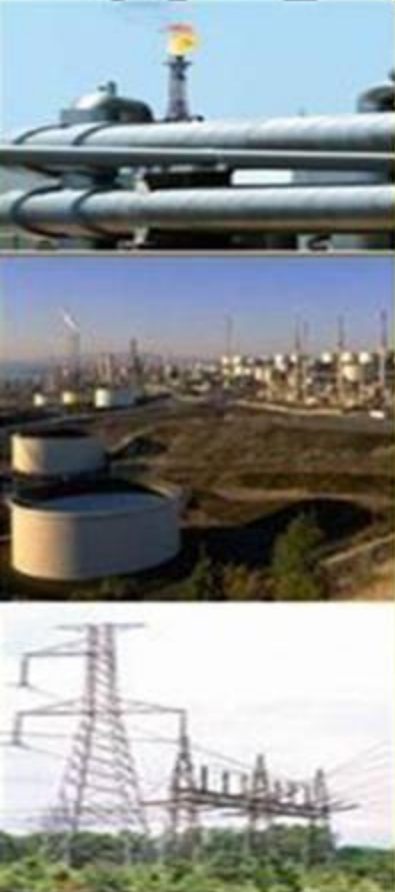




Department of Energy

Renewable Energy IPP Procurement Programme

Bid Window 3
Preferred Bidders' announcement
4 November 2013



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Introduction

- The procurement documents, amended for the purposes of Bid Window 3, were released on the 3 May 2013.
- The procurement document provided for procurement of 3725MW in five different rounds subject to the availability of the MW
- Pursuant to the Ministerial determination in December 2012, the Minister determined that a further 3200MW of renewables generation capacity was to be procured
- Of the further Ministerial determination, an additional allocation of 308MW was made available for bidding in Bid Window 3 (CSP 200MW, Biomass 47,5MW and Small Hydro 60MW)



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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.
- With regards to Bid Window 3:
 - Received 93 bids on the 19 August 2013
 - These bids amount to 6023MW whilst the available MW for allocation was 1473MW
 - 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 and Rules
- Part B: Qualification Criteria
- Part C: Economic Development

Power Purchase Agreement

- Contract between the IPP and the Seller
 - Wind PPA
 - Solar PPA
 - Landfill gas PPA
 - CSP PPA
 - Biomass PPA

To be concluded in respect of all Bid Window 3 projects

Implementation Agreement

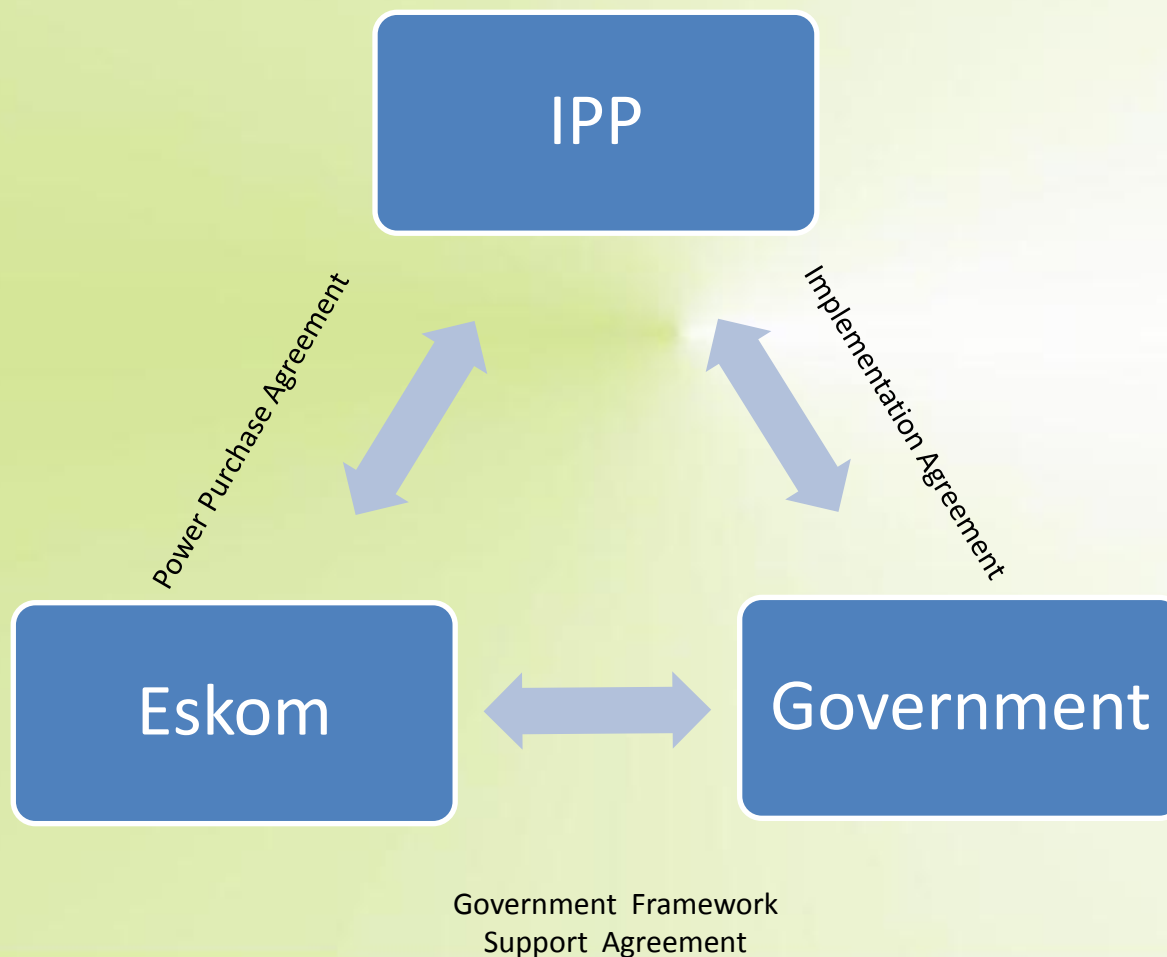
- Contract between the IPP and the Department
- Obligation for IPP to deliver on economic development obligations
- On buyer default – Department to pay the IPP



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Contractual Arrangement

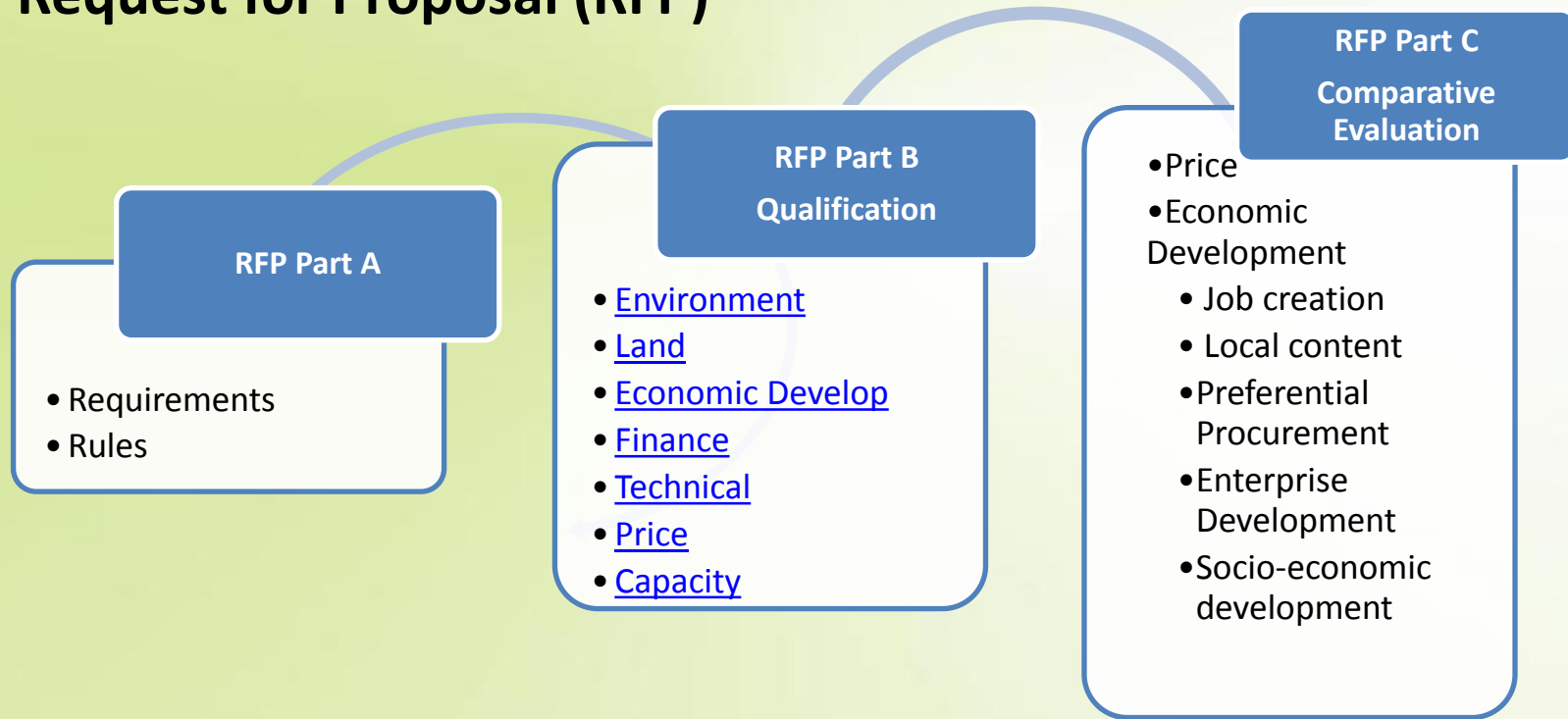


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Procurement Process Background

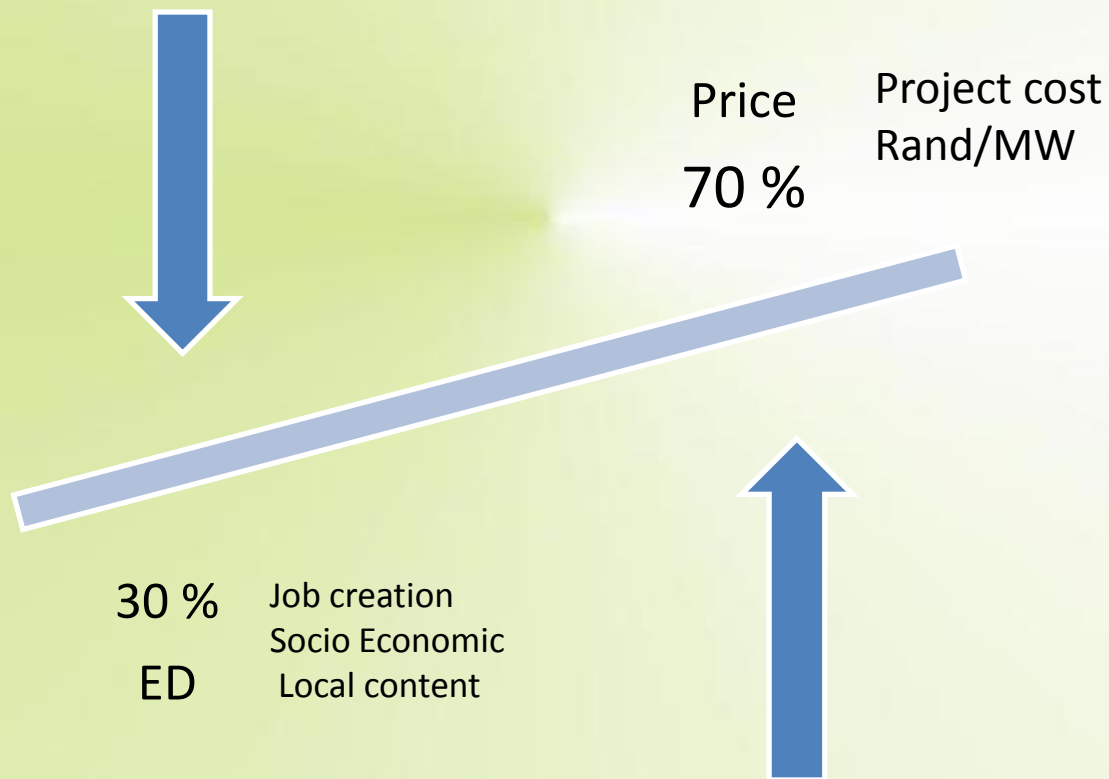
Request for Proposal (RFP)



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PART C EVALUATION



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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
- 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 teams



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Evaluation Composition

Evaluation team:

- Independent reviewers
 - Legal review – Linklaters (UK)
 - Technical review – Tony Wheeler/Blueprint consult
 - Financial review – Pieter van Huyssteen
 - Governance review – EY
- Legal evaluation team
 - Bowman Gilfillan
 - Edward Nathan Sonnenbergs
 - Ledwaba Mazwai
 - Webber Wentzel
- Technical evaluation team
 - Mott Macdonald
- Financial evaluation team
 - EY
 - PWC

Evaluation Streams:

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



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Preferred Bidders Solar Photovoltaic

Project Name	Contracted Capacity (MW)	Fully indexed Price (R/MWh)	Partially indexed Price (R/MWh)	Portion Indexed
Adams Solar PV 2	75	864.10	1239.30	20.0%
Tom Burke Solar Park	60	952.20	1329.80	20.0%
Mulilo Sonnedix Prieska PV	75	1100.00	1440.00	20.0%
Electra Capital	75	1069.00	1324.60	20.0%
Pulida Solar Park	75	992.20	1415.50	20.0%
Mulilo Prieska PV	75	985.00	1473.10	20.0%
TOTAL	435			



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Preferred Bidders

Wind

Project Name	Contracted Capacity (MW)	Fully indexed Price (R/MWh)	Partially indexed Price (R/MWh)	Portion Indexed
Red Cap - Gibson Bay	110	664.00	970.00	20.0%
Longyuan Mulilo De Aar 2 North Wind Energy Facility	139	740.00	1078.00	20.0%
Nojoli Wind Farm	87	682.00	999.00	20.0%
Longyuan Mulilo De Aar Maanhaarberg Wind Energy Facility	96	795.00	1157.00	20.0%
Khobab Wind Farm	138	746.40	1108.10	20.0%
Noupoort Mainstream Wind	79	771.00	1022.00	27.4%
Loeriesfontein 2 Wind Farm	138	759.60	1127.00	20.0%
TOTAL	787			



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Preferred Bidders

Concentrating Solar Power (CSP)

Project Name	Contracted Capacity (MW)	Fully indexed Price (R/MWh)	Partially indexed Price (R/MWh)	Portion Indexed
Xina CSP South Africa	100	1650.00	1860.00	29.0%
Karoshhoek Consortium	100	1629.50	2098.80	46.0%
TOTAL	200			



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Preferred Bidders

Landfill Gas

Project Name	Contracted Capacity (MW)	Fully indexed Price (R/MWh)	Partially indexed Price (R/MWh)	Portion Indexed
Johannesburg Landfill Gas to Electricity	18	940.00	1108.00	50.0%



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Preferred Bidders

Biomass

Project Name	Contracted Capacity (MW)	Fully indexed Price (R/MWh)	Partially indexed Price (R/MWh)	Portion Indexed
Mkuze	16	1399.99	1850.51	50.0%



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Preferred Bidders Summary

	No of Bids	MW taken by Preferred Bidders	Maximum MW allocated for Bid Window 3
Solar photovoltaic	6	435	401
Wind	7	787	654
Concentrated solar	2	200	200
Small Hydro (<40 MW)	0	0	121
Landfill gas	1	18	25
Biomass	1	16	60
Biogas	0	0	12
TOTAL	17	1 456	1 473



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Preferred Bidders

Job creation per Province

Description	Jobs during construction period	Jobs during operations period*
Eastern Cape	512	4908
Free State	414	1443
Gauteng	6	240
KwaZulu-Natal	96	240
Limpopo	160	1366
Northern Cape	6502	8736
Western Cape	223	1295
TOTAL	7915	18228

* One job = 12 person-months



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Recommended Preferred Bidders Investment

Technology	Total Project Value (ZAR million)	Local Content Value (ZAR million)	Local Content %
Solar photovoltaic			
Northern Cape	R 3 867	R 2 183	56.5%
Western Cape	R 1 075	R 528	49.1%
Free State	R 1 106	R 574	51.9%
Limpopo	R 819	R 412	50.3%
Onshore wind			
Northern Cape	R 9 870	R 4 671	47.3%
Eastern Cape	R 3 520	R 1 612	45.8%
Concentrated solar power			
Northern Cape	R 12 690	R 5 627	44.3%
Biomass			
KwaZulu-Natal	R 653	R 261	40.0%
Landfill gas			
Gauteng	R 210	R 88	41.9%
Total	R 33 810	R 15 957	47.2%

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Preferred Bidders

Foreign Investment

	Total funding	Foreign portion	% of Total
Debt	R 26 791	R 6 718	25,2%
Equity	R 17 621	R 8 884	50,4%
TOTAL	R 44 412	R 15 602	



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Preferred Bidders Economic Development Solar Photovoltaic

	Bid Window 3	Bid Window 2	Bid Window 1
Local Content Value (R'million)	R 3 698	R 5 727	R 6 261
Local Content %	53.8%	47.5%	28.5%
Job Creation : Construction (Citizens)	2119	2270	2381
Job Creation : Operations (Citizens)	7513	3809	6117



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Preferred Bidders Economic Development

Wind

	Bid Window 3	Bid Window 2	Bid Window 1
Local Content Value (R'million)	R6 283	R 4 001	R 2 766
Local Content %	46.9%	36.7%	21.7%
Job Creation : Construction (Citizens)	2612	1787	1810
Job Creation : Operations (Citizens)	8506	2238	2461



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Preferred Bidder Economic Development Concentrated Solar Power

	Bid Window 3	Bid Window 2	Bid Window 1
Local Content Value (R'million)	R5 627	R 1 638	R 2 391
Local Content %	44.3%	36.5%	21.0%
Job Creation : Construction (Citizens)	3082	1164	1883
Job Creation : Operations (Citizens)	1730	1180	1382



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Preferred Bidders Economic Development Landfill Gas

	Bid Window 3	Bid Window 2	Bid Window 1
Local Content Value (R'million)	R88	N/A	N/A
Local Content %	41.9%	N/A	N/A
Job Creation : Construction (Citizens)	6	N/A	N/A
Job Creation : Operations (Citizens)	240	N/A	N/A



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Preferred Bidders Economic Development Biomass

	Bid Window 3	Bid Window 2	Bid Window 1
Local Content Value (R'million)	R261	N/A	N/A
Local Content %	40.0%	N/A	N/A
Job Creation : Construction (Citizens)	96	N/A	N/A
Job Creation : Operations (Citizens)	240	N/A	N/A



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Preferred Bidders Solar Photovoltaic

Project Name	Contracted Capacity (MW)	Fully indexed Price (R/MWh)	Partially indexed Price (R/MWh)	Portion Indexed	ED Score
Adams Solar PV 2	75	864.10	1239.30	20.0%	12.58
Tom Burke Solar Park	60	952.20	1329.80	20.0%	13.68
Mulilo Sonnedix Prieska PV	75	1100.00	1440.00	20.0%	18.01
Electra Capital	75	1069.00	1324.60	20.0%	11.68
Pulida Solar Park	75	992.20	1415.50	20.0%	12.61
Mulilo Prieska PV	75	985.00	1473.10	20.0%	17.16
TOTAL	435				



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Preferred Bidders Salient Terms

Solar Photovoltaic

	Bid Window 3	Bid Window 2	Bid Window 1
Price: Fully Indexed (Ave Rand per MWh) (Base Apr '11)	R 881	R 1 645	R 2 758
Price: Fully Indexed (Ave Rand per MWh) (Base Apr '13)	R 990	R 1 848	R 3 098
MW allocation	435 MW	417 MW	632 MW
Total Project Cost (R'million)	R 8 145	R 12 048	R 21 937



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Preferred Bidders

Wind

Project Name	Contracted Capacity (MW)	Fully indexed Price (R/MWh)	Partially indexed Price (R/MWh)	Portion Indexed	ED Score
Red Cap - Gibson Bay	110	664.00	970.00	20.0%	18.03
Longyuan Mulilo De Aar 2 North Wind Energy Facility	139	740.00	1078.00	20.0%	20.67
Nojoli Wind Farm	87	682.00	999.00	20.0%	13.79
Longyuan Mulilo De Aar Maanhaarberg Wind Energy Facility	96	795.00	1157.00	20.0%	21.48
Khobab Wind Farm	138	746.40	1108.10	20.0%	8.01
Noupoort Mainstream Wind	79	771.00	1022.00	27.4%	8.80
Loeriesfontein 2 Wind Farm	138	759.60	1127.00	20.0%	7.79
TOTAL	787				



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Preferred Bidders Salient Terms Wind

	Bid Window 3	Bid Window 2	Bid Window 1
Price: Fully Indexed (Ave Rand per MWh) (Base Apr '11)	R 656	R 897	R 1 143
Price: Fully Indexed (Ave Rand per MWh) (Base Apr '13)	R 737	R 1 008	R 1 284
MW allocation	787 MW	562 MW	634 MW
Total Project Cost (R'million)	R 16 969	R 10 897	R 12 724



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Preferred Bidders

Concentrated Solar Power

Project Name	Contracted Capacity (MW)	Fully indexed Price (R/MWh)	Partially indexed Price (R/MWh)	Portion Indexed	ED Score
Xina CSP South Africa	100	1650.00	1860.00	29.0%	8.39
Karoshhoek Consortium	100	1629.50	2098.80	46.0%	17.87
TOTAL	200				



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Preferred Bidders Salient Terms Concentrated Solar Power

	Bid Window 3	Bid Window 2	Bid Window 1
Price: Fully Indexed (Ave Rand per MWh) (Base Apr '11)	R 1 460*	R 2 512	R 2 686
Price: Fully Indexed (Ave Rand per MWh) (Base Apr '13)	R 1 640*	R 2 822	R 3 017
MW allocation	200 MW	50 MW	150 MW
Total Project Cost (R'million)	R 17 949	R 4 483	R 11 365

* Bid Window 3 base price payable for 12 hours every day and 270% of base price payable for 5 “peak” hours every day. This pricing basis is not comparable with Bid Windows 1 and 2.



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Preferred Bidders

Landfill Gas

Project Name	Contracted Capacity (MW)	Fully indexed Price (R/MWh)	Partially indexed Price (R/MWh)	Portion Indexed	ED Score
Johannesburg Landfill Gas to Electricity	18	940.00	1108.00	50.0%	13.69



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Preferred Bidders Salient Terms Landfill Gas

	Bid Window 3	Bid Window 2	Bid Window 1
Price: Fully Indexed (Ave Rand per MWh) (Base Apr '11)	R 837	N/A	N/A
Price: Fully Indexed (Ave Rand per MWh) (Base Apr '13)	R 940	N/A	N/A
MW allocation	18 MW	0 MW	0 MW
Total Project Cost (R'million)	R 288	R 0	R 0



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Preferred Bidders

Biomass

Project Name	Contracted Capacity (MW)	Fully indexed Price (R/MWh)	Partially indexed Price (R/MWh)	Portion Indexed	ED Score
Mkuze	16	1399.99	1850.51	50.0%	7.19



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Preferred Bidders Salient Terms Biomass

	Bid Window 3	Bid Window 2	Bid Window 1
Price: Fully Indexed (Ave Rand per MWh) (Base Apr '11)	R 1 246	N/A	N/A
Price: Fully Indexed (Ave Rand per MWh) (Base Apr '13)	R 1 400	N/A	N/A
MW allocation	16 MW	0 MW	0 MW
Total Project Cost (R'million)	R 1 062	R 0	R 0



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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 remaining
Solar photovoltaic	632	417	435	1 041
Wind	634	563	787	1 336
Concentrated solar	150	50	200	200
Small hydro ($\leq 40\text{MW}$)	0	14	0	121
Landfill gas	0	0	18	7
Biomass	0	0	16	43
Biogas	0	0	0	60
Total	1 416	1 044	1 456	2 808

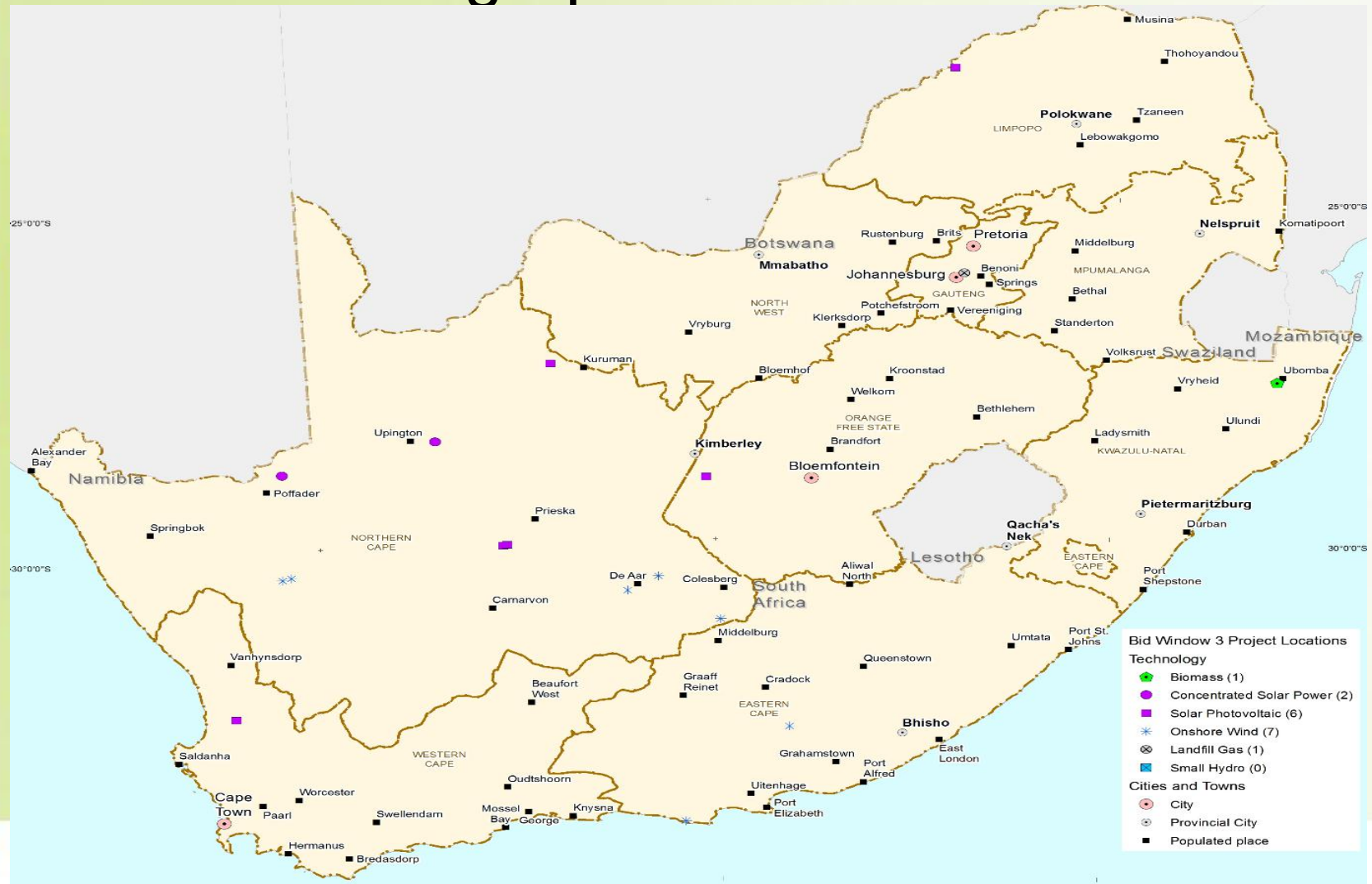


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Geographic Distribution





THANK YOU



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