



## Just Energy Transition (JET) Fact Sheet #003

*Re-invigorating, rejuvenating and redefining Eskom's destiny as we lead the energy transition into the future*

**Welcome to the 3<sup>rd</sup> edition of our JET Change Management Fact Sheet. In this edition we focus on, Eskom's signed partnership agreement for the development of a new training facility at Komati, Eskom and CPUT signing a MoA, Dutch Agri-tech contribution to Eskom's repurposing efforts, and the Socioeconomic Impact Assessment Study for shutting down and repurposing Eskom's coal-fired power stations.**

**Eskom has signed a partnership agreement for the development of a new training facility at Komati P/S**



Photo by Creamer Media's Darren Parker

*GEAPP executive director Joseph Nganga and CPUT vice-chancellor Professor Chris Nhlapo*

Eskom, the South African Renewable Energy Technology Centre (Saretec) – based at the Cape Peninsula University of Technology (CPUT) – and the Global Energy Alliance for People and Planet (GEAPP) have signed a partnership agreement on 23 September 2022 for the development of a new training facility to be established at the soon-to-be-decommissioned Komati Power Station.

The plans for Komati, to accommodate more than 200 full-time Eskom employees at the plant, include a manufacturing plant for mobile, renewable energy “micro-grids” and the generation of renewable energy, including the launch of a training facility where workers will be “reskilled” for employment in the renewable energy sector.

In October, the 1 000MW Komati Power Station will become the first of Eskom's old coal-fired fleet to shut down for decommissioning.

The “Just Energy Transition” plans will be tested for the first time at Komati, where Eskom will be launching several projects to see generation and workforce activity continue at the power station after its imminent shutdown date. This is the second time in Komati's history that it will be shut down. After coming online for the first time in 1961, the power station was completely “mothballed” in the early 1990s because SA had too much generation capacity at the time, said Komati GM Jurie Pieterse. However, between 2008 and 2011 the station was brought online again.



Photo by: Julia Evans

*General Manager of Komati Power Station Jurie Pieterse on a site tour to show stakeholders how old classrooms will be used for teaching when Komati is repurposed into a renewable energy training centre.*



Photo by: Julia Evans

*Joseph Nganga, executive director for Africa of GEAPP, with general manager of Eskom's Just Energy Transition Office Mandy Rambharos, in front of a containerised solar micro grid on display at Komati Power Station*





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### *Eskom and CPUT signing a MoA to establish a renewable energy training centre at Komati Power Station,*



*Eskom's Group Chief Executive André de Ruyter and Cape Peninsula University of Technology (CPUT) Vice Chancellor Chris Nhlapo signed a Memorandum of Agreement (MoA)*



The Memorandum of Agreement (MOA) was signed by Eskom CEO André De Ruyter and CPUT Vice-Chancellor Professor Chris Nhlapo at the SA Renewable Energy Technology Centre (SARETEC) on Monday.

The MoA will allow for the upskilling and reskilling of workers and communities dependent on the coal-value chain in Mpumalanga and surrounds, using accredited courses and programmes from CPUT's SARETEC, explained Nhlapo.

- Eskom is partnering with CPUT in the reskilling of workers at Komati and surrounds dependent on the coal-value chain.
- The reskilling project is part of a range of initiatives to repurpose the power station to ensure a just transition.
- Komati's last unit is to be decommissioned in September.
- The Facility will be managed by Eskom's Academy of Learning (EAL)

#### **Eskom's Group Chief Executive Mr André de Ruyter stated at the signing of the MoA:**

"We had two options. On the one hand we could put a padlock on the gate and walk away and leave a community that has served Eskom and South Africa well for decades in the lurch. Or we could make an alternative plan and make sure that we provide a new future and new horizon for the people of Komati and the surrounding area."



*Eskom Group Chief Executive André de Ruyter, Group Executive HR Elsie Pule, Just Energy Transition GM Mandy Rambharos, EAL GM Beke Moloi*



Kindly click on the link below to watch the SABC News clip aired on "Eskom and CPUT signing a multi-million rand deal to train workers".

**SABC NEWS** <https://www.youtube.com/watch?v=g4URyZj-RP8>







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### *Eskom partners with the Netherlands Embassy to repurpose and repower the Grootvlei Power Station*

On 27 July 2022, the Embassy of the Kingdom of the Netherlands and Eskom, South Africa, signed a Letter of Intent to formalise their partnership on Just Energy Transition Projects. The projects will be designed to repurpose and repower the Grootvlei Power Station, which is destined to be shut down. The main aim of these projects will be to ensure that the Just Energy Transition contributes to inclusive economic development at the power station and in the surrounding communities.

*Niek Bosmans,  
Agricultural Counsellor at  
the Embassy of the  
Kingdom of the  
Netherlands and Mandy  
Rambharos, General  
Manager of Just Energy  
Transition from Eskom  
co-signing the Letter of  
Intent as witnesses*



*Han Peters, Ambassador to South  
Africa for the Embassy of the Kingdom  
of the Netherlands and Mr André de  
Ruyter, CEO of Eskom, after the signing  
of the Letter of Intent*



Eskom's Just Energy Transition office places equal importance on the "transition to lower carbon technologies", and the ability to do so in a manner that is "just". Eskom is, therefore, committed to ensuring that the socioeconomic and environmental benefits of transitioning are realised, that employees and communities are involved in finding the solutions, and that the transition not only does not exacerbate the already high unemployment rate in our country but also results in a net increase in sustainable jobs. We are keen to assess all options for repurposing our sites, where these options will ensure greater community involvement, innovative revenue creation, and upliftment of the socioeconomic status of these areas. The Kingdom of the Netherlands is committed to combatting climate change and supports the Just Energy Transition in South Africa. This transition should accelerate a green and inclusive economy without leaving anyone behind.

In keeping with this drive for alternative employment and economic development opportunities from both parties, the Embassy of the Kingdom of the Netherlands embarked in 2021 on grant-funded agriculture-related studies at the Grootvlei Power Station, based on the vast experience of the Netherlands in this regard. The Grootvlei Power station was selected for its site repurposing potential, strategic location (proximity to the industrial hub, Gauteng) and accessibility (along the N3 highway).





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### *Eskom and the Netherlands sign agreement*



*Eskom & Embassy staff celebrating the signing of the Letter of Intent*

The Netherlands Embassy had drawn on the expertise of the Territorial Development Team which is part of the Netherlands Enterprise Agency. Given their expertise with integrated territorial development approaches in the Netherlands and abroad, this would greatly benefit Eskom. By supporting a participative, multi-stakeholder process to develop transition pathways and create new, green employment opportunities, the Just Energy Transition at Grootvlei can become an inspiration, and also a blueprint for other power stations in transition.

The aim of the study was to determine the most applicable climate-smart, labour-intensive farming and agriculture-related repurposing opportunities for the Grootvlei Power Station, in order to create a positive social, economic, and environmental impact on the surrounding area, while ensuring the local communities' involvement and empowerment. These repurposing opportunities will be employed in addition to the renewable energy repowering options that are currently being assessed for the site.

These activities are complementary and fulfil the aim of Eskom's JET Strategy to meet the two goals of decarbonisation and socioeconomic growth. The collaboration so far has resulted in a Geographical Information Systems study of the Grootvlei area, an assessment of the repurposing options, a preliminary situational analysis of the property by horticultural experts, and soil and water quality analyses by specialists.

Signing the letter of intent guided the next phase of the collaboration between Eskom and the Netherlands Embassy. This next phase will provide guidance for all future work, and also for the collaboration among Eskom, the Netherlands, and the communities to determine tangible outcomes. In the next phase of the collaboration, Eskom and the Netherlands Embassy, supported by the Netherlands Enterprise Agency, intend to work along two tracks: a) pre-feasibility study for climate-smart, labour-intensive agricultural/horticulture development at the Grootvlei Power Station; and b) an integrated and sustainable approach to repurposing the Grootvlei Power Station.



*Eskom JET Snr Advisor, Noella Molefe & the Embassy of the Kingdom of the Netherlands Agricultural Advisor, Bernard Likalimba*







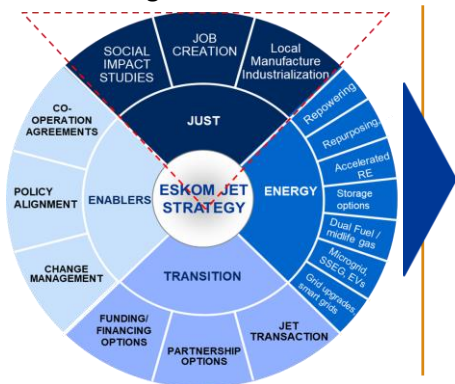
# Just Energy Transition (JET) Fact Sheet #003

*Re-invigorating, rejuvenating and redefining Eskom's destiny as we lead the energy transition into the future*

*The Socioeconomic Impact Assessment Study for shutting down and repurposing Eskom's coal-fired power stations to create a basis for sustainable livelihoods*

## Eskom's Just Energy Transition Strategy

The JET will focus on elements in four main areas over the next five years to drive the goals of net zero emissions and socioeconomic growth.



- Just:** Doing better for people and the planet, Growing localisation and industrialisation
- Energy:** Cleaner, sustainable electricity provision
- Transition:** Transformational change of business models, attracting green financing
- Enablers:** Collaboration across constituencies



Social Impact Process

## Context of the Socioeconomic Impact Assessment Study

In support of JET, Eskom is undertaking socioeconomic impact assessment studies into shutting down certain coal-fired power stations. This shutdown is the biggest transition that Eskom will undertake and will in turn affect the employees and communities created as a by-product from the operation of these stations.

Social Impact Assessment includes the processes of analysing, monitoring, and managing the intended and unintended social consequences, both positive and negative, of planned interventions (policies, programmes, plans, projects) and any social change processes caused by these interventions. Its primary purpose is to bring about a more sustainable and equitable biophysical and human environment advocated by the International Association for Impact Assessment (IAIA).

## The socioeconomic impacts covered in the study will be used for repurposing and repowering Eskom's older power stations and relate to People, the Economy & Environment

- Quality of life
- Out-migration
- Living conditions
- Family ties
- Access to services
- Social ills
- Income levels

- Employment
- Skills
- Community sustainability
- Economic sustainability
- Business impact
- Government revenue
- Property

- Land uses
- Quality of the environment
- Access to natural resources
- Create a basis for continued, sustainable livelihoods in the affected regions and support a just energy transition in line with applicable legislative framework, policies and programmes





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## Policy context for shutting down the power stations

Komati PS	Grootvlei PS	Hendrina PS
Units: 4 (beginning 2020)	Units: 3 (beginning 2020)	Units: 6 (beginning 2020)
<b>MW</b> Capacity: 450 MW	<b>MW</b> Capacity: 570 MW	<b>MW</b> Capacity: 1 135 MW



### The socioeconomic study has the following aims:

- Understand the impacts of the shutdown.
- Consult and engage with employees, affected communities, and stakeholders to ensure they receive the necessary information and contribute to identifying possible solutions.
- Mitigate the negative economic and societal impacts of the shutdown.
- Create a basis for continued, sustainable livelihoods for the affected communities, and in local and district municipalities to support a just energy transition.



Kindly [click here](#) to view the Eskom Sustainability Webinar on the *Socioeconomic Impact Study For The Shutdown And Repurposing Of Eskom Coal-fired Power Stations* held earlier this year.



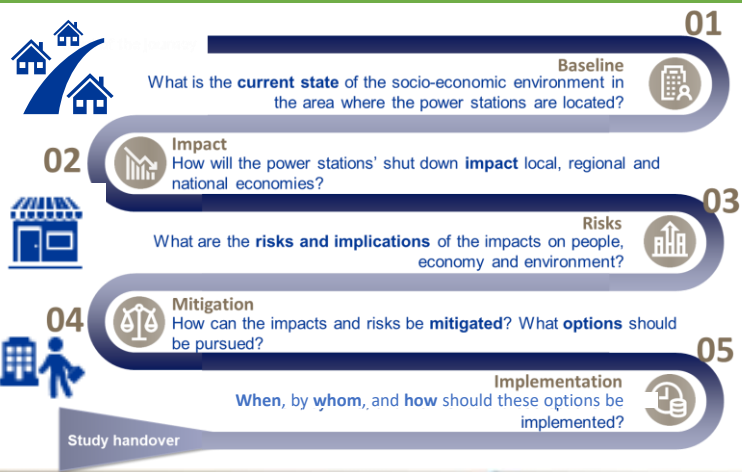
## Generation has prepared a shutdown plan as part of the Road Map to 2035

IRP 2019: By 2030, Eskom will decommission 10 500 Megawatts of electricity from coal , and compile a revised plant end-of-design life plan for Komati, Hendrina and Grootvlei.

Generation's shutdown plan is part of the Road Map to 2035. This shutdown means that "power station units are available to operate but are not electrically connected to the transmission system for capacity or economic reasons for a period greater than twelve (12) months". This is not decommissioning. Decommissioning means: "Dismantle all equipment, demolish all buildings and structures, clean up the entire site, including wet and dry disposal areas, coal yards – all as per standards." Repowering means using an alternative power source to generate electricity at the power station, e.g. solar, wind, biomass. Repurposing means using the power station for alternative purposes, such as agriculture and manufacturing.



## Study objectives and approach







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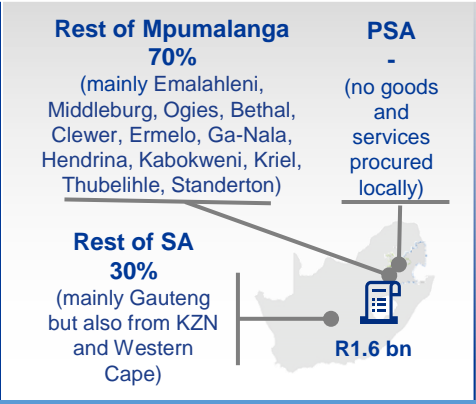
## Komati Power Station repowering and repurposing

- In 2021 there were 662 employees at Komati. The repurposing option will provide the necessary re-skilling to create employment opportunities for the existing power station employees.
- A total of 1 083 – 1 286 construction jobs and between 285 – 445 operational jobs will be created by Solar Photovoltaic (PV), and by Wind and Battery Energy System Storage (BESS).
- Eskom is also establishing a state-of-the-art renewables training facility at the Komati Power Station.

## Direct contribution of Komati Power Station procurement effects and services



### Where are goods and services procured (excluding labour)? 2019/20



### Insights & Economic Contribution

- The power station's operations:**
- Expenditure ranges around R1,6 billion annually
  - Over the years, Eskom has promoted spending in Mpumalanga through procurement policy
  - There are 1 600 coal truck deliveries per day
  - Coal contracts will be transferred to other power stations
  - Business support interventions are key
- The power station contributes to the following:**
- Gross Domestic Product (GDP)
  - Government taxes
  - Employment
  - Direct, indirect, and induced effects

### What services are provided by the Power Station directly and to whom?

- The Komati Power Station supplies water to the following:
- Komati village: 45 ML/month;
  - Lakama Guesthouse (Komati Village): 1,5 ML/month;
  - Koorfontein mine: 8 ML/month; and in addition
- Owns 2 properties in Komati village;
  - A total 640 houses.

## Komati Mitigation Plan

Repurposing initiatives at the Komati Power Station that will create jobs and opportunities include Solar, Photovoltaic (PV), Battery Energy System Storage (BESS), a containerised microgrid assembly plant, aquaponics, an Ash geopolymer plant, and a training centre for renewable energy.

Support given to local suppliers includes Small, Medium and Micro Enterprises (SMME), and community development projects on health, education, and food security. Other projects to support the local community and rejuvenate the local economy are being conducted by the Steve Tshwete Local Municipality, the Nkangala District Municipality, and neighbouring mines.

## Independent assessments of the repowering and repurposing potential at the Komati Power Station



- Repowering Initiatives:**
- Solar (~100 MWp) + 50 MWp
  - Battery Storage (150 MW = 600 MWh)
  - Gas (possible 500 MW (not cost-competitive at this stage)
  - Wind (50 MW), Synchronous condenser SCO
- 2. Repurposing Initiatives:**
- Microgrid Assembly plant
  - Agrivoltaics (500 kWp)
  - Ash Geopolymer Manufacturing

- 3. SEIM Initiatives to support 1 & 2:**
- Enabling, Empowering, Reskilling, and Upskilling
  - Microgrid Assembly, Farming (Aquaponics, Raised beds)
  - Enterprise Development
  - Small, Medium & Micro Enterprises (SMME): Incubator and Digital Hubs





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## Eskom Rising Live Event focusing on the Just Energy Transition (JET) Programme

The Eskom Rising Live Event on JET was held on 31 May 2022. The Eskom Group Chief Executive, André de Ruyter, gave an overview of the JET programme, and Mandy Rambharos, General Manager: Just Energy Transition, provided further details on the current and future projects that are being rolled out as part of the JET Strategy.



An interesting video was shared within this session. If you missed it, kindly click on the link below to access this video [click here](#)

**Video Clip** “Voices from under a dark cloud: Towards a Just Transition in the coalfields of South Africa”

If you missed this live event, kindly [click here](#) to watch the Eskom Rising Live Event focusing on the Just Energy Transition (JET) Programme.



## Abbreviations

Abbreviation	Definition
JET	Just Energy Transition
IRP	Integrated Resource Plan
PV	Photovoltaic
NDC	Nationally Determined Contributions
RSA	Republic of South Africa
MW	Megawatts
EPC	Engineering, procurement, and construction
USD	United States Dollar
UK	United Kingdom
US	United States
IPP	Independent Power Producers

Abbreviation	Definition
CSP	Concentrating Solar Power
IAIA	International Association for Impact Assessment
COP26	Conference of the Parties – “26th COP”
BESS	Battery Energy System Storage
RVO	Rijksdienst Voor Ondernemend
CCGT	Combined Cycle Gas Turbine
FTE	Fixed Term Employee
SMME	Small, Medium and Micro Enterprises
KZN	KwaZulu-Natal
GDP	Gross Domestic Product



## Change Management & Culture programme







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### Questions and Answers

Questions	Answers
<b>Eskom has the skills for coal, or at least that is what the facts state. Does Eskom have the skills for JET? How will we train/reskill employees to adapt to this change?</b>	Eskom has renewable skills in the current clean energy power plants—hydro plants and the wind farm in the Western Cape. There will be opportunities for Eskom employees to move into renewables through training/upskilling. Eskom's Academy of Learning (EAL) is working on various partnerships to establish renewable training centres, and the first centre will be opened at Komati. Existing training staff will also be reskilled/upskilled to ensure that they can train others. Technical staff will be upskilled or reskilled to fit the new positions/opportunities.
<b>A lot of people at the Coal 3 sites have been told that jobs will be lost. Management has confirmed that no one will be retrenched but the rumour persists. I think the details of jobs being created ought to be shared as a matter of urgency.</b>	Operating and maintaining the existing generation fleet as well as the additional plants that JET will introduce, will require employees who are skilled and motivated. Eskom will prioritise sourcing people with the skills for these positions from its existing workforce by upskilling, reskilling and/or redeploying staff. Where a shortfall may occur, Eskom will recruit supplementary skills from the external market, focusing on scarce and critical skills that cannot be found internally. Eskom is establishing Memorandum of Understanding (MoU) with social partners to source funding for training. Eskom's learner pipeline will be used to supplement the workforce. Bursaries will include opportunities for qualifications/programmes in clean technologies.
<b>What was the outcome of the study regarding job security for Eskom employees?</b>	Eskom has guaranteed job security during the transition and there will be no job losses. Three levers are being used: 1. Reskilling and upskilling the employees, 2. Transfers to other stations, 3. Secondments. A human impact assessment has been undertaken and HR plans are being developed for each power station. Human Resources is currently preparing to engage with the Human Impact and Human Resource Plans.
<b>Is the JET programme aimed at plugging the energy deficit gap, thereby ending load shedding and what are the timelines?</b>	The Government is accountable for ensuring that the country's energy deficit is plugged, and also for the Integrated Resource Plan (IRP) 2019 and its enabling mechanisms such as the Renewable Independent Power Producer Programme (REIPPP) Programme. However, this is a collective effort that includes all energy stakeholders. Eskom's sustainability is underpinned by its 2035 strategy when ~22 GW of installed coal capacity will be shut down and repowered (pending an Eskom renewable energy allocation issued by the Minister of the Department of Mineral Resources and Energy (DMRE) – without which Eskom will not be able to build renewables on our decommissioned sites). Eskom will then have to consider full decommissioning, rehabilitation of the land, and multi-decade site monitoring – which Eskom will have to fund off its balance sheet.

**Mandy Rambharos**  
General Manager  
Just Energy Transition Office



*We have now released our 3rd edition of our Change Management JET Fact Sheet. I encourage you to read through this JET Fact Sheet as you will gather a deeper appreciation and understanding of Eskom's Just Energy Transition initiatives and projects. Let's continue to work together to make Eskom Just Energy Transition (JET) a success.*

**Change Management & Culture programme**

