SPEECH DELIVERED ON BEHALF OF THE MINISTER OF ENERGY AT THE NORTHERN CAPE RENEWABLE ENERGY CONFERENCE 2018

DE AAR

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Programme Director

Honorable Premier

Executive Mayor

Honorable Ministers

MECs

Senior Government Officials,

Invited Speakers,

Delegates,

Distinguished Guests, Ladies and Gentleman

Good Morning,

It is indeed a great pleasure and honour for me to address you today at this important and strategic conference that focuses on renewable energy. The year 2018 marks 100 years since the birth of two of our icons and heroes of our revolution who dedicated their lives in the struggle for freedom and contributed immensely to the birth of a new South African nation.

We celebrate the birth of the founding father of our democracy Nelson Rolihlahla Mandela under the theme: “Be the legacy”, as well as Mama Albertina Nontsikelelo Sisulu one of the shining examples of

our struggle who dedicated her life to the service of her people under the theme: “A Woman of fortitude.” As this year, marks the centenary of Mama Sisulu, it provides all of us an opportunity to pay tribute to and draw inspiration from her courage, fortitude, selflessness and dedication. In addition we also remember other heroines, past and present and reclaim women’s struggle heritage and women space in our history as a country.

Energy contributes to a better quality of life. To those that have modern energy, it unlocks access to improved health care; improved education; a catalyst to other basic services; and improves economic opportunities and longer life. To those that do not have modern energy services, it is a major constraint to their social and economic development and women bear the brunt of energy poverty as they strive to support their families.

In Africa, nearly 60% of people have no access to reliable electricity. To put these numbers in perspective, the entire continent of Africa has about 150 GW of installed power generating capacity, uses about 3% of the world’s electricity. Thus, Africa and sub-Saharan Africa in particular is the epicenter of the global energy poverty. Approximately 1.19 billion people (about 16% of the global population) lived without electricity in 2014.

The Report of the UN Secretary-General, *"Progress towards the Sustainable Development Goals",* 2017 also states that globally, 85.3

per cent of the population had access to electricity in 2014, an increase of only 0.3 percentage points since 2012. That means that 1.06 billion people, predominantly rural dwellers, still function without electricity. Half of those people live in sub-Saharan Africa. Access to clean fuels and technologies for cooking climbed to 57.4 per cent in 2014, up slightly from 56.5 per cent in 2012. More than 3 billion people, the majority of them in Asia and sub-Saharan Africa, are still cooking without clean fuels and more efficient technologies.

Distinguished Guests, The share of renewable energy in final energy consumption grew modestly from 2012 to 2014, from 17.9 per cent to 18.3 per cent. Most of the increase was from renewable electricity from water, solar and wind power. Solar and wind power still make up a relatively minor share of energy consumption, despite their rapid growth in recent years. The challenge is to increase the share of renewable energy in the heat and transport sectors, which together account for 80 per cent of global energy consumption.

From 2012 to 2014, three quarters of the world's 20 largest energy-consuming countries had reduced their energy intensity — the ratio of energy used per unit of GDP. The reduction was driven mainly by greater efficiencies in the industry and transport sectors. However, that progress is still not sufficient to meet the target of doubling the global rate of improvement in energy efficiency[2].

Renewable Energy sources not only contribute to the diversification and energy supply security but also assist our government to widen access to modern energy services, while also contributing to sustainable development through their negligible carbon footprint. It must be emphasised that, we also promote renewable energy resources for their role in reducing Greenhouse Gas Emissions which emanate mainly from the predominant use of coal in our energy supply mix.

You may be aware that in 1994, the country's access to electricity was at 36%. As a result, the new administration then committed to ensure universal access by 2014. However due to various reasons, that target could not be met which in the main was affected by the following among others:

- ✓ Population growth as we had to cater for infills and extensions – new developments and informal settlements;
- ✓ Inclusion of Farm Dwellers' houses – historically not electrified;
- ✓ Historical backlog resulted from the country's spatial planning and development;
- ✓ Lack of Bulk Infrastructure upgrading, maintenance or refurbishment to align it with population growth.

This proves the critical role that Integrated Planning plays infrastructure projects.

Programme Director, the SADC Energy Ministers endorsed the importance of gender equality in the energy sector which is informed by the United Nations Sustainable Development Goal (SDG) 5 which states that there is need to "*Achieve Gender Equality and Empower All Women And Girls".* The SADC Energy Ministers approved the full and effective participation and equal opportunities for women and youth in all energy programmes and projects in the region. While we "ensure affordable, reliable and sustainable energy for all" as informed by UN SDG 7, equally so we have to drive across SDG 5 without bias and many other SDGs which cut across.

Energy security is one of the most important pre-occupations of many governments around the world including our own, since energy is central to economic growth and development and the general well-being of citizens.

It is important to provide this progress to date that the Department has concluded further consultations and the revision of the Integrated Resource Plan (Revised IRP) as committed at the time the Minister assumed his tenure as the Minister of Energy early in 2018 that the Plan will be submitted for Cabinet consideration by middle of August. I can report that the IRP was presented to Cabinet yesterday and approved for further consultation and gazetting.

While we all recognize the need to explore the use of advanced non-polluting, more efficient, affordable and cost-effective energy

technologies to meet the rising local and global demand for energy, particularly in developing countries including our own country, South Africa. A number of renewable energy sources and technologies are available in South Africa, but most still need to be developed to their full potential.

Ladies and gentlemen, Given our endowment with solar resources, we have committed to ensure that solar energy contributes significantly to the energy supply mix. True to this commitment, from all the bid windows, a total of **two thousand nine hundred and twenty two mega Watts** (2 922 MW) procured from solar PV and CSP plants is only second to wind.

NATIONAL SOLAR WATER HEATER PROGRAMME (NSWHP)

Distinguished Guests, our experience and lessons learned of the roll out of solar water heater programme since inception from 2009/10 especially on dysfunctional geysers following installation to date, we concur with the International Renewable Energy Agency (IRENA) booklet, 2015 on Quality Infrastructure for Renewable Energy Technologies particularly on Solar Water Heaters that “Quality Assurance has proven to be indispensable for establishing an enabling environment for a rapid uptake of renewable energy technologies that consists of standards which are intended to ensure that products and services perform as expected, as well as

mechanisms to verify that such requirements are fulfilled, e.g. testing and certification.

It is indeed true that Quality Assurance builds credibility necessary for the creation of healthy, efficient and rapidly growing technology markets and ensures that expectations from investors and end-users for technology performance, durability and safety are met. It is also evident that Quality Infrastructure requires development of testing laboratories and certification bodies, along with the supporting organisations for accreditation, inspection, installer training and standards development.

Since inception, the South African government has been appropriating annual solar water heater (SWH) grant funding in order to achieve several competing objectives such as reducing electricity demand by diverting the use of electricity away from electric geysers; shielding the poor from escalating electricity bills, addressing climate change impacts, help government achieve other socio-economic imperatives such as job creation and widening access to hot water. In 2011, in the spirit of the Preferential Procurement Policy Framework Act (PPPFA) and other institutional arrangement tools such as the Green Economy and Local Procurement Accords, Government led by the **Economic Development Department** with its Social Partners agreed to work together in advancing various commitments that will grow the economy.

Specifically in the renewable energy sector, a lot has been done although not yet sufficient. With regards to both the Green Economy Accord and Local Procurement Accord some of the key elements as outlined in the Commitments made are now tangible milestones and as such we need to reflect on the actual performance and deliberate further in effort to enhancing delivery on those areas:

To this end, working together with other key departments such as Trade and Industry**,** we would like to appreciate the support received from **the dti** in enhancing our work so that we can contribute meaningfully to country's economic growth in our efforts to facilitate the creation of a robust local manufacturing industry with higher levels of local production and content as designated and further enforced through the National Treasury published designation notes.

To ensure that we achieve most of the commitments and also address some past weaknesses, in 2015 the Department had to revise the Solar Water Heater Implementation Model based on the lessons learned and also in consideration from which the capacity of local manufacturers had to be tested as per the designation notes, the establishment of Measurement and Verification of Local Content had to be done among others. To date, as a country we can confirm that there is local manufacturing capacity in this specific area and we can look forward to seamless infrastructure roll out.

About 87 000 systems have been procured by the Department for implementation under the social component of the National Solar Water Heater Programme. The Department plans to install all procured 87 000 SWH units in nineteen (19) participating municipalities during the 2018/19 Financial year. Of the nineteen municipalities, two (2) are from the Northern Cape Province and these are - Sol Plaatjie Local Municipality (**6000** allocated solar geysers) and Emthanjeni Local Municipality (**4000** allocated solar geysers) respectively and the entire quantity is locally manufactured and verified by the South African Bureau of Standards (SABS).

Programme Director, the Department has committed to work very closely with participating municipalities through the signing of Framework Agreements during the implementation of this programme. This will include activities that need to be done prior to installation such as social facilitation and technical feasibility assessments so as to ensure that this phase of the programme becomes a success and that some of the technical challenges experienced before at Sol Plaatjie Municipality that led to dysfunctional geysers are averted.

HYDROPOWER PROJECTS

Ladies and Gentlemen, 247 MW potential for new small-scale hydro development is believed to exist in South Africa, in the form of embedded water transfer and gravity-fed systems throughout the country. Of the country's estimated potential, South Africa only has an installed capacity of 38 MW.

We appreciate the Department of Water and Sanitation (DWS) efforts in advancing the country's policy on hydropower whilst recognises the global shift towards Renewable Energy technologies; resource utilisation and efficiency; and seeks to make it easier for small scale hydro power projects to be developed. The REIPPPP has already seen successes in relation to the latter with 14MW procured from small hydro power installations.

In November 2015, the Department of Water and Sanitation gazetted a draft pricing strategy that seeks to facilitate reforms in the sector as well to provide transparency and predictability to water users on how water will be priced. It is comforting that the strategy redefined water use categories, recognising RE production from hydropower as a non-consumptive use and further acknowledges the importance of supporting the viability of hydropower schemes as part of the diversification of the energy mix. This again further affirms, the level of integrated planning we need as a country to reduce implementation hindrances.

SOUTH AFRICAN WIND ENERGY PROGRAMME (SAWEP)

Let me also thank our International Partners for their contribution towards some of our projects like the Global Environmental Facility the United Nations Development Programme implement the second phase of the South African Wind Energy Programme (SAWEP 2). The SAWEP partnership started in 2009 with the implementation of SAWEP 1, which played a pivotal role in supporting the growth of what was then a fledgling industry.

The SAWEP 2 project has four (4) major components which are: (1) Optimisation and improvement of local content targets in wind energy procurement mechanisms; (2) Wind resource mapping and wind corridor development support for policy-makers; (3) Support for the development of the small-scale wind energy sector; and (4) Training and human capital development.

Ladies and gentlemen allow me to reflect mainly on the wind resource mapping work done under this programme. Due to the level of skills and multidisciplinary teams required in areas like this, the Danish Government complemented what we commonly referred to as WASA (The Wind Atlas of South Africa Project which included parts of the Northern Cape. When SAWEP II started in March 2013 it sought to extend WASA to the rest of the Northern Cape Province in addition to KwaZulu-Natal Province, Free State Province and the remaining parts

of the Eastern Cape. Once complete, WASA will give us a good indication of the potential of the wind resource in the country from which 70% of South Africa will be covered.

In conclusion, I wish with these deliberations we can find better solutions to take South Africa's Renewable Energy Forward.

I thank you.