

**REMARKS BY MINISTER OF ENERGY MR DAVID MAHLOBO, MP,  
ON THE OCCASION OF THE 44<sup>TH</sup> POLICY GROUP MEETING OF  
THE GENERATION IV INTERNATIONAL FORUM , CAPE TOWN  
SOUTH AFRICA, 19 OCTOBER 2017**

Programme Director

Chairperson of the Generation IV International Forum, Mr Francois  
Gauché

Distinguished Policy Group Representatives from member countries,

Honourable Guests,

Ladies and Gentlemen,

Good Morning to all

**Introduction**

1. On behalf of HE President Zuma, his Government and the people of the Republic of South Africa, it gives me great pleasure to welcome you to South Africa, for the 44<sup>th</sup> Policy Group Meeting of the Generation IV International Forum. It is our pleasure to host this meeting for the second time, the first being in 2010.
2. Please feel free to enjoy our country, and the city of Cape Town with its natural beauty bound to leave you with a memorable experience.
3. As a country and her people, South Africa is proud to host this important conference which seeks to provide policy solutions for the continued sustainable use of nuclear as an energy resource.

4. As a peace loving country, anchored in the noble principles of our constitution, we are the first country to voluntarily disarm our nuclear weapons programme in the early 1990s, and more recently received an international award for being the first to convert our SAFARI-1 research reactor and medical isotope production through the use proliferation resistant nuclear fuel.
5. South Africa is of the firm view that there are no safe hands for Weapons of Mass Destruction. The only viable solution to the problems of nuclear weapons is their total elimination as expressed in the recently UN adopted Treaty banning Nuclear Weapons. This is the view expressed by HE President Zuma at when he addressed the Un General Council in last month. He said, and I quote:

*It can no longer be acceptable that some few countries keep arsenals and stockpiles of nuclear weapons as part of their strategic defence and security doctrine, while expecting others to remain at their mercy. We are concerned that any possible accidental detonation would lead to a disaster of epic proportions.*

*We continue to make a clarion call to all Member States of the UN to sign and ratify the Ban Treaty in order to rid the World and humanity of these lethal Weapons of Mass Destruction. We reaffirm, at the same time, the inalienable rights of states to peaceful uses of nuclear energy as reinforced in the Non Proliferation Treaty.*

End quote

6. In July 2017, the UN adopted the treaty to ban nuclear weapons. A majority of states has voted in favour of eliminating and banning those weapons because of their devastating effects on human health and the environment. Even though the pathway towards their actual abolition may be another arduous task, this development surely marks a significant step in deligitimising nuclear arms.

### **Policy Matters**

7. Chairperson, Cape Town is home to the Koeberg Nuclear Power Station, the only one on the African continent. I understand that some of the delegates visited this power plant yesterday.
8. The Department of Environmental Affairs has recently issued a positive record of decision for Eskom to proceed with an Environmental Impact Assessment into the suitability of the same site to host 4000 MW of nuclear generated electricity.
9. We welcome this decision as it allows for a public participation process which we believe will propel the country towards the fulfilment of the government policy position on an all-inclusive energy mix.
10. The nuclear industry has over decades been an integral part of the world economic development, evolving from import to export oriented industry, providing a central impetus to technological innovation as well as to socio-economy developments such as infrastructure, health and education.

11. South Africa has accumulated extensive experience in nuclear technology development and nuclear power generation.
12. South Africa is one of the founding members of the Generation IV International Forum back in the early 2000s. In 2015, we signed the 10 year extension of the Framework Agreement of the Generation IV International to re-affirm our strong interest and commitment to pursue collaborative research and development on Generation IV reactor technology.
13. On that note, I also wish to officially congratulate Australia on depositing their instrument of accession into the Framework Agreement of the Generation IV Forum. We look forward to working with you at all developing the next Generation of nuclear reactors.
14. I applaud continued collaborative research and development under the GIF seeking to develop economic, innovative, safe and flexible nuclear reactor systems to meet both the current and future energy needs.
15. The multifaceted nature of the energy policy requires for factors such as economic, social and environmental concerns to be considered in energy planning. There are therefore different sets of variables that inform energy planning nationally, regionally and globally and there cannot be a one-size fits all approach.

16. South Africa recognises the role of nuclear power in ensuring security of energy supply and meeting the challenge of climate change. We promote an energy mix of coal, gas, renewables and nuclear. Each of these options has their role; some of the energy sources are intermittent supply and while others, such as nuclear and coal, are base-load supply.
  
17. South Africa has made a policy decision to pursue nuclear energy as part of the energy mix and recognise the role of nuclear as a base-load source of energy in ensuring security of supply and climate change mitigation. Currently, nuclear constitutes about 6% of the South African energy mix – with 1 800 Megawatt electric of electricity supplied to the national grid by the Koeberg Nuclear Power Station in the Western Cape. The approved Integrated Resource Plan of 2010-30 provides for coal, gas, renewables and 9600 Megawatt nuclear as part of the energy landscape by 2030.
  
18. As you may be aware, the Clean Energy Ministerial, during the June 2017 conference in Beijing, China, received and endorsed a proposal by the United States of America for the inclusion of nuclear as a work stream. South Africa supported this initiative and we look forward to working with our counterparts on advancing the nuclear energy at the Clean Energy Ministerial and ensuring that the role nuclear towards decarbonisation of the world is recognised and made practical.

19. Being a developing country, our key driver to our policy decision for nuclear power is the economics of the energy source. Currently Koeberg is one of our lowest cost electricity sources, and generation III nuclear power plants remain a good economic choice for South Africa. Generation IV nuclear power plants promise improved economics and South Africa looks forward to deploying such advanced energy systems for its development.
  
20. Sustainability of our environment is key, and being a committed party to the Paris Convention, South Africa has set ambitious carbon reduction targets, which Generation IV reactors will continue the tradition of nuclear power being the lowest carbon emitter from all energy sources. With the advent of reduced waste from these systems, there is no doubt that nuclear power itself will be more sustainable than ever.
  
21. One of the most important facet of nuclear power is – Safety. With most of the reactors globally still being Generation II, South Africa has taken a decision to deploying only Generation III or above type technology going forward. Although the Fukushima disaster had catastrophic consequences, nuclear power continues to be the safest source of electricity. The further improved safety of Generation IV systems will surpass this benchmark, and hopefully cure the myth that nuclear is an unsafe source of energy.

22. As you know, South Africa previously embarked on a Generation IV type reactor project known as the Pebble Bed Modular Reactor. This project was put into care and maintenance in 2010, however, we remain interested to still deploy such technology into the future. At this stage, we are focusing on readily deployable technologies to address our electricity demand needs going into the future as our coal fired power plants become decommissioned.

23. Chairperson, I am very pleased that the plans for the 4<sup>th</sup> GIF Symposium 2018 to be held in Paris around the same time next year is taking shape, more-especially the involvement of youth. As you may be aware, South Africa's nuclear industry is re-inventing itself with many young people now becoming the bulk of our nuclear industry.

24. This conference must also focus on the need for increased involvement of women at the GIF, because looking around this room; I can see that much needs to be done about this. If we talk about the next generation of nuclear reactors, we should also be talking about the next generation of women in nuclear.

### **Conclusion**

25. Chairperson, let me wish you successful discussions and decisions over the next two days and that these lead us ever closer to the next generation of nuclear energy with improved safety, economics, and proliferation resistance.

26. It is our responsibility as this current generation to produce knowledge systems that enhances the sustainable use of nuclear power to drive a developmental agenda and bequeath to the next generation a world they are proud to call home.

27. In our hands therefore, we hold the future of this world. We dare not fail them.

28. I thank you.