

National Climate Change Response Strategy: Lessons from REIPPP – The Way Ahead



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IN SUMMARY

- **Renewable Energy – via REIPPPP as a first phase – has kick started the Low Carbon Economy energy transition**
 - Worst power crisis in 40 years (NPC)
 - Of 87 coal generating units, “32 require major surgery and 3 are in critical condition “
 - The country will be electricity constrained until 2020 and possibly beyond – NDP growth ambition requires approx. 3% p.a electricity growth. Only Renewable Energy and cogen plus Demand Side Interventions can assist in this period
 - Climate Change response – RE a clear driver for Low Carbon industrialisation
 - RE is the cheapest source of clean new generation, often by a significant margin
 - RE has brought ZAR 140 billion investment in 3 years and will invest ZAR 11 billion into rural communities over the next 20 years
 - **But it’s the next R300 billion investment that will escalate the Low Carbon energy transition**
 - National Climate Change Response Strategy and Integrated Resource Plan must integrate and lead to a future with very high RE
- **An increase in RE ambitions pre-2020 will further cement Low Carbon Economy transition – local content levels that unlock local manufacturing, job creation, modernising our electricity sector**

FROM HOPEFUL START TO TANGIBLE REALITY



FROM HOPEFUL START TO TANGIBLE REALITY



REIPPPP – THE SUCCESS STORY SO FAR

- 3922 MW of RE Delivered since 2010
- 64 projects, mostly wind and solar project in 3 years
- World class competitive procurement process – significant investment into SA
- SA one of the top 3 renewable energy investment destinations worldwide
- PV prices drop 68% and wind prices 42% in 3 years
- Significant economic development benefits to rural/peri-urban communities
- Some considerations.....
 - Complex and expensive process
 - Aimed at ensuring good quality projects
 - R1: dominated by range of developers, equity holders, local companies
 - By R3: large foreign balance sheet players make up significant %
 - Financing landscape has changed – harder for local, smaller companies to compete

Our Collective Energy Challenge

- Medupi/Kusile only fully operational in 2020 or later – current plant availability at best 70% and declining
- Total cost of grid power to escalate appreciably - carbon emissions, grid losses, water use, OCGT costs, loss of investment etc
- **Households / agriculture compete with dirty power generation for water**
- **Fossil fuel creates more risk for SA** - more risk = lower GDP
- **Costs of doing nothing** can be OCGT cost (over R4.50kWh), blackout cost and/or the economic opportunity cost of insufficient supply. Conservatively ZAR 11 billion per annum for 5 years. In 2008, NERSA found that the cost of the unmet electricity 75/kWh (compare solar PV: R0,88c/kWh; wind energy: R0,70c/kWh)
- IPP's can build power projects and expand grid – no capital cost to Government and citizens

Powering SA Inc. Putting South Africa to Work.

- **Rework/realign REIPPPP with NDP & Green Economy Accord objectives**
 - 2000MW a year for next 4 years – jobs, skills, new clean investment, clean industrialisation, poverty alleviation
- **Set up medium scale procurement programme (5MW to 60MW): fixed tariffs, high thresholds re local content, job creation, local ownership, skills development.**
 - This category of projects will pursue greater value for “SA Inc“, more than price – create more local RE companies/operators
- **Roll-out Rooftop PV Programme at scale – SMME’s at core, high job creation**
- **Pursue solar water heating with the greater focus and urgency**
- **Auction building of new grid – finance smart grid, rural mini-grids**

THANK YOU



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THE SOUTH AFRICAN RENEWABLE ENERGY COUNCIL (“SAREC”)



- Umbrella body for industry bodies in renewable energy
- Founders were SESSA, SASTELA, SAPVIA and SAWEA
- Committed to government to form the Council during the NEDLAC discussions on the Green Economy Accord
- See:

[http://www.engineeringnews.co.za/article/sa-renewable-energy-associations-to-launch-umbrella-body-2011-12-15;](http://www.engineeringnews.co.za/article/sa-renewable-energy-associations-to-launch-umbrella-body-2011-12-15)

[http://mg.co.za/article/2011-12-09-umbrella-body-becomes-sas-voice-on-renewable-energy;](http://mg.co.za/article/2011-12-09-umbrella-body-becomes-sas-voice-on-renewable-energy)

[http://www.timeslive.co.za/local/2011/12/15/renewable-energy-sector-to-get-new-umbrella-body;](http://www.timeslive.co.za/local/2011/12/15/renewable-energy-sector-to-get-new-umbrella-body)

<http://www.esi-africa.com/Umbrella/body/SA/renewable/energy/associations>

THE SOUTH AFRICAN RENEWABLE ENERGY COUNCIL (“SAREC”) ***(continued)***

- Goals: To act as a collective custodian and voice for the renewable energy in South Africa
 - Work collectively towards optimising the regulatory and policy framework for renewables
 - Collectively remove barriers to entry for renewable energy in South Africa;
 - To provide expert resources that Government can draw on re energy policy;
 - Liaise between international agencies and the South African Government on RE and CC;
 - Promote public and private sector coordination towards the cost optimisation of renewable energy generation and localisation