Perspectives on the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP) & the investment and business opportunities it offers

...”it (REIPPPP) has already established a flagship public-private partnership model for South Africa, and indeed the rest of Africa, and in the process is helping alleviate Eskom’s current power crisis while also reducing greenhouse gas emissions.”

- Enabling Renewable Energy in South Africa: Assessing the REIPPPP, WWF, August 2014
Presentation Outline

1. Background of the IPPP Programme
2. The role and mandate of the IPP Office
3. REIPPPP Progress to Date
4. REIPPPP’s Contribution to Generation Capacity
5. Small IPP Programme Update
6. REIPPPP Eastern Cape Project Locations
7. Design of the REIPPPP
8. Available Investment and Business Opportunities
9. Most Accessible Contracting Opportunities
Background of the IPPP Programme

Overall Goal:-

➢ To procure energy while contributing to broader national development objectives viz. job creation, social upliftment & widening the scope of economic ownership

REIPPPP Objectives:-

➢ Increase electricity supply, while reducing reliance on fossil fuels
➢ Stimulate an indigenous renewable energy industry
➢ Contribute to socio-economic development & environmentally sustainable growth
NDP:-
- SA must invest - strong network of economic infrastructure:
  - To support medium & long term economic and social goals
- Energy infrastructure - critical component to underpin econ activity & growth
- 10 000 MWs to be established by 2025 in addition to 2013 baseline of 44 000 MWs

IRP 2010:-
- 17 800 MW target - from renewable energy sources by 2030:
  - 5 000 MW - operational by 2019
  - Further 2 000 MW (i.e. combined 7 000 MW) operational by 2020
Further capacity:-
- Base load
- Medium Term Risk Mitigation (MTRM) plan

Determinations:-
- 6 825 MW - Renewable Energy
- 2 500 MW - Coal
- 1 800 MW - Co-generation (MTRM plan)
- 3 126 MW - Gas (2 652 MW base load + 474 MW MTRM)
- 2 609 MW - Imported hydro
- 6 300 MW of RE - promulgated on 18 August 2015
Role & Mandate of the IPP Office

• A joint venture between DoE, NT & DBSA

• **Primary mandate:**
  – Secure electrical energy from the private sector via renewable & non-renewable energy sources

• **Services Offered:**
  - Professional advisory services
  - Procurement management services
  - Monitoring, evaluation & contract management services
Role & Mandate of the IPP Office

Renewable Energy Procurement

• REIPP Procurement Programme (onshore wind, solar PV, CSP, small hydro, biomass, biogas, landfill gas)
• Small RE IPPs
• Hydro
• Cogeneration (from agricultural waste / byproducts)

Non Renewable Energy Procurement

• Coal (base load)
• Cogeneration
• Gas

Advisory Services

• Gas Utilisation Master Plan (GUMP)
• Small projects fund
• Biofuels
Role of the IPP Office – Continued

**REIPPPP Procurement:-**
- Onshore wind, solar PV, CSP, small hydro, biomass, biogas, landfill gas
- Small RE IPPs
- Hydro
- Cogeneration (agricultural waste/by products)

**Non-Renewable Energy Procurement:-**
- Coal (base load)
- Cogeneration
- Gas

**Advisory Services:-**
- Gas Utilisation Master Plan (GUMP)
- Small projects fund
- Others (Biofuels, demand side management, cross-border)
REIPPPP Progress to Date

**BW 1**
- Submission date: 4 November 2011
- 28 preferred bidders
- 1 425 MW of contracted capacity
- Signature of the PPAs - 5 November 2012

**BW 2**
- Submission date: 5 March 2012
- 19 preferred bidders
- 1 040 MW of contracted capacity
- Signature of the PPAs - 9 May 2013

**BW 3**
- Submission date: 19 August 2013
- 17 preferred bidders
- 1 457 MW of contracted capacity
- Signature of the PPAs - 11 December 2014

**BW 3.5**
- Submission date: 31 March 2014
- 2 preferred bidders
- 200 MW of contracted capacity
- Signature of the PPAs - 11 December 2014

**BW 4**
- Submission date: 18 August 2014
- 26 preferred bidders
- 2 205 MW of contracted capacity
- Announcement of 13 preferred bidders on 13 April 2015
- 13 additional bidders were announced on 13 June 2015
- 1 800 MW Expedited Bid Window due 11 November 2015
REIPPPP’s Contribution to Generation Capacity
Since November 2011 more than 6 327 MW from 92 renewable energy projects have been awarded

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<tr>
<th>Capacity</th>
<th>Number of Projects</th>
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<td>Onshore Wind</td>
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<td>Solar CSP</td>
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<td>Landfill Gas</td>
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<td>Biomass</td>
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<td>BW4</td>
<td>2 205</td>
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<td>ALL</td>
<td>6 327</td>
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Small IPP Programme Update

• 49MW of the 200MW – allocated in Oct 2015

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<th>Technology</th>
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<td>George Small Scale Biomass to Energy Consortium</td>
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<td>Hopefield Community Wind Farm (Pty) Ltd</td>
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<td>Adams Solar PV Project (Pty) Ltd</td>
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<td>Ngqushwa</td>
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<td>Hamburg</td>
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<td>Humansdorp</td>
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Design of the REIPPPP

• To benefit all South Africans in general & black women, in particular:
  – Minimum 40% SAEP
  – Economic Development Commitments (70:30 point scoring)
    • Obligations: Job creation, local content, ownership, management control, preferential procurement, enterprise development & socio-economic development
  • Support to Women Owned Vendors
Available Investment & Business Opportunities

Manufacturing Opportunities for Onshore Wind Energy:

- **Small wind turbines:**
  e.g. 0.6kW to 3kW in size

- **Medium/large wind-turbine generators:**
  e.g. 300kW

- **Large grid-connected wind turbines:**
  Limited quantities of components for this market sector

  - e.g. GRI-Renewables Industries in Atlantis (WC) transported its first locally manufactured wind turbine to Noupoort (NC) on 19/10/2015
Available Investment & Business Opportunities

CSP Value Chain:-

- **Materials:-** steel, plastic, copper, brass, aluminium, concrete, silica, molten salt and synthetic oil. While these are generally sourced globally, many materials (including steel, plastic, aluminium, concrete and potentially synthetic oil) are available in South Africa and some can be manufactured locally.

- **Components:-** for the collector system, steam generator system, heat storage system and electrical/control system. Some of these can be manufactured by South African engineering, aerospace and automotive companies.

- **Construction/assembly:-** most of the construction can be undertaken by South African companies.
Available Investment & Business Opportunities

Solar PV:-

- South Africa has potential for local production of several components that make up a Solar PV plant including:-
  - Module
  - Inverters,
  - Tracking systems
  - Steel structures
  - Cabling
  - Transformers
Most Accessible Contracting Opportunities

CONSTRUCTION PHASE

Electrical:
• Materials Supply
• Cable Installations
• Design
• Sub-station Build

Logistics & Other:
• Security
• Labour Hire
• Accommodation
• Transport
• Crane Hire and Installation
• Cleaning
• Catering

CONSTRUCTION PHASE

Civil:
• Concrete Works
• Reinforcing Steel
• Fuel Supplies
• Storm Water Pipes
• Cement Supply
• Plant Hire
• Fencing
• Tipping Trucks
Most Accessible Contracting Opportunities - Continued

OPERATIONS PHASE

• Cleaning
• Gardening
• Electrical Maintenance
• Panels Cleaning
• Transport
• Security
Contact Information

For any enquiries related to the IPPP Programmes, please contact the IPP Office by using the following email address:

query@ipp-renewables.co.za

Website address: www.ipp-projects.co.za