

Department of Energy

Renewable Energy IPP Procurement Programme

Bid Window 4
Preferred Bidders' Announcement
16 April 2015



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Introduction

- In August 2011, subsequent to the Ministerial determination of the same month providing for procurement of 3 725 MW of renewables generation capacity from IPPs, the Department of Energy initiated the IPP Procurement Programme to procure renewables generation capacity from the private sector in a series of rounds (“**Bid Windows**”)
- In a further Ministerial determination in December 2012, the Minister determined that a further 3 200 MW of renewables generation capacity was to be procured from IPPs
- To-date, the Department has procured 4 116MW across Bid Windows 1, 2, 3 and 3.5* under the Renewable Energy IPP Procurement Programme
- The procurement documents, updated for the purposes of Bid Window 4, were released on 26 May 2014
* 2 Preferred Bidders in Bid Window 3 yet to sign for Financial Close



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Introduction (cont'd)

- To-date, the Department has:
 - Under Bid Window 1, entered into 28 agreements on 5 November 2012;
 - Under Bid Window 2, entered into 19 agreements on 9 May 2013;
 - Under Bid Window 3, announced 17 Preferred Bidders on 4 November 2013 and entered into 15 agreements on 11 December 2014.
- With regards to Bid Window 4:
 - Received 77 bids on 18 August 2014
 - These bids amounted to 5 804 MW whilst the available MW for allocation was 1 105 MW
 - The Department was pleased to note the competitive pricing offered in the bids received



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Procurement Process Background

Procurement documents

Request for Proposals

- Part A: General Requirements, Rules and Provisions
- Part B: Qualification Criteria
- Part C: Evaluation Criteria

Power Purchase Agreement

- Contract between the Buyer (Eskom) and the Seller (IPP)
 - Solar Photovoltaic PPA
 - Onshore Wind PPA
 - Small Hydro PPA
 - Biomass PPA

To be concluded in respect of all Bid Window 4 projects

Implementation Agreement

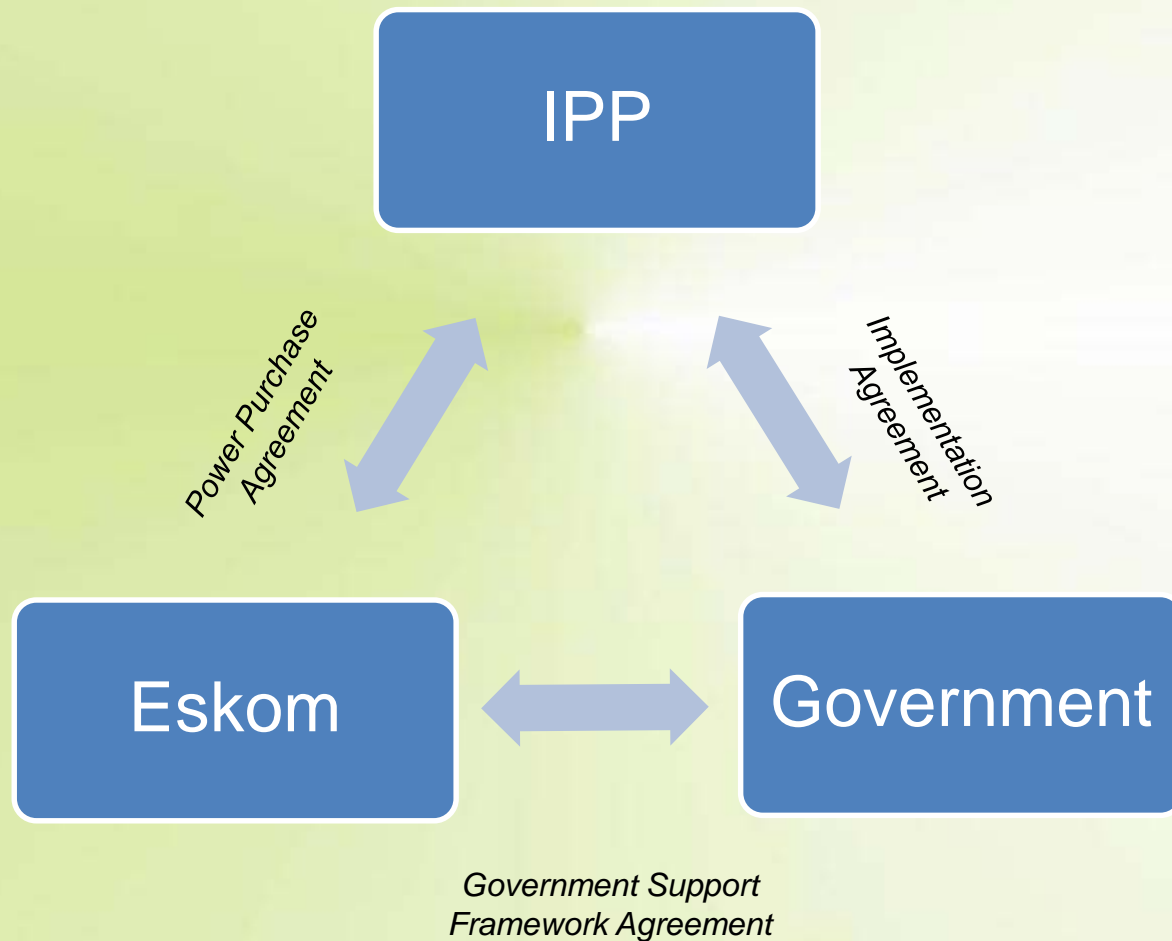
- Contract between the IPP and the Department
- Obligation for IPP to deliver on Economic Development obligations
- On Buyer default – Department to pay the IPP



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Contractual Arrangement

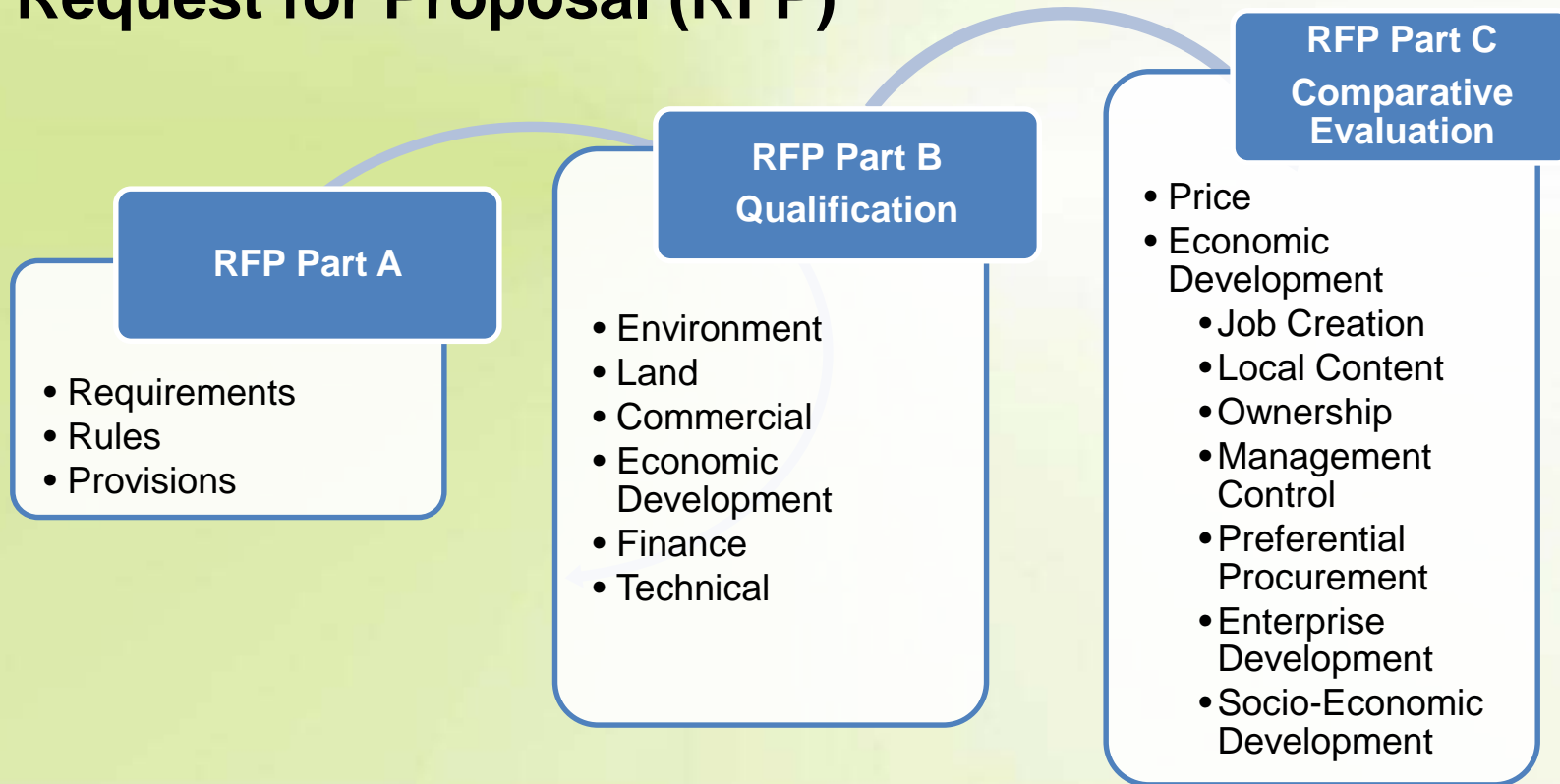


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Procurement Process Background

Request for Proposal (RFP)



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PART C EVALUATION



Price *Fully and Partially Indexed (to CPI)*
70% *Price – Rand/MWh*



*Balanced
Scorecard – ED
commitments*

ED
30%



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OVERVIEW OF EVALUATION PROCESS



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Evaluation Protocols

- Evaluation conducted in a 'closed' evaluation environment, under strict security conditions
- Members of the evaluation team are 'ring-fenced' within each of their firms
- Signed declaration of interest by all firms and individuals involved in the evaluation process
- Reports prepared by each discipline reviewed by independent review teams
- Overall process reviewed by independent governance review team



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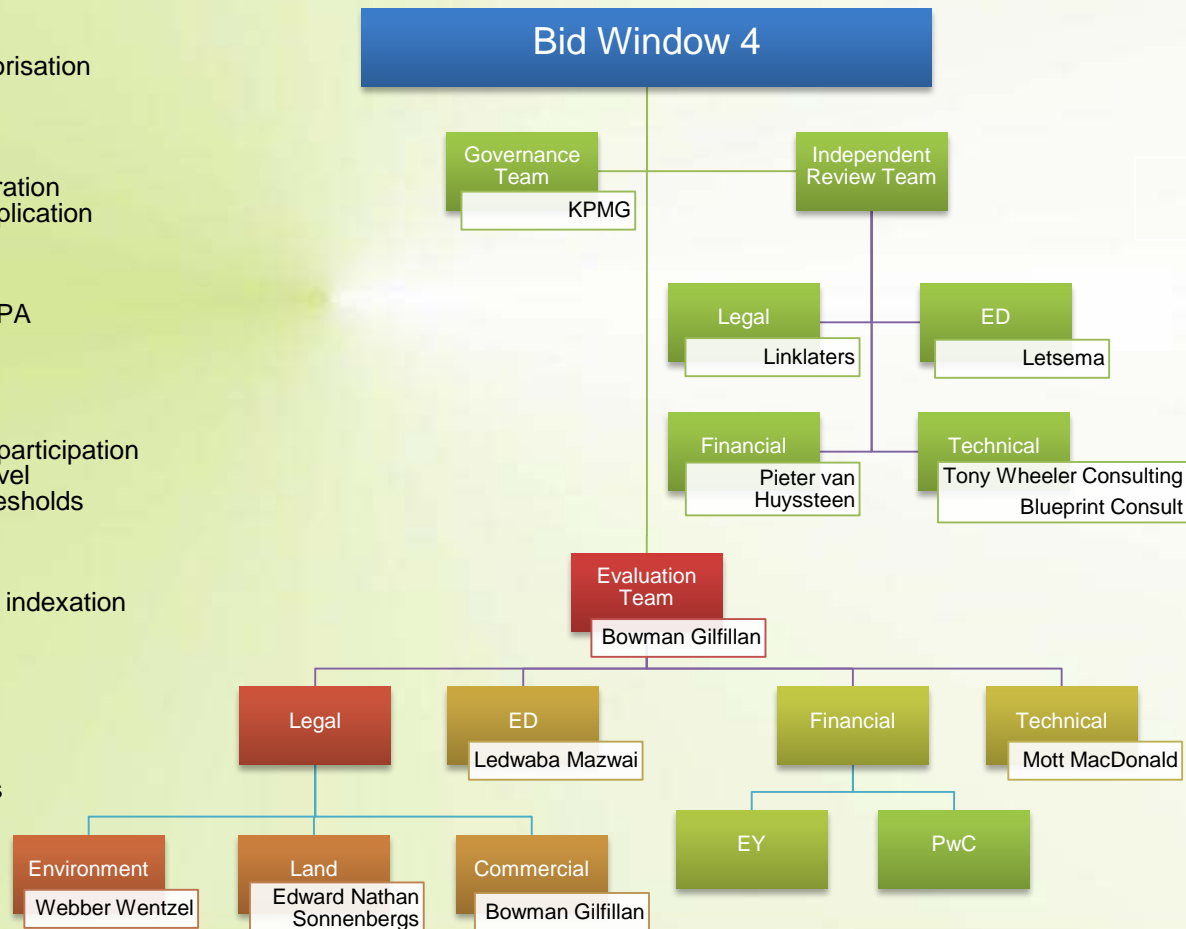
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Evaluation Composition

Evaluation Streams:

- Legal Environment
 - Environmental Authorisation
- Legal Land
 - Land rights
 - Notarial lease registration
 - Proof of land use application
- Legal Commercial
 - Acceptance of the PPA
 - Project structure
- Economic Development
 - South African entity participation
 - Contributor status level
 - Compliance with thresholds
- Financial
 - Full and partial price indexation
 - Financial proposal
- Technical
 - Eligibility
 - Energy resource
 - Technical proveness

Evaluation team:



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PREFERRED BIDDERS



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Preferred Bidders Solar Photovoltaic

Project Name	Contracted Capacity	Fully Indexed Price* (ZAR/MWh)	Partially Indexed Price* (ZAR/MWh)	Portion Indexed
Aggeneys Solar Project	40 MW	R 777,00	R 1 073,00	33,0%
Droogfontein 2 Solar	75 MW	R 832,50	R 1 282,05	20,0%
Dyason's Klip 1	75 MW	R 772,00	R 1 182,00	20,0%
Dyason's Klip 2	75 MW	R 776,00	R 1 193,00	20,0%
Konkoonsies II Solar Facility	75 MW	R 786,00	R 1 087,00	35,0%
Sirius Solar PV Project One	75 MW	R 771,00	R 1 169,00	20,0%
TOTAL	415 MW			

** April 2014 base date*



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Preferred Bidders Salient Terms Solar Photovoltaic

	Bid Window 4	Bid Window 3	Bid Window 2	Bid Window 1
Price: Fully Indexed (Ave. Rand per MWh) (Base Apr '11)	R 659	R 881	R 1 645	R 2 758
Price: Fully Indexed (Ave. Rand per MWh) (Base Apr '13)	R 740	R 990	R 1 848	R 3 098
Price: Fully Indexed (Ave. Rand per MWh) (Base Apr '14)	R 786	R 1 050	R 1 961	R 3 288
MW allocation	415 MW	435 MW	417 MW	632 MW
Total Project Cost (ZAR Millions)	R 8 504	R 8 145	R 12 048	R 23 115



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Preferred Bidders Onshore Wind

Project Name	Contracted Capacity	Fully Indexed Price* (ZAR/MWh)	Partially Indexed Price* (ZAR/MWh)	Portion Indexed
Golden Valley Wind	117 MW	R 583,00	R 830,00	33,1%
Oyster Bay Wind Farm	140 MW	R 612,31	R 875,93	20,0%
Roggeveld Wind Farm	140 MW	R 559,70	R 894,50	20,0%
The Karusa Wind Farm	140 MW	R 666,52	R 994,16	20,0%
The Nxuba Wind Farm	139 MW	R 671,23	R 941,67	20,0%
TOTAL	676 MW			

** April 2014 base date*



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Preferred Bidders Salient Terms Onshore Wind

	Bid Window 4	Bid Window 3	Bid Window 2	Bid Window 1
Price: Fully Indexed (Ave. Rand per MWh) (Base Apr '11)	R 519	R 656	R 897	R 1 143
Price: Fully Indexed (Ave. Rand per MWh) (Base Apr '13)	R 583	R 737	R 1 008	R 1 284
Price: Fully Indexed (Ave. Rand per MWh) (Base Apr '14)	R 619	R 782	R 1 069	R 1 363
MW allocation	676 MW	787 MW	563 MW	634 MW
Total Project Cost (ZAR Millions)	R 13 466	R 16 969	R 10 897	R 13 312



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Preferred Bidders

Small Hydro

Project Name	Contracted Capacity	Fully Indexed Price* (ZAR/MWh)	Partially Indexed Price* (ZAR/MWh)	Portion Indexed
Kruisvallei Hydro	5 MW	R 1 117,20	R 1 630,60	20,0%

** April 2014 base date*



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Preferred Bidders Salient Terms Small Hydro

	Bid Window 4	Bid Window 3	Bid Window 2	Bid Window 1
Price: Fully Indexed (Ave. Rand per MWh) (Base Apr '11)	R 937	N/A	R 1 030	N/A
Price: Fully Indexed (Ave. Rand per MWh) (Base Apr '13)	R 1 053	N/A	R 1 157	N/A
Price: Fully Indexed (Ave. Rand per MWh) (Base Apr '14)	R 1 117	N/A	R 1 228	N/A
MW allocation	5 MW	-	14 MW	-
Total Project Cost (ZAR Millions)	R 245	N/A	R 631	N/A



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Preferred Bidders

Biomass

Project Name	Contracted Capacity	Fully Indexed Price* (ZAR/MWh)	Partially Indexed Price* (ZAR/MWh)	Portion Indexed
Ngodwana Energy Project	25 MW	R 1 450,00	R 1 790,00	50,0%

** April 2014 base date*



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Preferred Bidders Salient Terms Biomass

	Bid Window 4	Bid Window 3	Bid Window 2	Bid Window 1
Price: Fully Indexed (Ave. Rand per MWh) (Base Apr '11)	R 1 216	R 1 246	N/A	N/A
Price: Fully Indexed (Ave. Rand per MWh) (Base Apr '13)	R 1 366	R 1 400	N/A	N/A
Price: Fully Indexed (Ave. Rand per MWh) (Base Apr '14)	R 1 450	R 1 486	N/A	N/A
MW allocation	25 MW	16 MW	-	-
Total Project Cost (ZAR Millions)	R 1 195	R 1 062	N/A	N/A



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Preferred Bidders Summary

Technology	No. of Bids	MW taken by Preferred Bidders	Maximum MW allocated for Bid Window 4
Solar Photovoltaic	6	415 MW	400 MW
Onshore Wind	5	676 MW	590 MW
Concentrated Solar Power	N/A	N/A	-
Small Hydro (≤ 40 MW)	1	5 MW	60 MW
Landfill Gas	-	-	15 MW
Biomass	1	25 MW	40 MW
Biogas	N/A	N/A	-
TOTAL	13	1 121 MW	1 105 MW



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Preferred Bidders

Geographic Distribution

Province	No. of Bids	Total Contracted Capacity
Eastern Cape	3	396 MW
Free State	1	5 MW
Gauteng	-	-
KwaZulu-Natal	-	-
Limpopo	-	-
Mpumalanga	1	25 MW
North West	-	-
Northern Cape	8	695 MW
Western Cape	-	-



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Preferred Bidders

Job Creation per Province ⁽¹⁾

Province	Jobs* during Construction Period	Jobs* during Operations Period
Eastern Cape	1 848	5 611
Free State	30	30
Mpumalanga	149	1 947
Northern Cape	4 808	11 823
TOTAL	6 835	19 411

** 1 job = 12 person-months and 1 person-month = 160 working hours*

(1) Jobs for RSA Citizens



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Preferred Bidders

Investment per Province

Province	Total Project Cost* (ZAR Millions)	Total Project Value** (ZAR Millions)	Local Content Value (ZAR Millions)
Eastern Cape	R 7 439	R 6 648	R 2 944
Free State	R 246	R 202	R 80
Mpumalanga	R 1 195	R 902	R 431
Northern Cape	R 14 531	R 11 569	R 6 521
TOTAL	R 23 411	R 19 321	R 9 976

* Total Project Cost - aggregate Debt and Equity required to fund the Project

** Total Project Value - defined in the IA, used to calculate Bidders' Local Content commitments



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Preferred Bidders

Foreign Investment

	Total Funding	Foreign Portion	Foreign % of Total Funding
Debt (incl. Mezz. Debt)	R 12 283	-	-
Equity	R 11 128	R 6 522	27,9%
TOTAL	R 23 411	R 6 522	27,9%



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Preferred Bidders Economic Development Solar Photovoltaic

	Bid Window 4	Bid Window 3	Bid Window 2	Bid Window 1
MW allocation	415 MW	435 MW	417 MW	632 MW
Local Content Value (ZAR Millions)	R 4 319	R 3 698	R 4 943	R 6 563
Local Content %	64,7%	53,8%	53,4%	38,4%
Job Creation: Construction (Citizens)	3 825	2 119	2 270	2 381
Job Creation: Operations (Citizens)	9 273	7 513	3 809	6 117



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Preferred Bidders Economic Development Onshore Wind

	Bid Window 4	Bid Window 3	Bid Window 2	Bid Window 1
MW allocation	676 MW	787 MW	563 MW	634 MW
Local Content Value (ZAR Millions)	R 5 146	R 6 283	R 4 817	R 2 727
Local Content %	44,6%	46,9%	48,1%	27,4%
Job Creation: Construction (Citizens)	2 831	2 612	1 787	1 810
Job Creation: Operations (Citizens)	8 161	8 506	2 238	2 461



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Preferred Bidders Economic Development Small Hydro

	Bid Window 4	Bid Window 3	Bid Window 2	Bid Window 1
MW allocation	5 MW	-	14 MW	-
Local Content Value (ZAR Millions)	R 80	N/A	R 483	N/A
Local Content %	40,0%	N/A	76,3%	N/A
Job Creation: Construction (Citizens)	30	N/A	409	N/A
Job Creation: Operations (Citizens)	30	N/A	144	N/A



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Preferred Bidders Economic Development Biomass

	Bid Window 4	Bid Window 3	Bid Window 2	Bid Window 1
MW allocation	25 MW	16 MW	-	-
Local Content Value (ZAR Millions)	R 431	R 261	N/A	N/A
Local Content %	47,8%	40,0%	N/A	N/A
Job Creation: Construction (Citizens)	149	96	N/A	N/A
Job Creation: Operations (Citizens)	1 947	240	N/A	N/A



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Analysis of MW allocation and remaining

Technology	MW capacity allocated in First Bid Window	MW capacity allocated in Second Bid Window	MW capacity allocated in Third Bid Window	MW capacity allocated in Fourth Bid Window	MW capacity remaining
Solar Photovoltaic	632 MW	417 MW	435 MW	415 MW	626 MW
Onshore Wind	634 MW	563 MW	787 MW	676 MW	660 MW
Concentrated Solar Power	150 MW	50 MW	200 MW	N/A	_*
Small Hydro (≤ 40 MW)	-	14 MW	-	5 MW	116 MW
Landfill Gas	-	-	18 MW	-	7 MW
Biomass	-	-	16 MW	25 MW	19 MW
Biogas	-	-	-	N/A	60 MW
TOTAL	1 416 MW	1 044 MW	1 456 MW	1 121 MW	1 488 MW

** 200 MW was allocated in the March 2014 CSP Bid Window*



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THANK YOU



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