INDEPENDENT POWER PRODUCERS PROCUREMENT PROGRAMME (IPPPP)

AN OVERVIEW

As at 31 March 2023

in Partnership with

mineral resources & energy
Department:
Mineral Resources and Energy
REPUBLIC OF SOUTH AFRICA

DBSA
DEVELOPMENT BANK OF SOUTHERN AFRICA
Building Africa's Prosperity

national treasury
Department:
National Treasury
REPUBLIC OF SOUTH AFRICA

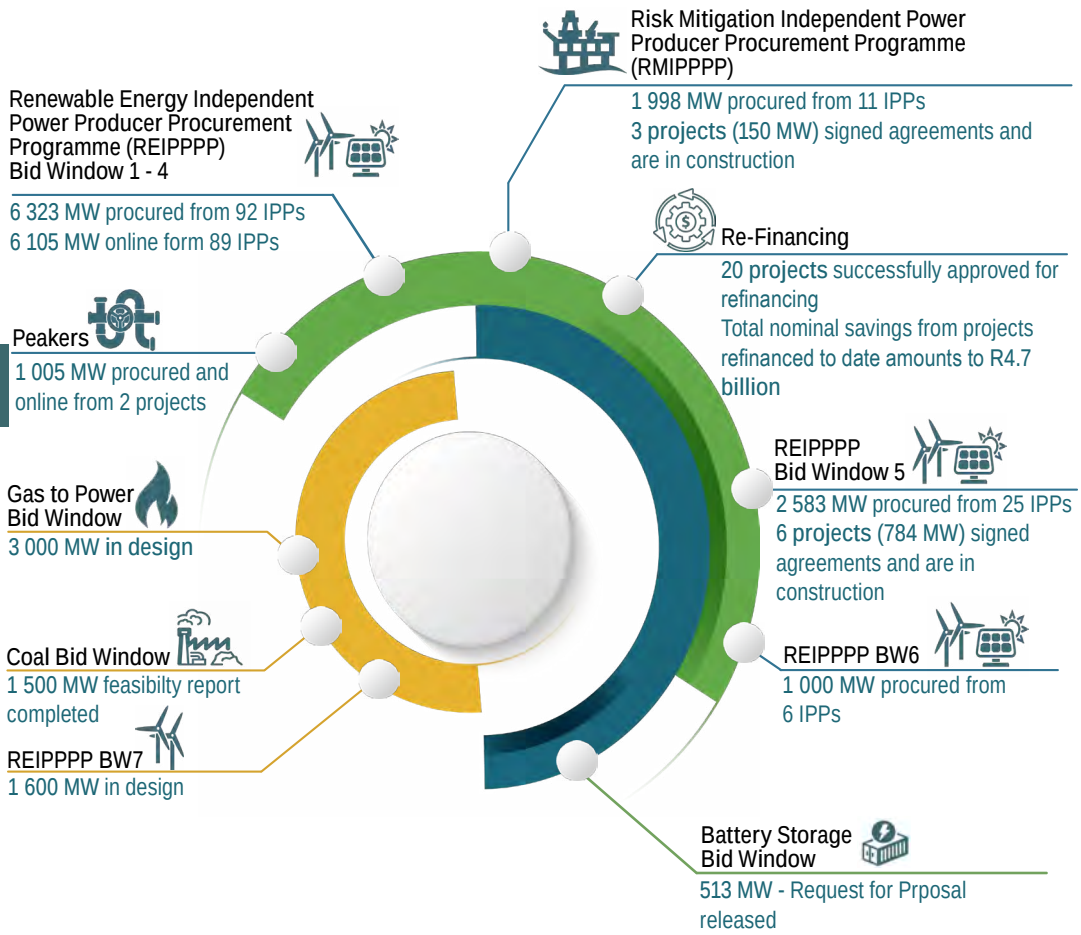
STAY SAFE
PROTECT SOUTH AFRICA
TOGETHER WE CAN BEAT THE CORONAVIRUS

2030 NDP

THE IPPPP
at a glance

The programme's primary mandate is to secure electrical energy from the private sector from renewable and non-renewable energy sources. In addition, the programme has been designed to contribute to the broader national development objectives of job creation, social upliftment and broadening of economic ownership.

This report provides an overview of the procurement activities of the IPPPP, including achievements as at the end of reporting Quarter 4 of the 2022/2023 Financial Year (1 January to 31 March 2023).



- Completed Procurement
- Procurement in Progress
- Planned Procurement

Key overall achievements

136 IPPs
selected as preferred bidders[1] (including 2 Peaker projects)

12 909 MW
electricity capacity available from procured projects[2]

R344.2 billion
investment attracted into South Africa's economy for energy infrastructure from projects[3]

102 IPPs
reached financial close

8 245 MW
electricity capacity procured from 102 IPPs that reached financial close

R252.8 billion
investment attracted into South Africa's economy for energy infrastructure from projects that reached financial close[4]

Note 1. 123 preferred bidders selected under REIPPPP BW1 – 6, 11 preferred bidders selected under RMIPPPP, and 2 Peakers projects. **Note 2.** 9 906 MW from BW1 – 6 + 1 998 MW from RMIPPPP + 1 005 MW from Peakers. **Note 3.** R274.3 billion from 123 projects in BW1-6 + R60.2 billion from 11 projects in RMIPPPP + R9.7 billion from Peakers. **Note 4.** R228.8 billion from 97 projects in BW1-5 + R14.3 billion from 3 projects in RMIPPPP + R9.7 billion from 2 Peakers.

THE IPPPP at a glance

Key Achievements as at end March 2023

91 IPPs Operational[1]

73 738
job years[2]

Employment opportunities for South African citizens during construction and operations

R3.0 billion

Actual contribution realised for socio-economic and enterprise development

95 795 GWh
Energy generated to date

which is enough to provide power to more than **28.9 million households**

The energy generated from RE sources[3] offsets **93.0 Mton CO_2**

The RE projects[3] realised water savings of **109.9 million kilolitres**

R83.1 billion

Actual BBBEE spend (77% of total procurement)

R67.9 billion

Actual local content spend (50% of total project value realised) (excluding Peakers)

37.6%
Shareholding by black South Africans

9.8%
Shareholding by local communities

Note 1. 89 REIPPPP projects and 2 Peaker projects. **Note 2.** The equivalent of a full time employment opportunity for one person for one year. **Note 3.** REIPPPP only.

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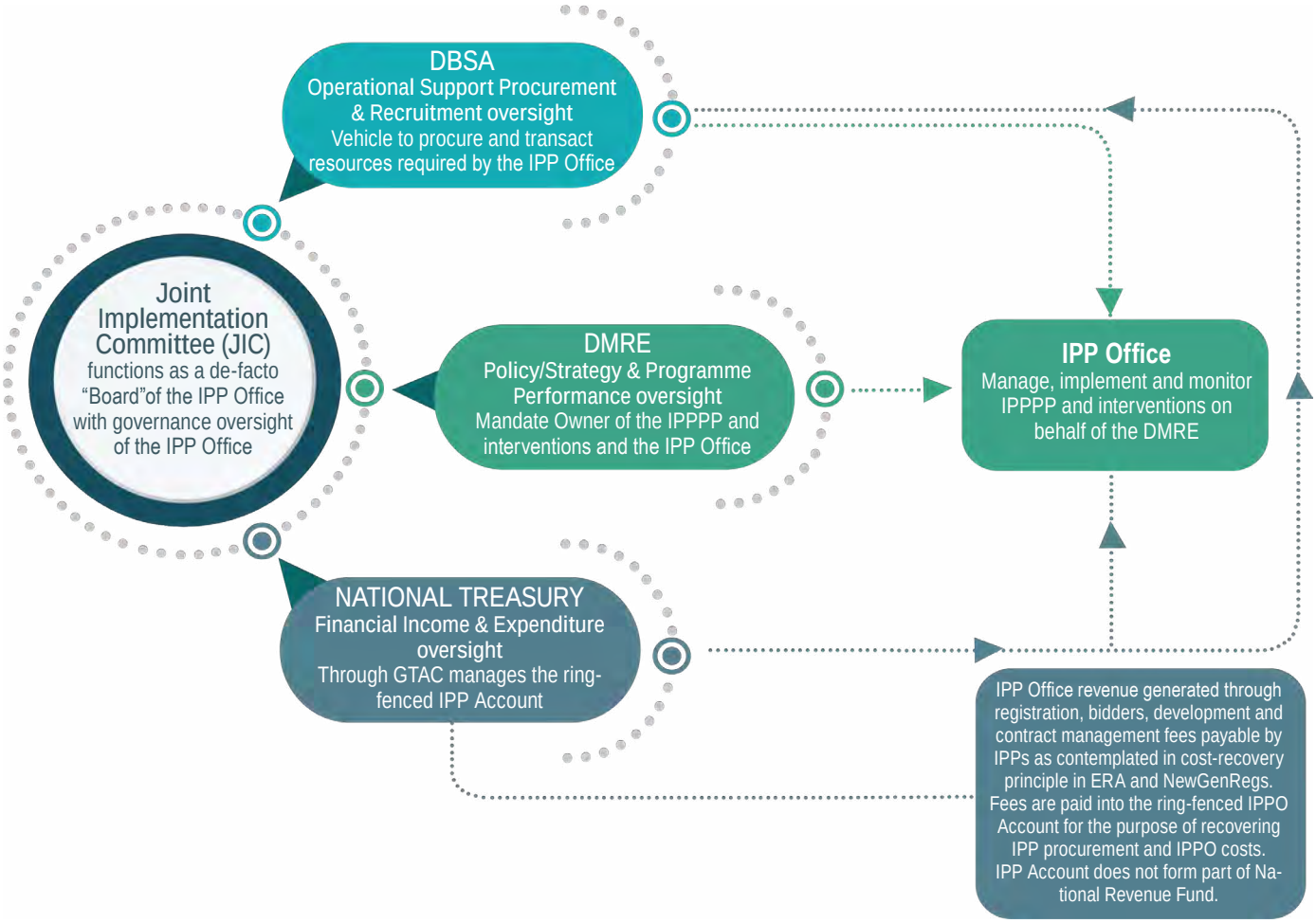
INTRODUCTION

ABOUT THE **IPP OFFICE**

The Department of Mineral Resources and Energy (DMRE), National Treasury (NT) and the Development Bank of Southern Africa (DBSA) established the IPP Office for the specific purpose of implementing the IPPPP.

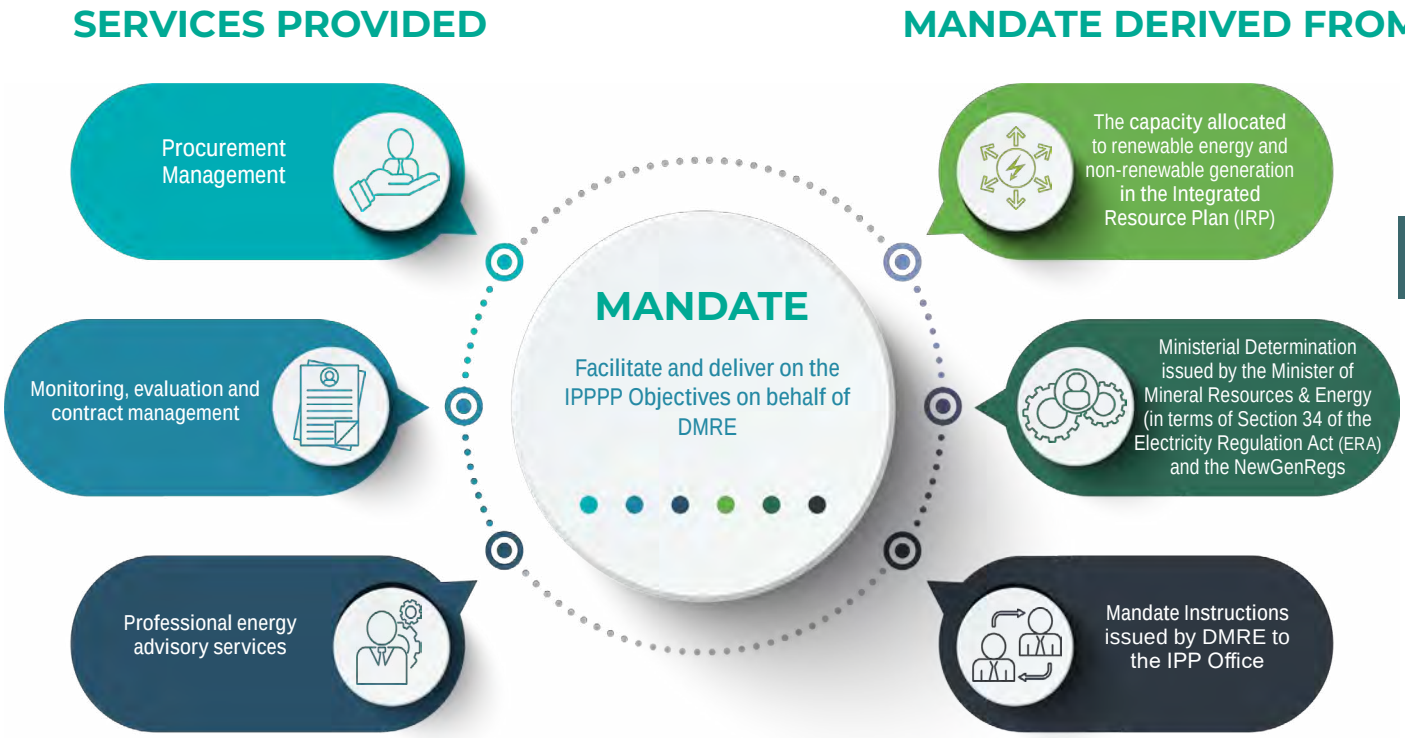
The IPP Office is governed in terms of a tripartite Memorandum of Agreement. A Joint Implementation Committee (JIC) provides governance oversight of the IPP Office. The Office generates its own revenue through the IPP Programmes, and the funds are held and managed by National Treasury, through GTAC, in an IPP Account. The IPP Account is not part of the National Revenue Fund. The IPP Office is independently audited by the Auditor General and statements are incorporated in DMRE Annual Financial Statements.



The IPP Office Mandate

The mandate of the IPP Office is to enhance private sector participation in electrical power generation capacity in the country, whilst contributing to broader national development objectives. The IPP Office is a programme office that provides independent and transparent procurement management, contract management and professional advisory services to the DMRE.

1. To enhance private sector participation in electrical power generation capacity in the country
2. To contribute to broader national development objectives



The Office's mandate is derived from the capacity allocated to renewable and non-renewable generation in the IRP, which together with the associated Ministerial Determinations, set the pace and direction of the roll out of the Independent Power Producers Procurement Programme (IPPPP). The IPPPP activities continue to evolve in order to effectively respond to the planning and development needs in the current energy context.

THE IPP PROCUREMENT PROCESS

What is an IPP?

An IPP is a Company (Consortium) established by a range of shareholders for the sole purpose of bidding for constructing and operating an independent power plant.

Typically the IPP company structure could consist of Black Industrialists, other South African shareholders, community trusts representing the local communities where the projects are located, and foreign shareholders bringing foreign direct investment (FDI) that improves the country's balance of payments, and transfer skills & expertise.

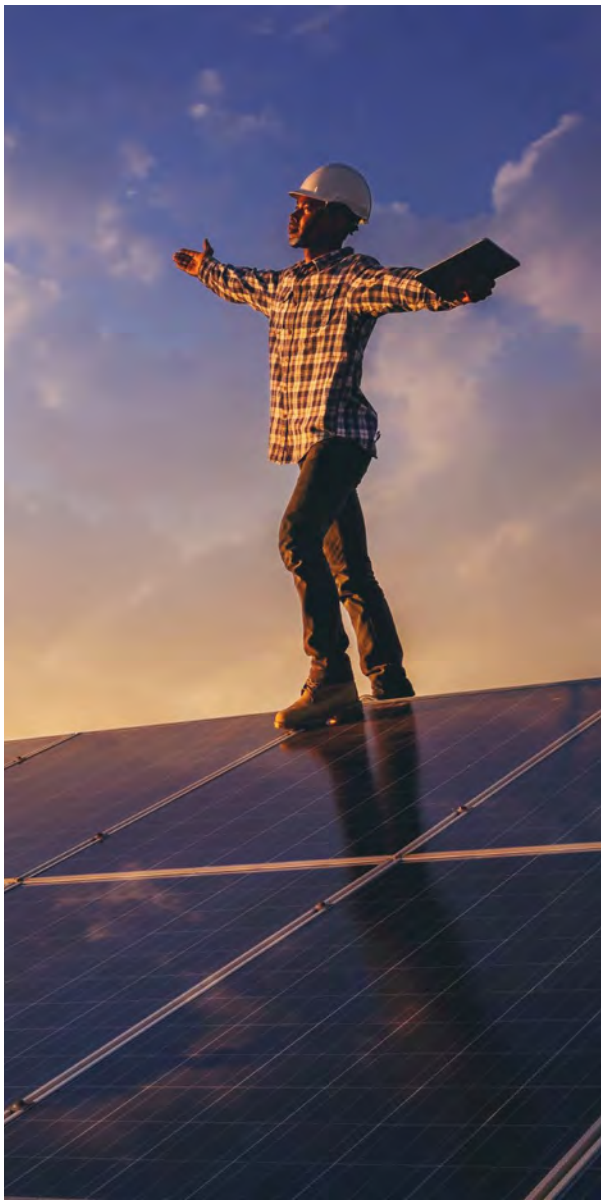
Why should IPPs be used for energy generation?

Not only do IPPs attract much needed new investment, skills, technologies and competition into the industry, but they also stimulate local industry development and job creation.

The IPPPP procurement design approach ensures a balance of risks between private sector and government. The IPPs provide all the funds for the construction and operation of the power plant and bears all the construction and site risks of the project. Any delays or cost overruns are for the account of the IPP and not recoverable.

IPPs need to commit to a specified date to start generating power and is penalised if they are late, so they generally provide the needed power on time. The risk of operation of the power plant over the lifetime of the projects also lies fully with the IPP and all cost overruns (such as increased maintenance cost) are for the account of the IPP and is not recoverable.

An IPP only starts recovering its investment when the power plant starts generating power, charges pre-determined and predictable prices, and also bears all the risk of reduced revenues when the power plant is not operational or produces less power. The IPP needs to commit upfront to achieving targets in respect of job creation, economic development and socio-economic upliftment.



How are IPPs procured?

The development of new generation capacity is steered by South African planning and electricity policy frameworks (such as the Integrated Resource Plan or IRP) and given effect by Ministerial determinations. The process of Ministerial determinations provides suitable process flexibility to allow adjustments to accommodate power system requirements and technology developments and price trends. Within the scope of determined capacity, each IPPPP bid round is initiated with a DMRE procurement instruction detailing a capacity allocation (or cap) and targeted technology mix.

STEP 01 Request for Proposals

STEP 02 Bid Preparation and Submissions

STEP 03 Bid Evaluations and Preferred Bidders Approved

STEP 04 Financial Close

STEP 05 Construction

STEP 06 Commercial Operation Date

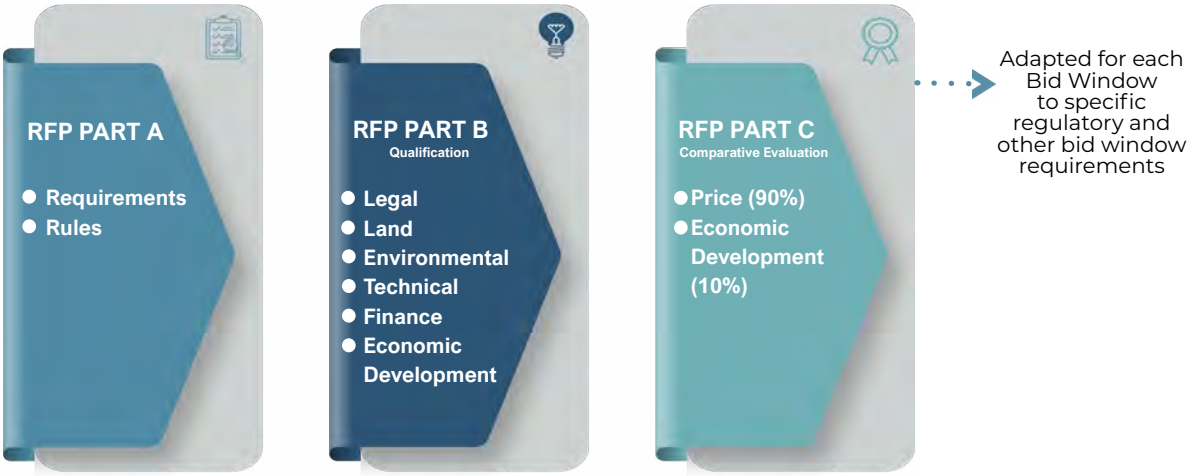
The IPP Procurement Process

Stage 1: Request for Proposals (RFP)

A bid round or bid window is opened with a request for proposals (RFP) issued to the market.

A Request for Information [RFI] is often used in the bid preparation process, especially in the procurement of new technologies / approaches.

The request for proposal is made up of three parts. The qualification criteria and comparative evaluation criteria is adapted for each bid window, according to design requirements.



Stage 2: Bid Submission

Interested bidders prepare and submit bid submissions in response to the RFP within specified timelines. As minimum qualification criteria, every project has to show a very advanced stage of development, as demonstrated by:

- Having secured land rights to the project site via ownership, leases or options;
- Having certain permits in place, most notably an authorisation under the country's environmental legislation;
- Having the whole project structure finalised, complete with technology suppliers, EPC contractors and financiers (both equity and debt);
- Fulfilling a range of technical requirements such as a yield assessment based on at least 12 months of measurements or data;
- Meeting minimum economic development requirements such as job creation and localisation;
- Offering an electricity tariff that is equal to or less than the technology tariff cap R/kWh (if applicable); and
- Providing a bid guarantee to Government.

Stage 3: Preferred Bidders Announced

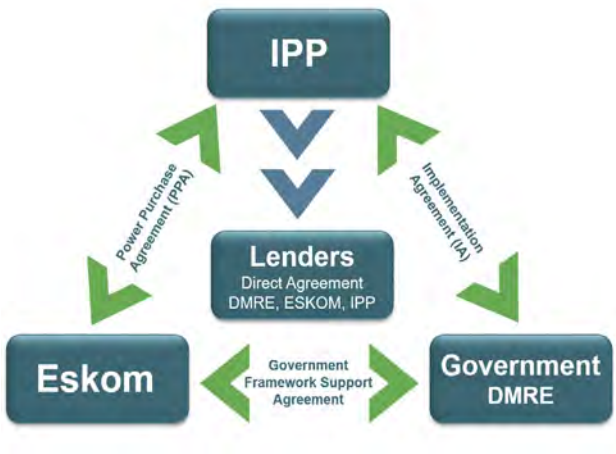
Qualifying bid submissions are adjudicated after an extensive evaluation process using independent advisors before preferred bidders are announced by the DMRE. The procurement evaluation process is conducted in a highly secured environment by an independent evaluation team. This independent and secure process is facilitated by the IPP Office.

Stage 4: Financial close

Preferred bidders are then required to finalise and sign all project agreements (implementation agreement and power purchase agreement, generally referred to as Legal Close) and financing agreements (where applicable) and meet all required conditions contained in them, to reach financial close. These non-negotiable agreements are included in the RFP to provide full transparency of the terms and conditions.

Stage 5: Construction

Following financial close the construction phase of the IPP facilities commences. Each facility procured in terms of the IPPPP is required to complete construction and achieve commercial operation by no later than the dates set out in the RFP. Within this prescribed window period, each IPP is contracted to their targeted commercial operation date (COD).



Implementation Agreement

- Provides comfort to the lenders in terms of Eskom Default under the PPA and Expropriation
- Does not provide support for IPP default but allows lenders to remedy the situation before terminating the agreements
- Corrupt Act is also dealt in accordance with RSA laws

Power Purchase Agreement

- Eskom purchases the electricity and sells it to the consumer
- It is a take or pay agreement in terms of RE but different for RMIPPPP of the Peakers

Direct Agreement

- Provides no compensation to the lenders for IPP default
- Allows lenders to step-in and remedy the default before termination

Government Support Framework Agreement

- Provide support to Eskom for its payment obligations under the PPA
- Eskom will report any potential risk that might trigger the government support

Connection Agreements with either

- The National Transmission Company (if the grid connection will be at transmission level.
- The Distributor (if the grid connection will be at distribution level); or
- The Self-Build Agreement with Eskom, or into a municipal distribution agreement with the relevant municipality

Stage 6: Commercial Operation Date (COD)

Commercial Operation Date marks the successful completion of construction and grid integration.

HIGHLIGHTS PER PROGRAMME

Renewable Energy Independent Power Producer Procurement Programme (REIPPPP)

REIPPPP
HIGHLIGHTS

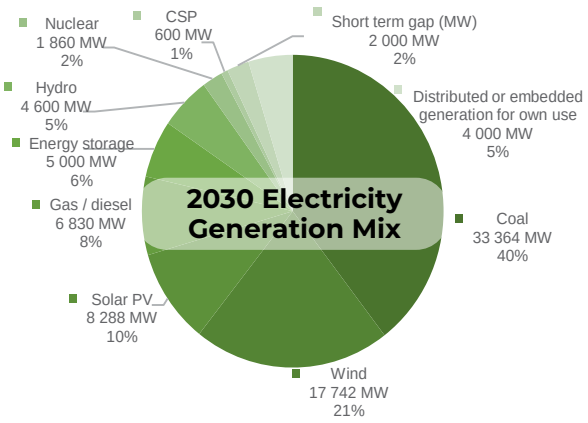
Overview

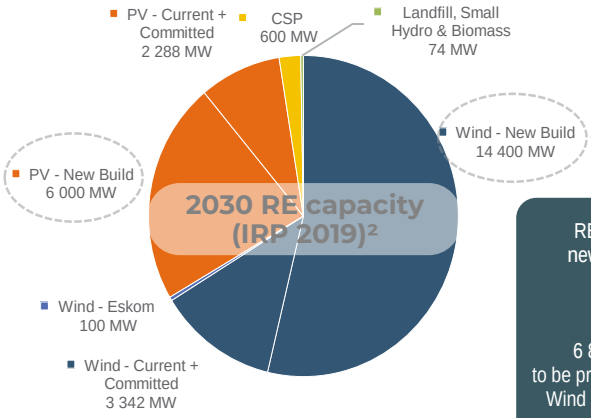
South Africa's Renewable Energy Independent Power Producer Procurement Programme (REIPPPP) is one of the world's most successful and progressive private sector renewable energy procurement programmes. Through its innovative approach and design, the programme is effectively contributing to transforming the economy towards a sustainable, low-carbon energy growth trajectory, while securing an inclusive and equitable society.

The programme is a competitive tender process and is structured into rolling bid windows that not only allows for continued market interest, but increased competitive pressure among bidders to participate and offer reduced pricing.

According to the IRP 2019, a total of 20 400 MW of new capacity from renewable energy needs to be added to the energy mix by 2030 - 14 400 MW from Wind (45.7% of total new capacity by 2030), and 6 000 MW Solar photovoltaic (PV) (19.1% of total new capacity by 2030).

To date 20 340 MW[1] capacity has been determined to be procured from Solar and Wind IPPs between 2022 and 2030.





RE capacity IRP 2019 new build = 20 400 MW

of which

6 800 MW determined to be procured from Solar PV and Wind between 2022 and 2024 and 13 540 MW determined to be procured from Solar PV and Wind between 2024 and 2030

BW5 was the first of the renewable energy procurement bid windows rolled out in response to the new determinations of the IRP 2019. The total capacity procured from these projects totals 2 583 MW. The MW capacity under the BW6 was increased to 4 200 MW which is within the limit of the current determinations, so as not to delay the procurement. The bid submissions for this bid window was received on the 3 October 2022, however due to grid availability the outcome of the BW was lower than planned, with only 1 000 MW procured from solar PV projects.

To date, all bid windows have been oversubscribed, and the majority of bid responses were well prepared resulting in a high level of competition.

Through the competitive bidding process the IPPPP effectively leveraged rapid, global technology developments and price trends, buying clean energy at lower and lower rates with every bid cycle, resulting in SA getting the benefit of RE at some of the lowest tariffs in the world. The estimated, average portfolio cost for all technologies under the REIPPPP has dropped consistently in every bid period to a combined average of R0.49/kWh in BW6.

In addition, the rolling bid windows allows for continued refinement and design improvements that aim to attract greater private investment, while optimizing the national development plan objectives. The high level of competition among projects has been supporting socio-economic transformation and encouraging black participation. The design improvements of bid obligations in BW5 onwards, specifically aimed at historically excluded and vulnerable groups, and on improving gender and disability equality will ensure that the programme's contribution to national objectives are intensified.

REIPPPP bidding process outcomes to date

409

Bid submissions received to date in BW1 to BW6, offering 36.8 GW for procurement

123

Preferred bidders selected (for 9 906 MW)

97

Preferred bidders that reached Financial Close (for 7 090 MW)

R0.49/kWh

Combined average portfolio cost in BW6 in April 2022 terms

Note 1. Three determinations to date, but only two specifies allocation for solar and wind technologies. In July 2020 the first determination under the IRP 2019, for the procurement of various technology solutions to close a 2 000 MW gap between 2019 and 2022, was gazetted. A second determination, for the procurement of 11 813 MW new generation capacity (including 6 800 MW solar PV and wind capacity for 2022 to 2024, 513 MW energy storage for 2022, 3 000 MW gas for 2024 to 2027 and 1 500 MW coal for 2023 to 2027), was promulgated in September 2020. The third determination, as issued in March 2023, makes provision for the procurement of 14 711 MW from renewables and storage technologies (3 940 MW solar PV, 9 600 MW wind and 1 231 MW storage) for the years 2024 to 2030.
Note 2. Excluding Hydro, but including 74 MW committed (included under distributed generation allocation) for landfill gas, small hydro, and biomass.

Key achievements as at end March 2023

Investment attracted from projects that reached financial close

R228.8 billion

IPPs that have reached financial close

97

Electricity capacity available from projects that reached financial close

7 090 MW

89 of these IPPs have started commercial operations

Electricity capacity delivered to the grid by operational IPPs

6 105 MW

Energy generated by renewable energy sources

91 580 GWh

Energy generated by these projects are enough to provide power to more than **27.6 million households**

Electricity generated by these projects are offsetting **93.0 Mton CO_2**

These projects realised water savings of **109.9 million kilolitres**

Employment opportunities for South African citizens during construction and operations

69 554

Actual contribution realised for socio-economic development

R2.3 billion

Actual contribution realised for enterprise development

R0.7 billion

Actual local content spend (49% of total project value realised)

R64.8 billion

37.3% Shareholding by black South Africans

9.3% Shareholding by Local communities

Actual BBBEE spend (83% of total procurement)

R82.1 billion

Diversifying the energy mix through the portfolio of RE capacity

The REIPPPP has successfully procured 7 090 MW from 97 IPPs (that reached financial close) in BW1 to BW5, which are at various stages of construction or have commenced with commercial operation. By end March 2023, 6 131 MW of the procured capacity started operations and delivered 6 105 MW of actual capacity (i.e. 89 IPPs delivering 26 MW short of procured capacity).

Note:
Number of projects = number of projects that reached Financial Close;
Capacity procured (MW) = capacity procured from projects that reached financial close

(Total figures shown in brackets)

North West

	PV
Number of Projects (5)	5
Capacity Procured (MW) (275)	275
Capacity Online (MW) (275)	275
In Construction (MW) (-)	-

Gauteng

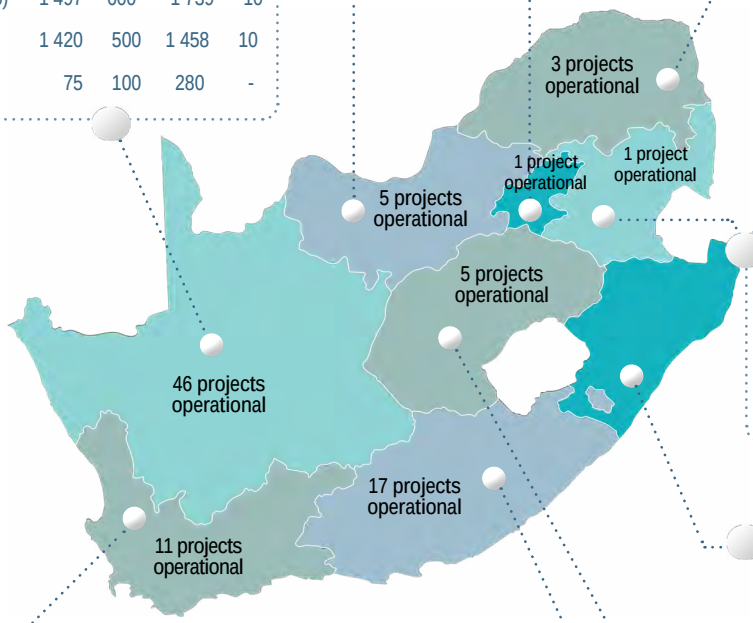
	LG
Number of Projects (1)	1
Capacity Procured (MW) (13)	13
Capacity Online MW (8)	8
In Construction (MW) (-)	-

Northern Cape

	PV	CS	OW	SH
Number of Projects (50)	28	7	14	1
Capacity Procured **(MW)** (3 846)	1 497	600	1 739	10
Capacity Online (MW) (3 388)	1 420	500	1 458	10
In Construction (MW) (455)	75	100	280	-

Limpopo

	PV
Number of Projects (3)	3
Capacity Procured (MW) (118)	118
Capacity Online (MW) (118)	118
In Construction (MW) (-)	-



Mpumalanga

	BM
Number of Projects (1)	1
Capacity Procured (MW) (25)	25
Capacity Online (MW) (25)	25
In Construction (MW) (-)	-

KwaZulu Natal

Number of Projects	0
Capacity Procured (MW)	0
Capacity Online (MW)	0
In Construction (MW)	0

Western Cape

	PV	OW
Number of Projects (13)	5	8
Capacity Procured (MW) (872)	134	738
Capacity Online (MW) (592)	134	458
In Construction (MW) (280)	-	280

Eastern Cape

	PV	OW
Number of Projects (19)	1	18
Capacity Procured (MW) (1 733)	70	1 664
Capacity Online (MW) (1 496)	70	1 426
In Construction (MW) (224)	-	224

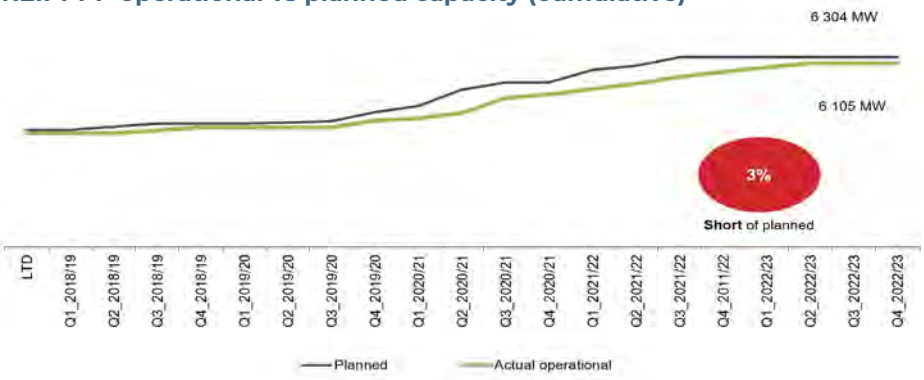
Free State

	PV	SH
Number of Projects (5)	3	2
Capacity Procured (MW) (208)	199	9
Capacity Online (MW) (204)	196	8
In Construction (MW)	-	-

Building capacity to power the country

At the end of March 2023, 89 projects (99%) out of 90 scheduled to be operational had reached COD. 6 204 MW was scheduled to be operational by end of March 2023, with 6 105 MW realised (98% of the scheduled capacity). A total of 75 MW of the 99 MW shortfall is as a result of 1 BW4 project that have not started operations as originally scheduled, while only 24 MW is attributed to under delivery against contracted capacity as at financial close.

REIPPPP operational vs planned capacity (cumulative)

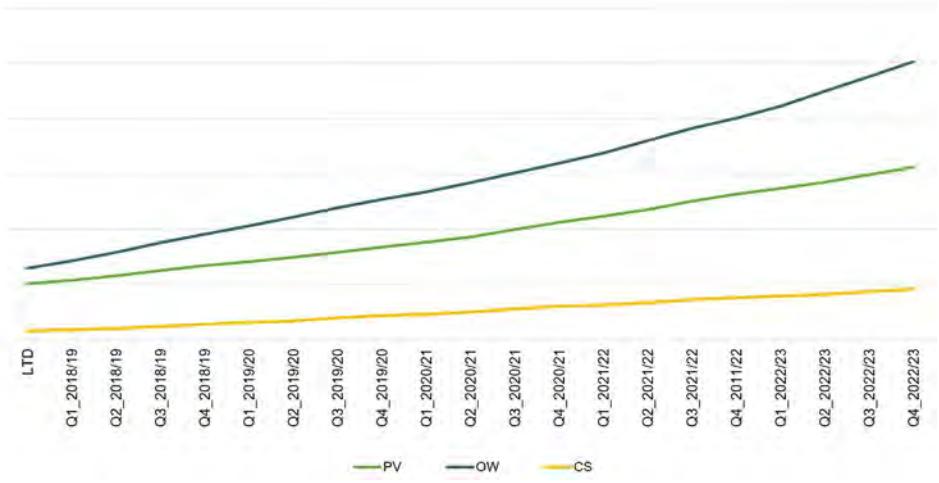


Significant renewable energy capacity can be brought online within a short timeframe. The average construction lead time for the current portfolio is 783 days i.e. 6 105 MW generation capacity was delivered within 2.1 years.

Energy Supplied

The first IPP reached COD, supplying power to the grid, in November 2013. Total renewable energy generated by the IPPs since the first project became operational totals 91 580 GWh, from the 89 projects that are operational. Of this energy, 4 571 GWh was generated during this reporting quarter, slightly less than the 4 596 GWh generated in the previous quarter.

REIPPPP energy generation per RE technology inception to date (cumulative)



Since inception, renewable energy generation per RE technology has been as follows:

- Onshore Wind projects: 50 271 GWh
- Solar PV projects: 31 264 GWh
- CSP projects: 9 181 GWh
- Landfill Gas projects: 168 GWh
- Small Hydro projects: 562 GWh
- Biomass projects: 134 GWh

Bid Window Status Overview as at end March 2023

Bid Window 1

All 28 projects (1 415 MW) reached COD

Bid Window 2

All 19 projects (1 033 MW) reached COD

Bid Window 3

All 16 projects (1 428 MW) reached COD
One project (17 MW) cancelled

Bid Window 3.5

One project (100 MW) reached COD
One project (100 MW) in construction

Bid Window 4

25 projects (2 130 MW) reached COD
1 project (75 MW) in construction

Bid Window 5

19 projects (1 799 MW) preparations for commercial close underway
6 projects (784 MW) in construction

Bid Window 6

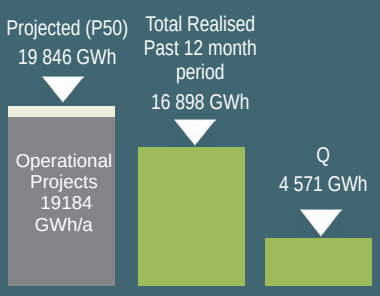
6 projects (1 000 MW) preparations for commercial close underway

Energy Generation as at end March 2023

91 580 GWh

energy generated by renewable energy sources - enough to provide power to more than

27.6 million



Attracting significant investment into the South African economy

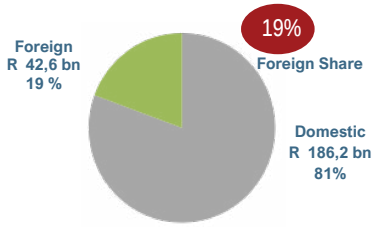
The REIPPPP has been an innovative vehicle for promoting private investment from foreign and local sources in the development of the REIPPs. The total investment (total project costs[1]), including interest during construction, of projects that reached financial close in BW1-5 is R228.8 billion. This includes R42.6 billion (19%) in foreign investment and financing. Prominent global renewable energy project developers and component manufacturers have been participating in the programme. The main participating countries are Germany, France, Italy, Spain and USA.

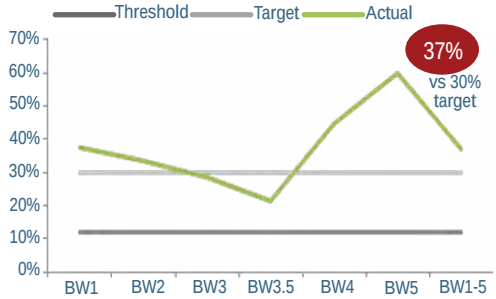
The influx of foreign investment and funding was enabled by the growth potential of the programme, localisation requirements, the programme's transparency, and government support. Since inception the programme has facilitated:

- local production, manufacturing and new service industries;
- the formation of new research and knowledge centres amongst tertiary institutions and in the private sector; and
- economic activity and opportunities, particularly in rural areas.

R228.8 billion

investment attracted into South Africa's economy for energy infrastructure from projects that reached financial close



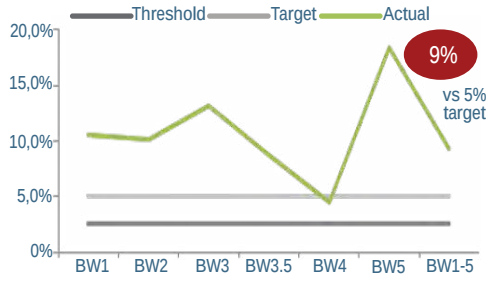


Shareholding (Black people total)

Ensuring South African citizen shareholding

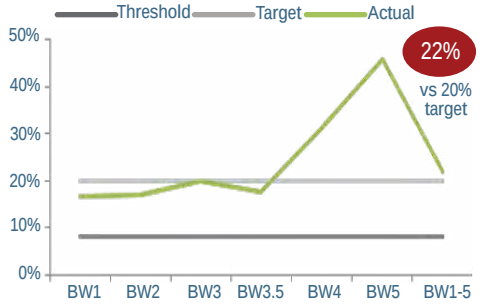
The importance of retaining shareholding in IPPs for South Africans was recognised and incorporated into the procurement conditions, requiring that at least 40% of each project should be owned by South African entities with level 5 contributor status.

For projects that reached financial close in BW1 to BW5, the South African (local) equity shareholding equates to 54% (R34.8 billion) of total equity (R65.0 billion), which is substantially more than the 40% requirement. Foreign equity amounts to R30.2 billion (46% of total equity).



Shareholding
(Black people in local communities total)

The REIPPPP contributes to Broad Based Black Economic Empowerment and the creation of black industrialists. Black South Africans own, on average, 37% of projects that have reached financial close (i.e. projects in BW1 – BW5), which is 7% higher than the 30% target. This includes black people in local communities that have ownership in the IPP projects that operate in or nearby their vicinities, and represents the majority share of total South African Entity Participation. On average, black local communities own 9% of projects that have reached financial close. This is well above the 5% target.

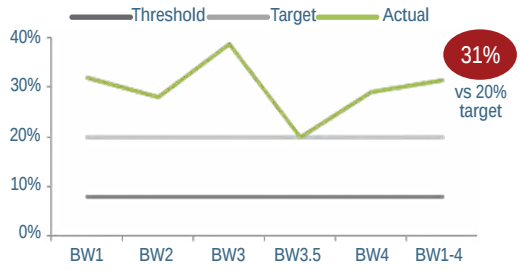


Black shareholding in EPC contractor

Shareholding by black South Africans has also been secured across the value chain.

An average of 22% shareholding by black people in engineering, procurement and construction (EPC) contractors has been attained in projects that have reached financial close under the REIPPPP. This is 2% higher than the 20% target.

Furthermore, shareholding by black people in operating companies of IPPs has averaged 31% (against the targeted 20%) for the 89 projects in operation (i.e. in BW1 – 4).



Black shareholding in operating company

Broader economic and socio-economic impacts

In addition to the financial investments into the economy and favourable equity structures that had been secured, the REIPPPP is targeting broader economic and socio-economic developmental benefits.

The Programme was designed and established at a time when the country was facing critical socio-economic challenges, which still persist today. In order to respond to these challenges, Economic Development (ED) elements was included as central pillars of the Programme, taking cognisance of the broader legislative and policy environment[1]. Bid obligations and minimum thresholds are utilised as mechanisms to capture a share of the value/prosperity from the programme for South Africans and local communities. This places obligations on the private sector to actively contribute to economic and social transformation in the country and to enhance opportunities for people previously disadvantaged under apartheid to gain access to the formal economy.

The REIPPPP ED Framework for BW1 to BW4 is aligned to the original B-BBEE Score Card of the Department of Trade and Industry and Competition (DTIC), but with one main difference: the programme's ED Framework was designed to be forward-looking, in that it is based on Economic Development commitments to be fulfilled over the 20-year term of the IPP Projects. The DTIC B-BBEE Score Card is retrospective, in the sense that it primarily assesses past behaviour of businesses to determine their B-BBEE rating, in order to determine whether or not they qualify for participation in Government procurement processes, programmes and incentive schemes.

There were little design changes between BW1 to BW4, only slight improvements with regard to local content obligations, however the IPP Office updated the REIPPPP RFP for BW5 and BW6 to align with the socio-economic transformation agenda of government and in line with the economic policies of the country. The new framework builds on the socio-economic transformation successes achieved in Bid Window 4 and have incorporated lessons learnt from previous Bid Windows. ED elements have been aligned as far as practically and commercially possible to the Amended B-BBEE Codes of Good Practice, and have deliberately been designed to exceed the targets of the generic B-BBEE scorecard, with a view to ensure that the IPPPP optimises benefits for local communities and leaves an indelible mark on social and economic development, local industrialisation and poverty alleviation. All sub-elements in the generic B-BBEE score card have been catered for and improved on in one way or another.

In BW1 to BW4, evaluation was based on a 70% Price and 30% ED commitment assessment as per the bespoke ED scorecard. BW5 evaluation was different from previous REIPPPP procurement rounds, in that it was based on the principle of a 90% Price and 10% Contributor Status Level (CSL) assessment[2]. Bidders only needed to comply with Economic Development thresholds as part of the Qualification criteria. This approach has resulted in much lower ED commitments compared to previous REIPPPP bid windows, and evaluation reverted to an ED commitment assessment in BW6.

Improvements of bid obligations is specifically aimed at historically excluded and vulnerable groups, and on improving gender and disability equality.

IPPs are required to report on their economic development achievements on a quarterly basis against their annual economic development obligations to ensure developmental impact is adhered to and maximised.

ED Elements

Bid Window 1 to 4:

1. Job creation
2. Local content
3. Ownership
4. Management control
5. Preferential procurement
6. Enterprise development
7. Socio-economic development (SED)

Evaluation BW1-4:

Based on a 70% Price and 30% ED commitment assessment

Bid Window 5 to 6:

1. Job creation
2. Local content
3. Ownership
4. Management control
5. Preferential procurement
6. Enterprise and supplier development
7. Socio-economic development (SED)

Evaluation BW5:

Based on a 90% Price and 10% Contributor Status Level (CSL) assessment

Evaluation BW6:

Based on a 90% Price and 10% ED commitment assessment

Note 1. The Broad-Based Black Economic Empowerment (B-BBEE) Act 53 of 2003 and the Amended B-BBEE Act 46 of 2013, the Amended B-BBEE Codes 2013, and as amended in 2019, and the Amended Construction Sector Codes 2017. **Note 2.** The CSL is determined according to the B-BBEE Codes and proof is required in the form of a valid verification certificate issued by an 'eligible' entity.

Leveraging employment opportunities towards a more equal society

Numerous employment opportunities are being created by the REIPPPP. To date, a total of 69 554 job years have been created for South African citizens, of which 49 422 were in construction and 20 132 in operations. Employment opportunities for equity categories are being tracked for the programme. Equity categories with contractual commitments in BW1 to BW4 include employment secured for South African citizens, black South African citizens and local communities.

Note:
1 job = 1 job year (the equivalent of a full time employment opportunity for one person for one year)

North West

	PV
SA citizens (3 171)	3 171
Black SA citizens (2 884)	2 884
Local communities (2 266)	2 266

Gauteng

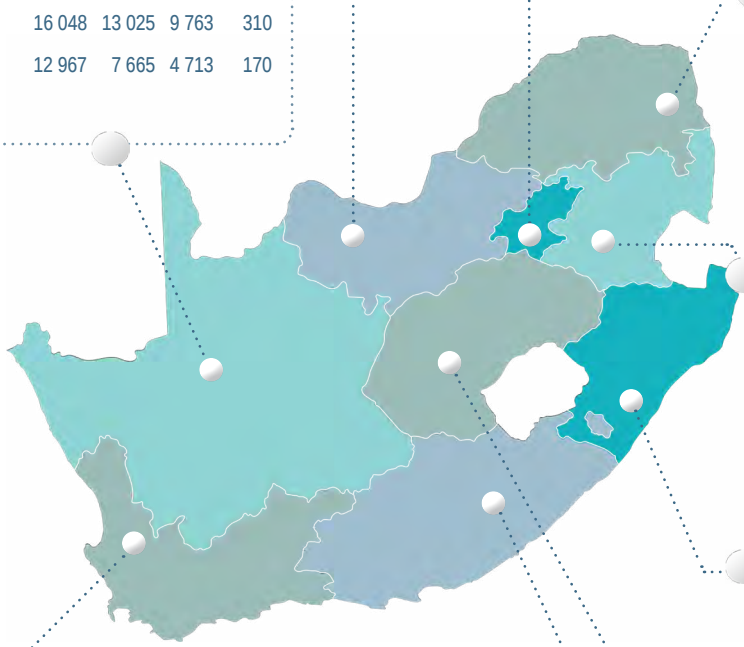
	LG
SA citizens (111)	111
Black SA citizens (MW) (82)	82
Local communities (85)	85

Northern Cape

	PV	CS	OW	SH
SA citizens (43 770)	18 236	14 129	11 034	372
Black SA citizens(39 145)	16 048	13 025	9 763	310
Local communities (25 515)	12 967	7 665	4 713	170

Limpopo

	PV
SA citizens (1 787)	1 787
Black SA citizens (1 671)	1 671
Local communities (1 294)	1 294



Mpumalanga

	BM
SA citizens (964)	964
Black SA citizens (829)	829
Local communities (205)	205

KwaZulu Natal

SA citizens	0
Black SA citizens	0
Local communities	0

Western Cape

	PV	OW
SA citizens (5 578)	2 159	3 419
Black SA citizens (4 951)	1 971	2 980
Local communities (3 261)	1 620	1 641

Eastern Cape

	PV	OW
SA citizens (10 761)	624	10 137
Black SA citizens (9 480)	547	8 932
Local communities (5 769)	497	5 272

Free State

	PV	SH
SA citizens (3 413)	2 926	487
Black SA citizens (3 128)	2 705	423
Local communities (2 246)	2 023	223

Total of 69 554 job years for SA citizens during construction and operations

Data on priority employment categories as identified by national objectives and the NDP (e.g. youths, women, people with disabilities and rural communities) is also collected, but is not a mandatory reporting requirement and not verified by the IPP Office (for BW1-4). To date, 11 374 employment opportunities have been created for women and 35 046 job years for youth.

Local content encouraging the development of a local green industry

The REIPPPP represents the country's most comprehensive strategy to date in achieving the transition to a greener economy. Local content minimum thresholds and targets were set higher for each subsequent bid window. For a programme of this magnitude, with construction procurement spend alone estimated at R75.4 billion (for projects that have reached financial close), the result is a substantial stimulus for establishing local manufacturing capacity.

Local content commitments by IPPs that reached financial close amount to R71.5 billion or 45% of total project value (R160.6 billion).

Actual local content spend reported for IPPs that have started construction amounts to R64.8 billion against a corresponding project value (as realised to date) of R131.2 billion. This means 49% of the project value has been locally procured, exceeding the 44% commitment from IPPs.

For the 89 projects that have reached COD, local content spend has been R63.4 billion against a committed R62.4 billion, which is 1.6% more than the planned local content spend.

Local Content Spend

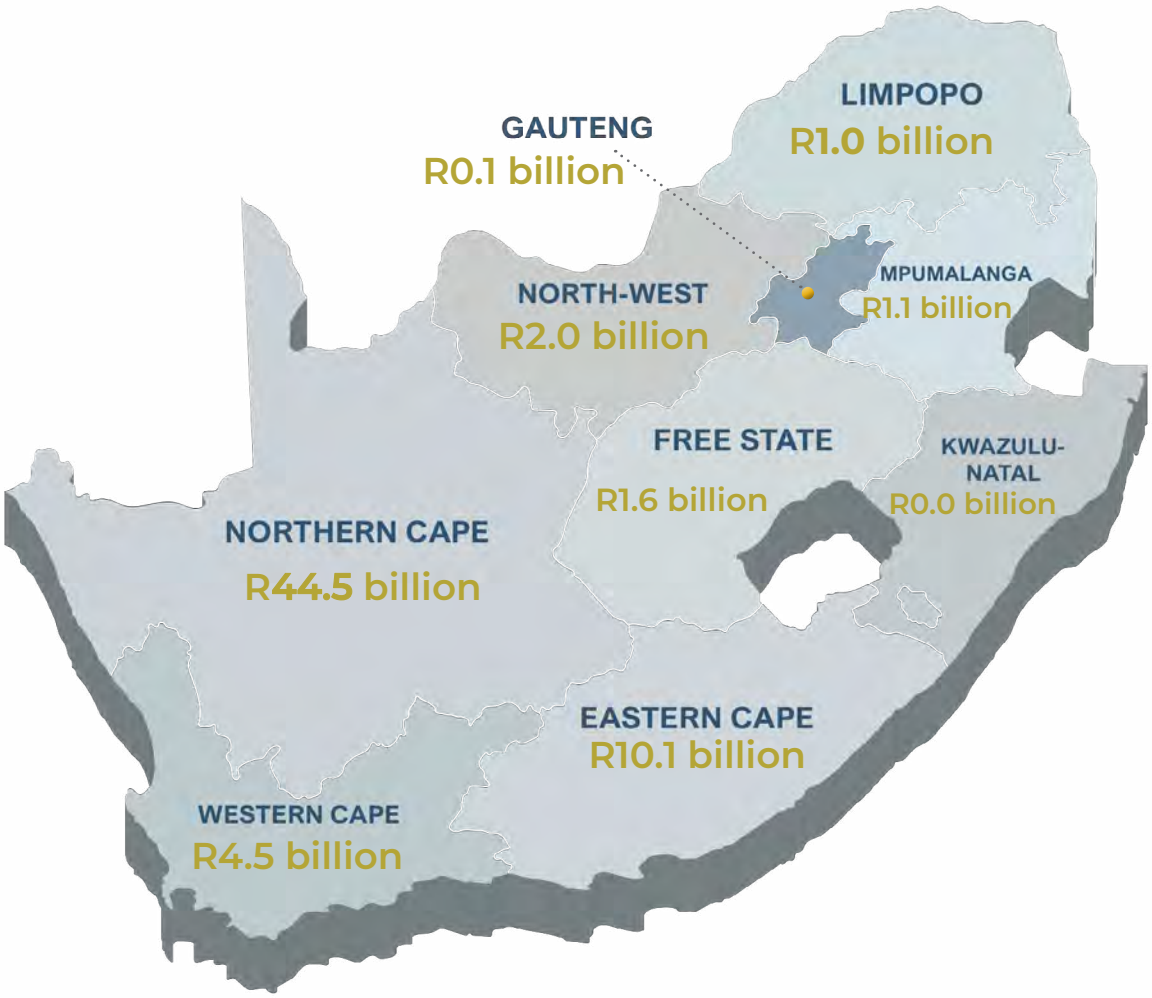
R64.8 billion

Total local content spend at the end of March 2023

49%

of total project value has been locally procured

Local Content achievements per Province
(total spend from inception to date)



Preferential procurement spend enabling South African suppliers to capture a share of the value of the programme

The share of procurement that is sourced from Broad Based Black Economic Empowered (BBBEE) suppliers, Qualifying Small Enterprises (QSE), Exempted Micro Enterprises (EME) and women owned vendors are tracked against commitments and targeted percentages. The actual spend per province (from inception to date) is provided below.

Northern Cape	Achieved during construction and operations (billions)	% of total procurement spend achieved
BBBEE	R53.5 billion	79.04%
QSE & EME	R20.5 billion	30.35%
Women-owned	R3.3 billion	4.83%

R67.7 billion
Total procurement spend (construction and operations) in NC

Western Cape	Achieved during construction and operations (billions)	% of total procurement spend achieved
BBBEE	R7.2 billion	88.02%
QSE & EME	R3.7 billion	44.51%
Women-owned	R0.6 billion	7.69%

R8.2 billion
Total procurement spend (construction and operations) in WC

Eastern Cape	Achieved during construction and operations (billions)	% of total procurement spend achieved
BBBEE	R13.0 billion	90.82%
QSE & EME	R3.7 billion	25.93%
Women-owned	R1.2 billion	8.62%

R14.3 billion
Total procurement spend (construction and operations) in EC

North West	Achieved during construction and operations (billions)	% of total procurement spend achieved
BBBEE	R2.5 billion	88.33%
QSE & EME	R0.6 billion	20.29%
Women-owned	R0.1 billion	5.24%

R2.8 billion
Total procurement spend (construction and operations) in NW

Free State	Achieved during construction and operations (billions)	% of total procurement spend achieved
BBBEE	R2.4 billion	88.30%
QSE & EME	R0.8 billion	28.35%
Women-owned	R0.2 billion	7.11%

R2.8 billion
Total procurement spend (construction and operations) in FS

Limpopo	Achieved during construction and operations (billions)	% of total procurement spend achieved
BBBEE	R2.0 billion	106.75%
QSE & EME	R0.4 billion	22.19%
Women-owned	R0.1 billion	4.17%

R1.9 billion
Total procurement spend (construction and operations) in LP

Mpumalanga	Achieved during construction and operations (billions)	% of total procurement spend achieved
BBBEE	R1.3 billion	91.63%
QSE & EME	R0.6 billion	43.54%
Women-owned	R0.1 billion	9.74%

R1.4 billion
Total procurement spend (construction and operations) in MP

Gauteng	Achieved during construction and operations (billions)	% of total procurement spend achieved
BBBEE	R0.2 billion	62.88%
QSE & EME	R4.2 billion	1.41%
Women-owned	-	-

R0.3 billion
Total procurement spend (construction and operations) in GP

KwaZulu Natal	Achieved during construction and operations (billions)	% of total procurement spend achieved
BBBEE	-	-
QSE & EME	-	-
Women-owned	-	-

R0.0 billion
Total procurement spend (construction and operations) in KZN

Total Procurement Spend (as at end March 2023)

R99.4 billion

R78.4 billion in construction — 9% more than planned

R21.0 billion in operations — 25% of planned spend (over 20 years)

Total Preferential Procurement Spend

83% of total procurement

Total BBBEE spend
R82.1 billion
of which R66.1 billion in construction and R16.0 billion in operations

30% of total procurement

Total QSE & EME spend
R30.3 billion
of which R24.5 billion in construction and R5.8 billion in operations

6% of total procurement

Total women-owned vendor spend
R5.7 billion
of which R4.2 billion in construction and R1.5 billion in operations

Socio-economic development and enterprise development contributions

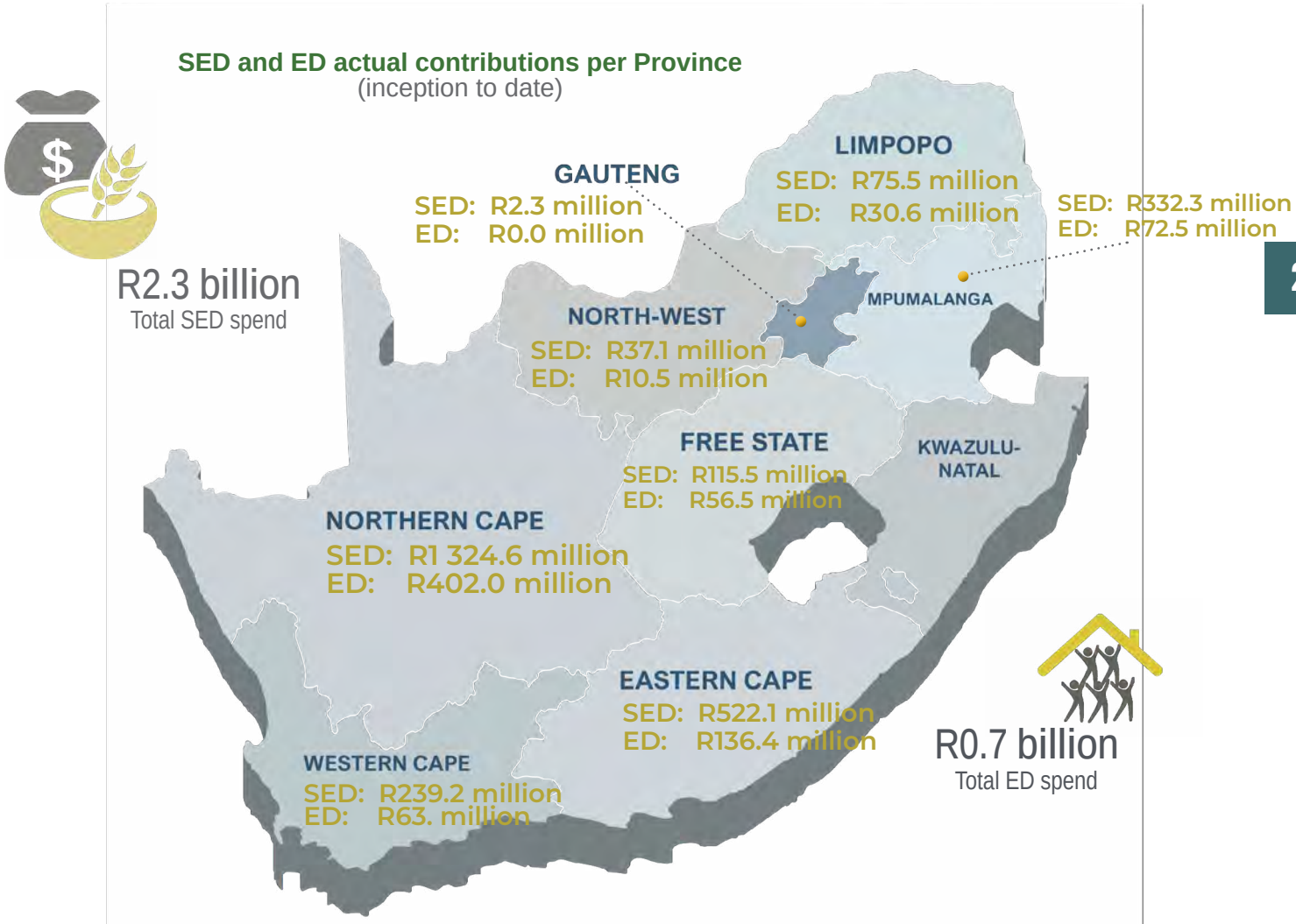
An important focus of the REIPPPP is to ensure that the build programme secures sustainable value for the country and enables local communities to benefit directly from the investments attracted into the area.

As part of the bid obligations, IPPs had to commit to contribute a share of the revenue to community needs. These contributions accrue over the 20 year project lifetime and are being used for housing and infrastructure as well as healthcare, education and skills development, and other community and enterprise development initiatives.

IPPs are required to contribute a percentage of projected revenues accrued over the 20 year project operational life toward socio-economic development (SED) and enterprise development (ED) initiatives. The minimum compliance threshold for SED contributions is 1% of revenue with 1.5% the targeted level over the 20 year project operational life. The average commitment level for the current portfolio (BW1-4) is 2% or 101% more than the minimum compliance threshold.

The target for IPPs to spend on enterprise development is 0.6% of revenues over the 20 year project operational life. IPPs, for the current portfolio, have committed an average of 0.63% or 0.03% more than the target.
As a percentage of revenue, SED and ED obligations become effective only when operations commence and revenue is generated.

SED contributions amount to R2.3 billion to date (1.3% of total revenue generated to date). A total of R699.0 million has been contributed to ED (0.4% of total revenue generated to date).



Enterprise and socio-economic development commitments have been made in five categories; namely, education and skills development, social welfare, healthcare, general administration, and enterprise development. The distribution of the combined ED and SED spend is shown across activity categories below (projects spend reported to date as % of total):

education	social welfare	health care	general administration	enterprise development
49.1%	15.4%	3.1%	11.6%	20.8%

REIPPPP
LOOKING FORWARD

Bid Window 6 progress

The RFP for BW6 was released to the market on 6 April 2022 to procure 2 600 MW (1 600 MW from wind resources and 1 000 MW from solar PV), with the bid submission date set for 11 August 2022. However, the capacity allocation was increased to 4 200 MW in August 2022 (3 200 MW from wind and 1 000 MW from solar PV).

Evaluation of the 56 bids, that was received on 3 October, was completed by the end of November. Five (5) preferred bidders (860 MW) were announced on 8 December 2022. An additional preferred bidder (identified as an eligible bidder on 8 December 2022) was announced on 23 March 2023 to increase the procured MW to the maximum 1 000 MW from solar PV.

As a result of no grid availability in the Western Cape, Eastern Cape and the Northern Cape, no wind project could be considered in the evaluations, since all of the wind bid responses were located in these areas.

Initial commercial close that was targeted for April 2023 has been delayed due to the issuing of the Budget Quotes (BQs) by Eskom. Commercial close will take place in a staggered approach from June to October 2023, dependent on the issuance of the BQs.

BW6 Project Impact

6 IPPs
selected as preferred bidders

1 000 MW
electricity capacity procured

R14.7 billion
investment attracted into South Africa's economy for energy infrastructure from procured projects

R10.8 billion
committed local content spend during construction and operations

49.3% Shareholding by South African Entities

49.3% Shareholding by Black South Africans

9 461
committed employment opportunities for South African citizens during construction and operations

R1 billion
Socio-Economic, Enterprise and Skills Development commitments

Risk Mitigation Independent Power Producers Procurement Programme (RMIPPPP)

RMIPPPP
HIGHLIGHTS

Overview

The Risk Mitigation Independent Power Producer Procurement Programme (RMIPPPP) has been designed to procure 2 000 MW of new generation capacity from different types of dispatchable electrical power generation projects. This technology agnostic programme aims to fill the supply gap, alleviate the medium term electricity supply constraints and reduce the extensive utilisation of diesel-based peaking electrical generators.

Eleven (11) preferred bidders (1998 MW) have been selected to enter into 20-year Power Purchase Agreements (PPAs) with Eskom to provide new generation capacity in compliance with the performance requirements of the electricity system operator, among other things. The programme attracted a variety of technologies:

- projects consisting of more than one facility combining gas technologies and solar photovoltaic;
- projects consisting of more than one facility combining gas technologies, solar photovoltaic and battery storage;
- projects combining wind, solar photovoltaic, battery storage and gas;
- projects with only solar photovoltaic and battery storage combinations; and
- floating powerships.

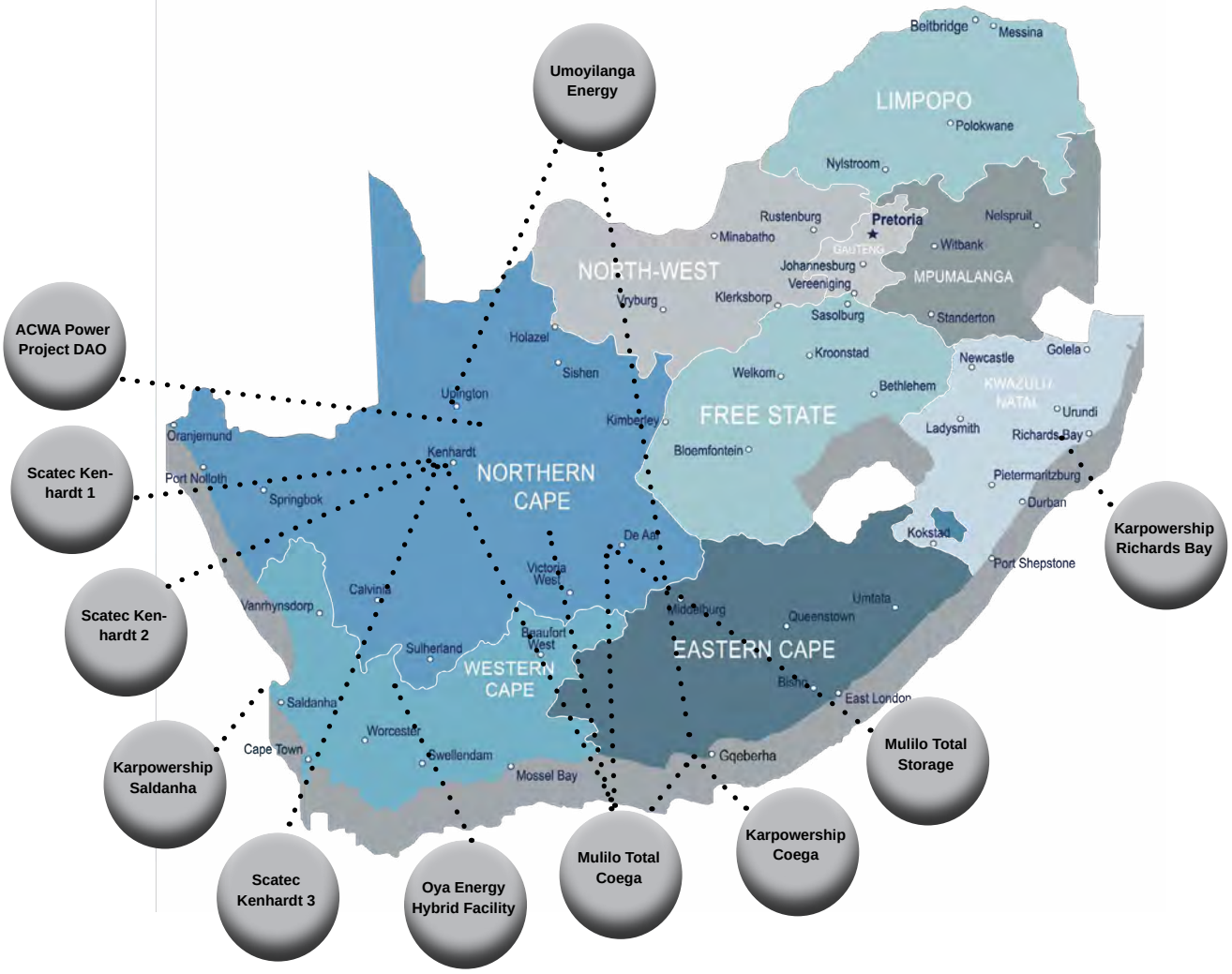
The RMIPPPP projects are located in 4 of the 9 provinces and are distributed as follows:

- Northern Cape: 5 projects
- Eastern Cape: 2 projects
- Western Cape: 2 projects
- Kwazulu Natal: 1 project

One project has sites located in both the Northern- and Eastern Cape.

The map shows the locations of the 11 projects.

Location of preferred bidders' project sites



Project impact

A total of 1 998 MW have been procured from 11 IPPs. The projects will attract R60.2 billion in investment (equity and debt). South African entities holds 51.8% of shares in the successful projects, while 43.4% of shares are held by black South Africans. The projects have committed to a range of economic development outcomes:

- Local content spend to the value of R40.3 billion – R16.7 billion during construction, and R23.6 billion during operations;
- Employment opportunities for South African citizens during construction and operations - the 11 projects committed to created 22 346 job years[1] in total; and
- Socio-economic, enterprise and skills development spend of R5.6 billion.

RMIPPPP Project Impact (committed)

1 998 MW

electricity capacity procured from 11 IPPs

R60.2 billion

investment attracted into South Africa's economy for energy infrastructure

R40.3 billion

Local content commitment for construction and operations

22 346 job years

Employment opportunities for South African citizens during construction and operations

43.4%

equitable shareholding by black South Africans

R5.6 billion

committed spend on socio-economic, enterprise and skills development

Project progress

- The first three projects reached Financial Close on 19 July 2022 and are expected to reach COD by November 2023.
- An extension was granted for legal close to June 2023 and the longstop date for commercial close by end September 2023. Delays in Eskom Board approval could impact the target date.
- Preparation for legal close for the remaining projects is underway.

Note 1. Employment / Job creation measured in job years (equivalent of a full time employment opportunity for one person for one year – refer to Annexure A, for full definition).

Key achievements as at end March 2023

A summary of achievements for the 3 projects (150 MW) in construction is provided below.

To date, the three projects have attracted R14.3 billion in investment. This includes R5.6 billion (39%) in foreign investment and financing. The South African (local) equity shareholding equates to 49% (R1.1 billion) of total equity (R2.2 billion).

Black South Africans own, on average, 49% of projects that have reached financial close, which includes black local communities that own 25% of projects that have reached financial close.

The projects spent a total of R2.1 billion on procurement during construction. Of this, R523.2 million (25% of total procurement) was BBBEE spend, R235.1 million was QSE & EME spend, and R6.8 million was procurement sourced from women-owned vendors.

Actual local content spend reported for the three IPPs that have started construction amounts to R3.0 billion against a corresponding project value (as realised to date) of R5.5 billion. This means 55% of the project value has been locally procured.

By the end of March 2023, the three projects in construction created employment opportunities for 571 South African citizens.

Note 1. Employment / Job creation measured in job years (equivalent of a full time employment opportunity for one person for one year – refer to Annexure A, for full definition).

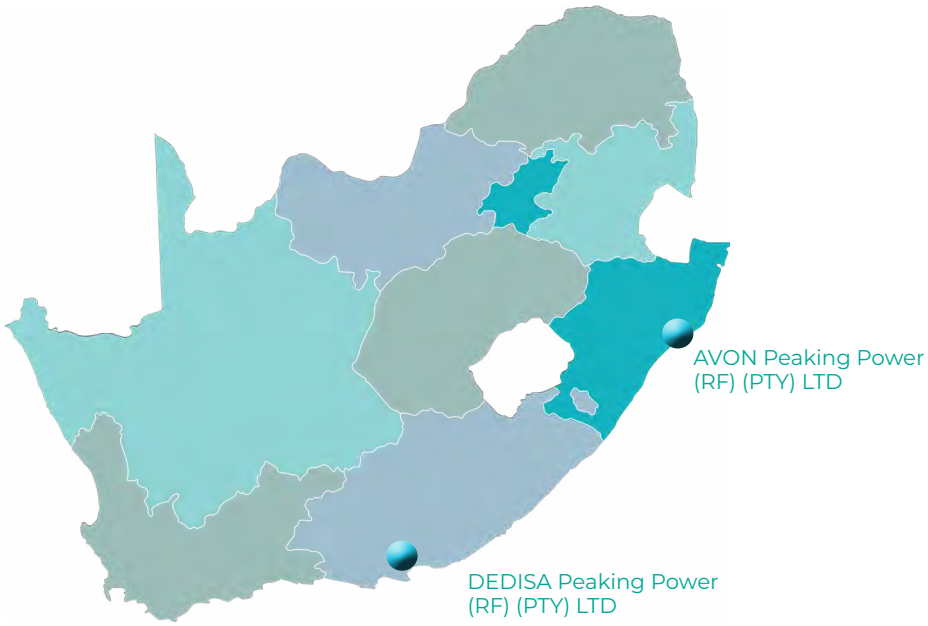
Peakers

PEAKERS
HIGHLIGHTS

Overview

The IPP peaking power generation project consists of two greenfield power generation plants, each based on diesel-fired open-cycle gas turbines ("OCGT"). In respect of facilities, these plants are capable of 'closing in the cycle' and converting to combined cycle gas turbines ("CCGT") and in so doing improve the plant efficiencies and the electrical generation from the plant.

The **Avon Plant** is located near Shakaskraal, Kwa-Zulu Natal, with a capacity of 670 MW and reached COD on 20 July 2016. The **Dedisa Plant** is located in the Coega Industrial Development Zone, Eastern Cape, with 335 MW capacity and reached COD in September 2015.



At the end of March 2023, **100%** of Peakers scheduled to be operational have started commercial operations and delivered 1 005 MW of capacity to the grid. The average lead time for these 2 projects to completion was **2.5 years.**

The two projects have already generated 4 215 GWh of energy to date, of which 354 GWh was generated in this quarter. Over the past 12 months (April 2022 – March 2023) a total of 1 092 GWh was generated by the two projects.

The projects are also supporting broader development objectives in terms of attracting investment, creating employment and ensuring equitable shareholding for SA citizens.

The **total foreign equity and financing** invested in Peakers was **R917 million,** of the R9.7 billion total investment attracted. **South African financial institutions** provided **R8.2 billion** of the required funding, while **R539 million** were **local equity.**

The two projects created **3 612 direct Job Years[1] (4 099 FTEs[2])** for South African citizens by March 2023. Of the jobs created for SA citizens, 3 045 (85%) were created during construction and 568 (15%) during the operational phase of the projects. Black people with voting rights and with an economic Interest in the projects hold **37%** of the equity shares in the Peakers.

Key Achievements (as at end March 2023)

1 005 MW
electricity capacity being delivered to the grid by the 2 operational Peakers

R9.7 billion
Investment attracted into South Africa's economy for energy infrastructure from the 2 Peakers

4 215 GWh
energy generated by the 2 Peakers to date

3 612 job years
Employment opportunities for South African citizens during construction and operations of the 2 Peakers

37%
equitable shareholding by black South Africans

Note 1. Employment / Job creation measured in job years (equivalent of a full time employment opportunity for one person for one year – refer to Annexure A, for full definition). **Note 2.** Person months (reporting unit of IPP agreements) converted to FTEs as per EPWP definition – refer to Annexure A, for full definition.

Refinancing Initiative (REFI)

REFINANCING **HIGHLIGHTS**

Overview

The Refinancing Initiative was launched by the Department of Mineral Resources and Energy (DMRE) in 2020 with the aim of reducing the tariffs associated with Bid Window 1 - 3.5 of the REIPPPP and as such contribute to lowering national electricity prices for consumers.

"Refinancing" includes any change in the nature of or the terms governing the financing arrangements of a project, as agreed at Financial Close, that may have the effect of increasing or accelerating the dividends or other distributions deriving from the project for the benefit of the shareholders, or of reducing their funding commitments in respect of the project. The upside (referred to as the "refinancing gain") of this voluntary process is to be shared between the Department and the Seller. The minimum sharing percentage is 50/50, although higher sharing percentages can be agreed between the parties. The Department's share is applied towards a tariff reduction.

The refinancing may not result in an increase in contingent liabilities associated with the project, and the refinancing should result in a reduction of tariffs over the remainder of the power purchase agreement (PPA) term.

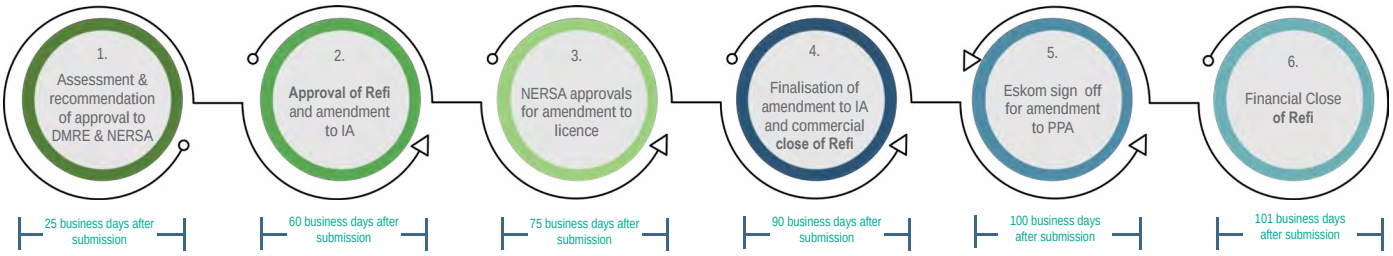
To ensure a standardised approach, the Department issued the Refinancing Protocol supported by Guidance Notes (1-5). The protocol aims to ensure that the process followed when undertaking a refinancing is transparent, consistent and is supported by all parties.

The indicative process and timelines for the consent to or approval of a refinancing notice is provided below.

Start:

Seller submits

- Refi notice to Department aligned to protocol
- Required info to NERSA to start tariff reduction approval process



Progress

By the end of March 2023, the Department has granted approval for twenty (20) Refinancing Applications resulting in savings of about R4.7 billion over the remaining terms of the Power Purchase Agreement.

- 2 Projects reached Financial Close during this quarter, in January 2023.
- The Department granted approval for 5 Refinancing Applications this quarter.
- 7 applications were approved in the 2022/2023 Financial Year.

APPENDIX A

Reference Component

DEFINITIONS & TERMINOLOGY

Contract definitions and terminology

- **"Capital Expenditure"** means any expenditure treated as capital expenditure under GAAP.

- **"Commercial Operation Date (COD)"** means the date specified in the Notice of Commencement of Facility i.e. it is the date on which the Independent Engineer ascertains that the Facility is completed, connected to the Grid and able to generate power

- **"Contracted Capacity"** means the anticipated Capacity of the Facility at the Delivery Point and expressed as AC power capacity, net of auto-consumption and the electrical losses up to the Delivery Point.

- **"Contract Quarter"** means the periods:

  a. 1 April to 30 June;
  b. 1 July to 30 September;
  c. 1 October to 31 December; and
  d. 1 January to 31 March,

  Should the Effective Date fall within any of the periods referred to above (and not commence on 1 April, 1 July, 1 October or 1 January), then the first Contract Quarter shall commence on the Effective Date and shall be the remaining portion of the Contract Quarter in which the Effective Date falls, plus the next Contract Quarter.

- **"Contract Year"** means each twelve (12) Contract Month period commencing at 00:00 hours on 1 April and ending at 24:00 hours on 31 March of the following year provided that:

  a. the first Contract Year shall commence at 00:00 hours on the first day after the Effective Date and shall end at 24:00 hours on 31 March of the following year; and
  b. the final Contract Year shall end at 24:00 hours on the Termination Date;

- **"CPI"** means the weighted average consumer price index (Dec 2012 = 100) as published by Statistics South Africa (or its equivalent successor entity), which is referred to as "Headline CPI – All urban areas" in Statistical Release P0141 from time to time (or equivalent successor index).

- **"Direct Agreement"** means the direct agreement entered into (or to be entered into) between the Buyer, the Seller, the DMRE and the Lenders (or their agent) in relation to the PPA and the Implementation Agreement.

- **"FTE"** means Full Time Equivalent Employment Created. It refers to one person-year of employment. In this report the EPWP definition is used where one person year is equivalent to 230 person days of work. The 230 days are effective days of work after subtracting provision for non-productive days in a year (e.g. leave, holidays, etc.).

- **"GAAP"** means generally accepted accounting practice in the Republic of South Africa as approved from time to time by the South African Accounting Practices Board.

- **"Implementation Agreement"** means the implementation agreement to be entered into between the Seller and the DMRE.

- **"Local Content"** means the portion of the Total Project Value that is in respect of South African Products.

- **"NERSA"** – refers to the National Energy Regulator of South Africa, established pursuant to Section 3 of the National Energy Regulator Act, 40 of 2004.

- **"Operating Expenditure"** means any expenditure treated as operating expenditure under GAAP.

- **"Operating Period"** means the period from the later of the Commercial Operation Date and the Scheduled COD to the Termination Date.

- **"PPA"** means the power purchase agreement to be entered into between a Project Company, as the Seller, and the Buyer pursuant to the IPP Procurement Programme.

- **"P50 / P90"** – refers to probabilities for annual energy production which are expressed as P values. A P50 figure is the level of generation that is forecasted to be exceeded in 50% of years

DEFINITIONS & TERMINOLOGY

over a 10 year (or sometimes 20 year) period. Similarly, a P90 figure is the level of generation that is forecasted to be exceeded in 90% of years over a 10 year period – in other words, the risk that an annual energy production of P90 is not reached is 10%.

- **"Procurement spend"** – refer to "Total Amount of Procurement Spend".
- **"Total Amount of Procurement Spend"** means the monetary spend on the procurement of goods and services for purposes of undertaking the Project Activities (without double counting), excluding costs of imported goods and services, taxation, salaries and wages.
- **"Total Project Cost"** means:

  a. for the purposes of calculating the Development Fee, an amount equal to the aggregate of the total Debt and Equity which is, as at the Signature Date, forecast in the Financial Model to be contributed up to the Commercial Operation Date; and

  b. for all other purposes, the total capital expenditure to be incurred up to the commercial operations date in the design, construction, development, installation and/or commissioning of a project, which is equal to the total debt and equity related to a project as reported at commercial close.

- "Total Project Value" means the total project cost that involves the capital costs and costs of services procured for the construction of a project, but excludes finance charges, land costs, mobilisation fees to the operations contractor and the costs payable to the distributor, national transmission company and/or a contractor for the distribution or transmission connection works.

Other definitions and terminology used in this report

- **Job years.** Employment / Job creation is reported in job years (i.e. the equivalent of a full time employment opportunity for one person for one year; i.e. defined in the IA as 174 hours per month for BW1 and BW2 and 160 hours per month for BW3, BW3.5 and BW4).
- Employment numbers are expressed as a percentage of the sum of StatsSA reported employed and unemployed numbers.

III

THE END

2023