Eskom

Just Energy Transition (JET) Fact sheet #002

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

"Hot off the Press" from COP 26

Top of mind at COP26 was finalising Article 6 of the Paris Agreement

One of the key issues at COP26 was finalising the rules on how countries can reduce their emissions using international carbon markets, which is governed under **Article 6** of the Paris Agreement on Climate Change.

What is Article 6 of the Paris Agreement?

- Article 6 is one of the least accessible and most complex concepts, that could not be agreed upon at COP25 in Madrid, 2019.
- It outlines a set of rules that govern the carbon markets . These rules are critical for fighting climate change depending on how they are structured.
- Article 6 could help the world avoid dangerous levels of global warming or let countries off the hook from making meaningful cuts in their emissions.

International carbon markets work in a such a way that countries which struggle to meet their emission-reduction targets under their national climate plans (known as "nationally determined contributions," or NDCs), or want to pursue less expensive cuts in emissions, may **purchase emission reductions from other nations** that have already cut their emissions by more than the amount they had pledged, such as by transitioning to renewable energy. If the Article 6 rules are structured appropriately, the result could be a win-win for everyone involved — both countries would meet their climate commitments, the over-achiever is financially rewarded for going above and beyond, and finance is provided to the country generating emission reductions

Article 6 provides an **accounting framework for international cooperation**, such as linking the emission-trading schemes of two or more countries. It also allows the international transfer of carbon credits between countries. Furthermore, it establishes a central UN mechanism for trading the credits from emission reductions generated through specific projects. For example, country A could pay for country B to build a wind farm instead of a coal plant. This would reduce country B's emissions while country B benefits from the clean energy plus Country A gets credit for the reductions. International cooperation through carbon markets can bring **additional public and private finance and catalyse the emission reductions** in a country hosting the mitigation activity. However, unless the right rules are in place, Article 6 could actually weaken countries' NDCs and increase global emissions. Article 6 has the potential to contribute to the Paris Agreement's goals at a lower cost. It may also provide a great incentive for private sector investment in various countries and could help some countries **leapfrog their technological development**. But all of this could only occur if the market is credible, reliable and has integrity. Depending on how these issues are resolved in the negotiations, Article 6 could either achieve this ambition or fail dismally. If it fails, the intent and purpose of national commitments under the Paris Agreement would be be seriously undermined.

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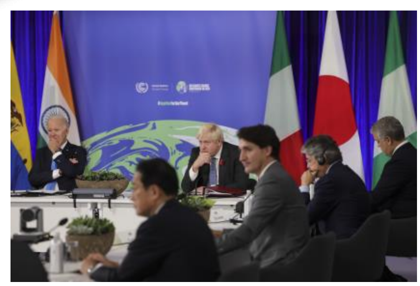
Key events and commitments made during COP 26

The first two days of COP26 in Glasgow, Scotland revolved around the **"World Leaders Summit"** theme, an opportunity for leaders from across the globe to have their say about the climate crisis and how they plan to help **accelerate decarbonisation** to meet the targets of the Paris Agreement 2050.

A **R131 billion partnership** agreement among the US, the UK, Germany and the EU to help South Africa finance a faster transition from coal. More than 40 countries have **pledged to phase out coal** power by 2040.

"We need to come out of Glasgow saying with credibility that we have kept 1.5 degrees alive," **Alok Sharma, COP26's president**, said on the 02 November 2021 India committed to achieving net zero emissions by 2070.



At least 110 countries, representing 85% of the world's forests, have committed to **stopping and reversing deforestation by 2030.**

20 countries including the US, UK and Canada have pledged to **end public financing for coal**, oil and gas overseas by the end of 2022.

"Let this be the moment that we answer history's call here in Glasgow," proclaimed **Joe Biden**.
The EU and US launched the **Global Methane Pledge**, an initiative to cut methane emission levels by 30% by 2030. Over 100 countries have joined the pledge.

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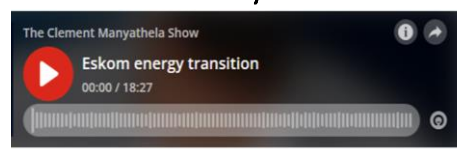
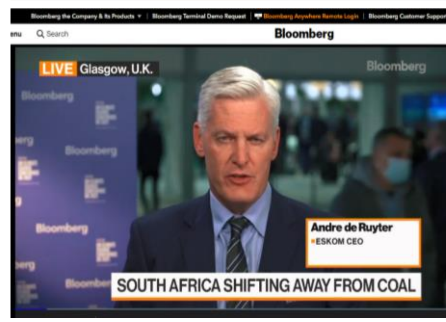
Eskom has been actively engaging with the carbon market negotiations at COP26

As Eskom, we are proud to announce that **Mandy Rambharos, JET General Manager** was a COP26 co-facilitator for the negotiations on carbon markets. Mandy was also part of the South African COP26 delegation in Glasgow, and she represented Eskom well in these leading and progressive discussions. **Kindly click on the link below to listen to one of the Radio 702 Podcasts with Mandy Rambharos during her time at COP26 in Glasgow, Scotland:**

https://portal.eskom.co.za/sites/hrecmcp/ToolKit_Videos/JET%20Podcast%20Mandy%20702/Eskom%20energy%20transition.mp3





Eskom and two of the biggest coal suppliers in South Africa have agreed to **work together towards shifting to renewable** energy projects. Exxaro and Seriti aim to achieve carbon reduction as well as cost savings with Eskom's support, and more important the companies **aim at creating employment and re-skilling opportunities** for the communities living and working at and around their areas of operations. The plans could result in a potential reduction in CO_2 emissions of up to 350,000 tons a year for **Seriti**, more than half of its current emissions, and 130,000 tons for **Exxaro** at its Matla coal mine.

Source: Article published by Bloomberg - South Africa's Eskom, Coal Suppliers to collaborate on Renewables, Oct 2021.

SERITI RESOURCES HOLDINGS

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South Africa establishes a historic international partnership to support a just transition

On 2 November 2021, the Governments of South Africa, France, Germany, the United Kingdom and the United States of America, along with the European Union, announced a new ambitious, long-term **Just Energy Transition Partnership** to support South Africa's decarbonisation efforts. The Partnership aims to accelerate the decarbonisation of South Africa's economy, with a focus on the electricity system, to help it achieve the ambitious goals set out in its updated Nationally Determined Contribution. "In preparation for COP26, South Africa submitted a revised **Nationally Determined Contribution** (NDC) to reduce carbon emissions between the target range of 420 CO_2-eq and 350 CO_2-eq by 2030. This revised target is compatible with the ambitious goals of the **Paris Agreement** and represents our country's best effort to confront climate change, which would have a devastating impact on sub-Saharan Africa if large scale mitigation and adaptation efforts fail. Through the **Political Declaration** issued on the 2nd November 2021, to establish this partnership agreement, partner countries will mobilise an initial R131 billion over the next three to five years by means of a range of instruments, including grants and concessional financing, to support the implementation of our revised NDC. The **concessional finance** that would be mobilised through this partnership agreement would accelerate investment in renewable energy and development of new sectors such as electric vehicles and green hydrogen. This would provide a significant boost to investment and growth, while ensuring that Eskom could access the resources to finance the repurposing of the coal-fired power station due for decommissioning over the next 15 years. The partnership that we established on 2nd November 2021 is a **watershed moment** not only for our own just transition, but also for the world as a whole. It is proof that we can take **ambitious climate action while increasing our energy security, creating jobs and harnessing new opportunities for investment**, with support from developed economies." *Source: Media statement issued by the Presidency of the South Africa on 2 November 2021.*

An inclusive task force team comprising South Africa and international partners will be established to achieve the outcomes of this partnership and to enable the following:

- The **accelerated decarbonisation of South Africa's electricity system** to achieve the most ambitious target possible within South Africa's Nationally Determined Contribution (NDC) range to the extent of the resources available;
- South Africa's efforts to lead a just transition that **protects vulnerable workers and communities**, especially coal miners, women and youth, affected by the move away from coal;
- South Africa's nationally determined efforts to **manage Eskom's debt successfully and sustainably**, define the role of the private sector, and create an enabling environment through policy reform in the electricity sector, such as unbundling and improved revenue collection.
- **Local value chains** (including Micro, Small and Medium Enterprises) will benefit from new areas of economic opportunity and
- **Opportunities for technological innovation and private investment** will drive the creation of green and quality jobs as part of a prosperous low emission economy.

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Eskom's Just Energy Transition (JET) Financing Facility

As outlined in the **SA National Development Plan**, the Just Transition refers to a transition towards a low-carbon economy and a climate-resilient society in a manner that does not impede socio-economic development, is socially just, and results in an increase in sustainable jobs. The **Just Transition** is not a sudden shift in economic activity but occurs in a phased manner over time.

Procedurally this will be done, by ensuring that the most climate-vulnerable groups participate in decision making. **Substantively** this will be done, by means of climate-compatible social and economic development which addresses the needs of workers and communities.

"Ambition" in the context of a Just Transition involves the following:

- Pursuing the development goals (poverty eradication, economic transformation, job creation) in the process of cutting emissions and building resilience
- Expanding employment and building a skills base
- Managing the adjustment process and minimizing the social impact
- Ensuring that the Just Transition creates more jobs, mobilising significant funding to invest in new energy sources, develop future sectors, and support the communities that are affected.

The Just Energy Transition Financing Facility will provide concessional funding for clean energy projects, and has been conceptualised as a multi-tranche, multi-year facility, funded by a multi-lender syndicate, that would have funds advanced on a "pay-for-performance basis" The funds will be advanced to Eskom as **progress payments** for different project stages. Should the project objectives not be achieved as agreed, or should the agreed-upon milestones not be achieved, future releases of funding tranches may be withheld, and/or concessional interest rates may be increased. This is a use it or lose it basis.

Eskom has identified a pipeline of 'Just Energy Transition' projects, and intends to secure financing with the **R131 billion concessional funding** raised from the international financiers who have committed to supporting the decarbonisation initiatives in developing countries, including South Africa. The Eskom Group Chief Executive, has previously mentioned that Eskom requires approximately 30-35 billion dollars to ensure a just transition, and we have to explore **additional sources of financing** and mobilise other international partners, to further support South Africa's JET ambition.

Numerous counterparties have indicated interest to support the Eskom JET Financing concept

Eskom's JET plans are the most developed that we have seen worldwide — WORLD BANK GROUP

Eskom JET work has been important for focusing the minds on what work needs to be done

Eskom's JET work provides an important platform for us to engage

The Eskom JET work is being discussed by our capitals

"As discussed, we are interested to support Eskom on this important agenda" — WORLD BANK GROUP

"…we would like to express our interest to support Eskom in the repurposing of such coal fired power stations…" — KFW

"AFD is keen to accompany Eskom in the decommissioning and repurposing of some of its coal fired power stations…" — AFD

"…setting a clear timeline of our joint work on this project would be beneficial for both NDB and Eskom to understand expectations of the parties…" — New Development Bank

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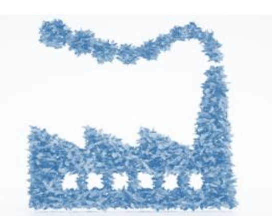
Safeguards associated with the JET Financing Facility

The following steps are outlined to safeguard the "pay-for-performance basis" Financing Facility Agreement

1. Staggered disbursement: The Financing Facility will be available to Eskom in three equal tranches, thus utilising the concessional funding of R131 billion over a 15 year period i.e. from 2022 to 2039.

2. Use it or lose it: The entire tranche has to be used in any given five-year period. The Lender Group shall at its sole discretion be entitled either to roll over the unutilised portion of the tranche to a subsequent period, or to remove it from the funding available to Eskom. *[This is an Important provision to ensure that Eskom does not sterilise the funding that could have been used elsewhere].*

3. Performance basis: Approvals for funding in terms of the Facility shall be granted by the Lender Group on a project basis, according to the project stage gates, and meeting the agreed criteria, in addition to the decarbonisation and social criteria (*e.g. EPC, international technology norms and specification.)*



4. Lender Group opt in or opt out: The group must consist of different entities with different policies requiring or prohibiting participation in funding certain technology options. The Lender Group shall ensure that adequate provisions for internal coordination provisions are n place to ensure the above, provided that a project meets all other criteria, however no project will be declined for this reason alone.

RSA Government approval processes: All reasonable endeavours will be made to enable and facilitate the project implementation by responding to requests for approval in a reasonable time, and enabling the regulatory processes to be completed expeditiously and fairly, in an equitable manner and in accordance with South African law. The RSA Government is committed to ensuring that the approvals required for project execution will not be unreasonably withheld.

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The concessional financing model is dependent on 3 key stakeholders groups

Including, but not limited to, the UK, US, Germany, France, AfD, kFW, CIF and the World Bank

South African Government is committed to an NDC target of 350-420 Mt by 2030, and puts in place appropriate enabling policies in the areas affected by the accelerated decarbonisation programme, in order to:

- support and promote reskilling and training of workers displaced from the coal value chain;
- promote the establishment of manufacturing and service industries associated with renewable energy, including the proclamation of special economic zones;
- promote small business development for vulnerable sectors, including women and the youth.

Eskom commits to decarbonisation by retiring nine coal-fired power stations by 2035, not investing in new coal plants nor returning to service coal plants, but by invest in cleaner technologies:

- A Just Transition by investing in socio-economic impact studies, micro grid industrialisation opportunities, collaboration with local manufacture, including repowering and repurposing project; and
- Unbundling, to separate itself into three legal entities, namely Generation, Transmission and Distribution, inter alia with the intent of enabling a liberalised electricity market.

Foreign Government and Lenders commit to providing concessional financing to the RSA Government and Eskom for the following:

- Expanding and strengthening its electricity transmission and distribution grid to accommodate the addition of significant technologies for new renewable electricity generation,
- Repurposing and repowering the power stations to be retired in a way that seeks to minimise the negative socio-economic impacts on direct and indirect stakeholders in the coal value chains associated with said power stations, and
- Enabling Eskom to construct new, no-carbon and low carbon electricity generation technologies to replace the coal-fired generation capacity to be retired, provided that Eskom projects will be supplementary to the new generation capacity to be built by the private sector.

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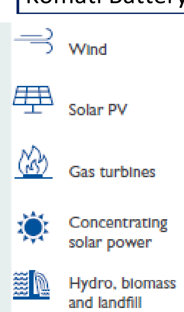
Eskom's Just Energy Transition (JET) Financing Facility will enable the development of other greenfield Eskom clean generation projects, and the expansion of the Transmission and Distribution grid infrastructure to add much needed clean energy to the grid.

Generation

Prioritised capacity and repurposing opportunities, including estimated timelines

Project	Timing
Komati PV	12-18 months
Komati Gas	24-48 months
Sere PV	18-48 months
Kleinzee	12-24 months
Aberdeen	24-26 months
Majuba PV	12-24 months
Tutuka PV	12-18 months
Arnot PV	12-18 months
Duvha PV	12-18 months
Lethabo PV	12-18 months
Olyvenhouts drift PV	12-18 months
Other wind	TBD
Microgrid	6-12 months
RBay gas	24-60 months
Komati Battery storage	12-18 months

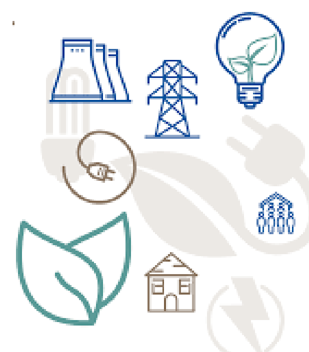


Distribution

- **Strengthening of critical corridors** on the Distribution grid to enable the connection of IPP's, Distributed Energy Resources **(R30 billion);**
- Rollout of **micro grid solutions to electrify 13% of the population (R15 billion)** to deliver the government's electrification programme
- Enable **bidirectional energy management and flexibility** and facilitate an inverted energy-economy

Transmission

- **Deliver at least 8000 km of transmission grid (R120 billion)** expansion to connect new capacity in line with the IRP and accelerated shutdown.;
- **Construct 12 substations across four provinces** (Northern Cape, Western Cape, Eastern Cape and Free State; and
- **Install 110 transformers** to deliver network strengthening requirements up to 2030.



Grid strengthening, in the Northern and Eastern Cape provinces, is a key enabler for the roll-out of new renewable capacity in these areas. Repurposing and repowering will allow for optimisation of grid capacity in Mpumalanga.

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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
AfD	African Development Bank
kFW	Kreditanstalt für Wiederaufbau
CIF	Climate Investment Funds
IPP	Independent Power Producers

"The first week of COP26 was a quick lesson in working out the logistics of finding routes to conference rooms, dealing with people face to face, and engaging in deeply detailed discussions on climate negotiations and the Eskom view on the Just Energy Transition. COP26 was a huge success for Eskom and many Guardians may not know that the SA JET plan which was approved at COP26 has the Eskom JET plan at its heart. Subsequent to the R131 billion partnership agreement announcement at COP26, there has been outpouring support for Eskom's JET Plan from across the world. People are eager to learn from the Eskom JET Team on how the JET plan was conceived and developed. Furthermore, the overwhelming support and admiration for the Eskom CEO, and his visionary leadership was extremely heart-warming to observe throughout my time at COP26 in Glasgow. Lets continue to work together to ensure that the Eskom Just Energy Transition is a success. Aluta continua".

Mandy Rambharos
General Manager
Just Energy Transition Office

Should you have any comments, feedback or suggestions, kindly email the team on: ***EskomChangeManagement@eskom.co.za***