



electricity & energy

Department:
Electricity and Energy
REPUBLIC OF SOUTH AFRICA

KEYNOTE ADDRESS BY DEPUTY DIRECTOR GENERAL

MR ZIZAMELE MBAMBO

ENLIT AFRICA

NUCLEAR IN AFRICA: AFRICA NUCLEAR FORWARD

20 MAY 2026

CTICC, CAPE TOWN

Programme Director

Distinguished delegates

Representatives of governments and regulatory authorities

Leaders from industry, academia and finance

Representatives of the nuclear industry and our continental partners

Ladies and gentlemen

Good morning.

It is both an honour and a privilege to address you today at this important gathering, “Nuclear in Africa 2026”, under the timely and ambitious theme: *Africa Nuclear Forward – From Vision to Execution*.

Allow me to begin by thanking the organisers for creating this strategic platform at a defining moment for Africa’s energy future. We meet at a time when the continent is no longer asking whether nuclear energy has a role to play in Africa’s development. That debate has evolved. The real question before us today is: how do we move decisively, responsibly and collaboratively from ambition to implementation?

Across Africa, energy demand is growing rapidly. Industrialisation, urbanisation, digitalisation and economic inclusion all depend on one critical enabler, that is reliable, affordable and clean electricity. Close to 600 million of Africans still lack access to electricity. At the same time, our countries are under increasing pressure to decarbonise, strengthen energy security and build climate resilience.

This is the context within which nuclear energy must be understood.

Nuclear energy should form part of a balanced and diversified energy mix capable of delivering stable baseload power, supporting grid stability, enabling industrial development and complementing intermittent renewable technologies.

South Africa’s own experience demonstrates this reality. For four decades, Koeberg Nuclear Power Station has safely and reliably contributed to the country’s electricity supply while providing valuable technical, regulatory and operational experience for the continent. The successful long-term operation programme and life extension of Koeberg has reinforced an important lesson: nuclear energy is not merely an infrastructure investment; it is a long-term national capability.

Today, Africa stands at the threshold of a new phase.

Countries such as Egypt are actively constructing nuclear power plants. Ghana and Kenya are progressing their nuclear programmes with increasing institutional maturity. Across the continent, discussions on Small Modular Reactors, localisation, nuclear fuel cycle opportunities and regional power integration are gaining momentum. This demonstrates that Africa's nuclear aspirations are no longer theoretical, but they are rather becoming practical and strategic.

However, if we are to succeed, we must confront difficult realities honestly.

Nuclear energy demands strong governance, credible regulation, skilled human capital, long-term financing models and public trust. It requires patience, discipline and policy certainty. Most importantly, it requires African leadership.

Africa cannot build sustainable nuclear programmes through dependency alone. We must deliberately develop our own regulatory expertise, engineering capability, legal frameworks and research institutions. We must invest in African universities, African regulators, African scientists and African innovators. The future of nuclear energy in Africa must not only be built in Africa, but it must also increasingly be designed, regulated and operated by Africans. This is why regional cooperation is essential.

No single African country can navigate the complexities of the nuclear sector in isolation. Institutions such as African Commission on Nuclear Energy (AFCONE), regional power pools and continental regulatory partnerships will be critical in harmonising standards, strengthening safeguards and supporting knowledge-sharing across borders.

Ladies and Gentlemen

South Africa has officially endorsed the global Declaration to Triple Nuclear Energy capacity by 2050, making our country one of the nations committed to the initiative to expand the clean reliable power. Within this balanced mix, **nuclear** remains a strategic imperative for South Africa's long-term energy future, industrialisation and continental leadership. Koeberg has demonstrated the value of reliable, low-carbon baseload power, while South Africa's nuclear institutions, regulatory capability, skills base, research infrastructure, isotope production and operating experience provide a platform few countries on the continent possess.

With an advanced nuclear programme dating back to 1948, South Africa is well positioned to support the African Union Commission and African Energy Commission (AFREC) in developing a coherent Continental Nuclear Energy Framework and advancing the responsible peaceful use of nuclear energy across Africa.

The Department will therefore support continental efforts, including work led through the African Union Commission and African Energy Commission, to ensure that nuclear deployment in Africa is advanced safely, responsibly and in line with the continent's development needs.

The Department will advance the nuclear build programme with prudence, transparency and institutional discipline, guided by the Integrated Resource Plan 2025 (IRP 2025). This includes the deployment of 5 200 MW new nuclear build programme by 2039, the development of Nuclear Industrialisation Plan and possible 10GW new-generation pathway and related industrial capability, the implementation of a nuclear fuel cycle strategy to re-establish the nuclear value chain to support the energy sovereignty, the development of small modular reactors, the Multi-Purpose Research Reactor pathway, SAFARI-1 life extension, the establishment of the Central Interim Storage Facility for management of spent fuel and the necessary regulatory and procurement processes.

Nuclear must be treated as long-term industrial infrastructure, not a slogan. It supports energy security, decarbonisation, high-end skills, isotope production, advanced manufacturing, research capability and sovereignty.

The Department will uphold the highest standards of safety, affordability, localisation and public confidence, while learning from global best practice, avoiding past procurement failures and protecting the public interest.

Cabinet approved the Critical Minerals Strategy for South Africa. This strategy aims to maximise the country's potential in the global market of critical minerals particularly those crucial for the country's just energy transition. This includes the uranium for the country's nuclear programme.

Ladies and gentlemen,

As policymakers and sector leaders, we also have a responsibility to engage honestly with the public. Nuclear energy discussions are often clouded by fear, misinformation and outdated assumptions. Building public confidence requires transparency, accountability and consistent communication around safety, environmental stewardship and socio-economic benefit.

Equally important is the need to ensure that nuclear development contributes meaningfully to economic transformation. Nuclear programmes must support localisation, industrialisation, skills development and job creation. They must become catalysts for broader technological advancement and not isolated megaprojects disconnected from societal benefit.

Safety must remain non-negotiable.

Africa's nuclear future must be anchored on the highest international standards of safety, security and non-proliferation. Our commitment to peaceful uses of nuclear technology must continue to guide every policy, every investment and every partnership.

The conversation we are having today is therefore larger than energy generation alone.

It is about sovereignty.

It is about industrial competitiveness.

It is about technological advancement.

And ultimately, it is about Africa's right to determine its own developmental future.

As we move "from vision to execution," we must ensure that implementation is pragmatic, bankable and inclusive. We must align our nuclear ambitions with realistic grid requirements, financing capabilities and national development priorities. We must also recognise that different African countries will pursue different pathways depending on their economic circumstances and energy needs.

What matters is that Africa moves forward strategically and collectively.

In closing, allow me to emphasise this: the global energy transition presents Africa with a historic opportunity, not only to close the energy access gap, but to redefine our position in the global energy economy.

Nuclear energy can and should form part of that future.

The task before us now is to convert political intent and policy prescripts into institutional readiness, partnerships into projects, and vision into implementation.

Let this conference therefore serve not merely as a platform for dialogue, but as a catalyst for coordinated African action.

I wish you fruitful engagements over the course of this event, and I look forward to the robust discussions that will shape the next chapter of Africa's nuclear journey.

I thank you.