the renewable energy sector, especially during the manufacturing and construction phases of projects.

Nevertheless, more specialised courses are needed, focused on roles in the renewable energy sector (e.g., wind turbine technicians). Such courses are provided by the South African Renewable Energy Technology Centre (SARETEC) based in the Western Cape province, and it is believed that collaboration between this training facility and TVET colleges is crucial for expanding these types of career opportunities to more people. Collaboration on developing training courses should include the Department of Higher Education and Training (DHET), OEMs, EPC contractors, and district and local municipalities, and should be implemented in two phases. In Phase 1, courses to be developed should resemble those offered by SARETEC, although admission will require a higher level of education, particularly with a university degree. Phase 2 should focus on establishing skills-development programmes and should target population groups with lower educational attainment (i.e., Grades 9–12). Phase 2 will train workers in assisting engineers and trade workers; as these workers gain experience and skills, they could enrol in the types of courses described in Phase 1.



Coal workers typically have lower formal educational attainment compared to Eskom workers, however they possess practical on-the-job training skills, thereby necessitating appropriate assessment of their abilities via Prior Learning Recognition (PLR). PLR is a process through which non-formal learning is measured for recognition across different contexts and certified

against the requirements for advancement in the formal education and training system. This process will be powerful in providing these workers with formal educational qualifications (e.g., in reskilling for roles in the renewable energy sector), and should be conducted through collaboration with DMRE, relevant SETAs (i.e., MQA, EWSETA, and MerSETA) and DHET.

High-impact action 8: Childcare facilities nearby training centres

Institution to champion the Action	Collaborative bodies to successfully implement the Action	Timeframe of the Action
Department of Basic Education (DBE)	Department of Higher Education and Training (DHET), Department of Small Business Development, Private sector	Short term, over the next 5 years

According to the IDPs of the three district municipalities, the province has a high teenage pregnancy rate, which presents challenges for efforts to bridge the skills gap between males and females. StatsSA 2017 shows that females without minor children reported higher labour participation rates than those with minor children (i.e., 48.3% of women with no minor children employed, compared to 40.1% of women with minor children, for women with sub-matric qualification). It is evident that childcare responsibilities are a limiting factor for career development, particularly among women. It is therefore crucial to provide childcare facilities near training centres.

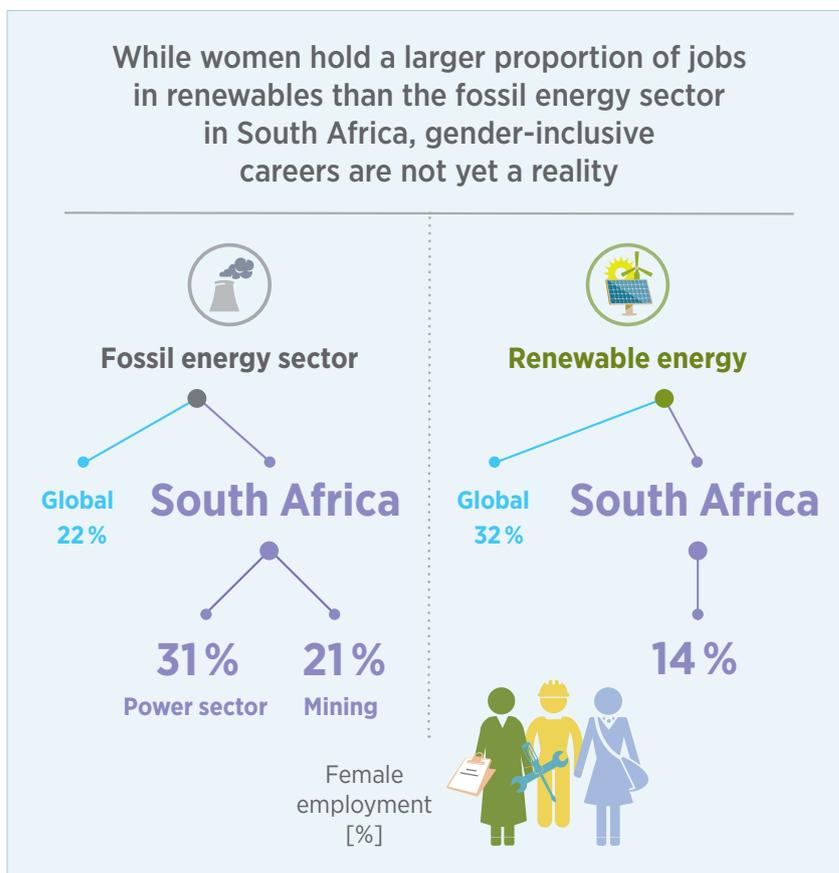
There should be partnership between existing childcare facilities within the region and TVET colleges. This will

encourage more childcare facilities to be registered with DBE and will also create small businesses within the area. The childcare facilities will be registered on TVET colleges database, and students will be asked if they need these facilities when they apply. This will enable students to select the facility that is most convenient.

TVET colleges offer early childhood development courses, and it is suggested that the students could do their training at those facilities. This will result in students getting experience and facilities, as a result, becoming more affordable to students. Availability of funds could be explored between DBE, NSFAS and Department of Small Business Development. Please note that childcare facilities that are register with DBE are already being subsidised.

High-impact action 9: Entrepreneurial development for women

Institution to champion the Action	Collaborative bodies to successfully implement the Action	Timeframe of the Action
Mpumalanga DEDT, EWSETA	SAWEA, SAPVIA SALGA/municipal chapters, Gender CC – Women for Climate Justice Southern Africa; Local Municipalities, CSIR Energy Industry Support Program (EISP), IPP Office, DHET	Short term, over the next 5 years



Data sources:
IRENA 2019, IASS 2021c,
ESKOM 2021, MQA 2021

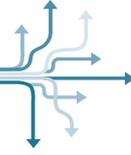
According to expert interviews and the literature review, there is a lack of entrepreneurial skills development, especially in the small business sector. This space is still male-dominated, meaning that women have less access to markets and networks. Procurement processes for developing clean technologies must therefore include gender diversity requirements. REIPPPP has been designed to enhance the participation of women through preferential procurement commitments and obligations with the DMRE. Projects have an obligation to spend a minimum of 0.6% of revenue on enterprise development (ED) and 1.5% of revenue on socio-economic development (SED) activities, exclusively in communities located within 50 km of the project site. Efforts should be pursued to increase the participation of female entrepreneurs in the RE sector, especially in connection with larger procurement processes. It is believed that females could capitalise on existing schemes such as stokvel investments. This type of social investment has been extremely successful in the country, and it could potentially create more SMMEs with female shareholders.

TVET colleges have entrepreneurship hubs known as Centres for Entrepreneurship Rapid Incubator (CFERI). CFERIs, which are funded and monitored by

SEDA and Department of Small Business Development, are developed to promote and develop young entrepreneurs. They are also developed in order to have self-sustainable entrepreneurs (start and grow activities) who can make a contribution to the economy and become fully-fledged and legally complying SMMEs. It is therefore suggested that these hubs be utilised by developing consortium of SMMEs who can partake in RE related businesses.

Large procurement processes in RE projects require experienced project managers, and an analysis is needed to assess the readiness of current SMME project managers who are interested in RE-related business within the region in order to mitigate any gaps through training.

Training female-owned SMMES would require an integrated effort, in the same way as IPP Office and other organisations already provide workshops to assist those businesses on how to partake in IPP bid windows. Having entrepreneurship hubs and female-owned SMMEs with access to large funds will create an enabling environment in which large IPP Office procurement processes are tackled by multiple smaller companies rather than a single big contractor.



References and recommended reading:

IASS (2021a): Green Employment for Women. Towards gender-inclusive renewable energy careers. COBENEFITS Impulse. Potsdam. www.cobenefits.info

IASS (2021b): The Social Performance Approach. Fostering community well-being through energy-sector investments. IASS Discussion Paper. June 2021. Potsdam.

IASS/IET/CSIR (2022): From coal to renewables in Mpumalanga: Employment effects, opportunities for local value creation, skills requirements, and gender-inclusiveness. Assessing the co-benefits of decarbonising South Africa's power sector. COBENEFITS Executive Report. Potsdam/Pretoria. www.cobenefits.info



The energy transition in Mpumalanga is also a chance to employ more women, who are currently underrepresented in the power sector. © Shutterstock/AS photostudio

COBENEFITS

Mobilising the Co-Benefits of Climate Change Mitigation through Capacity Building among Public Policy Institutions

COBENEFITS works with national authorities and expert organisations in countries across the globe such as Germany, India, Kenya, Mexico, South Africa, Vietnam, and Turkey to quantify and unlock the social and economic co-benefits of early climate action in these countries. With a focus on renewable energy COBENEFITS supports efforts for enhanced NDCs with the ambition to deliver on the Paris Agreement and the 2030 Agenda on Sustainable Development (SDGs). COBENEFITS facilitates capacity building and cross-country learning among policymakers, expert organisations, CSOs and the private sector through a set of connected measures: Country-specific socio-economic assessments, an international COBENEFITS training programme, policy dialogues and briefings on enabling political environments and overcoming barriers to maximise co-benefits of renewable energy and climate action for people, communities and businesses.

COBENEFITS Impulse September 2022

Contact

Sebastian Helgenberger, Institute for Advanced Sustainability Studies (IASS)
sebastian.helgenberger@iass-potsdam.de

DOI: 10.48481/iass/2022.037

www.cobenefits.info

 @IKI_COBENEFITS



Supported by:



based on a decision of
the German Bundestag

