



Fixed investment: reforms strengthen Eskom's capacity, markets react positively on formation of GNU so far

Wednesday 12 June 2024

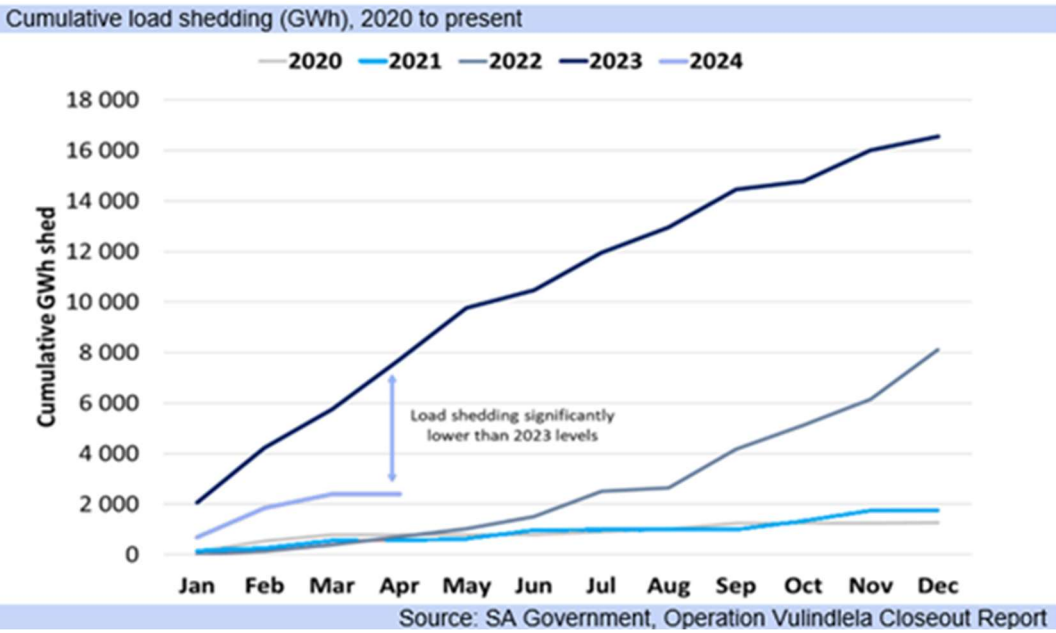
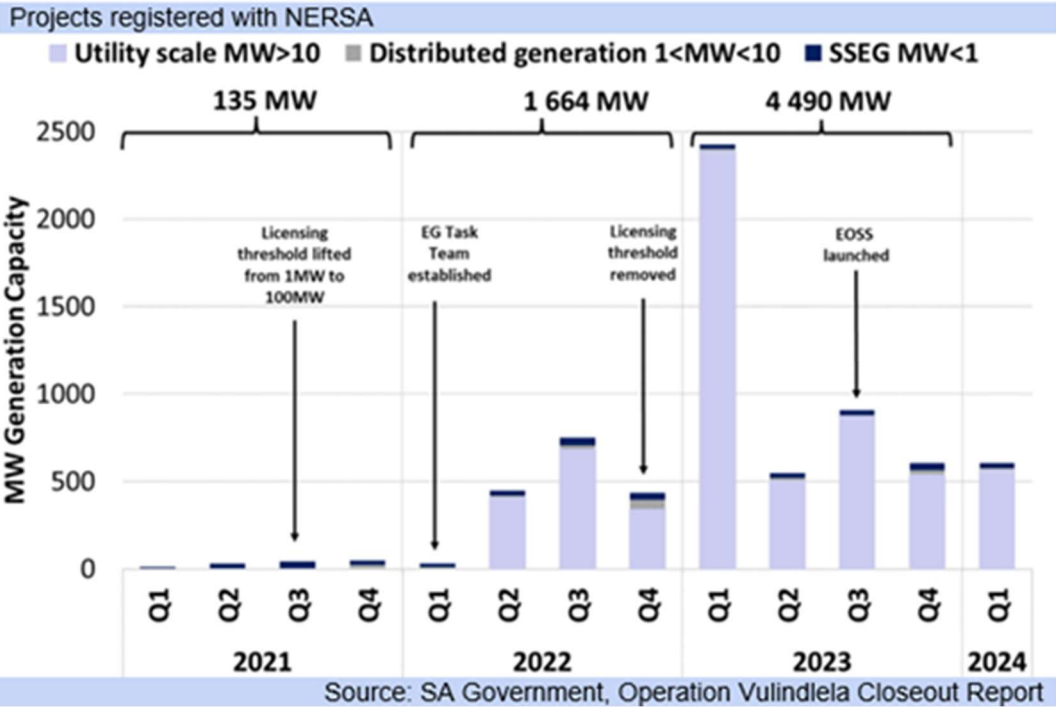
Eskom's investment in maintenance and disciplined execution of the recovery plan has resulted in a gradual reduction of unplanned losses

Gx actual performance on unplanned losses²

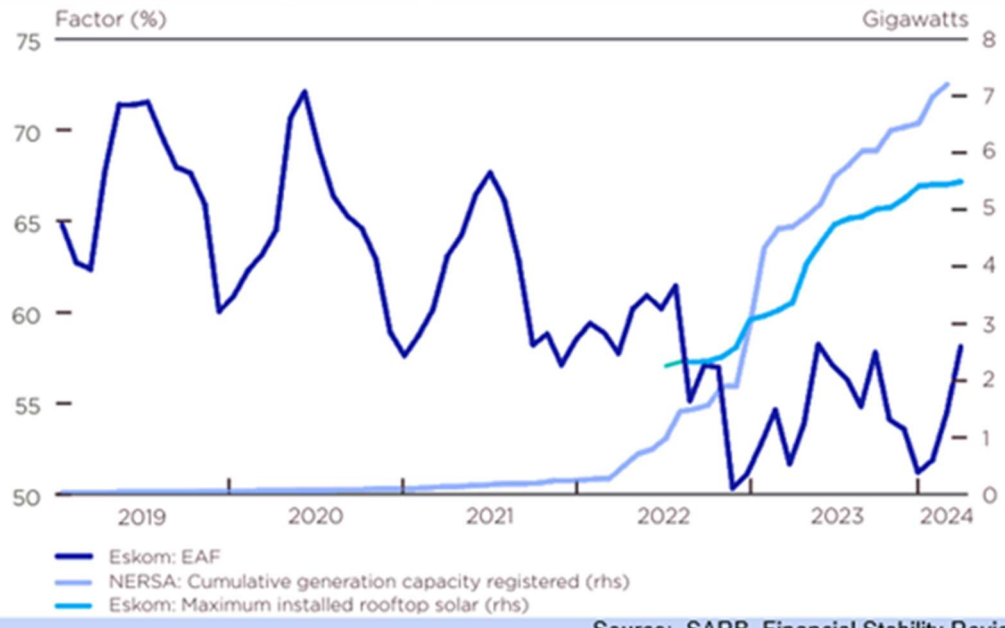


- Downward trend in unplanned losses especially at the priority 6 stations (Tutuka, Majuba, Kusile, Kendal, Matla, Duvha):
 - Year-on-year overall unit trips are declining, indicating the fleet is becoming more reliable – 19.2% reduction between FY23 vs. FY24
 - Return of 4 Kusile units: U1-3 that were impacted by the flue duct collapse which have been recovered and US has been synchronised to the grid
 - Multiple projects are in progress to reduce Partial Load Losses – e.g. cooling tower refurbishments at Kriel and Tutuka, re-bagging at Majuba
- Current unplanned losses of 14.2GW (-30%) are however still unsustainable hence the target is to reduce load losses to below 14GW¹

Source: Eskom, Medium-Term System Adequacy Outlook 2024-2028



Eskom EAF and renewable generation registered and installed



Source: SARB, Financial Stability Review

Value of FDI products by industry and subsector, R 'billion, Q4 2023

PROJECT	COMPANY	VALUE R'BILLIONS	INDUSTRY	PROGRESS UPDATE
Complete				
RMIPPPP: Scatec Kenhardt (1-3)	Scatec	14.8	Utilities	Commenced electricity supply to the national grid in the Northern Cape
Construction/implementation				
RMIPPPP: Umoyilanga hybrid renewable project	EDF Renewable/ Perpetua holdings	14.6	Utilities	Project achieved legal and financial close with early works and construction commencing. Signed PPA with Eskom and implementation Agreement with DMRE.
RMIPPPP: Acwa Power Project DAO	ACWA Power	15.0	Utilities	The PPA has been signed with Eskom and the project is under construction.
Project-preparation				
RMIPPPP: Oya Energy hybrid facility	G7 Renewable Energy/ ENGIE	*5	Utilities	Achieved commercial close
RMIPPPP: Mulilo Total Hybrid renewable project	TotalEnergies/ Hydra Storage Holdings/ Reatile Renewables	1.8	Utilities	Signed 20-year PPA with Eskom and reached financial close achieved in December. There has also been a change in the local partners, Mulilo was a part of the project, now it is no longer listed with Hydra Storage Holdings and Reatile added
REIPPPP BW5: Grootspuit Solar PV Project	ENGIE Africa/Pele Green Energy	1.4	Utilities	Project achieved financial close
REIPPPP BW5: Gaspan Solar PV Project	ENGIE Africa/Pele Green Energy	1.4	Utilities	Project achieved financial close
Sasol and Air Liquide renewable-energy project.	Mainstream Renewable Power	Not reported	Utilities	Sasol and Air Liquide signed a 20-year PPA with Mainstream Renewables Power for long term supply of 97.5 MW capacity renewable energy for Sasol's Secunda site.
Early stage developments: regulatory approvals, studies and exploration				
RMIPPPP: Karpowership SA Saldanha	Karpowership SA	10.9	Utilities	Environmental impact authorisation (EIA) approved after appeals against the project, plan to move towards financial close
RMIPPPP: Karpowerships SA Richards Bay ⁶	Karpowership SA	10.9	Utilities	EIA was approved; however, it is being appealed by civil society groups. The project was supposed to reach financial close at the end of 2023, it will be delayed pending the appeal process.
Envusa - Anglo American and EDF renewable energy business	Envusa/Anglo American/ EDF Renewables	0.0	Utilities	National Energy Regulator of South Africa issued electricity trading licence for the Envusa Energy. Three projects closed under Envusa Energy joint venture.

Source: Trade and Industrial Policy Strategies. FDI Tracker

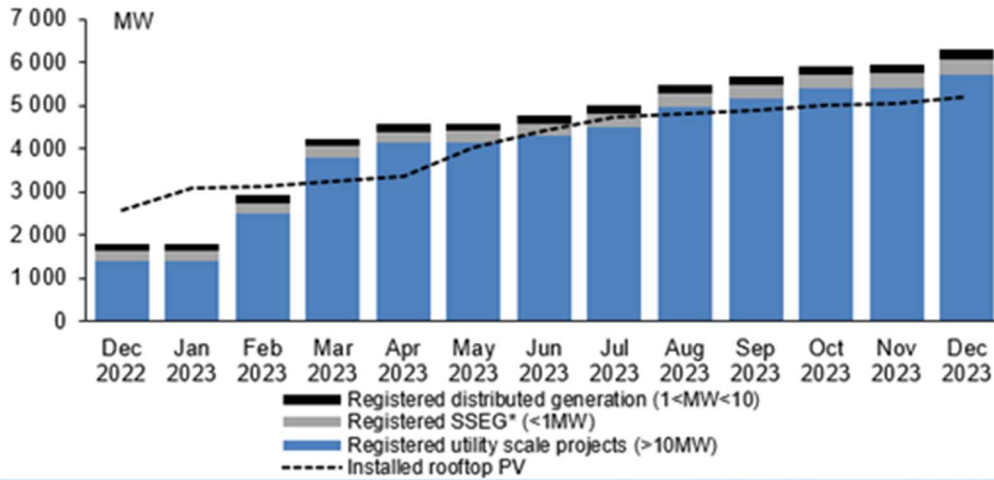
	2023	2024	2025	2026	2027	2028	2029
Gross Fixed Capital Formation							
GFCF, total (real, %)	4.2	4.3	4.8	5.0	5.2	5.4	5.5
GFCF as % of GDP	15.1	15.5	16.0	16.5	17.0	17.5	17.8
Private sector (real, %)	4.9	4.4	4.8	5.0	5.2	5.4	5.5
Government (real, %)	2.7	4.0	4.7	4.8	5.1	5.3	5.5
Non-residential GFCF (real, %)	6.5	4.9	4.8	5.0	5.2	5.4	5.5
Residential buildings (real, %)	-2.2	2.0	4.8	4.9	5.2	5.3	5.4

Please note: all data may be subjected to historical revisions.

- The private sector continues to drive investment into renewable energy in South Africa, from both households and companies investing in solar panels primarily for self-use, to renewable energy companies for supply to the grid.
- In February already 5 200MW came from self-generation from households and businesses, while Eskom notes “current planned maintenance of 4 653MW is consistent with our maintenance plans for this winter”.
- “The year-to-date (1 April 2024 to 6 June 2024) EAF increased to 61.1%. This is a significant ~8% improvement compared to the same period last year (1 April 2023 to 6 June 2023), where the EAF was 53.2%.”
- In addition, the weekly EAF (Electricity Availability Factor) “has moved from 57.0% at the beginning of the financial year to 63.8% from 1 April to 6 June 2024”, Eskom notes, on “a drop in the unplanned outages of the generation units.”
- Fixed investment remains key to economic growth. May’s Bloomberg consensus for 2024’s economic growth rate remained at 1.1% y/y, as uncertainty around the election outcome prevailed in the survey period, while the rand saw weakness.
- The reforms ongoing in the freight and electricity sector take some time to feed through, but the improvements at Eskom already are expected to lift GDP growth in Q2.24, with the outcome likely to be stronger than the expected 0.4% qgsa.
- The improvement in Eskom’s capacity is not due to increased usage of diesel generators either, as “OCGT (Open Cycle Gas Turbines) usage continue to be significantly lower compared to the same period for the past two years”.
- May’s Bloomberg survey, the latest available, also shows the 2025 and 2026 forecasts of 1.5% y/y and 1.8% y/y respectively, close to Investec’s forecasts of 1.5% y/y and 1.9% y/y for the respective years.
- The Bloomberg consensus shows a downward dip in May’s forecasts from 1.6% y/y and 1.9% y/y in April for the next two years, but this dip is likely temporary, once SA establishes the GNU, which sees progress continue on Eskom and Transnet.

Please scroll down to the second section below

Cumulative capacity registered and rooftop PV installed during 2023



Source: National Treasury. Budget 2024

Booming solar industry



51
The number of solar farms in South Africa



R12-billion
Cost of solar panels imported by SA from January to June 2023

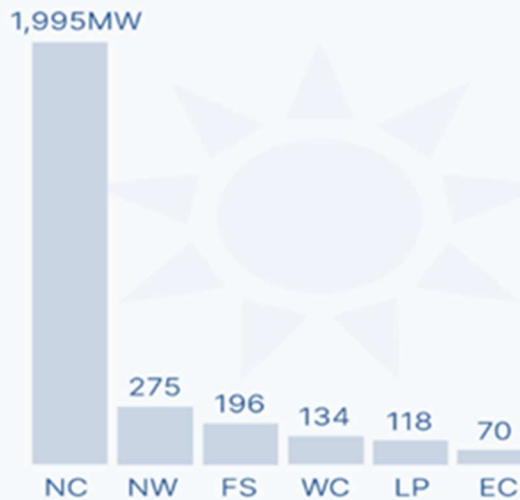


2,787MW
Total installed capacity at the country's solar farms



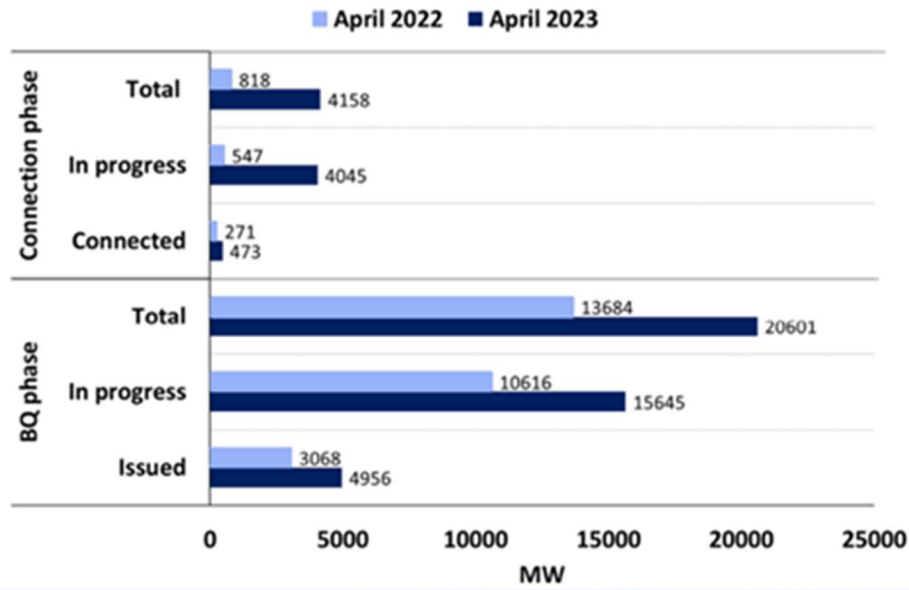
20,000
The estimated number of people employed by the solar industry in 2022

Solar farm capacity per province



Source: The Outlier

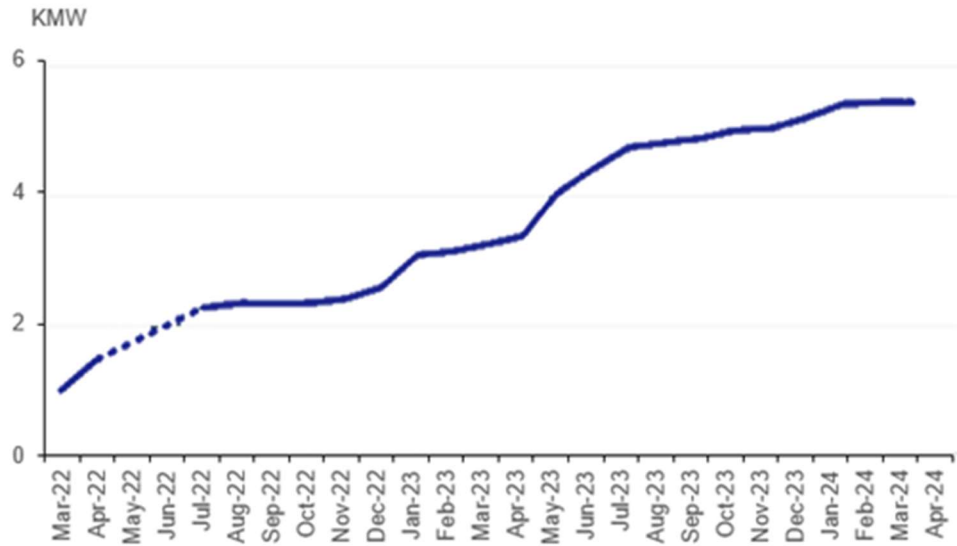
Confirmed pipeline of private sector projects in the grid connection process, 2024



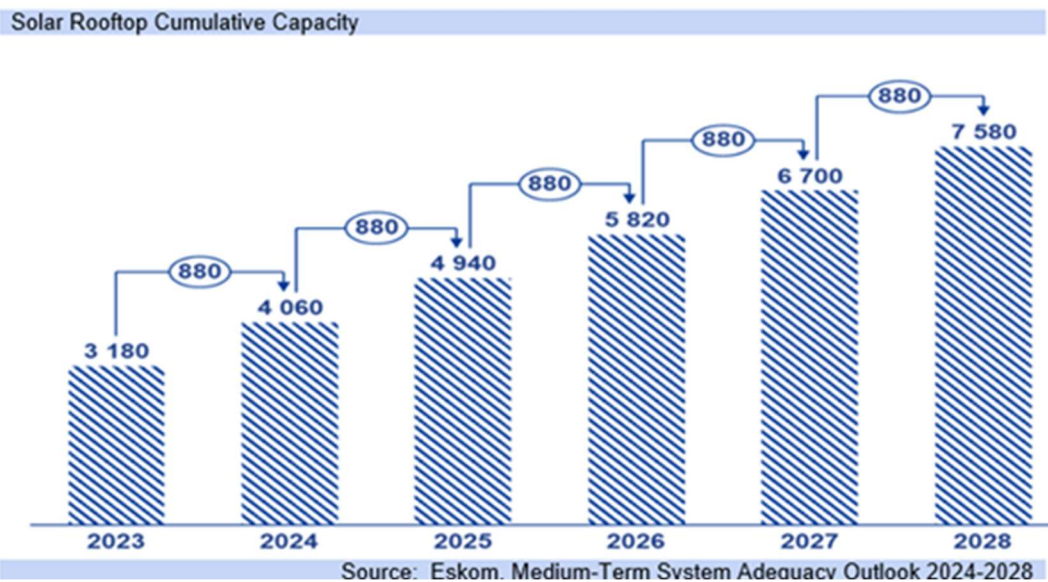
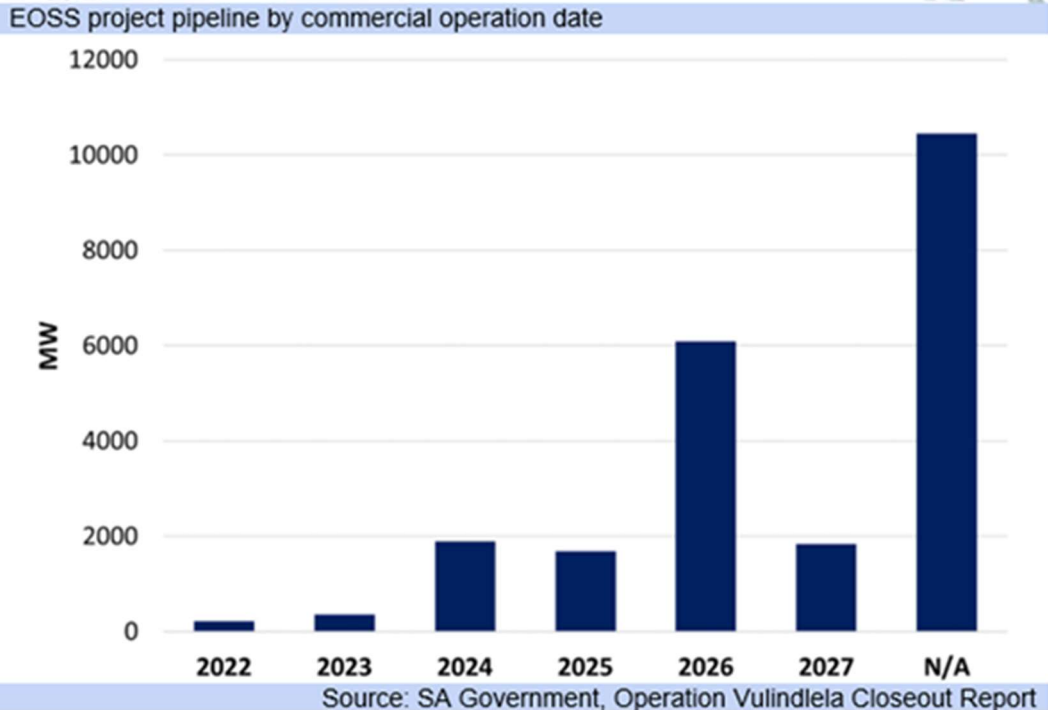
Source: SA Government. Operation Vulindlela Closeout Report

Solar Boom

Installations of solar panels have gone through the roof, more than quintupling in just two years



Source: Bloomberg



- The rand has strengthened as the President noted on Monday “(w)ith the 2024 elections behind us and discussions between political parties around the formation of a government ongoing, there is broad support for the continuation of economic reforms.”
- “(W)e have implemented a range of growth-enhancing structural reforms to remove the constraints which have held back growth, to attract higher levels of investment, and to make our economy more efficient and competitive”.

- “These reforms include an overhaul of the energy sector to enable efficiency, stability and greater investment in electricity generation and to introduce a more competitive electricity market.”
- “We have introduced private sector participation in the operation of port terminals, enabled open access to the freight rail network and completed the auction of high-demand broadband spectrum.”
- “Regardless of the form or composition of the incoming administration, it is important that the momentum of reform be retained and sustained. (I)t will take time for the impact of many of these reforms to be fully felt.“
- “Modelling by the National Treasury showed that the successful implementation of key reforms could raise GDP growth to over 3% a year, add an additional R600 billion to revenue and create a substantial number of additional jobs over ten years”.
- With the President focussed on policy continuity and hence stability, along with no changes to the constitution or radical alterations to the functioning of the Reserve Bank, the judiciary, National Treasury, rule of law and democracy.
- Financial markets have seen some positive reaction on the maturity of SA’s election and formation of government underway, with the President concluding “deepening our partnership as government, business and labour, by accelerating structural reform”.
- Furthermore, markets seek stability, a message echoed by the President stating “(a) stable and effective government committed to economic reform will enable us to build an inclusive and growing economy that benefits all South Africans.”

Solar PV Project profiles			
PROJECT NAME	MERCEDES-BENZ CHARGING INFRASTRUCTURE	MERCEDES-BENZ SOLAR PV INSTALLATION	MASTERCARD TECHNOLOGICAL INFRASTRUCTURE
Investment value (foreign currency)	Rand value only	US\$5.35 million	Not reported
Investment value rand	R40 million	R300 million	Not reported
Start date	November 2023	2024	Not reported
End date	Not reported	Not reported	November 2023
Permanent jobs	Not reported	Not reported	Not reported
Temporary jobs	Not reported	Not reported	Not reported
Project location: Province	Multiple locations	Eastern Cape	Gauteng
Project location: City/Town	Multiple locations	East London	Johannesburg
Project type	Upgrade	Brownfield	Greenfield
Project phase	Construction/Implementation	Announced	Complete
Investor firms	Mercedes-Benz South Africa and Chargify	Mercedes-Benz South Africa	Mastercard
Investor country	Germany	Germany	United States
Investor City	Stuttgart	Stuttgart	Purchase
Project industry	Construction	Utilities	Services
Project sector	Other building installation	Renewable energy	ICT
Government participation	Not reported	National Energy Regulator of South Africa (NERSA)	Not reported
Target market	Domestic	Domestic	Domestic
Social Development Programme	Technology transfer, enterprise and supplier development	Not reported	Technology transfer
Project description	MBSA is installing an electric vehicle charging network across the country in collaboration with local EV charging solution developer Chargify. The project is being implemented in two stages and, when complete, there will be a total 127 AC and fast-charging DC charging stations. EV stations are already available in parts of the country. They will be placed along main routes, in metros and small towns at locations such as airports and malls in first quarter of 2024.	MBSA plans to add solar PV panels at its manufacturing plant in East London. The investment forms part of the second phase of MBSA's goal of net-carbon-neutral manufacturing under its sustainable business strategy: Ambition 2035. The upcoming installation will cover five rooftops with 22 847 solar panels adding 12.6MW of renewable energy, bringing the total peak generation capacity to 14.6MW. The project is to be completed in collaboration with a local company.	The company developed new technological infrastructure that will improve how transactions are processed and modernise the local digital payment industry. The new infrastructure includes new data centres to enable efficient and secure transaction processing.
Motivation	Local customer support and market opportunity and reducing the company's carbon footprint	Energy efficiency, reducing carbon footprint in line with company objectives	Operational efficiency, modernisation and diversification

Source: Trade and Industrial Policy Strategies, FDI Tracker

Solar PV and renewable project profiles

PROJECT NAME	BESIPPPP: MOGOBE (FERRUM) BESS	SOLAR CAPITAL ORANGE: LOERIESFONTEIN	SALDANHA GREEN HYDROGEN PROJECT
Investment value (foreign currency)	US\$163 million	US\$100 million	Rand value only
Investment value rand	R3.1 billion	R1.9 billion	R47 billion
Start date	November 2023	2020	October 2023
End date	2024	2023	2026
Permanent jobs	Not reported	Not reported	500
Temporary jobs	392	Not reported	2500
Project location: Province	Northern Cape	Northern Cape	Western Cape
Project location: City/Town	Kathu	Loeriesfontein	Saldanha
Project type	Greenfield	Greenfield	Greenfield
Project phase	Announced	Complete	Project preparation
Investor firms	Scatec (51%) / Perpetua Holding (46.5%) / Community Trust (2.5%)	Phelan Green Energy/Solar Capital	Phelan Green Energy/Solar Capital
Investor country	Norway	Ireland	Ireland
Investor City	Oslo	Dublin	Dublin
Project Industry	Utilities	Utilities	Manufacturing
Project sector	Renewable energy	Renewable energy	Chemicals and chemical products
Government participation	Eskom/ NERSA/DMRE	NERSA/Eskom/DMRE	Granted Strategic Infrastructure Project status
Target market	Domestic	Domestic	Domestic, regional and international
Social Development Programme	Includes B-BBEE, local content, preferential procurement enterprise development, black ownership, black women ownership	Solar Capital socio-economic development scheme	Not reported
Project description	Scatec will develop the Magobe (Ferrum) battery energy storage project under Bid Window 1 of the BESIPPPP. Scatec's project will utilize lithium-ion phosphate technology and it will contribute 103MW at a minimum installed energy rating of 412MWh. Power will be transmitted under a 35-year PPA with Eskom.	Solar Capital completed the development of a 88MW solar PV power plant which has been connected to the grid. The company signed a 20-year PPA to supply Eskom with electricity with a sovereign guarantee from the South African government. Solar Capital was selected as a preferred bidder in Bid Window 4.	Phelan Green Energy plans to build a green hydrogen and ammonia production plant. The facility is expected to produce 85 000 tons annually of green hydrogen and its derivatives. The company intends to start exporting in 2026. The complex will be built on 8000 hectares of land.
Motivation	Market expansion	Customer base retention and growth; market expansion	Market expansion.

Source: Trade and Industrial Policy Strategies, FDI Tracker

Solar PV renewable project profiles

PROJECT NAME	BESIPPPP: OASIS MOOKOOI	BESIPPPP: OASIS AGGENIS	BESIPPPP: OASIS NIEUWHOOP
Investment value (foreign currency)	Rand value only	Rand value only	Rand value only
Investment value rand	R2.1 billion	R2.1 billion	R2.1 billion
Start date	November 2023	November 2023	November 2023
End date	2024	2024	2024
Permanent jobs	Not reported	Not reported	Not reported
Temporary jobs	Part of 992 total	Part of 992 total	Part of 992 total
Project location: Province	Northern Cape	Northern Cape	Northern Cape
Project location: City/Town	Vryburg	Aggenys	Groblershoop
Project type	Greenfield	Greenfield	Greenfield
Project phase	Announced	Announced	Announced
Investor firms	EDF Renewables/Mullis/Pele Green and GIBB-Crede	EDF Renewables/Mullis/Pele Green and GIBB-Crede	EDF Renewables/Mullis/Pele Green and GIBB-Crede
Investor country	France and Denmark	France and Denmark	France and Denmark
Investor City	Paris and Copenhagen	Paris and Copenhagen	Paris and Copenhagen
Project Industry	Utilities	Utilities	Utilities
Project sector	Renewable energy	Renewable energy	Renewable energy
Government participation	Eskom/NERSA/DMRE	Eskom/NERSA/DMRE	Eskom/NERSA/DMRE
Target market	Domestic	Domestic	Domestic
Social Development Programme	Includes B-BBEE, local content, preferential procurement enterprise development, black ownership, black women ownership	Includes B-BBEE, local content, preferential procurement enterprise development, black ownership, black women ownership	Includes B-BBEE, local content, preferential procurement enterprise development, black ownership, black women ownership
Project description	EDF Renewables will develop the Oasis Mookooi battery energy storage project under Bid Window 1 of the BESIPPPP. It will utilize lithium-ion technology and contribute 77MW at a minimum installed energy rating of 308MWh. Commercial close is expected by June 2024.	EDF will also develop the Oasis Aggenys under the BESIPPPP. It will utilize lithium-ion technology and contribute 77MW at a minimum installed energy rating of 308MWh. Commercial close is expected by June 2024.	Oasis Nieuwkoop will utilize lithium-ion technology and contribute 103MW at a minimum installed energy rating of 412MWh. It has four hours of storage. Commercial close is expected by June 2024. This is the third project under the BESIPPPP that will be developed by EDF Renewables.
Motivation	BESIPPPP participation, market opportunity	BESIPPPP participation, market opportunity	BESIPPPP participation, market opportunity

Source: Trade and Industrial Policy Strategies, FDI Tracker

Solar PV renewable project profiles

PROJECT NAME	TFC SOLAR PV POWER PLANT AND BATTERY STORAGE PROJECT	SAINT-GOBAIN RENEWABLE ENERGY SUPPLY AGREEMENT PROJECTS
Investment value (foreign currency)	Not reported	Not reported
Investment value rand	Not reported	Not reported
Start date	May 2022	December 2023
End date	Not reported	Not reported
Permanent jobs	Not reported	Not reported
Temporary jobs	Not reported	Not reported
Project location: Province	Umpuqa	Gauteng and Western Cape
Project location: City/Town	Steeleport	Brakpan, Alrode, Germiston and Farrow
Project type	Greenfield	Not reported
Project phase	Project preparation	Announced
Investor firms	Samancor Chrome/CGN Energy	CVE and Saint-Gobain
Investor country	China	France
Investor City	Beijing/Shenzhen	Marseille and La Defense
Project industry	Utilities	Utilities
Project sector	Renewable energy	Renewable energy
Government participation	NERSA/ Eskom/DMRE/DFE	NERSA/Eskom
Target market	Domestic	Domestic
Social Development Programme	Not reported	Not reported
Project description	The project entails the development of a 60MW peak (MWp) solar PV Plant over five potential sites adjacent to the Tubatse Ferrichrome (TFC) Smelter which will supply the facility. Samancor Chrome selected CGN Energy as an IPP to develop the project following a request for proposals process in March 2021. In addition, the project would BESS and other infrastructure.	CVE South Africa and Saint-Gobain have signed a PPA in which CVE will supply about 140GWh of solar electricity over 20 years for Saint-Gobain's three operations in Gauteng and one operation in the Western Cape. This PPA is expected to cover around 40% of Saint-Gobain's energy needs at major production sites. CVE is a renewable energy producer with a decentralized regional energy model and a focus on short supply chains. Saint-Gobain designs, manufactures, and distributes materials and services for the construction and industrial markets.
Motivation	Operational efficiency (production cost saving), self-generation, policy change: 100MW embedded generation threshold	Self-generation, decarbonisation, operational efficiency

Source: Trade and Industrial Policy Strategies, FDI Tracker

Project profiles

PROJECT NAME	POWGEN-HYFI JOINT VENTURE	MOOVE EXPANSION	DURBAN CONTAINER TERMINAL PIER 2
Investment value (foreign currency)	US\$2.5 billion	Rand value only	Not reported
Investment value rand	R45.5 billion	R300 million	Not reported
Start date	July 2023	October 2023	July 2023
End date	Not reported	July 2024	Not reported
Permanent jobs	Not reported	Not reported	Not reported
Temporary jobs	Not reported	2000	Not reported
Project location: Province	Mpumalanga	Multiple Locations	KwaZulu-Natal
Project location: City/Town	Not reported	Johannesburg, Cape Town	Durban
Project type	Greenfield	Expansion	Upgrade
Project phase	Project preparation	Announced	Announced
Investor firms	Biohwer Operations Corporation (as WHFI)/ POWGEN Energy	Moove	Transnet/ International Container Terminal Services (ICTSI)
Investor country	Australia and United States of America	Netherlands	Philippines
Investor City	Cocunut Creek	Amsterdam	Manila
Project industry	Utilities	Services	Transport
Project sector	Renewable energy	Financial services	Operation and maintenance of ports and harbour
Government participation	Not reported	Not reported	Transnet
Target market	Domestic	Domestic	Domestic
Social Development Programme	Not reported	Not reported	Not reported
Project description	The joint venture will build a solar energy facility to supply municipalities in Mpumalanga and support various other industries. The project's starting target capacity is 30W (with the initial project value) of power that could be expanded to 300W. Project installations for the first 10W are anticipated to commence in Q1 2024. The joint venture, known as POWGEN-HYFI, aims to construct, own, and operate green electricity-generating facilities over a period of 45 years.	Further investment of R300 million will be allocated to the purchase of 1400 new vehicles, with further funding and vehicle allocation taking place in 2024.	Transnet selected ICTSI as a preferred bidder for a joint venture to upgrade and develop the Durban Container Terminal Pier 2. The term for the partnership is 25 years. A new company will be formed to manage the operations. ICTSI is one of the biggest container terminal operators in the world and manages several terminals globally. Transnet plans to grow Pier 2's current capacity of two million twenty-foot equivalent units to 2.8 million. The partnership is expected to come into full effect in the first half of 2024. Jobs will be sustained.

Source: Trade and Industrial Policy Strategies, FDI Tracker

Project profiles

PROJECT NAME	BOLOBEDU SOLAR POWER PLANT	TERACO DB1	TERACO CT2
Investment value (foreign currency)	Not reported	Not reported	Not reported
Investment value rand	Not reported	Not reported	Not reported
Start date	October 2022	Not reported	November 2023
End date	2024	2023	2025
Permanent jobs	53	Not reported	Not reported
Temporary jobs	700	Not reported	Not reported
Project location: Province	Limpopo	KwaZulu-Natal	Western Cape
Project location: City/Town	Belobedu	Durban	Cape Town
Project type	Greenfield	Expansion	Expansion
Project phase	Construction/Implementation	Complete	Construction/Implementation
Investor firms	Valtala/Rio Tinto	Teraco	Teraco
Investor country	France	United States	United States
Investor City	Paris	Austin	Austin
Project Industry	Utilities	Services	Services
Project sector	Renewable energy	ICT	ICT
Government participation	NERSA/Eskom/DMRE (Regulatory)	Not reported	Not reported
Target market	Domestic	Domestic and regional	Domestic and regional
Social Development Programme	Black enterprise (41%), Black-woman enterprise (10%), Belobedu community ownership (5%)	Not reported	Not reported
Project description	Valtala is developing a 148MW solar PV power plant that will supply electricity to Rio Tinto subsidiary Richards Bay Minerals in KwaZulu-Natal. It has an estimated generation capacity of 300GWh annually. The plant will enable Richards Bay Minerals to reduce its electricity costs. The 20-year PPA was signed in October 2022. Valtala owns 44% of the project and aims to commission the plant by 2024.	Teraco completed the expansion of the firm's DB1 Data Centre. DB1 has been expanded to 5800 square metres of building structure serviced by four megavolt-amperes (MVA) of utility power supply and provides 2.2MW of critical power load. DB1 is an interconnection hub that lies along various cables on the East African cable systems. The facility offers clients colocation and interconnection services and directly leverages Teraco's digital hubs in Johannesburg. Market expansion, support demand by enterprises	Teraco is expanding the CT2 hyperscale data centre facility by 30MW. It will include the latest environmentally sustainable cooling and water management designs. CT2 Phase 2 construction has commenced with new capacity scheduled to be available in the first quarter of 2025. CT2 Phase 2 will comprise four data halls of 5.3MW, two data halls of 3.1MW, and a further two data halls of 2.2MW. On completion, the entire CT2 facility will support a total IT load of 50MW. Market expansion, support demand by enterprises
Motivation	Self-generation, decarbonisation	Market expansion, support demand by enterprises	Market expansion, support demand by enterprises

Source: Trade and Industrial Policy Strategies, FDI Tracker