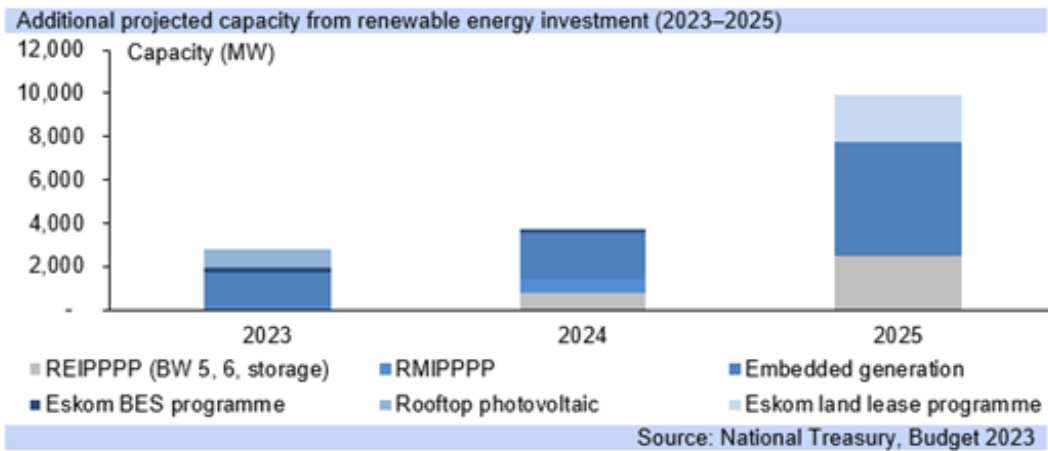




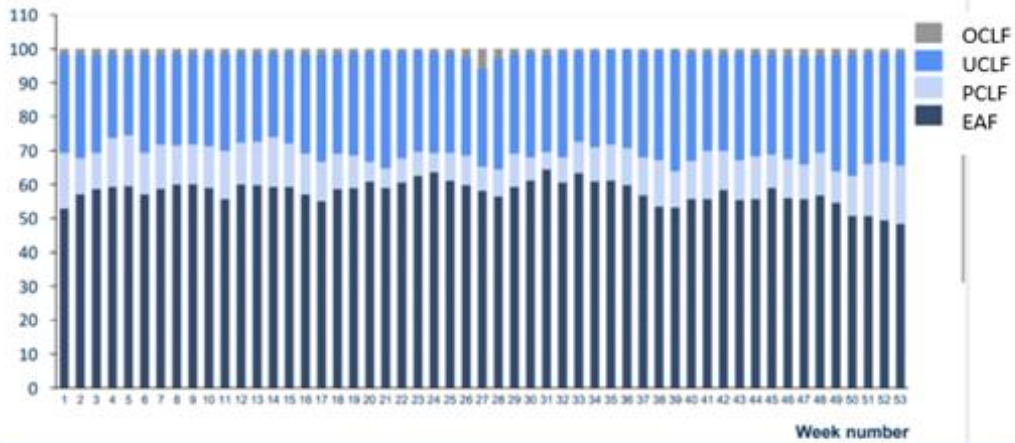
Fixed investment note: 2023's Investment Conference reaffirms state power and freight plans

Friday 14 April 2023



Eskom fleet performance continues to decline with an annual EAF of 58.1% with planned maintenance of 10.6%, unplanned outages of 29.8% and other at 1.5% (weekly performance shown below)

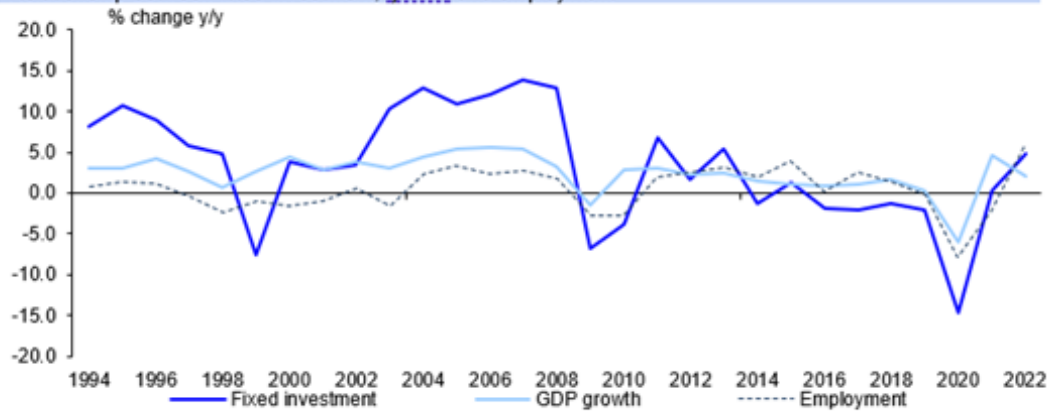
Plant performance (weekly)
[%]



Source: CSIR

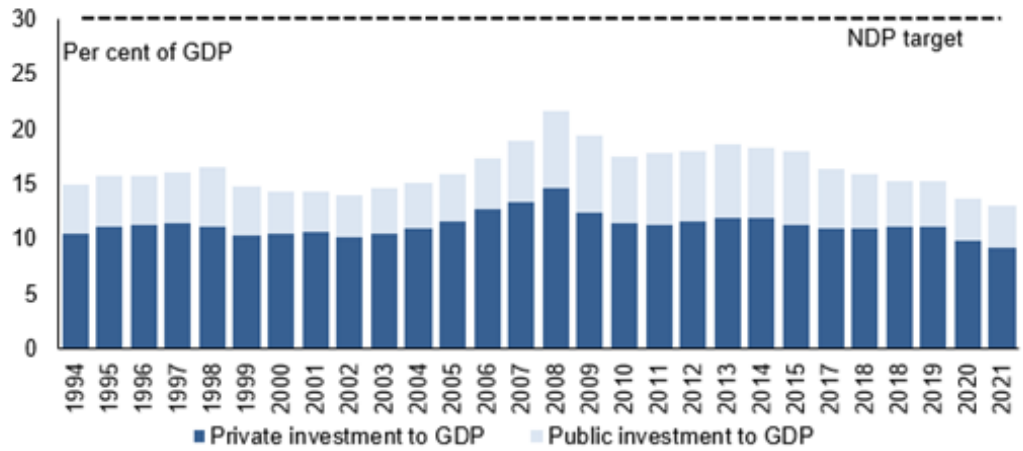
Notes: EAF- Energy Availability Factor, PCLF – Planned capability loss factor, UCLF – Unplanned Capacity Loss Factor, OCLF – Other Capability Loss factor

Relationship between fixed investment, growth and employment



Source: SA Reserve Bank

Public- and private-sector capital investment as a share of GDP, 1994-2021*



Source: National Treasury, Budget Review 2023

Large capital projects likely to be drive fixed investment activity - 2022				
Announced date	Project Name	Company Name	Estimated Completion date	Estimated value
Jan-22	Green hydrogen plant	Hive Hydrogen and Linde, through its wholly owned South African subsidiary Afrox	Dec-26	75000
May-22	Round 5 - Renewable Energy Independent Power Producer Procurement Programme (REIPPPP)	Various companies	Dec-26	34300
Jun-22	Salvokop mixed use government district	Public Works and Infrastructure	Dec-25	18000
Jul-22	TNPA Western Region ports expansion project	Transnet National Ports Authority (TNPA)	Dec-28	16100
May-22	Round 6 - Renewable Energy Independent Power Producer Procurement Programme (REIPPPP)	Various companies	Dec-26	12100
Sep-22	Seriti coal mine windfarm project	Seriti Resources	Jun-24	12000
Dec-22	Komati power station repurposing project	Eskom	Sep-28	9000
Jun-22	Prasa rolling stock overhaul	PRASA	Sep-25	7500
Mar-22	Gamsberg Phase 2 expansion project	Vedanta Zinc International	Dec-24	7000
Feb-22	Investec Property logistics hub	Investec	Dec-23	6000
Feb-22	Nkuna Smart City	Masingita Group of Companies	Jun-24	5500
Apr-22	Marula Phase II	Impala Platinum	Dec-28	5100
Jan-22	Mototolo/Der Brochen life extension project	Anglo American Platinum (Amplats)	Dec-24	3900
Jul-22	South Africa own- and commercial-use generation facilities projects.	Nersa	Jun-24	3650
Jul-22	Earth & Wire independent renewable-energy company	Earth & wire	Jun-25	3500
Aug-22	Shoprite: Environmental programme expansion	Shoprite	Dec-25	3500
Jan-22	South32 aluminium plant	South32	Dec-23	3000
Jun-22	Mogale Gold Tailings storage facilities (TSFs)	Pan African Resources	Apr-25	2500
Jun-22	Vametco and Vanchem operations expansion	Bushveld minerals	Dec-28	2300
May-22	Pick n Pay - Eastport distribution centre	Pick n Pay and partner Fortress Reit	Dec-23	2000
Jan-22	Mnambithi Terminals	Mnambithi Terminals	Dec-23	1500
Feb-22	Dakota Precinct.	Improvon and Nedbank	Dec-24	1300
Mar-22	Bidvest liquid petroleum gas facility	Bidvest	Dec-23	1000
May-22	Virginia Gas Project	Regergen through its subsidiary company Tetra4	Jun-23	1000
Jul-22	Vodacom - Rural KwaZulu-Natal network coverage improvement	Vodacom	Dec-23	1000
Dec-22	Richards Bay liquid bulk terminal	Vopak SA Developments and Transnet	Jun-25	1000

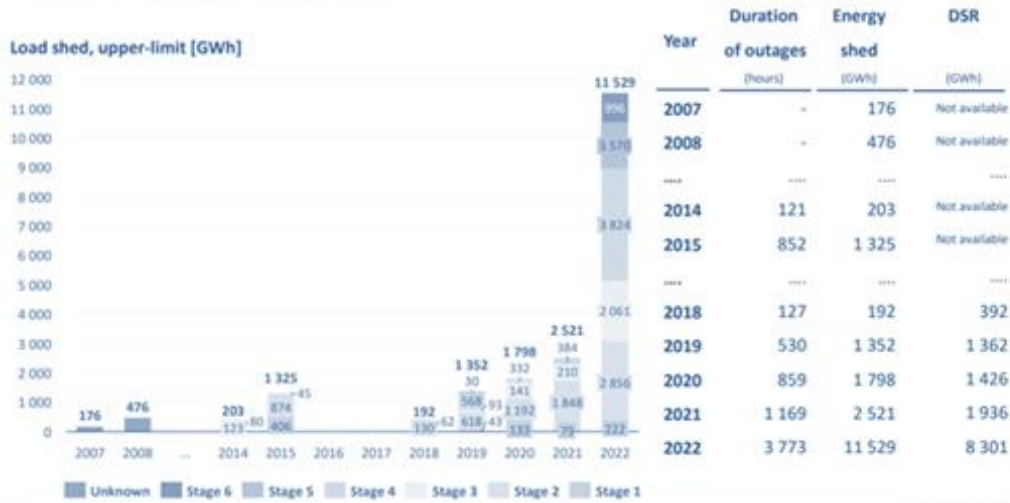
Source: Nedbank Capex

- Yesterday's fifth SA Investment Conference (SAIC) saw the five year objective of R1.2trillion in private sector fixed investment in South Africa exceeded, with the investment commitments reaching a reported R1.51trillion for the five year period.
- The conference took place against the severe backdrop of insufficient electricity supply and freight services by Transnet to meet the demands of the economy, which has resulted in a contraction in GDP in Q4.22, and indications are in Q1.23 as well.
- That is, the SA economy is contracting to meet the reduced levels of productive capacity, as it does not have security of electricity supply, water and rail and port transport services (essential productive factors necessary for economic growth).

- Indeed, the supply of these productive factors have been falling, not increasing, which means there is no space to maintain previous levels of economic activity (hence the contractions in GDP) let alone economic growth.
- The state acknowledges that SAIC takes place against a “constrained energy supply that has resulted in persistent load shedding ... government through the Energy Action Plan has announced several interventions to turnaround the situation.”
- But adds “(w)e have been implementing wide-ranging reforms in the electricity sector to enable private investment in electricity generation and accelerate the procurement of new generation capacity from solar, wind, gas and battery storage.”
- “(T)he removal of the licensing threshold for embedded generation, ... with measures to streamline regulatory processes, has enabled a surge of new projects, with the pipeline of committed projects now representing over 10,000 MW of new capacity.”
- “What we are witnessing in the energy sector is an undeniable surge of investment that will not only address the electricity supply shortfall in years to come, but will propel growth and create jobs.” On the freight deficit the President added “Transnet’s railway and port constraints are significantly affecting the mining, agriculture, forestry, automotive and manufacturing sectors. ”
- “Just as the private sector Resource Mobilisation Fund is providing support for the Energy Action Plan, we are greatly encouraged by indications from business that they are prepared to support government in our effort to fix the logistics system.” While the conference struck a positive tone, and looks to raise R2 trillion over the next five years in fixed investment, it has not likely lifted business sentiment, nor will it alleviate the current deficits in productive capacity and risks of recession in 2023.

Please scroll down to the second section below

2022 overtook 2021 as the most intensive loadshedding year yet, more than 4 times more. Also, far exceeding 2019's stage 6 loadshedding.



Source: CSIR

Note: Loadshedding assumed to have taken place for the full hours in which it was implemented. Practically, load shedding (and the Stage) may occasionally change/end during a particular hour. Total GWh calculated assuming Stage 1 = 1000 MW, Stage 2 = 2000 MW, Stage 3 = 3000 MW, Stage 4 = 4000 MW, Stage 5 = 5000MW, Stage 6 = 6000 MW

December 2022 was an exceptionally high month in terms of loadshedding. 2022 is the first year that the majority of loadshedding has not been Stage 2, it was overtaken by Stage 4. Stage 6 loadshedding has far surpassed 2019, the only other year with Stage 6



Source: CSIR

Note: Loadshedding assumed to have taken place for the full hours in which it was implemented. Practically, load shedding (and the Stage) may occasionally change/end during a particular hour. Total GWh calculated assuming Stage 1 = 1000 MW, Stage 2 = 2000 MW, Stage 3 = 3000 MW, Stage 4 = 4000 MW, Stage 5 = 5000MW, Stage 6 = 6000 MW

In 2022, for the first-time coal dropped below 80% of the 228 TWh of total system load met, while PV, wind and CSP contributed 7%

2022 Electricity

[TWh]



Source: CSIR

Notes: Wind, including Eskom's Sere wind farm (100MW). Wind and solar PV energy excludes curtailment and is thus lower than actual wind and solar PV generation. PS = pumped storage. Demand Side Response (DSR) = Manual Load Reduction (MLR) + Interruptible Load Supply (LS) + Interruption of Supply (IOS)

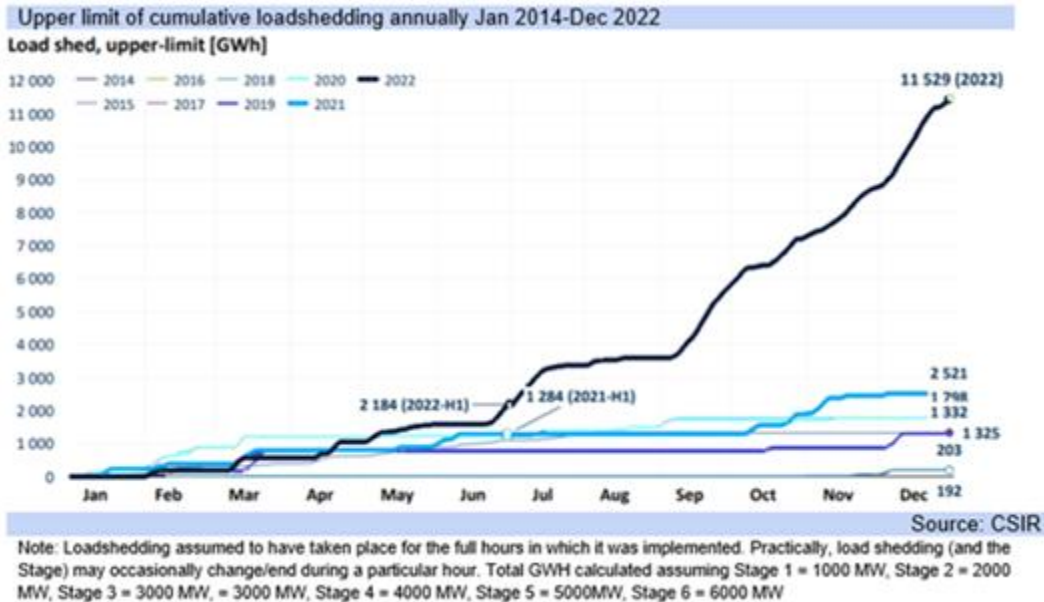
From 1 Nov 2013 to 31 Dec 2022, 3 443 MW of wind, 2 287 MW of large-scale solar PV and 500 MW of CSP became operational in RSA

Capacity operational [MW]



Source: CSIR

Notes: RSA = Republic of South Africa. Solar PV capacity = capacity at point of common coupling. Wind includes Eskom's Sere wind farm.



- The President highlighted “(w)e are prioritising port and rail efficiencies as part of the structural reform process. Our new National Rail Policy provides for third party access to the freight rail network, which will allow private rail operators onto the network to increase investment and improve efficiency.”
- “Transnet is also in the process of establishing private sector partnerships at the Durban and Ngqura Container Terminals, which we expect to be concluded in the coming weeks. Significantly, we have agreed with key stakeholders to establish a National Logistics Crisis Committee to drive the implementation of a comprehensive roadmap for the freight logistics sector”.
- “We are confident that working together with the private sector and organised labour, Transnet and government will be able to overcome these constraints to improve efficiencies.” Despite the positive tone however, it will take several years to sort out the deficiencies, incapacities and deficits in Transnet’s rail and port services, adding to low business confidence and weakening the investment impetus.
- The private sector is already taking on, or planning on, self-generation where possible with “(s)everal municipalities ... making use of regulatory changes to procure power independently. We have introduced tax incentives for households and businesses to invest in rooftop solar. We have called for financial institutions to support this effort through affordable funding for households and small and medium enterprises. The government will assist poor households through a number of programmes. The debt transfer package for Eskom, together with the progress made in unbundling the utility, will enable the necessary investment in the transmission network and in maintenance of Eskom’s generation fleet. ”

- “Cabinet has approved the Electricity Regulation Amendment Bill, which will soon be tabled in Parliament, to establish a competitive market for electricity generation. We expect the National Transmission Company to be fully operational shortly. Through our renewable energy programme, we have signed agreements for approximately 2,800 MW from bid windows 5 and 6, with several large projects already in construction and others on track to reach financial close. We recently released a request for proposals for over 500 MW of battery storage, and will soon open further bid windows for wind and solar, battery storage and gas power. As we work to close the electricity supply shortfall and end load shedding in the short term, we are laying the foundation for a fundamental reform of the energy sector in the longer term.”
- “Even as we work to improve the performance of our existing coal-fired power stations to address load shedding, we remain committed to a just energy transition and our target of achieving net zero emissions by 2050. We will implement our Just Energy Transition Investment Plan, which outlines our investment needs to support a just and inclusive transition towards cleaner forms of energy. We will soon be completing the review of the Integrated Resource Plan to lay the foundation for a fundamentally transformed energy landscape that transitions us along a low-carbon, climate resilient developmental path.”
- On greylisting the President noted “(t)he South African Police Service, the Special Investigating Unit and the NPA’s Investigating Directorate are making notable progress in dealing with cases of serious corruption. This work has resulted in arrests, asset forfeitures, successful convictions and the recovery of misappropriated funds. Since its inception the work of the Fusion Centre has led to the preservation and recovery of approximately R1.75 billion in criminal assets. These developments highlight the importance of South Africa’s efforts to be removed from the Financial Action Task Force’s ‘grey list’ as soon as possible.”
- “Yesterday, I met with business leaders from some of South Africa’s leading companies to discuss the challenges that are holding up growth in our economy. We agreed to undertake practical joint action in three immediate priority areas: energy, logistics, and crime and corruption. In doing so, we will be building on the collaborative model that we used so successfully in managing our response to Covid-19 and in our vaccine rollout. We are confident that if we can address these three issues, we will be able to turn our economy around and unleash its full potential”.
- While the President did seem more task orientated towards the multiple crises facing the country (electricity, water, freight, corruption and criminality), the progress is not expected to be swift in restoring security of electricity and state freight services supply, to the detriment of economic growth and job creation. This will not lift business confidence, and instead would provide a drag on fixed investment growth.

Projects at advanced stages of preparation			
Project name	Project description	Estimate of potential total investment (R million)	Progress to date
Lanseria Wastewater Treatment Works	The project entails the planning, design and implementation of the Lanseria wastewater treatment works and associated bulk outfall sewer. The objective is to construct and commission a module of 50 megalitres/day (M/d) as part of a programme to deliver 150 M/d	3,400	Feasibility studies completed
Olifants Management Model Programme	Development of raw water and potable water pipelines in five phases to deliver 250 M/d. The project will benefit municipalities, industries and mines	24,900	Phases 2B and 2B+ have completed project preparation activities. BFI application is being packaged for the social component. Other phases are under preparation
One-Stop Border Posts	To modernise border post infrastructure to ensure efficient movement of goods and people through six inland border posts	9,100	Feasibility studies completed. Supplementary studies under way. The request for proposal was submitted in March 2022 and resubmitted in December 2022
Ngqura Manganese Export Terminal Project	Development of a world-class 16 million ton per annum (mtpa) manganese export facility at the port of Ngqura to complement 6mtpa from port of Saldanha to cater for projected demand of 22mtpa	10,000	Feasibility studies completed
Cape Town Container Terminal Expansion Project	Phase 2 was to increase the landside terminal capacity to 1.4 million twenty-foot equivalent units (TEUs) per annum, to match the "waterside" capacity. Part of the Phase 2 work was completed in 2009. This increased the landside terminal capacity from 800 000 to 1 million TEUs and was grouped as Phase 2A of the project	1,800	Feasibility studies completed
Student Housing Infrastructure Programme (Cluster 1 and 3)	The programme seeks to ensure that housing is developed into an attractive and reliable asset class for potential investors and to attract greater sources of financing into this market	5,200	Feasibility studies completed. Resolving legal arrangements with Department of Higher Education and Training
Total			54,400

Source: National Treasury, Budget Review 2023

Projects at advanced stages of preparation (continued)

Project name	Project description	Estimate of potential total investment (R million)	Progress to date
eThekweni Avoca Node Phase 2	The programme is located on a 350-hectare site in the northern corridor of the KwaZulu-Natal metro. It consists of the Brickworks, Northfield, and Caneridge developments and will provide for industrial and social housing needs	12,000	Advanced project preparation
Leeuwpoot Integrated Human Settlements Project	The project is in a 1 300-hectare site with a variety of land uses including mixed-income residential, industrial, commercial, open space, education and other amenities. It is in Ekurhuleni across three sub-township extensions: Rieger Park, Park Dene and Sunward Park	15,600	Advanced project preparation
Six water and sanitation projects	To improve the integrity of the bulk water and sanitation infrastructure in selected priority district municipalities, to improve supply reliability	1,600	Feasibility studies being completed
Total		83,600	

Source: National Treasury, Budget Review 2023

Major public-sector infrastructure projects

Sector	Project name	Quantity ¹	Capita costs (R million)	Approved BFI (R million)	Private-sector funding (R million)	Other grants/equity (R million)	Progress to date
Human settlements	Hospital Street Social Housing Project	1,056	388	82	–	306	Construction
Human settlements	Goodwood Station Social Housing Project	1,055	457	121	–	336	Construction
Human settlements	Midrand Heights Social Housing Project	305	163	82	–	81	Due diligence
Human settlements	Greenfields Estate (Mohlakeng x16) Social Housing Project	1,080	416	20	–	396	Due diligence
Human settlements	Luthereang Mixed Use Development Project	11,000	7,700	3,400	2,150	2,150	Construction
Water and sanitation	Phase 1: Olifantspoort and Ebenezer Water Supply Programme	20,075	4,600	1,400	2,000	1,200	Procurement
Water and sanitation	Phase 1: uMkhomazi Water Augmentation Project	300,000	24,000	12,000	12,000	–	Procurement
Water and sanitation	Moretele North Klipvoor Bulk Water Supply Scheme	15,330	5,200	1,900	2,600	700	Procurement
Water and sanitation	Piñanesberg Bulk Water Supply Scheme	45,990	2,900	1,800	1,100	–	Procurement
Student housing	Tshwane University of Technology	3,500	1,089	338	210	541	Awaiting ministerial approval
Student housing	University of KwaZulu-Natal	3,000	973	200	188	585	Awaiting council approval
Student housing	Gert Sibande TVET College	1,500	504	188	109	207	Awaiting ministerial approval
Student housing	Majuba TVET College	1,500	477	174	103	200	Awaiting ministerial approval
All sectors	Total		48,866	21,705	20,460	6,701	

Source: National Treasury, Budget Review 2023

1. The quantity for human settlements and student accommodation is in units, while the quantity for water and sanitation is in megalitres per annum

Other major public-sector infrastructure projects

Project name	Project description	Estimate of potential total investment (R million)	Progress to date
Salvakop Precinct PPP Project	Feasibility	Collaborative project between the three spheres of government to build four government headquarters, commercial buildings and a shelter for the vulnerable	R18 billion
Gauteng Schools PPP Programme	Feasibility	Construction, expansion, refurbishment and facilities management of 64 schools in Gauteng	R4.7 billion
Inkosi Albert Luthuli Central Hospital PPP Project	Procurement	Design, construction, operation and provision of ICT equipment	R10.4 billion
Renewable Energy for Public Buildings	Procurement	Procurement of renewable energy and energy efficiency for public buildings	R55 billion
Kopanong Precinct PPP Project	Procurement	Construction of Gauteng Provincial Government office to consolidate administration function of 19 buildings in the Johannesburg CBD	R6.5 billion
Rural Bridges Programme	Feasibility	Construction of rural bridges in various parts of the country	R7.8 billion
KwaMashu Wastewater Treatment Works	Feasibility	Design, finance, build and operate wastewater treatment works in KwaMashu, eThekweni Municipality	R1.2 billion
City of Cape Town Water Desalination	Feasibility	Desalination of sea water for bulk and reticulation	R2.5 billion
Comprehensive Urban Management Programme	Feasibility	Improvement and maintenance of public spaces in various cities and towns to promote economic growth	R3.3 billion
Limpopo Central Hospital PPP Project	Implementation	Construction of a new 488-bed central hospital in Polokwane, which will form part of an academic health complex attached to the University of Limpopo's medical school	R4.5 billion
Boegoebaai Port and Rail Development PPP Project	Feasibility	Port and rail development in Boegoebaai in the Northern Cape	R13 billion
Gauteng Rapid Rail Network Extension Parts 1 and 2 (Gautrain 2) PPP Project	Feasibility	A two-phase extension of the existing Gautrain rail system	R65.4 billion
Midvaal Electricity Distribution Project	Procurement	Refurbishment and expansion of the existing distribution lines owned by the municipality	R1 billion
Solar Water Initiatives	Feasibility	Rollout of solar water heaters across the residential market through partnering with the insurance industry and banks	R6.8 billion
National Roads Programme – upgrades to existing non-concession national toll roads	Feasibility	Major upgrades to various sections of the N1, N2 and N3	R22 billion
Small Harbours Development Programme	Implementation	Upgrading and refurbishment of 12 proclaimed fishing harbours in the Western Cape, and nodal-based refurbishment and development of new harbours in the Northern Cape, Eastern Cape and KwaZulu-Natal	R7.1 billion

Source: National Treasury, Budget Review 2023

Other major public-sector infrastructure projects (continued)			
Project name	Project description	Estimate of potential total investment (R million)	Progress to date
Solar Water Initiatives	Feasibility	Rollout of solar water heaters across the residential market through partnering with the insurance industry and banks	R6.8 billion
National Roads Programme – upgrades to existing non-concession national toll roads	Feasibility	Major upgrades to various sections of the N1, N2 and N3	R22 billion
Small Harbours Development Programme	Implementation	Upgrading and refurbishment of 12 proclaimed fishing harbours in the Western Cape, and nodal-based refurbishment and development of new harbours in the Northern Cape, Eastern Cape and KwaZulu-Natal	R7.1 billion
Expansion of the MyCiTi Bus Rapid Transport System in Cape Town	Implementation	Expansion of the MyCiTi bus rapid transit system network to areas including Linga, Mitchells Plain and Khayelitsha	R7.1 billion
Tygerberg Hospital	Implementation	Construction of a 550-bed regional hospital	R4.2 billion
Klipfontein Hospital	Implementation	Construction of a new hospital to replace the GF Jooste Hospital	R4.3 billion
Bravos - Berg River Voëlmei Dam Pipeline (Western Cape)	Construction	Construction of a weir and abstraction works with a pump station on the Berg River, with a 6.3-km-long pipeline to the Voëlmei Dam	R1 billion
Vaal River System Phase 2	Construction	Bulk water infrastructure development	R32 billion
Makhulu Crocodile Water Project	Feasibility	Bulk water infrastructure development	R15 billion
Olifants Economic Development Project	Various stages	Bulk water infrastructure development	R20 billion

Source: National Treasury, Budget Review 2023