

African Utility Week

Clean Power Africa

The largest global meeting place from African Utilities

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Cape Town, South Africa



Success of the Renewable Energy IPP Programme in South Africa and Current Developments in Sub Saharan Africa

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Introduction

Energy aims to 2030

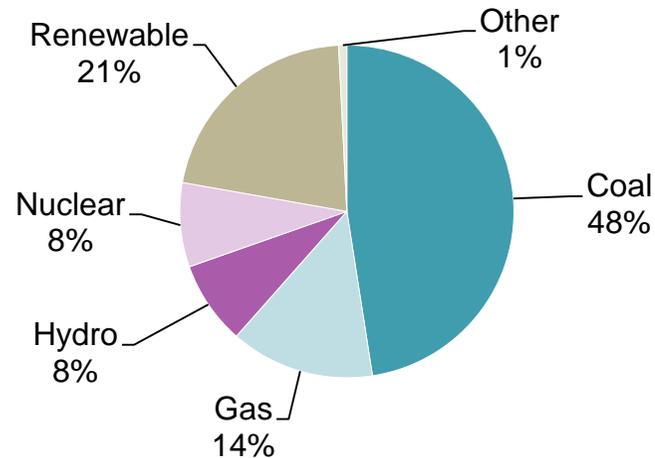
South Africa's IRP envisions an additional 41GW of new electricity generating capacity (excluding replacement of decommissioning plants) taking South Africa's electricity generation capacity to 81GW by 2030

Some of the key objectives of the IRP include:

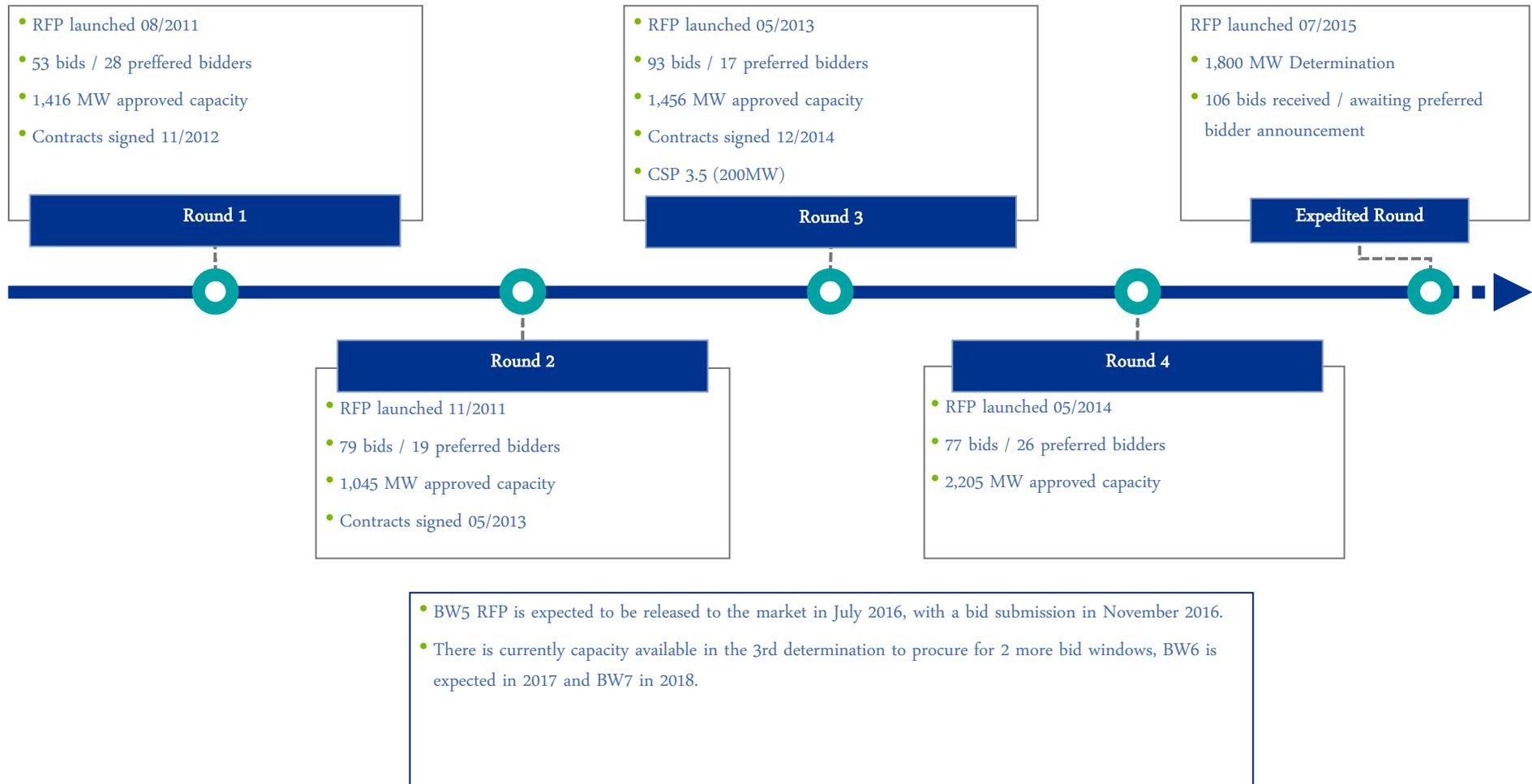
- Diversifying the coal driven power mix
- Increasing generation through domestic and regional IPPs
- Incorporating multiple energy sources such as renewables and nuclear power

In the short term coal will remain key in the generation mix; but both Eskom and IPPs will focus on utilizing alternate energy sources going forward

Installed capacity (2030) per IRP – 81GW (planned)



REIPPPP Timelines



Achievements to date

- Globally acclaimed process
- Significant investor confidence in SA
- Has reached significant cost efficiency

92 Projects Awarded

6327 MW Procured through REIPPPP

19050 Job years created

1827 MW generated into the grid

21.7 Billion Rand spent to date on local content

192.6 Billion Rand Committed investments

53.2 Billion Rand Foreign investments & financiers



Highlights from the SA REIPPP Programme

- Actual SPV tariffs are now below the latest cost assumptions in the IRP
- Wind tariffs achieved 2030 assumptions by Bid Window 3 with continued decline in Bid Window 4
- Further cost reductions possible as battery/storage capacities improve
- A globally praised procurement process, leading in many regards

Challenges- SA REIPPP Programme

Some challenges emerging:

- remote area sites (added Transportation costs)
- available infrastructure services under pressure
- grid connections and stability
- DOE roll out of projects
- local skills base, productivity and labour unrest

Africa Renewables Development

The renewable landscape on the African Continent can be summarized as follows:

Q4,2015 (GW)	West	East	Central	Southern
Natural Gas	10.6	4.2	0.1	2.5
Hydro	6.5	4.2	1.0	5.3
Solar	1.4	1.9	-	1.4
Wind	0.6	1.8	-	0.2
Total	19.1	12.1	1.1	9.4

Mostly all African countries are included in some renewable transaction or the other

USAID – Power Africa Programme

Objectives	Additional Power
Maximise value from existing transactions (various stages of transaction support provided)	18-21GW
Identify new deal opportunities (solar, wind, geothermal)	9-11GW
Improve generation efficiency at under utilised plants	2-3GW

Result:

+/- 30GW for 60m users

Project preparatory funding of USD1bn over a 5 year period for pre-qualified consortiums

Launch of International Solar Alliance (“ISA”)

- India launched ISA on Earth Day as a common platform for co-operation among solar resource rich countries
- Prospective founding members (121 countries) to promote green, clean and sustainable energy
- Joint efforts through innovative policies, projects, programmes, capacity building measures and financial instruments to mobilise more than USD1 trillion of investments by 2030.
- Creation of an international steering committee and launch of the ISA programme

Renewables on the African Continent



Observations

- Given low levels of electrification, continued significant growth can be expected
- It is still not a base load solution, a balanced mix of power sources are probably still required
- The South African REIPPP Programme has been highly successful. Africa should be leveraging from this programme in all regards: IPP's, processes, agreements, financing, regulatory etc.
- USAID and recently launched ISA drives renewable sources of Power. This leverage and momentum must be used constructively
- Many corridor- approach infrastructure developments on the Continent. Stand alone country and isolation projects are much more difficult to implement. The Power and related industries lends itself to corridor/regional thinking and application more than any other

Thank you