



**REMARKS BY THE HONOURABLE MINISTER
OF
MINERAL RESOURCES AND ENERGY
MR SAMSON GWEDE MANTASHE
AT THE SOLAR POWER AFRICA 2022 CONFERENCE
CTICC, 16 FEBRUARY 2022**

Programme Director,

CEO of the South African Wind Energy Association (SAWEA), Mr Niveshen Govender
Chairperson of the South African Photovoltaic Association (SAPVIA), Mr Wido
Schnabel

Chairperson of the South African Wind Energy Association (SAWEA), Ms Mercia
Grimbeek

Chairperson of the South Africa Energy Storage Association (SAESA), Ms Jo-anne
Dean

Team DMRE

Mr Bernard Magoro, Head of IPP Office

Rand Merchant Bank (RMB)

Esteemed guests

Members of the media

Ladies and gentlemen

It is an honour to be with you at this first Solar Power Africa Conference ever held in
South Africa.

Congratulations to the South Africa Photovoltaic Industry Association (SAPVIA) and
Messe Frankfurt South Africa (MFSA) for successfully convening this platform which
offers an opportunity for stakeholders to deliberate on pertinent issues in the Solar
Power and Battery Storage technologies, and industry at large.

Ladies and Gentlemen,

Since the commitment made by the former President, Jacob Zuma, at Copenhagen in
2009, with the guaranteed R20bn into green energy, the renewable energy sector has
grown.

Until this guarantee by the state, private capital had been reluctant to take up the 30%
offered to independent power producers. Understandably, hesitancy was, in part, due
to the monopoly of the national power utility, and the risk aligned.

Government's investment into this sector arose out of its policy, the New Growth Path
(NGP), which aimed – among others, to rekindle the economy and, specifically, birth

a new industry, the green industrial energy, and meet our commitments for environmental sustainability.

The catalytic IPP Procurement Programme, launched in 2010, diversified our energy-mix, introduced new technologies; thereby transforming the landscape of electricity generation, trading, and access to the national grid.

The Renewable Energy IPP Programme (REIPPPP) has grown South Africa's renewable energy footprint, which started with the announcement of Bid Window One in December 2011. The first renewable energy IPP, a solar PV project, started supplying electrical power to the grid in November 2013; and by the end of September 2021, five thousand four hundred and twenty-three megawatts (5 423 MW) of electricity capacity, from 83 IPP projects, were connected to the national grid and supplying energy to Eskom.

The IPPs have, since then, generated sixty-six thousand seven hundred and fifty-six gigawatt hours (66 756 GWh) of renewable energy procured under the REIPPPP. Between October 2020 to September 2021, IPPs have contributed around 7% of total electrical energy in South Africa.

In addition, today, there are green property associations, renewable masterplans underway, investment by the banking sector and other private entities, a small manufacturing capacity, collaboration with international partners, relatively low cost of energy, technology development, and others.

The IPP Programme has attracted investment to the value of R212.4 billion from national and international funders.

Energy procured by the REIPPPP is progressively becoming cost effective. Solar PV is one of the cheapest forms of generating electricity. The real price for solar PV power has dropped by 75% to R1.14/kWh (in April 2021 terms), while the average base rate of CSP decreased by 7% to R4.12/kWh between BW1 and BW2 and by 8% to R2.23/kWh from BW3 to BW3.5.

The Integrated Resource Plan (IRP) 2019 has consolidated the significant role played by renewable technologies and facilitated energy reforms.

The first two Ministerial determinations made under the IRP 2019 amount to thirteen thousand eight hundred and thirteen megawatts (13 813 MW). This represents 44% of the total IRP 2019 target of thirty-one thousand four hundred and eighty-eight megawatts (31 488 MW) for new additional capacity that must be added by 2030. The IPP Office has procured four thousand five hundred and seventy-eight megawatts (4 578 MW) or 33% of the determined energy. Bid Window 5 of the REIPPPP currently at Preferred Bidder stage and financial close is expected by the end of April this year. A further nine thousand two hundred and thirteen megawatts (9 213 MW) is planned to be procured during 2022 and early 2023.

A defining and innovative feature of the RMIPPPP design is that it provides for multiple generation technology projects.

Of the 11 Preferred Bidders announced under this programme, 7 projects will deploy Solar PV and Battery Storage technologies, which will be newly tested in South Africa. These Solar PV and Battery projects have also achieved an average evaluation price of R1 700 per MWh, demonstrating, in line with international experience, that the price of renewable energy is increasingly becoming cost competitive with conventional power sources.

The 25 bidders announced under the Bid Window 5 of the REIPPPP in October 2021, will contribute a total capacity of two thousand five hundred and eighty-three megawatts (2 583 MW), consisting of one thousand six hundred and eight megawatts (1 608 MW) from Wind and nine hundred and seventy-five megawatts (975 MW) from Solar PV. These projects are expected to attract over R50 billion in investment and create about thirteen thousand nine hundred and two (13 902) job opportunities during construction and their 20-year lifetime.

SOLAR POWER

South Africa's solar resource potential is amongst the highest in the world, with most areas in the country averaging two thousand five hundred (2 500) hours of sunshine per year, combined with high solar irradiation levels (between 4.5 and 6.5 kWh/m² per day). Six (6) provinces host solar power projects. The Northern Cape, the capital of SP and Concentrated Solar Power, hosts 100% of the CSP and 65% of the solar PV capacity procured in REIPPP BW1 to BW4.

By the end of September 2021, 44 of the 45 PV projects from Bid Windows One to Four, have started commercial operation, contributing two thousand two hundred- and twelve-megawatt (2 212 MW) capacity to the national power system. In addition, six (6) of the 7 CSP projects are operational, contributing five hundred megawatts (500 MW) capacity to the grid.

Solar power is contributing 30 222 GWh of energy, which represents 45% of all renewable energy produced until the end of September 2021. This also means that solar projects have reduced carbon emissions by 30.7 Mtons.

Employment

Through the IPPPP, sixty-one thousand eight hundred and fifty-eight (61 858) job opportunities have been created in the construction and operation of IPPs, until the end of September 2021, of which thirty-seven thousand six hundred and seventy-three (37 673) new job opportunities were created through the Solar power projects.

However, given the scourge of unemployment in South Africa, especially among women and youth, the green energy sector should do more to move the country from job opportunities to permanent employment and manufacturing capacity.

Participation of Black South Africans

Transformation of our society, which includes de-racialisation of the economy, participation, and ownership of the economy by the majority, is a policy imperative.

Black South Africans are said to, on average, own 34% of the renewable energy projects that have reached financial close. This includes black people in local communities that have ownership in the IPP projects that operate in or nearby their vicinities. There is a further, on average, 21% shareholding of engineering, procurement, and construction (EPC) contracting companies involved in the construction of IPP projects, and 34% of shareholding in operating companies of IPPs.

IPPs have made contributions of over R2 billion towards Enterprise Development and Socio-economic Development initiatives in communities to date. These contributions have been spent in education, health, social welfare, and enterprise development. It is better to pool resources together and work on a project that will change the lives of our communities.

Transformation should be seen and felt in the lives and livelihoods of these previously marginalised communities.

Change must give meaningful realism to the socio-economic principles, and dignity, inherent in our Constitution.

Localisation and industrialisation

The IPPPP has created multiple opportunities for South Africa to advance our manufacturing capacity and industrial development and participate in new technology value-chains.

Local content commitments by IPPs amount to R67.6 billion or 45% of total project value. To date R 62.5 billion, which is 50% of project value has been realised.

Government is developing a Renewable Energy Master Plan to ascertain industrial development through this programme. As stakeholders, you should contribute to the master plan.

AFRICA and THE WORLD

Africa possesses natural and mineral wealth capable of turning around country economies and the prospects of the continent. The inability to translate this potential resource into actualisation is hampered by lack of financial, technological, and human capabilities, that are compounded by difficult global dynamics.

Critical to the continent's challenges is energy poverty. At least thirty (30) African countries experience regular, often, chronic electricity shortages, leading to outages and the need for expensive back-up power generation facilities.

Clean, sustainable, and adequate energy supplies will enable Africa to reach her full potential, to meet the needs of her developing economies and escape the poverty trap.

We have, traditionally, relied on hydropower and coal. Solar PV, with recent substantial cost reductions, offers a rapid, cost-effective way to provide utility-scale electricity for the grid and modern energy services.

Through a combination of policy reforms and lower prices, Solar PV ramped up, approximately, one hundred and thirty-nine gigawatts (139 GW), raising the global Solar PV total to an estimated seven hundred and sixty gigawatts (760 GW), which included both on-grid and off-grid capacity.

Since 2012, installed costs for power generated by utility-scale solar PV projects, in Africa and abroad, have decreased. The International Renewable Energy Agency (IRENA) estimates that by 2030, Africa could be home to more than 70 gigawatts of Solar PV capacity.

CONCLUSION

Government recognises the role that the renewables are playing in the just energy transition. We are a coal-based energy economy. We need to diversify our energy mix as we transition from high carbon emissions to low carbon emissions. With the natural resources we have for the development of the renewable industry, it is possible to generate the much-needed energy to kickstart our economy and put South Africa on a just energy transition trajectory.

I wish you successful deliberations. I thank you.