

ENERGY ACTION PLAN

ONE YEAR PROGRESS REPORT: August 2023



REPUBLIC OF SOUTH AFRICA



INTRODUCTION

The **Energy Action Plan** is South Africa's plan to end load shedding and achieve energy security. Announced by President Cyril Ramaphosa in July 2022, it outlines a bold set of actions aimed at fixing Eskom and adding as much new generation capacity as possible, as quickly as possible, to close the gap in electricity supply.

The plan includes five key pillars:

1. **Fix Eskom** and improve the availability of existing supply
2. Enable and **accelerate private investment** in generation capacity
3. **Fast-track the procurement** of new generation capacity from renewables, gas and battery storage
4. Unleash businesses and households to invest in **rooftop solar**
5. Fundamentally **transform the electricity sector** to achieve long-term energy security

The **National Energy Crisis Committee (NECOM)** was established to ensure that the **Energy Action Plan** is fully implemented to achieve these objectives. NECOM is led by the Minister in the Presidency responsible for Electricity, Minister Kgosientsho Ramokgopa. It is overseen at a technical level led by the Director-General in the Presidency and includes more than 100 high-level officials from across government and Eskom, working closely with business and other social partners.

NECOM is working hard to remove barriers to new generation capacity and unlocking energy from many different sources, including Eskom, independent power producers, businesses and households.

This is a collective national effort to ensure South Africa has enough energy now and for the future.

KEY ACHIEVEMENTS IN THE PAST YEAR

Establishment of the National Energy Crisis Committee



- **NECOM was established** to coordinate the many government agencies involved in responding to a complex energy crisis. One year on, responsibilities are well defined, and the structures for planning, oversight and problem-solving structures are fully operational.
- **Accountability** has been strengthened, with consistent tracking of progress and rapid resolution of challenges. This is ensuring a momentum to implementation not seen before.
- Ten fully staffed **work streams** have been established with clear, time-bound delivery plans to ensure prioritisation and focus.
- **Strong partnerships** have been established with the private sector to make available technical expertise and support delivery of the plan.

BUILDING COLLABORATION WITH THE PRIVATE SECTOR

The Resource Mobilisation Fund (RMF) was established by Business for South Africa following a request from the President for the private sector to help capacitate NECTOM. The RMF was set up to source private sector funding to procure and then donate capacity into government, and specifically NECTOM, on an expedited basis. Expertise provided to NECTOM to date includes a project management office, together with specialist legal, energy modelling, and engineering expertise over a one-to-two-year period.

In addition to technical support donated by the RMF, the private sector has provided expertise and assistance in kind through the Energy Council of South Africa. This includes the deployment of specialist engineering teams to support the turnaround of four poor-performing power stations as well as to optimise the utilisation of Eskom's gas-fired peaking plants, or OCGTs.

KEY ACHIEVEMENTS IN THE PAST YEAR

OBJECTIVE 1:

Fix Eskom and improve the availability of existing supply



The performance of Eskom's generation fleet is showing sustained improvement, enabling less severe load shedding than expected over the winter period.



This is due to a reduction in unplanned losses to less than 16,000 MW, from over 18,000 MW.

In addition, planned maintenance has been reduced to approximately 2,500 MW during the winter period, having executed significant maintenance in previous months.

Generation available from wind power has increased due to weather conditions in the coastal regions.

National Treasury has finalised a substantial debt relief package finalised for Eskom, totaling R254 billion, alongside debt relief for municipalities and a move towards unbundled, cost-reflective tariffs.



This is a critical step to enable Eskom to invest in necessary maintenance as well as expansion of the transmission network.

An independent technical review of Eskom's power stations is underway to diagnose challenges and provide detailed recommendations on actions to be taken.



This will support the implementation of Eskom's Generation Recovery Plan going forward.

Steps have been taken to increase the load factor of OCGTs and ensure that they can be utilised more frequently to curb load shedding.



Eskom and National Treasury have finalised a funding solution to secure supplies of diesel for the rest of the 2023 financial year, and an expert team has been deployed to address challenges with the supply of diesel to Ankerlig.

KEY ACHIEVEMENTS IN THE PAST YEAR

OBJECTIVE 1: (Continued)

Intensive work is underway to return additional units at Kusile and Medupi power stations to service on an expedited basis.



An interim solution has been found to expedite the return of Medupi Unit 4 from August 2024 to April 2024.

Kusile Units 1-3 are on track to return to service by November 2023 as planned, while Unit 5 will synchronise with the grid in October 2023 and Unit 6 in May 2024.

Eskom has introduced powerful incentives for energy saving measures through the Distribution Demand Management Programme.



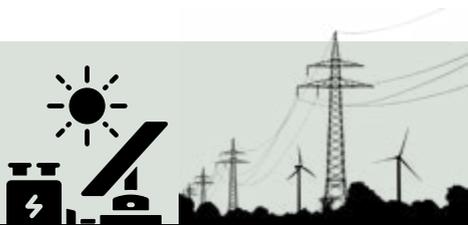
The programme follows a performance contracting approach, with an incentive of R3 million/MW provided for achieved demand reduction during specified periods.

WHAT DO “MEGAWATTS” MEAN?

Megawatts (MW) are used to measure the output of a power plant. South Africa currently has a shortfall of approximately 6,000 MW, which is why we have to implement load shedding. Every 1,000 MW of new capacity that we add to the national grid reduces load shedding by one stage.

OBJECTIVE 2:

Enable and accelerate private investment in generation capacity



Schedule 2 of the Electricity Regulation Act was amended in December 2022 to remove the licensing threshold for generation facilities.



This is a game-changing reform to enable private investment in generation projects of any size.

KEY ACHIEVEMENTS IN THE PAST YEAR

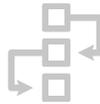
OBJECTIVE 2: (Continued)

Since the implementation of regulatory changes, the pipeline of private sector generation projects has increased to over 100 projects representing more than 10,000 MW of new capacity.



This will begin to connect to the grid from this year. A survey conducted by Eskom showed that the number of projects in development is even greater, at 66,000 MW.

Timeframes have been reduced significantly for regulatory approvals required by energy projects.



The following processes are being fast-tracked:

- Transmission infrastructure no longer needs an environmental permit in areas with low environmental impact.
- Environmental permits are now issued in 57 days for Strategic Infrastructure Projects.
- Registration with NERSA now takes an average of 19 days.
- Grid connection now takes six months instead of nine.
- Land-use authorisations now take 30 days instead of 90.

A One Stop Shop has been established to provide a single entry point for renewable energy projects to obtain the necessary authorisations.



This includes an online platform and dedicated capacity in Invest SA to facilitate applications, follow up regularly and ensure that maximum timeframes are adhered to.

Eskom has leased land around several power stations in Mpumalanga to developers for private energy projects.



In Phase 1, agreements have been signed for 1,800 MW of capacity to be built where transmission infrastructure is already available.

Eskom has put in place mechanisms to buy power from companies that have extra capacity available, through the Standard Offer Programme and Emergency Generation Programme.

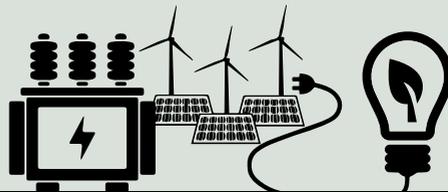


These programmes have already unlocked close to 400 MW in immediately available power, with a further 600 MW in the contracting process.

KEY ACHIEVEMENTS IN THE PAST YEAR

OBJECTIVE 3:

Fast-track the procurement of new generation capacity from renewables, gas and battery storage



Government has issued a determination for more than 14,000 MW of new generation capacity to be procured from wind, solar and battery storage.



This is the remaining allocation in the Integrated Resource Plan (IRP) 2019. This will allow further bid windows to proceed on an accelerated basis.

Three projects from the risk mitigation programme are already in construction, and will connect to the grid by the end of November 2023.



An additional five preferred bidders for hybrid projects from the same programme have confirmed their intention to reach financial close within the coming months.

Power Purchase Agreements have been signed with 19 projects from Bid Window 5 of the renewable energy programme totalling 1,759 MW.



Of these, 1,009 MW have achieved commercial close (of which 784MW is already in construction) and a further 300 MW are anticipated to reach close and proceed to construction by the end of September 2023.

Six projects from Bid Window 6 with a total of 1,000 MW are on track to reach commercial close by the end of September 2023.



This will bring the total amount of new capacity under construction from the last two bid windows to over 2,300 MW.

Eskom is working to import more power from neighbouring countries, such as Botswana, Mozambique, and Zambia.



An additional 400 MW of power is already being imported from Cahora Bassa in Mozambique following the strengthening of the transmission line to South Africa.

KEY ACHIEVEMENTS IN THE PAST YEAR

OBJECTIVE 4:

Unleash businesses and households to invest in rooftop solar



Government has introduced special tax incentives for businesses and households who install solar and a revised bounce-back loan scheme to help small businesses go solar.



As an added benefit, you can also now sell any surplus power you generate back to the grid in certain areas.

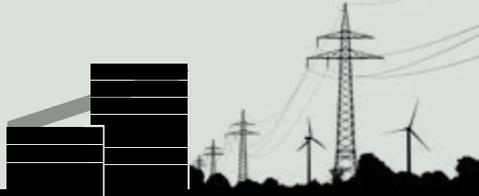
The amount of rooftop solar capacity in South Africa has increased to more than 4,000 MW, helping to reduce load shedding over the winter months.



This means that rooftop solar installations have more than doubled since the Energy Action Plan was announced – an exponential increase.

OBJECTIVE 5:

Fundamentally transform the electricity sector to achieve long-term energy security



The National Transmission Company of South Africa is being set up as an independent entity responsible for managing the national electricity grid.



This will keep the national grid in state hands, but create a level playing field to allow for more private sector participation.

New legislation has been tabled in Parliament to create a competitive market for electricity – the Electricity Regulation Amendment Bill.



In the future, this will allow consumers to choose which energy supplier they want to buy power from, and enable competition and efficiency from multiple electricity generators. The Bill was formally tabled in Parliament on 20 July 2023.

REASONS FOR HOPE

Load shedding is causing extreme frustration and hardship for all South Africans. It makes it difficult to go about our daily lives, and places a heavy burden on small and large businesses. However, while it cannot be fixed overnight, there are good reasons to hope that load shedding will be reduced and eventually made a thing of the past:



- **Return of units at Kusile and Medupi power stations to service:** There are currently three units at Kusile and one unit at Medupi out of service. Taken together, these units represent more than 3,000 MW of capacity that is currently offline – or four stages of load shedding. Kusile Units 1-3 will return to service in November 2023, and Medupi Unit 4 will return in April 2024. This will ease load shedding by the end of 2023.

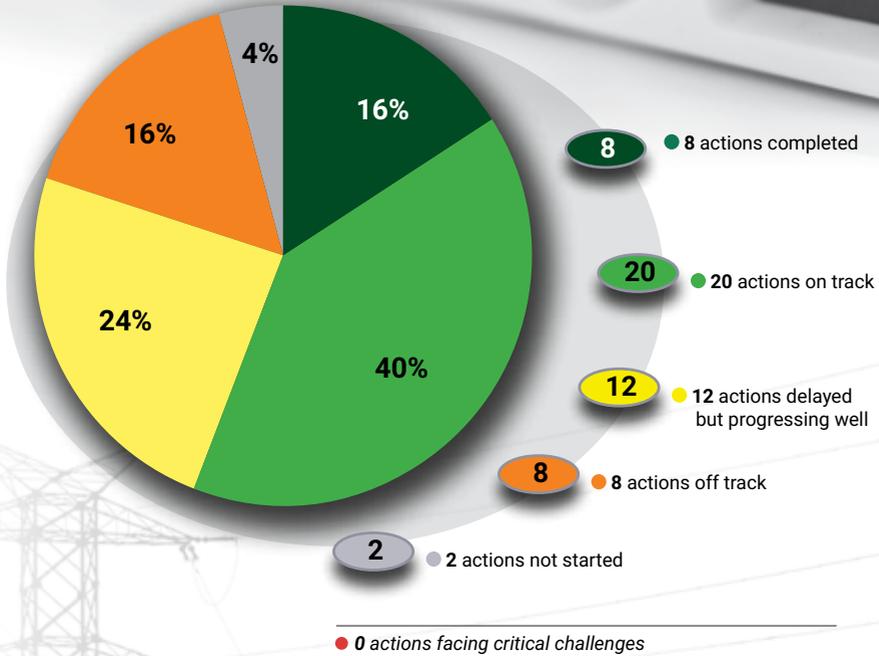


- **Rapid rollout of rooftop solar:** The amount of rooftop solar installed by businesses and households across South Africa has more than doubled in the year since the Energy Action Plan was announced by President Ramaphosa. New tax incentives and innovative financing mechanisms are helping to drive a boom in rooftop solar, bringing down load shedding significantly.



- **Private investment in electricity generation:** The regulatory changes implemented through the Energy Action Plan have opened the space for private investment in large-scale electricity generation projects for the first time. Hundreds of projects are now being developed across the country, without needing any money from government. These projects will make the biggest difference in bringing an end to load shedding, while also helping to shift South Africa towards cheaper, greener energy sources.

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