



Solar Capital De Aar 3 Inauguration Speech by the Minister of Energy,

Ms Tina Joemat-Pettersson, MP

Thursday, 17 March 2016, 12h00

Solar Capital De Aar Facility, De Aar, Northern Cape

- Programme Director,
- Mayor of Emthanjeni Local Municipality,
- Councillors of both Local and District Municipalities,
- Chairperson, CEOs and Board Members of Solar Capital De Aar Plant
- Distinguished Guests, Ladies and Gentlemen
- Members of the Media

Good morning,

I am greatly honoured to address you at the inauguration of the Solar Capital De Aar 3 PV plant in the beautiful Northern Cape Province.

The Northern Cape has the largest geographic footprint of all provinces in South Africa, covering 31% of the country's surface area, but it is home to only 1.16 million people or 2.2% of the total 53.8 million South Africans. The Northern Cape province contributes 2.2% to national GDP, which is small compared to its geographic size, but reasonable relative to its low population number.

This economic contribution can mainly be ascribed to activities in the mining and community services sectors with a combined 49% share of the economic output for the province. The distribution of economic activities across other sectors is low, but somewhat evenly spread, indicating a diverse range of activities. Nonetheless, electrical power generation presents an opportunity for greater economic diversification and growth in the province.

The province has a good road network, making the interior easily accessible from South Africa's major cities, harbours and airports. This offers a good platform for the establishment of new power infrastructure under the IPPPP and for diversification of the economy associated with renewable energy, particularly solar energy.

In addition, the Northern Cape is also becoming a potential gas hub for the country. The Orange Basin is a promising offshore gas field in South Africa, with estimated prospective resources of 22.5 Trillion Cubic Feet (TcF). The 70-km-offshore Sunbird Ibhubesi gas project, with estimated reserves of 540 Billion Cubic Feet, has signed an MOU with Eskom for investigating gas supply to the Ankerlig Power Station. Furthermore, the Karoo's Shale Gas potential may be actively explored upon favourable international gas supply and price trends.

Adjacent to the Northern Cape, offshore Namibia is seen as an exciting new gas exploration province which has been largely overlooked in recent decades following the drilling of 18 wells in the shallower water shelfal regions to appraise the Kudu field discovery. Eskom and Nampower have conducted joint transmission studies to establish a possible interconnection solution for the Kudu project.

The Northern Cape Province is well-linked with Namibia mainly via the Kalahari and the Orange River Basin Corridors, strengthening trade and transport linkages between the two countries. With regard to marine transport, Port Nolloth, currently the Province's only natural harbour, is being considered for potential enlargement. It is already used on a small-scale particularly for off-shore mining support services, fishing and recreation. As the Northern Cape's economy grows and becomes more diversified, so will the demand and opportunities grow for port development.

The inauguration of Solar Capital De Aar 3 marks the commercial operation of the 17th Solar Photovoltaic plant in the Northern Cape Province, which has become the country's mecca for the development of renewable energy sources.

The commercial operation of this 75MW plant is a huge achievement not only for the project, but also for scaling up the deployment of renewable energy and curbing the effects of climate change in South Africa. It is exciting to see how changes to the energy system

through the IPPP Programme are increasingly accompanied by deep shifts in our socio-economic landscape and touching the lives of communities in very different ways.

Since the implementation of the REIPPP Programme in South Africa, the province has attracted the lion share of IPP projects to date. The highlights in the province, amongst others include:-

- In December 2015, 86% of IPP scheduled to be operational started with commercial operations;
- Local content achieved in the construction of the projects was 50% of Total Project Value;
- Total Foreign equity and finance investment in the bid windows to date reached R35.4 billion, 66% of all investment attracted into South Africa;
- Employment of South African citizens which include members of the local community to IPP operations were 14 189 job years at end of December 2015;
- Equity shareholding for Black South Africans amount to 26%, local communities hold 9% equity in the IPPs of bid windows 1 – 3.

To date, a total of 6 376MW of renewable energy has been procured from 102 IPPs under the REIPPPP. The 51 projects located in the Northern Cape account for 56% of procured capacity - a total of 3 581MW. The Northern Cape offers some of the best conditions in the world for solar electricity generation, and therefore it is not surprising that the province hosts 100% of the CSP and 65% of the solar PV capacity procured in bid windows to date in the REIPPPP in South Africa, contributing 72.5% or 2 112MW of the total 2 992MW solar power in the country. This includes 3 solar power projects with a procured capacity of 15MW from 'small' REIPPPP projects, ranging between 1MW and 5MW.

Through the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP), the DoE is targeting the procurement of 13 225MWs from RE IPPs by 2025, as determined by the Minister of Energy. To this end, an expedited bid window was introduced; open to all bids that were not successful during previous rounds as well as other ready projects. One hundred and six (106) submissions for the expedited bid window were received on 11 November 2015 totalling 9 500MW, of which 6 500MW was interest from IPPs located in the Northern Cape.

As part of the Department of Energy's energy policy initiatives and in an effort to progress the uptake of renewable energy, a Ministerial Determination has been granted for the procurement of 1 500MW through a solar park to be developed in the Northern Cape Province, due to the fact that the province has the highest concentration of solar projects, vast interest for further investment, and sufficiently high solar radiation intensity to support such investment. The planned solar park will provide new impetus for the economy by reducing the cost of solar power due to economies of scale, creating an opportunity for localization through the development of a technology manufacturing capability, and attracting private sector investors to operate IPP plants within the park.

One of the key constraints facing future large scale roll out of renewable energy projects, is access to the grid. The projects procured in the Province to date have utilised much of the available grid capacity in the Northern Cape area. Currently, the capacity limit of the network between Karoo and Namaqualand is approximately 3 200MW, while total interest for this area is approximately 3 700MW. Approximately 3 000MW has already been allocated.

No major network strengthening is planned between Namaqualand and Karoo in the near term, but there is strengthening planned between Namaqualand and Kimberley. Further network strengthening is required to accommodate the interest in the Northern Cape area which has not been budgeted for in the current multiyear price determination (MYPD3) to 2017/18. Until more funds are made available for transmission projects, development costs and relevant capital costs to connect IPPs, private investment in the grid remains an option to address the funding and implementation constraints experienced. An option for co-funding as mentioned by Minister Pravin Gordhan.

The electrical energy that will become available from the investments made in renewable energy in the Northern Cape to date will equate to more than 100% of its own electrical power needs, effectively making it a net exporter of electricity to other provinces in future. This is in line with the Northern Cape's Renewable Energy Strategy's vision of the province being a net exporter of electricity by 2020. It is expected that the Northern Cape would be a net exporter of electricity a year or two before the target of 2020, considering the scheduled commercial operation dates of the projects in the province.

The Solar Capital De Aar 3 PV Plant will contribute an additional 75MW to the 835MW new renewable energy capacity supplied to the network by the 19 operational projects in the Province since the beginning of 2014.

Given that the PV project is located in the area with the best solar resource potential in the country, we anticipate that it will annually contribute 164GWh to the grid. This is enough power to supply approximately 49 525 average South African households with electricity each year. This means that if the energy from the Solar Capital De Aar 3 PV project was available directly to the Pixley ka Seme District Municipality only, it would have powered nearly all of its households.

Through a clean energy source such as solar, the country is diversifying its electricity mix and reducing its dependence on coal power, which is responsible for the majority of the country's CO₂ emissions. By producing electricity from solar, Solar Capital De Aar 3 will displace almost 167 000 tons of CO₂ annually; significantly reducing South Africa's negative impact on climate change. Solar energy generated by this project will help reduce greenhouse gas (GHG) emissions that are related to global warming in the long run, directly supporting one of the objectives of the Northern Cape's Renewable Energy Strategy that relates to the reduction of GHG emissions from electricity consumed by commercial, residential, general government and personal services sectors in the Province.

The Solar Capital De Aar project also confirms our view that we do not have to separate climate change responses from our goals of pursuing development and poverty eradication. Pursuing the green economy must be, and is linked to our overall agenda of pursuing employment-creating growth and socio-economic improvements in the lives of our people.

Solar Capital De Aar 3 has spent more than R1 billion on local content to date, providing a stimulus for establishing local manufacturing capacity and local economic development.

The development of local enterprises will further be directly supported with an allocation earmarked for enterprise development that will accrue over the project's life. Local and provincial enterprises will benefit from an estimated R112.5 million contribution by the

Solar Capital De Aar 3 PV plant, spread over 20 years. One of the projects that is benefitting from the funds made available for enterprise development is a Hydroponic Tomato farm in the Emthanjeni Local Municipality. The project has been operating successfully, and under the supervision of the Department of Agriculture, Land Reform and Rural Development, they have managed to persevere amidst a demanding economic climate. Funds will be used to develop a business model for the project to stimulate positive growth and profitability and promote permanent job opportunities for the local communities of De Aar, Britstown, Phillipstown and Hanover, amongst others.

The socio-economic development programmes that the project aims to deliver include, amongst others:

- A women's shelter and victim empowerment programme which will deliver direct support to victims of gender based and sexual violence;
- An Early Childhood Development programme which aims to promote early learning awareness and enrolment. Solar Capital will contribute to the upgrading of the Early Childhood Development Centre infrastructure and contribute to teacher qualification and training;
- Construction of an indoor sport facility to create and enhance sporting opportunities particularly amongst youth;
- Youth development, scholarship and placement programmes to ensure a deeper understanding of potential post-school opportunities among learners.

In conclusion, Ladies and Gentlemen, the Solar Capital project is an excellent example of how the REIPPPP is making a significant contribution to energy security, economic growth and development and environmental sustainability.

We trust that this partnership will assist to contribute to alleviating the wide spread poverty in the local communities, through stimulating the local economy and providing honest, decent sources of livelihood. In addition to adding to the energy mix, the project will continue to help ensure a more steady supply of power; and, perhaps most importantly, ensure future growth for the community, while also contributing to the growth of the region and the country.

I would like to thank all the different parties and partners in this project, who worked tirelessly not only to complete the project, but also to prepare and participate in the celebrations today. You deserve a round of applause.

I thank you.