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Supporting
the Implementation
of Priority Structural Reforms



Energy market reform in South Africa

The path to energy security, affordability
and sustainability

May 2025



national treasury

Department:
National Treasury
REPUBLIC OF SOUTH AFRICA



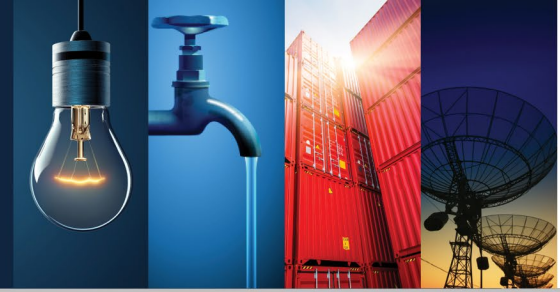
THE PRESIDENCY
REPUBLIC OF SOUTH AFRICA



**STAY
SAFE**

VACCINATE TO SAVE SOUTH AFRICA

Energy Action Plan



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In July 2022, President Ramaphosa announced a range of measures to tackle the energy crisis in five areas:

- 1 Fix Eskom and **improve the availability of existing supply**
- 2 Enable and **accelerate private investment** in generation capacity
- 3 **Accelerate procurement of new 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

In the short term, improving the performance of Eskom's existing power stations and adding new generation capacity is crucial to prevent a return to load shedding. **In the long term, however, reform of the energy sector is required to address the root causes of load shedding and ensure a secure and sustainable supply of energy in future.**

Electricity sector reform in the EAP



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*“The measures I have outlined are not just to **address our immediate constraints**.*

***Our ultimate objective is to achieve long-term energy security**, so that we never have to experience an electricity shortage again.*

*We aim to do this by stabilising Eskom and improving plant performance, **establishing a competitive electricity market**, opening the way for private investment in new generation capacity and increasing our investment in renewables.*

*These measures are necessary to **revive economic growth** and create jobs.*

*In the process, **we will position our country as a leading player in the transition to new and sustainable energy sources**, turning this crisis into an opportunity for future growth and resilience.”*

- President Ramaphosa, 25 July 2022



Policy context of energy market reform



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White Paper on the Energy Policy of the
Republic of South Africa
December 1998

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Energy Policy Unit
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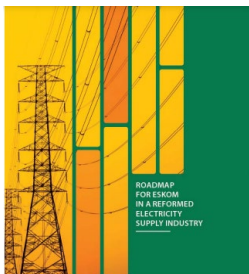
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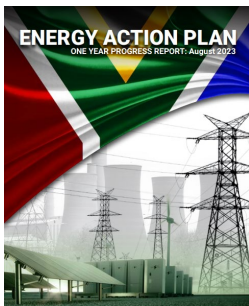
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The 1998 White Paper on Energy Policy set out government's vision for the energy sector, including the vertical and horizontal unbundling of the electricity supply industry, separating competitive and natural monopoly components, introducing competition, ensuring non-discrimination, enabling open access to transmission, and establishing independent regulation. The Energy Policy identified an independent transmission entity as a necessary step.



The 2019 Eskom Roadmap laid out a plan to implement these policy commitments by providing direction for the restructuring of Eskom, in the context of a worsening electricity supply shortfall and significant underperformance of the current market structure. The roadmap provides for the establishment of the National Transmission Company of South Africa (NTCSA) to act as an independent transmission, system and market operator.



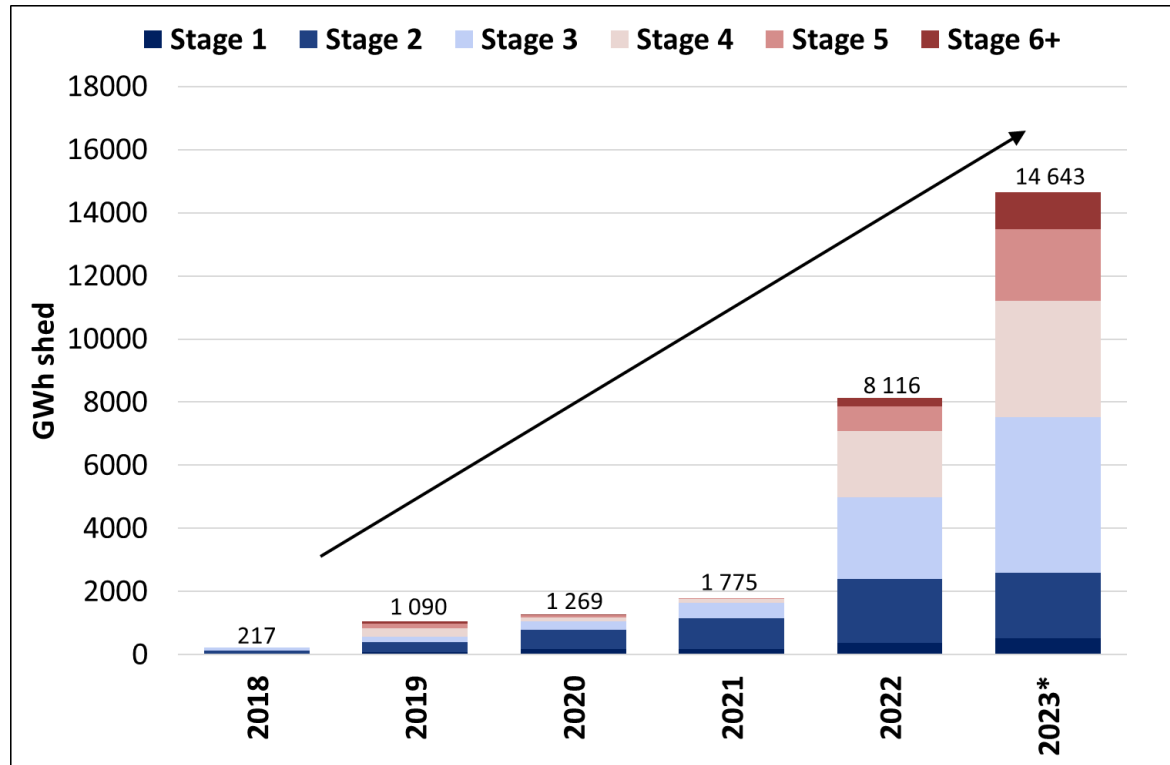
The Energy Action Plan, announced by President Ramaphosa in July 2022, recognises that reform of the energy sector is crucial to achieving long-term energy security for all South Africans. In addition to short-term interventions to alleviate the immediate energy supply shortfall, the plan reinforces the importance of the restructuring of Eskom and the establishment of a competitive energy market in achieving adequacy of supply and preventing the return of load shedding.

Impetus for reform in the South African context



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Source: Eskom, Year ending 30 September 2023

Note: Stage 6+ includes incidences where manual load reduction exceeded 5000 MW

- Eskom is currently a vertically integrated monopoly utility and accounts for the majority of South Africa's energy supply. This has led to a high level of concentration in the energy sector, with little competition and limited mechanisms for private investment in electricity generation.
- The current structure of the energy system has resulted in high levels of inefficiency and a shortage of energy generation capacity, due to a lack of investment in the sector.
- South Africa has, as a result, grappled with frequent power outages with a severe impact on our economy since 2007.
- Load shedding is estimated to have **cost the economy R224 billion between 2020 to 2022**. Load shedding (in GWh) for the year ending September 2023 was 30% higher than the three prior years combined, and the cost is expected to be much higher.

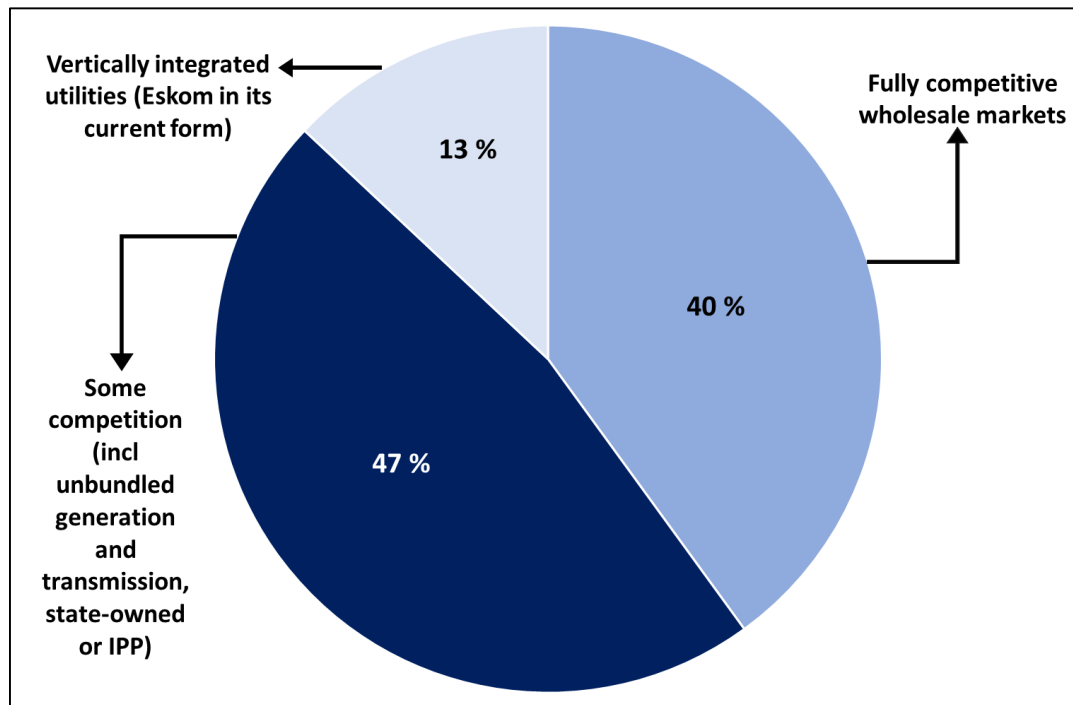
International trends in energy sector reform



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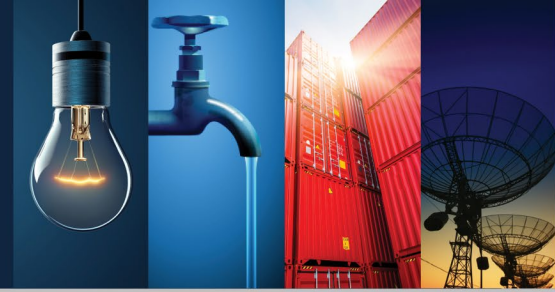
Status of market liberalisation (as % of global demand)



Source: International Energy Agency (2020)

- The **global shift towards power sector reforms** was marked by the unbundling of vertically integrated electricity utilities and a drive towards enhancing competition, primarily within generation.
- The rationale behind unbundling is that competition can be introduced in power generation, thereby **improving energy supply and increasing investment, while the grid remains under regulated monopoly control**. Unbundling and independent transmission entities also remove conflicts of interest in a state-owned vertically integrated utility where the utility generates power while also controlling the transmission network.
- **More than 90 countries globally have unbundled electricity utilities** and established either combined Independent Transmission/System Operators or separate System Operators and Independent Transmission Operators, with the majority typically remaining under state ownership.
- At least **21 upper-middle-income and 24 lower-middle-income countries have undertaken unbundling and restructuring reforms**, including all of the BRICS member countries, China, Russia, India and Brazil.

The Electricity Regulation Amendment Act

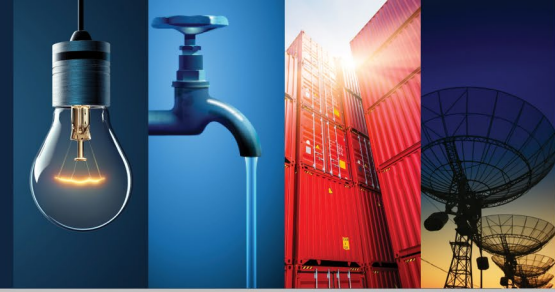


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- The ERA, which was passed in the Sixth Parliament, provides for a fundamental overhaul of South Africa's energy system. **The most important objectives of the Act are:**
 - Establishing an independent Transmission System Operator which will manage South Africa's national electricity grid, including a System Operator and Market Operator
 - Creating a competitive electricity market, enabling multiple electricity generators to compete on a level playing field
 - Ensuring that regulation (including of tariffs) is transparent, effective and clearly defined in scope
 - Providing certainty to all participants in the market regarding their roles and responsibilities
- The ERA outlines a **clear process for the development of the market code**, which will be developed by the market operator and submitted to NERSA for approval: *"A market operator must...develop a market code and rules, including qualifying criteria for power market participants, approved by the Regulator."*
- While the ERA establishes the parameters for the future market structure, the design of the market will be provided for through policy and regulation to ensure adaptability as circumstances evolve.

The rationale for energy market reform

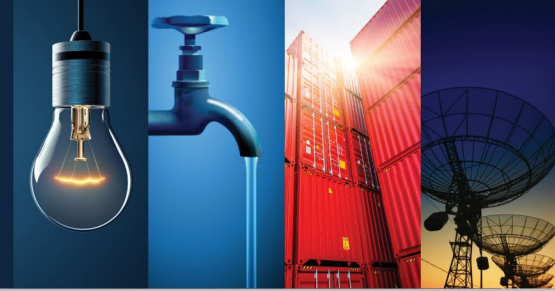


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- South Africa's energy sector faces three simultaneous imperatives:
 - To ensure **security of supply**, now and into the future
 - To ensure **access and affordability** for all South Africans
 - To keep up with rapid technological changes and the need to **decarbonize the energy system**
- The current energy crisis presents **a unique set of challenges** that we will need to navigate carefully, including an acute energy supply shortfall; a constrained fiscal environment; and historical underinvestment in infrastructure
- At the same time, the crisis presents **a unique opportunity** for fundamental transformation of the energy system. In this context, the establishment of **wholesale competition in energy generation** is a crucial step toward energy security, for a number of reasons:
 - It will allow multiple generators to **invest in new generation capacity** based on clear price signals in order to meet current and future projected demand, reducing the risk of reliance on a single supplier.
 - The introduction of competition between generators will result in **greater efficiency**, as generators must compete in the market. In addition, it will result in **lower energy prices**, compelling energy suppliers to offer competitive pricing in order to attract and retain customers.
 - The **financial sustainability** of the energy sector will be increased, as risk is spread across multiple entities rather than concentrated in Eskom.

The rationale for energy market reform (cont.)

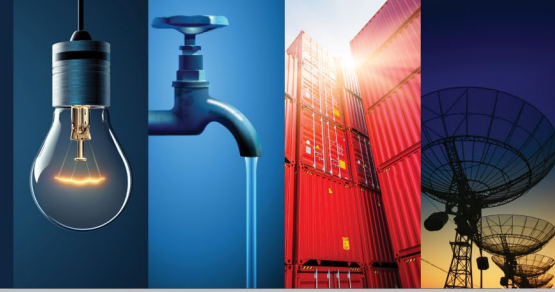


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- While some private investment in generation is already occurring (through amendments to Schedule 2 of the Electricity Regulation Act), this is largely through **bilateral agreements** with individual off-takers. The establishment of a competitive market will **enable greater investment** by allowing IPPs to build new capacity in response to market signals.
- Going forward, **Eskom will remain an important generator of electricity** while **other generators will be able to invest** in power plants and compete based on efficiency and price. These measures are expected to lead to a significant increase in generation capacity, which will ultimately end load shedding.
- While competition in electricity generation will improve efficiency, reduce costs, and support future energy security, **transmission and distribution networks should remain state-owned**. These are “natural monopolies” which cannot practically be duplicated, and without access to which it is not possible to participate in a given economic activity. Once the infrastructure is built, it is then typically most economically efficient to maximise volumes on that system, rather than to build multiple competing systems. In effect, the economies of scale are such that the market is best served by only one facility, creating a natural monopoly.
- This transition has the potential to **stimulate economic growth** by attracting investment into the energy sector, generating **employment**, and fostering **innovation**, thereby **benefiting the economy as a whole**.

Segments of the electricity sector

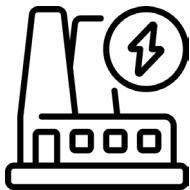


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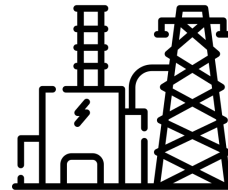
Generation

- All generators will compete on a level playing field
- Participate in the centralized market or contract bilaterally
- Market will accommodate Eskom generation, government procured IPPs (e.g. REIPPPP), Schedule 2 generators, and distributed generation via aggregators



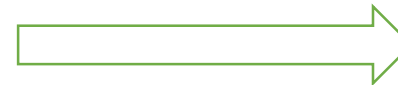
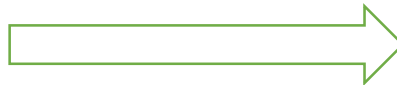
Transmission

- NTCSA will primarily be a market facilitator – create a level playing field
- NTCSA will undertake TO, SO, MO activities
- NTCSA will have a CPA as a counterparty to legacy IPPs, Eskom Gx, and certain distributors
- It will be regulated by NERSA

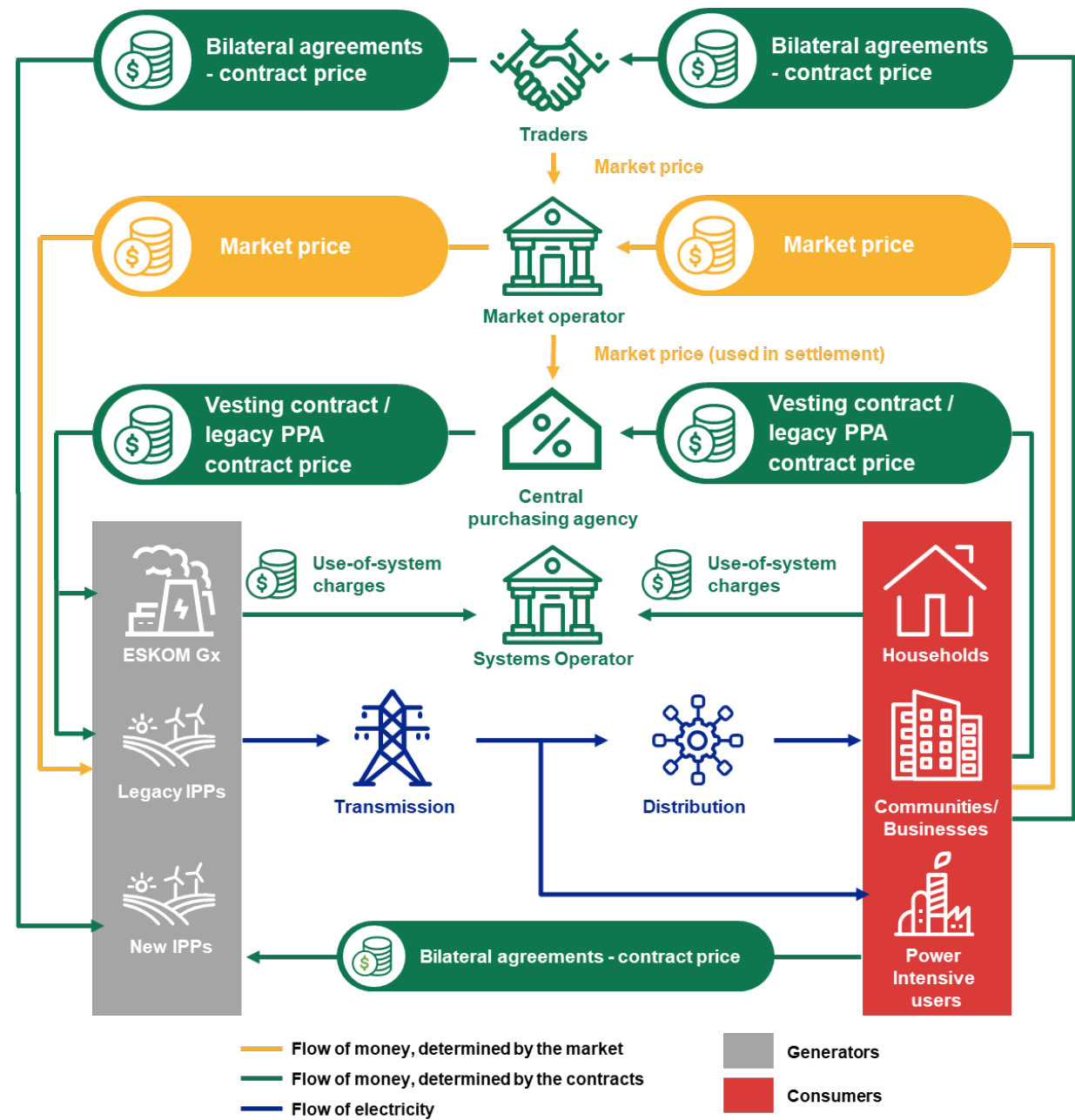


Distribution

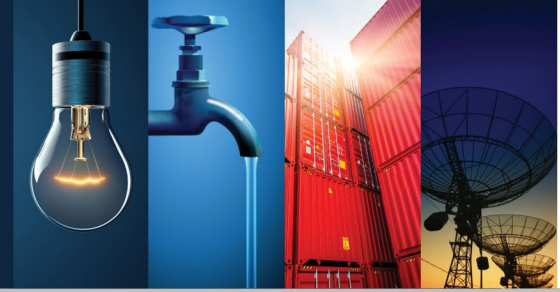
- Network services will be non-discriminatory
- Some customers will be “eligible” to purchase electricity directly on the market or through traders, while smaller customers will purchase electricity from distributors
- Subsidies will be maintained through network charges



Simplified market model



Addressing key concerns



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“Privatising the country’s key economic assets”

The ERA Bill aims to modernise South Africa’s energy system and to enable competition in electricity generation while ensuring that the national transmission grid remains state-owned. The Bill supports that Eskom will remain an important generator of electricity while enabling private investment in generation and competition based on efficiency and price. Importantly, the Bill provides that the transmission network will remain state-owned.

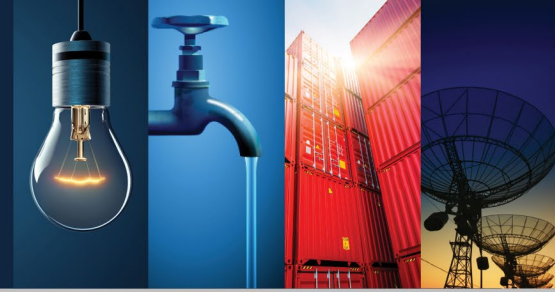
“Higher cost of electricity”

The Bill introduces competition among energy providers, compelling them to offer competitive pricing and efficient services to customers. This competitive environment will drive down prices and lead to lower energy bills for consumers in the long term. The Bill provides for effective regulatory oversight to ensure fair practices, maintain appropriate subsidies, prevent abuse of market dominance and ensure that competition serves the best interests of consumers.

“Job losses”

The energy sector reform, as supported by the Bill, has the potential to stimulate economic growth by attracting private investment into the energy sector, particularly energy generation. The emergence of new players will strengthen the skills base and technical capacity in the energy sector, while creating economic opportunities and contributing to economic growth and stimulating job creation.

Progress in energy market reform



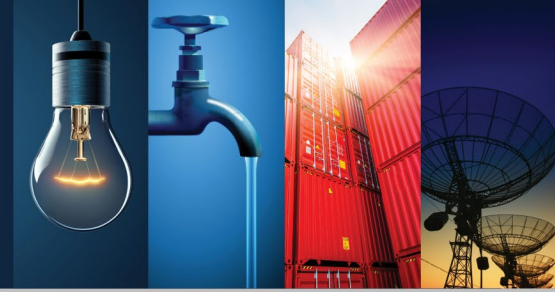
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Significant progress has been made on the journey towards reform of the energy system.

- The **removal of the licensing threshold** for private generation facilities has unlocked substantial private investment in new generation capacity, with a growing pipeline of **over 22 GW of projects with an investment value of R393 billion**
- The **establishment of the National Transmission Company of South Africa** has been completed, with the NTCSA having commenced trading in July 2024
- The **Electricity Regulation Amendment Act (ERA)** has been passed and assented to by the President.
- The following key next steps are being prioritised:
 - The **development of a market code** for submission to NERSA
 - The **establishment of a market operator** within the NTCSA with appropriate capacity and systems to oversee the market
 - The **further unbundling of generation and distribution** to complete the restructuring of Eskom
 - The implementation of an **effective wheeling framework** to enable supply of power to customers in municipal distribution networks

Conclusion



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- The central theme of the ERA is **the shift away from a predominantly single-buyer electricity market**, dominated by Eskom, **towards the establishment of a competitive multi-market structure** where multiple electricity generators can compete on a level playing field within an open market platform.
- This means that while the transmission network will remain state-owned, South Africa will have many electricity companies competing to **provide power most efficiently and cheaply**.
- The ERA Bill is a crucial part of government's plan to address South Africa's energy crisis, bring an end to load shedding and **transform the country's electricity sector** to achieve long-term energy security.
- A transition to a competitive energy market structure **will increase generation capacity and enhance energy reliability, therefore reducing power outages**. Furthermore, this transition has the potential to attract private investment into the energy sector. New players in the sector will increase innovation and strengthen the skills base and technical capacity while contributing to **economic growth and job creation**.
- Going forward, we need to ensure that **the reform process is carefully managed** and that **design choices protect consumers** and promote **an affordable and sustainable energy supply**.