THE REAL ECONOMY BULLETIN

TRENDS, DEVELOPMENTS AND DATA

FIRST QUARTER 2024

The Real Economy Bulletin is a TIPS review of quarterly trends, developments and data in the real economy, together with a comprehensive analysis of the main manufacturing industries and key data in Excel format.*

GDP growth

The GDP shrank slightly, by 0.1%, in the first quarter of 2024. The decline underscored the increased volatility of GDP growth since the COVID-19 pandemic started in 2020. The GDP declined in five quarters over the past three years, compared to nine from 1994 to 2018. The volatility resulted, in part, from extraordinary fluctuations in world mining prices as well as shortfalls in infrastructure. The inability of Transnet and Eskom to meet post-pandemic demand has vastly accelerated growth in private-sector alternatives.

In the first quarter of 2024, the GDP contracted marginally (Graph 1). For the four quarters to 2024, it grew just 0.7%. That compares to 2.5% annual growth over the three preceding years. In the first quarter of 2024, the GDP was 1.2% higher than in the first quarter of 2020, just before the pandemic.

GDP growth has become markedly more volatile since the pandemic. It shrank in five quarters in the three years to March 2024. That compares to nine quarters of decline in the 24 years to 2018, three of which occurred during the Global Financial Crisis.

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EDITORIAL TEAM

The Real Economy Bulletin is a TIPS Publication

Editor

Muhammed Patel

Contributors

Neva Makgetla

Nokwanda Maseko

Lesego Moshikaro

Kelello Mashiane

Rethabile Molala

Wendy Nyakabawo



TRADE & INDUSTRIAL POLICY STRATEGIES

+27 12 433 9340 info@tips.org.za www.tips.org.za

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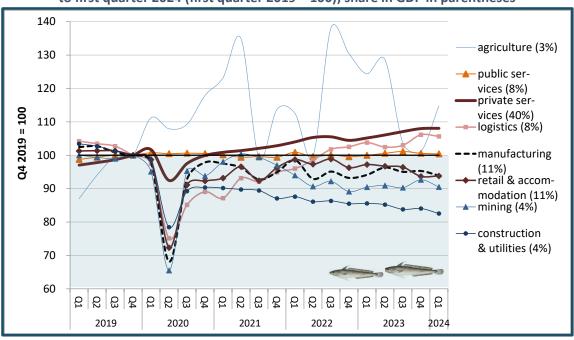
-5.0%

-10.0%

Source: Calculated from Statistics South Africa. GDP quarterly figures. GDP P0441 – 2022Q4.

Graph 1. Quarterly change in GDP, seasonally adjusted, 2000 to first quarter 2024

Source: Calculated from Statistics South Africa. GDP quarterly figures. GDP P0441 — 2022Q4. Excel spreadsheet.



Graph 2. Indices of value added in constant rand terms (volume for mining), first quarter 2019 to first quarter 2024 (first quarter 2019 = 100); share in GDP in parentheses

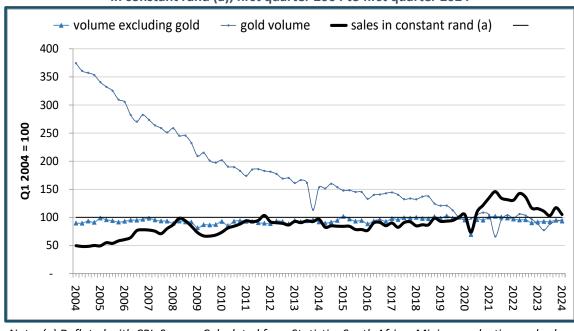
Source: Calculated from Statistics South Africa. GDP quarterly figures. GDP P0441 – 2022Q4. Excel spreadsheet.

The overall recovery from the pandemic hides vast disparities between economic sectors, with goods production in a particularly precarious state. Only the private services — which contributed some 40% of the GDP in the first quarter of 2024 — plus agriculture, public services and logistics now produce more than before the pandemic. The rest of the economy remains underwater. (Graph 2). Value added in construction is 17% lower than in the fourth quarter of 2019, having seen a steady fall over the period. Manufacturing and retail have shrunk by 5%. Mining has seen

a modest decline in tonnage sold although its revenues have fluctuated substantially with world prices. (See Graph 4)

The volatility in GDP growth since 2020 points to the lingering effects of the COVID-19 pandemic. Critical elements have been the sharp fall in coal and platinum prices off earlier speculative highs, and disruptions in electricity and supply chains. The private sector has been quick to provide alternatives to Eskom and Transnet, mitigating the impacts on growth.

The GDP data on mining reflect the modest but persistent decline in output in volume terms over the past 20 years, driven mostly by a continual fall in gold output as deposits run out. A focus on volume alone, however, underplays the impact of extraordinary fluctuations in world prices, and consequently rents to local producers, thanks to the pandemic and the Russian invasion of Ukraine. In constant rand, mining revenues jumped some 20% from the third quarter of 2020 to the fourth quarter of 2021. The production response was tepid, increasing only 3% even excluding gold. Mining sales then plummeted 22% in constant rand from the fourth quarter of 2021 to the first quarter of 2024, while non-gold mining output dropped 7% in volume terms. (Graph 3).



Graph 3. Indices of production of non-gold and gold mining and total mining sales in constant rand (a), first quarter 2004 to first quarter 2024

Note: (a) Deflated with CPI. Source: Calculated from Statistics South Africa. Mining production and sales. P2041. Excel table from 2003.

In the year to March 2024, plummeting prices for coal and platinum were a particular drag on overall economic growth. For coal, the average price per tonne dropped almost 40% in constant rand terms. For platinum, it fell over 35%. (Graph 4) These two commodities accounted for 14% of South African exports in the fourth quarter of 2024.

Q1 2019 Q1 2020 Q1 2021 Q1 2022 Q1 2023 Q4 2023 Q1 2024

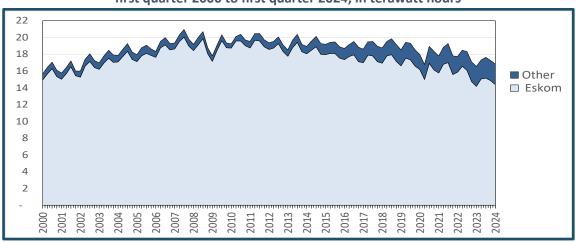
250
200
150
50
platinum (8%) steel and ferro alloys (7%)

gold (6%) chrome (4%)
alloys (7%)

Graph 4. South African unit export prices for major mining and metals exports in 2024 rand (a); with share in total export revenues in parentheses (b)

Note: (a) Reflated with CPI rebased to first quarter 2024. (b) As of first quarter 2024. Source: Calculated from Quantec. EasyData. Interactive dataset. Series on trade in SIC categories.

Electricity, rail and port services saw demand plummet during the lockdown, and found it hard to keep up with the swift upswing in demand that followed. In part, their struggles reflected the decline in Eskom and Transnet capacity over the previous decade. The rapid expansion in private alternatives in response has initiated a transformation in ownership and control in network infrastructure.



Graph 5. Electricity available through the national grid, Eskom and private suppliers, first quarter 2000 to first quarter 2024, in terawatt hours

Source: Calculated from Statistics South Africa. Electricity generated and available for distribution. Excel table from 2000.

Eskom's electricity output fell an average of 0.7% a quarter, or 2.7% a year, from the first quarter of 2020, just before the pandemic, to the first quarter of 2024. Its production had begun to decline earlier, though, with a fall of 0.4% a quarter (1.7% annually) from first quarter 2011 to first quarter 2020. The gap in supply was partially made up by private producers, some to the grid (as shown in Graph 5). Off-grid supply also grew rapidly, but is not tracked consistently.

Estimates from Eskom and the National Treasury suggest that private off-grid capacity – both rooftop solar and plants set up by mines, refineries and other major users – now exceeds five gigawatts, or about 10% of Eskom's nominal capacity. It has climbed from well under 5% five years ago. The growth in capacity outside of Eskom has clearly been crucial in securing even slow growth from mid-2022 to the end of 2023, when loadshedding hit new heights.

A similar pattern emerged for freight transport. The volume carried by Transnet fell 20% from the first quarter of 2020 to the first quarter of 2022. The fall slowed to 5% over the next two years. Transnet volume had peaked seven years earlier, in the first quarter of 2015. In that quarter, it was 45% above first quarter 2024 and 10% higher than at the start of 2020, just before lockdown. Road transport took up the slack, climbing 20% from March 2020 to March 2024. As a result of these trends, the share of land freight carried by rail fell from 30% before the pandemic to under 20% in late 2024. Rail saw a particularly sharp drop at the end of 2022, when it plummeted to 14%, but it recovered some of its losses in 2023.

While the auto industry and other businesses argued port delays affected production and exports, tonnage at the ports did not shrink as much as Transnet rail. It climbed 9% from 2020 to 2022, but then dropped back 5% through the first quarter of 2024.

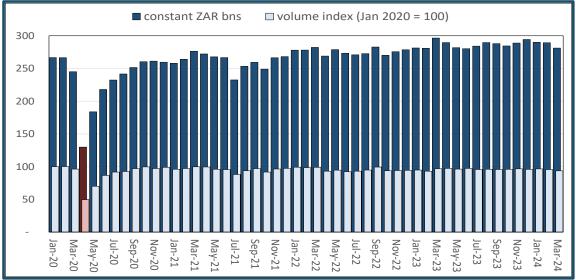
ports cargo **—**road freight (right axis)

Graph 6. Million tonnes of freight carried by rail and road and transiting the ports, first quarter 2018 to first quarter 2020

Source: Road and rail freight from Statistics South Africa. Land Transport Survey. Excel spreadsheet. Ports from Transnet National Ports Authority. Ports Statistics. Web page.

A sharp fall in manufacturing sales over the first quarter of 2024 contributed to slow overall growth. In constant rand (deflated with CPI), they recovered gradually from the pandemic downturn through late 2023. They shrank steadily from December 2023 to March 2024, however, dropping by 4.5%. (Graph 7)

Graph 7. Monthly manufacturing sales in billions of constant (2024) rand (a) and volume index (January 2020 = 100), seasonally adjusted, January 2020 to March 2024

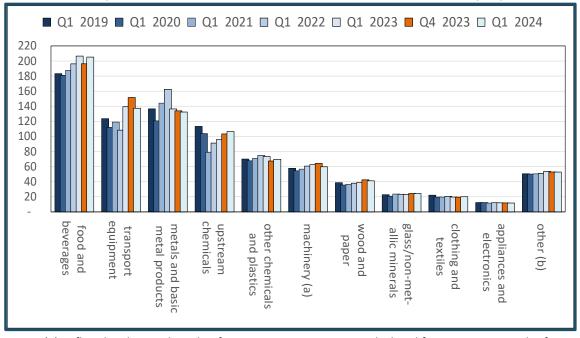


Note: (a) Reflated with CPI rebased to first quarter 2024. Source: Calculated from Statistics South Africa.

Manufacturing: Production and Sales, December 2023

Most manufacturing industries had falling sales over the year to March 2024. The exceptions were petrochemicals, wood and paper, glass and clothing. Naamsa, the auto industry association, said lower sales were due to a combination of slow growth in South Africa and port delays that affected exports.

Graph 8: First quarter sales by manufacturing industry from 2019 to 2024, and third quarter 2023, in billions of constant (2023) rand (a), seasonally adjusted



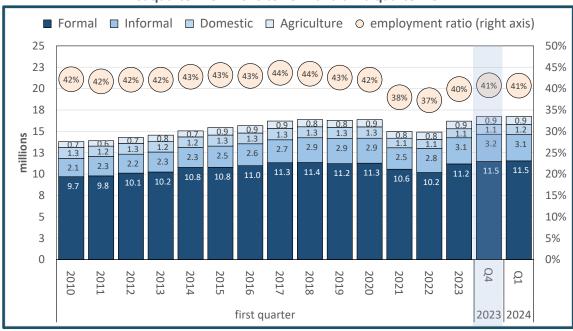
Note: (a) Reflated with CPI rebased to first quarter 2024. Source: Calculated from Statistics South Africa.

Manufacturing: Production and Sales, December 2023.

Employment

In the year to the first quarter 2024, although the GDP grew only 0.7%, employment reportedly expanded by over half a million. The formal sector accounted for two thirds of the new jobs. Domestic work saw a sharp recovery, but remained below pre-pandemic levels. Changes in employment within manufacturing did not align with industry sales figures, with an unusually sharp decline reported in auto and extraordinary growth in clothing and textiles.

In the year to the first quarter of 2024, the Quarterly Labour Force Survey (QLFS) found that total employment increased by 550 000 jobs, or 3.4%, to reach a total of 16.7 million (Graph 9). The QLFS is not seasonally adjusted, and quarter on quarter changes are largely seasonal. The formal sector generated most of the net new jobs growth over the year to March 2024. It added 360 000 positions, expanding by 3.2%. Domestic work reportedly gained 120 000 jobs, or over 10%, although it remained below pre-pandemic levels. Agriculture added 50 000 jobs, for growth of 6.1%, while the informal sector was essentially unchanged. Employment in the first quarter of 2024 was 360 000 higher than in the first quarter of 2020, just before the pandemic downturn hit.



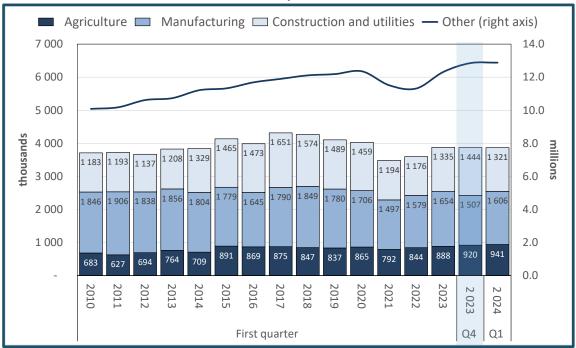
Graph 9. First quarter employment by type of employer, and the employment ratio (a), first quarter from 2010 to 2024 and third quarter 2024

Note: (a) The employment ratio equals employed as percentage of total working aged population. Source: Calculated from Statistics South Africa. QLFS Trends 2008-2024Q1. Excel spreadsheet

The share of adults with employment climbed 1% over the year to March 2024, reaching 41%. Still, the ratio remained well below pre-pandemic levels because the jobs recovery lagged population growth. In the rest of the world, around 60% of the adult population is employed.

Manufacturing lost 50 000 jobs in the year to March 2024, according to the QLFS, while construction also shrank slightly. Together, these sectors employed around half a million fewer people than in the mid-2010s, according to the survey, and 150 000 fewer than before the pandemic. In contrast, the rest of the economy, made up mostly of private and personal services, retail, logistics and social services, gained 550 000 jobs, or 4.6%, in the year to March 2024.

Graph 10. Employment in agriculture, manufacturing and utilities and construction, in thousands, and in the rest of the economy in millions, first quarter 2008 to 2024 and fourth quarter 2023



Source: Calculated from Statistics South Africa. QLFS Trends 2008-2023Q1. Excel spreadsheet.

By industry, job losses in manufacturing reportedly occurred principally in auto and glass and other non-metallic minerals (Graph 11). According to the QLFS, transport equipment, which includes components producers and major assembly plants, shed over 20 000 jobs in the year to March 2024, for a fall of 20%. Employment in glass and non-metallic minerals declined by a similar amount. While auto did see a fall in sales, as noted above, the employment data derive from a household survey and may be overstated. Similarly, a reported jump of 45 000 jobs in clothing, textiles and footwear over the year seems unlikely. It would mean employment climbed 20% in the industry although its sales dropped 5% in value and over 2% in volume. Food and the wood/paper value chain also reported expanded employment. In contrast, the other manufacturing industries all lost some jobs in the year to March 2024.

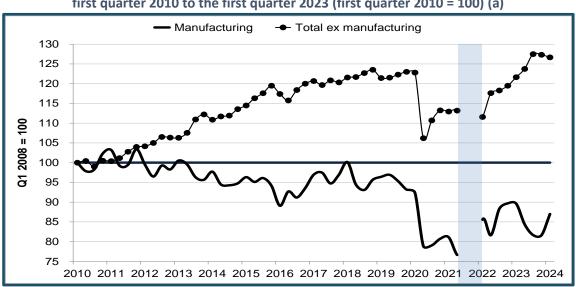
■ Q1 2020 ■ Q1 2021 ■ Q1 2022 ■ Q1 2023 ■ Q4 2023 □ Q1 2024 450 400 350 300 250 200 150 100 50 Furniture, and printing and other Food processing Clothing, textiles Wood and paper Petroleum, chemicals metal products Machinery, equipment equipment Publishing metallic minerals Transport Glass and nonand footwear rubber, and plastic Metals and and appliances

Graph 11. Employment in manufacturing industries, first quarter 2019 to 2022 and fourth quarter 2023

Source: Calculated from Statistics South Africa. Quarterly Labour Force Survey for relevant quarters.

Electronic databases.

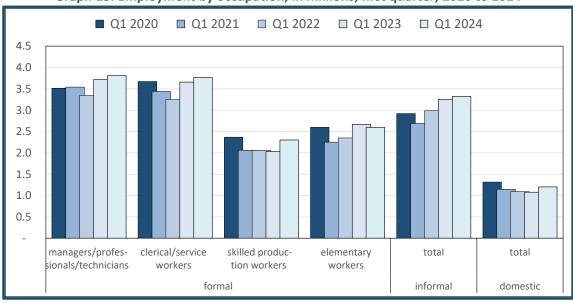
Despite job gains in some years, the QLFS reports that manufacturing employment has dropped significantly since 2010, and recovered only partially from the pandemic downturn. In contrast, employment in the rest of the economy is now substantially above its pre-pandemic level, although it shrank over the six months to March 2024. (Graph 12)



Graph 12. Index of employment in manufacturing and the rest of the economy, first quarter 2010 to the first quarter 2023 (first quarter 2010 = 100) (a)

Note: (a) Response rates for the QLFS were extremely low in the second half of 2021, and the figures for that period are therefore highly unreliable and excluded from the graph. Source: Calculated from Statistics South Africa. QLFS for relevant quarters. Electronic databases.

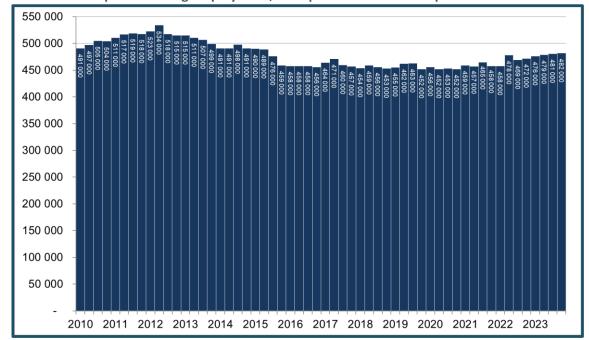
By occupation, the year to March 2024 saw substantial gains for domestic and skilled production workers, for the first time since before the pandemic (Graph 13). Formal skilled and semi-skilled production workers reportedly added 270 000 jobs, for growth of over 25%. In contrast, formal elementary workers saw modest job losses. Managerial, professional, clerical and informal jobs climbed relatively slowly, at under 2.5% for the year. That said, in March 2024, formal managers and professionals held almost 300 000 jobs more than in March 2020, just before the lockdown, and had enjoyed almost half of all jobs growth over the recovery period. The informal sector had 400 000 more workers than before the pandemic, and clerical and service workers had gained nearly 100 000. In contrast, formal elementary employment only returned to pre-pandemic levels in March 2024, while skilled production workers still had 3% fewer places than before the pandemic, and domestic workers almost 10% less.



Graph 13. Employment by occupation, in millions, first quarter, 2020 to 2024

Source: Calculated from Statistics South Africa. QLFS for relevant quarters. Electronic databases.

For data on mining employment, Statistics South Africa recommends the survey of formal businesses, the Quarterly Employment Survey, rather than the QLFS, which samples households. The Quarterly Employment Survey is published a quarter behind the QLFS, however. Based on the data, mining had gained 10 000 more jobs in the last quarter of 2023 compared to a year earlier. The industry had expanded gradually from 2020, in large part due to soaring metals prices internationally. Still, it remained around 20% smaller than at the height of the commodity boom in the 2010s, largely thanks to the on-going decline in gold production. (Graph 14)



Graph 14. Mining employment, first quarter 2010 to first quarter 2023

Source: Statistics South Africa. Quarterly Employment Statistics. Detailed breakdown. First quarter 2022

Excel spreadsheet

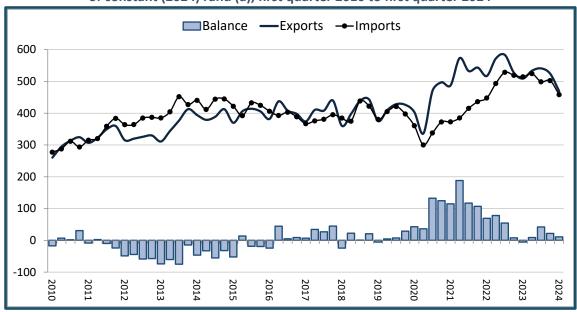
International trade

Trade continued to normalise as international commodity prices came off the speculative highs seen from 2020 to 2022 while imports gradually recovered until mid-2022. Since then, imports have fallen, due mostly to a combination of slowing growth and softer world oil prices. In manufacturing, foreign auto sales remained strong but coal and platinum exports suffered from a sharp fall in international prices.

In constant rand, South Africa's trade surplus shrank by half in the first quarter of 2024, which meant it was 75% lower than six months earlier. (Graph 15) It dropped from R42 billion in the third quarter of 2023 to R22 billion in the fourth quarter, and R11 billion in the first quarter of 2024. In effect, the balance of trade has now normalised after the pandemic and then the Russian invasion of Ukraine brought soaring world mining prices, but a relatively slow recovery in imports. Since then, world mining prices have fallen substantially although they generally remain above pre-pandemic levels in constant rand terms (see Graph 4). Moreover, imports climbed through 2022, although they have fallen since then as overall economic growth slowed and world oil prices dropped.

Despite these trends, the trade balance remained positive from the second quarter of 2023 until the first quarter of 2024, reversing a R5 billion deficit in the first quarter of 2023. In constant rand, in the first quarter of 2024 the value of exports fell by R55 billion (11%) to R469 billion. Imports dropped by R44 billion, or 9%, to R458 billion.

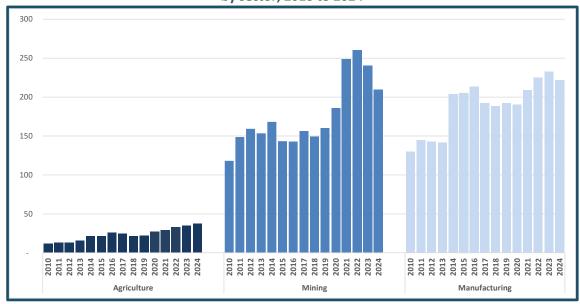
Graph 15. Quarterly exports, imports and balance of trade in billions of constant (2024) rand (a), first quarter 2010 to first quarter 2024



Note: (a) Reflated with CPI rebased to first quarter 2024. Source: Calculated from South African Revenue Service data.

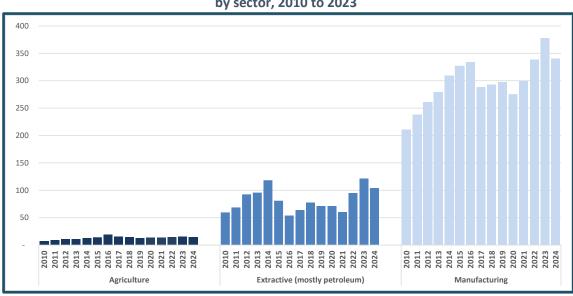
In constant rand, mining exports were 20% off their 2022 peak in the first quarter of 2024 (Graph 16). Nonetheless, they exceeded pre-pandemic levels by some R24 billion, or 13%. Manufacturing exports also declined over the past year following rapid growth in 2021 and 2022. Again, the main driver was fluctuations in international prices for metals, which contribute around a quarter of South Africa's manufactured exports. Agricultural exports remained relatively small but have grown steadily from 2019.

Graph 16. First quarter goods exports in billions of constant (2023) rand (a), by sector, 2010 to 2024



Note: (a) Reflated with CPI rebased to first quarter 2024. Source: Calculated from South African Revenue Service data.

Goods imports declined over the year to March 2024 in constant rand terms (Graph 17). Manufacturing imports contracted by 10% or R38 billion in constant 2024 rand, falling to R340 billion. Extractive imports, which are almost exclusively crude oil and petrol, fell by 15% to R104 billion, reflecting moderation in world oil prices. Still, they remained almost twice as high as in the late 2010s in constant rand terms. Agricultural imports have been essentially flat for the past five years.



Graph 17. First quarter goods imports in billions of constant (2023) rand (a), by sector, 2010 to 2023

Note: (a) Reflated with CPI rebased to first quarter 2024. Source: Calculated from South African Revenue Service data.

Within manufacturing, only food and transport equipment expanded exports in the year to March 2024. Transport equipment saw the largest absolute increase in constant rand terms, by about R7 billion or 15%. Food and beverages grew R1.2 billion, or 6%. These gains were, however, more than offset by declining sales of metals, chemicals, machinery and paper, as shown in Table 1. All manufacturing industries saw falling imports, reflecting the overall economic slowdown. Imports of cars and capital equipment contracted particularly sharply.

Table 1. Trade by manufacturing subsector

Table 1. Trade by manufacturing subsector							
	VALUE (BILLIONS)		% CHANGE FROM Q1 2024		CHANGE IN BILLIONS		
INDUSTRY	USD	RAND	USD	RAND	USD	RAND	
EXPORTS							
Food and beverages	1.08	20.5	5.8%	6.4%	0.06	1.22	
Clothing and footwear	0.40	7.5	-10.5%	-10.2%	-0.05	-0.85	
Wood products	0.13	2.4	-3.7%	-3.0%	-0.00	-0.07	
Paper and publishing	0.44	8.3	-24.1%	-23.3%	-0.14	-2.52	
Chemicals, rubber, plastic	1.84	34.8	-13.2%	-12.6%	-0.28	-5.02	
Glass and non-metallic mineral products	0.10	1.9	-2.7%	-2.1%	-0.00	-0.04	
Metals and metal products	2.79	52.7	-12.8%	-12.1%	-0.41	-7.23	
Machinery and appliances	1.86	35.1	-11.3%	-10.8%	-0.24	-4.23	

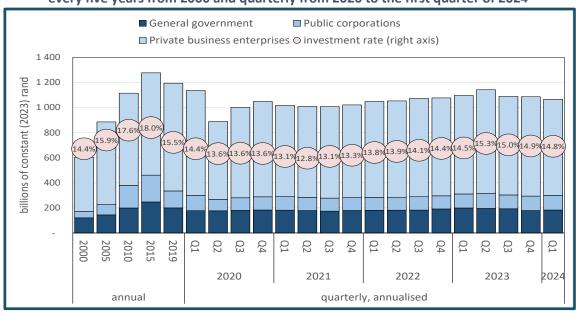
	VALUE (BILLIONS)		% CHANGE FROM Q1 2024		CHANGE IN BILLIONS	
INDUSTRY	USD	RAND	USD	RAND	USD	RAND
Transport equipment	2.90	54.7	14.7%	15.0%	0.37	7.15
IMPORTS						
Food and beverages	0.88	16.7	-4.2%	-3.5%	-0.04	-0.61
Clothing and footwear	1.15	21.7	-3.4%	-2.1%	-0.04	-0.46
Wood products	0.10	1.9	-3.7%	-2.5%	0.00	-0.05
Paper and publishing	0.75	14.2	-2.7%	-1.9%	-0.02	-0.27
Chemicals, rubber, plastic	3.57	67.4	-3.1%	-2.1%	-0.11	-1.42
Glass and non-metallic mineral products	0.20	3.9	-13.0%	-12.2%	-0.03	-0.53
Metals and metal products	1.28	24.2	-4.1%	-3.3%	-0.05	-0.82
Machinery and appliances	6.01	113.5	-11.1%	-10.3%	-0.75	-13.00
Transport equipment	3.74	70.5	-23.4%	-22.8%	-1.14	-20.81

Source: SARS monthly data.

Investment and profitability

Investment fell 1.8% in seasonally adjusted terms in the first quarter of 2024. In consequence, it dropped 6.6% from the second quarter of 2023, when for the first time since the lockdown it exceeded pre-pandemic levels. The investment rate (the share of investment in GDP) fell to 14.8%, down from 15.3% in the second quarter of 2023, 15.5% in 2019, and 18% in 2015. The sharpest fall occurred in private investment, which dropped 3.3% in the first quarter of 2024. General government investment fell by 2.4% and state-owned companies by 1.3%. (Graph 18)

Graph 18. Investment by type of investor in constant 2024 rand and the investment rate (a), every five years from 2000 and quarterly from 2020 to the first quarter of 2024



Note: (a) Figures for investment are reflated with implicit deflator rebased to March 2023. The investment rate is gross fixed capital formation as a percentage of expenditure on the GDP. Source: Calculated from Statistics South Africa. GDP quarterly figures. GDP P0441 – 2024Q1. Excel spreadsheet.

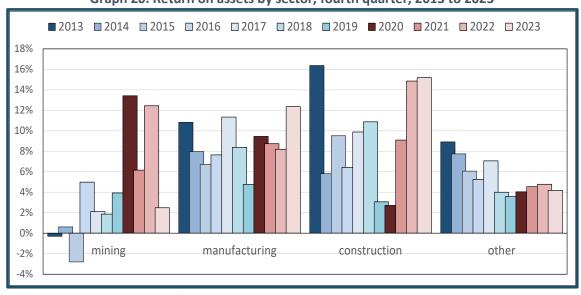
As Graph 19 shows, the investment rate in South Africa remains low by global standards. It is on par with Brazil, but lower than other African and Latin American countries. Investment in Asia is unusually high, especially in China. Most economists argue that investment of between 20% and 25% is necessary to sustain long-term growth. Higher rates are associated with significant inefficiency and falling returns; lower rates with inadequate maintenance and expansion of productive assets as well as economic and social infrastructure.

45% ---China 40% ---India 35% 30% → Other developing Asia 25% -Other Africa 20% ——Other Latin America 15% **→** Brazil 10% South Africa 5% 0% 2018 2021 Actual Forecast

Graph 19. Investment rate in South Africa compared to China, India, Brazil and other developing countries by region, actual 2018 to 2022 and IMF forecast to 2026

Source: Calculated from IMF. World Economic Outlook. April 2024.

Figures for business returns on assets are only available through the fourth quarter of 2023. Manufacturing saw a marked improvement in the year to the quarter four of 2023, increasing from 8.2% to 12.4% (Graph 20). Construction also saw relatively high returns of around 15% for the second year in a row. Falling world prices brought a steep decline in mining profitability, however. It dropped to levels last seen at the bottom of the commodity cycle in the 2010s.



Graph 20. Return on assets by sector, fourth quarter, 2013 to 2023

Source: Calculated from Stats SA, Quarterly Financial Statistics. Excel spreadsheet

In constant (2023) rand, mining profits in the final quarter of 2023 were 90% lower than at the top of the speculative mining boom in early 2022, just after Russia invaded Ukraine. In contrast, manufacturing profits in the second half of 2023 were higher than any time since 2017. (Graph 21)

Mining Manufacturing 130 120 110 100 billions of constant (2023) rand 90 80 70 60 50 40 30 20 10 - 10 - 20 - 30 2014 2017 2018 2013

Graph 21. Quarterly profits in manufacturing and mining in billions of constant 2023 rand (a), 2013 to fourth quarter of 2023

Note: (a) Reflated with CPI rebased to fourth quarter 2023. Source: Calculated from Stats SA, Quarterly Financial Statistics. Excel spreadsheet.

Foreign direct investment projects

The TIPS Foreign Direct Investment Tracker monitors FDI projects on a quarterly basis, using published information. In the first quarter of 2024, 20 projects were added to the Tracker. Only a handful of projects published investment values this quarter. This resulted in a substantial underestimate in the amount recorded for the quarter – R3.74 billion derived from five projects. Monitoring updated 15 pre-existing projects this quarter.

New and existing projects

Investment was recorded in four industries, notably energy related activity. Among the projects that reported a value, the highest recorded was Sylvania Metals, which proposed a R2.5 billion platinum group metals (PGM) mine. Sylvania Metals announced two mining projects, both under exploration, with the Far Northern Limb PGM project. Investment values were also recorded in services (R1.04 billion) and electricity (R0.21 billion). Services recorded the greatest number of projects with eight announcements. Most notable was the R1 billion Zululand Energy Terminal for liquid natural gas that will be developed by Vopak Terminal Durban and Transnet Pipelines Consortium. The tracker also noted Energiequelle's entry into the South African market. Its operations relate to solar and wind generation projects.

The Tracker identified one project in manufacturing. This project was the capital investment recommended by the Competition Commission in the acquisition of Engen by Vitol Group from the Netherlands. Specifically, the conditions require Engen to undertake a substantial capital investment to maintain and grow Engen's operations in South Africa.

By province, Limpopo was the recipient of the highest investment, followed by KwaZulu-Natal. Investment was not identified for Mpumalanga and Free State. In terms number of projects, Europe was the top contributor, mainly represented by Germany and the Netherlands.

Table 2: FDI projects captured in Q1, 2024

COMPANY	ORIGIN	VALUE (R bns)	LOCATION	PROJECT SUMMARY			
Mining: R2.5 billion							
Volspruit PGM projects	Bermuda	2.5	Limpopo	Open-cast PGM resource exploration			
Far Northern Limb PGM projects	Bermuda	Not reported	Limpopo	Two contiguous PGM projects			
Jacomynspan battery metals project	Australia	Not reported	Northern Cape	Proposed nickel-copper-cobalt- PGE-gold underground and open pit mining operation			
Services: R1.04 billio	n						
Zululand Energy terminal	Netherlands	1	KwaZulu- Natal	Warehouse for refrigerated cargo			
Medlog MSC cold storage facility	Switzerland	0.035	KwaZulu- Natal	Proposed new liquid natural gas terminal			
Rhenus SA warehouse network expansion	Germany	Not reported	Multiple locations	Opened two new warehouses			
Rhenus warehouse modernisation	Germany	Not reported	Eastern Cape	Modernising and extending facility			
Microsoft data centre	US	Not reported	Gauteng	Building a new datacentre			
Equinix Africa expansion	United States of America	Not reported	Not reported	Expanding existing operations and new data centres			
TTEC customer experience delivery centre	United States of America	Not reported	Western Cape	Set up new customer experience centre			
Haval parts distribution centre	Netherlands	Not reported	Gauteng	Proposed new liquid natural gas terminal			
Chery parts warehouse	China	Not reported	Gauteng	New parts distribution centre			
Electricity: 205 million							
DSV solar PV and battery systems	Germany	0.15	Multiple locations	Installing battery storage and solar photovoltaic panels at three logistics parks			
VWA sustainability projects: Solar 2	Denmark	0.055	Eastern Cape	Adding 3MW of solar energy at the Kariega assembly plant			

COMPANY	ORIGIN	VALUE (R bns)	LOCATION	PROJECT SUMMARY		
Neosun South Africa market entry	China	Not reported	Not reported	Establishing operations in South Africa		
Epping facility solar installation	United States	Not reported	Western Cape	Roof top 2.2MW solar PV installation		
Rhovan facility solar power plant	Switzerland	Not reported	North West	25MW solar PV power plant		
Energiequelle South Africa operations	Germany	Not reported	Western Cape	Established local subsidiary, opened offices		
Manufacturing: Not reported						
Vitol capital investment	Netherlands	Not reported	Multiple locations	Capital investment condition post- merger pending Competition Tribunal approval of Engen acquisition		

Note: Numbers may not always sum to the exact total investment amounts due to rounding.

Source: TIPS FDI Tracker database

Greenfield projects make up the majority by both value and number. Most projects are still at the announced stage.

Table 3: Value of projects by investment stage and type, Q1 2024, in billions of rand

Investment	Announced	Explora- tion	Project prepar- ation	Construction/ Implemen- tation	Com- plete	Value	Number
Greenfield	N/a	2.5	1	N/a	0.35	3.5	10
Upgrade	N/a	_	N/a	_	_	0.205	6
Expansion	N/a	_	_	_	N/a	N/a	4
Total value	0.2	2.5	1	N/a	N/a		
Number of projects	8	3	2	1	3		

Note: Numbers may not always sum to the exact total investment amounts due to rounding.

Source: TIPS FDI Tracker database

Updates

The Tracker updated 15 pre-existing projects. Progress was noted with projects involving the development of data centres and associated infrastructure, including Google's first cloud region in Africa launched in Gauteng. The other project completed this quarter was Lotus Bakeries' new snack manufacturing facility. Most of the projects updated this quarter are in the construction phase.

Enel Green Power began construction of three renewable energy facilities under long-term power purchase agreements with Sasol and Air-Liquide. The quarter also saw another investment under the 2020 Risk Mitigation Independent Power Producer Programme (RMIPPP) entering construction. Also noted was Equinix and Africa Data Centres respective data centres.

Another significant private renewable electricity generation project has made headway. Envusa – Anglo American and EDF Renewables – has concluded the project financing process. All three

of the proposed Karpowership projects initially contracted to supply the national grid under the RMIPPP remain at early-stage development and are facing issues around grid access, pricing and legal challenges.

Table 4: Project updates, first quarter of 2024

PROJECT	COMPANY	VALUE	INDUSTRY	UPDATE			
		(R bns)					
Complete		ı					
Lotus Bakeries manufacturing plant	Lotus Bakeries	0.17	Manufac- turing	Opened new production facility			
Google South Africa cloud region	Google	Not reported	Services	Completed Johannesburg cloud data centre			
Construction/implementation	n			'			
Sasol and Air Liquide renewable-energy project	Enel Green Power South Africa	9	Utilities	Signed an additional PPA (total 3) for 110 MW renewable electricity, started construction on three facilities			
Anglo American Operations Investment (Kapstevel South Project (Kolomela mine)	Kumba Iron Ore	7	Mining	Majority of project completed; first ore expected in 2024			
Equinix SA data centre	Equinix	2.8	Services	Development progressing, plan to launch in June 2024			
Mulilo Total Hybrid renewable project	Total Energies	1.8	Utilities	Under construction, expected to be operational in 2025			
Witwatersrand Basin project: Qala Shallows Stage 1	West Wits Mining	0.767	Mining	IDC conducting due diligence as potential funder; Decision pending for additional mining prospecting right			
SKA MeerKAT telescope expansion – German investment	German and South African Govern- ment	0.4	Research and develop- ment	The first antenna of the MeerKAT extension project was handed over.			
Africa Data Centre – Cape Town facilities	Africa Data Centres	Not reported	Services	Commenced construction, completion target is mid 2024			
Project preparation							
Envusa - Anglo American and EDF renewable energy business	Envusa	Not reported	Utilities	Completed project financing, entered offtake agreement with Anglo American Platinum			
Teraco power generation infrastructure	Teraco	1.1	Services	Secured grid capacity allocation from Eskom			
Early stage developments: regulatory approvals, studies and exploration							
Karpowerships SA Richards Bay, Saldanha and Coega	Karpower- ships	29.6	Utilities	Eskom withdraws grid access allocation for all three Powerships			

Briefing Note 1: The structural crisis in steel

Neva Makgetla

ArcelorMittal South Africa's (AMSA) threatened closure of its Newcastle plant underscores the long-term structural crisis in the South African steel industry. For three decades, domestic demand for steel has been essentially stagnant as the steel-intensity of economic growth dropped steadily. Meanwhile, exports declined from 2006 while low-cost mini-mill producers and, to a lesser extent, imports took a growing market share.

In volume terms, domestic sales of crude steel (including imports) fell, on average, 0.2% a year from 1976 to 2023. In the same period, the GDP expanded 2% annually. From 1976 to 2006, domestic sales climbed 1.6% a year, but from 2006 to 2023 they dropped 2.6% a year. Exports expanded from 1976 to 2006 but then fell. After 2011, exports were below 1977 levels. (Graph 22)

| Local sales | Imports | Exports |

Graph 22. South African crude steel production for domestic sale and export, and imports, in millions of tonnes, 1976 to 2023

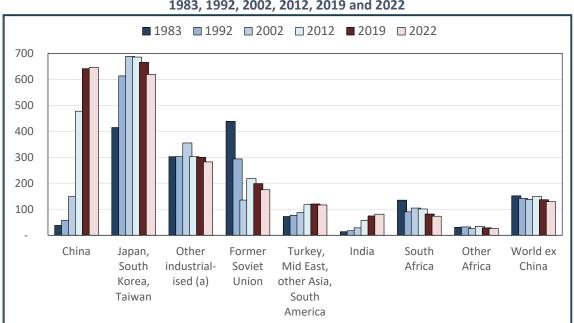
Source: Calculated from South African Iron and Steel Institute. Historical time series. Spreadsheet. Downloaded from https://www.saisi.org/historical-time-series/ in May 2024.

The long-run stagnation in crude steel sales in South Africa ultimately reflected a persistent decline in the steel intensity of the GDP. In 1976, South Africa used 38 million tonnes of steel per trillion rands of GDP, in constant 2022 terms. By 2022, that figure had fallen over two thirds, to 12 million tonnes per trillion rands of GDP. (Graph 23) In the late 1970s, steel output climbed around 1.7% for each 1% increase in the South African GDP. In the late 2010s, in contrast, steel sales dropped over 2% a year despite an average of 1% GDP growth annually. Moreover, steel consumption lagged the overall GDP recovery that followed the extraordinary downturn at the

start of the COVID-19 pandemic in 2020. The steel intensity of growth in South Africa generally fell more sharply than the international norm, as shown in Graph 23.

Graph 23. Million tonnes of steel produced internationally and used in South Africa per trillion US dollars of GDP, in constant 2015 terms, 1976 to 2022

Source: Data on global steel production from WorldSteel Association. World Steel in Figures. Relevant years. Downloaded from https://worldsteel.org/data/world-steel-in-figures/ in May 2024. Data on South African steel apparent domestic consumption (local sales including imports) from South African Iron and Steel Institute. Historical time series. Spreadsheet. Downloaded from https://www.saisi.org/historical-time-series/ in May 2024. GDP data from World Bank. World Development Indicators. GDP in constant 2015 US dollars. Accessed at www.worldbank.org in May 2024.



Graph 24. Apparent finished steel consumption per person by region, 1983, 1992, 2002, 2012, 2019 and 2022

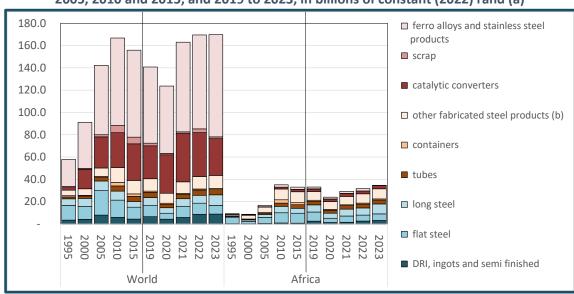
Source: Calculated from WorldSteel. World Steel in Figures. Relevant years. (For 2002 and 2012, published by International Iron and Steel Institute.) Tables on apparent consumption of finished steel per capita.

Accessed at https://worldsteel.org/data/world-steel-in-figures/ in May 2024.

The decline in steel intensity over the past half century had deep roots. In South Africa and the Global North, it stemmed principally from the shrinking share of goods industries; surging

reliance on new plastics and metal alloys in production and construction; and the continual downsizing of machinery and appliances. Internationally, the trend was partially offset in the 2000s by rapid growth in manufacturing and construction in lower-income countries, especially China and more recently India. As the following graph shows, outside of China, consumption of steel per person declined over the past 40 years, despite some increases in parts of the Global South. Steel consumption in Africa outside of South Africa declined after 2012 from an already low base.

In terms of South Africa's exports, ferroalloys remain strong, but other crude steel products struggled. Flat steel exports saw a particularly precipitous decline. In part, that reflected the extraordinary growth in Chinese steel production, which accounted for virtually all the increase in steel output in the past 25 years. In part, it resulted from a decision at AMSA from 2006 to shift away from European and Asian markets to other African countries. This strategy aligned with the global policy of its parent, ArcelorMittal. It led to a sharp fall in AMSA exports, however.



Graph 25. South African steel exports internationally and to African countries, 1995, 2000, 2005, 2010 and 2015, and 2019 to 2023, in billions of constant (2022) rand (a)

Note: (a) Reflated with average annual CPI rebased to 2022. For ferroalloys and stainless steel products, figures for Africa are mirror data. (b) Includes rail, structural steel, cutlery and other basic manufactures; excludes machinery including locomotives and rolling stock. Source: Except for ferroalloys, calculated from Quantec. EasyData. HS 8 series. Interactive dataset. Accessed at www.quantec.co.za in May 2024. Figures for African imports of ferro alloys from South Africa are calculated from ITC. Trade Map. Interactive dataset. Accessed at www.trademap.org in May 2024.

While domestic and export markets for steel (excluding ferroalloys) were at best flat, competition intensified for the South African market. The share of local steel consumption from producers other than AMSA climbed from 25% in the mid-2010s to 30% at the end of the decade and 50% in 2023. Most of the competition came from new mini mills that produce a smaller range of products than AMSA but have lower costs. They benefited from significant state support, especially from measures to shift rents on scrap from exporters to local beneficiation and from financing by the Industrial Development Corporation. Meanwhile, imports climbed from a tenth of domestic steel consumption in 2006 to a seventh in the late 2010s and over a quarter in 2023.

As Graph 24 shows, the combination of flat demand and rising competition has increasingly squeezed AMSA. It made losses in seven of the past 10 years; its production has dropped by more than half despite substantial success in cutting costs; and it is operating at under 60% capacity.

operating profit operating costs → revenues output in mn tonnes (right axis) 90.0 9.0 80.0 8.0 billions of constant (2023) rand 70.0 7.0 ons 6.0 60.0 50.0 5.0 ₫ nnes 4.0 40.0 앜 30.0 3.0 liquid 2.0 20.0 1.0 **e** 10.0 - 10.0 - 1.0 2003 2001 2004 2006 2005 2007 2008 2010 2014 2011 2012

Graph 26. AMSA profits, operating costs and revenue in billions of constant (2023) rand (a), and its output in millions of tonnes of steel, 2000 to 2023

Notes: (a) Reflated with CPI rebased to 2023. Source: AMSA annual reports for relevant years.

All of these factors contributed to South Africa being the worst performer of major steel producers globally in the 2010s. South Africa's share in world steel production excluding China dropped from 1.3% in 2002 to 0.8% in 2012 and 0.5% in 2022. If we include China, South Africa's share in 2022 was just 0,2%. A strategy on steel has to take the underlying structural changes into account, rather than simply trying to turn back the clock.

¹ Calculated from WorldSteel. World Steel in Figures. Relevant years. (For 2002 and 2012, published by International Iron and Steel Institute) Tables on production by process. Accessed at: https://worldsteel.org/data/world-steel-in-figures/ in May 2024.

Briefing Note 2: The renewable energy value chain in South Africa

Gaylor Montmasson-Clair

Renewable energy technologies, principally solar photovoltaic (PV) and wind energy along with battery storage, have had exponential growth over the last two decades. From virtually no solar and wind energy generation capacity worldwide in the 1990s, a total of 375GW of solar energy and 108GW of wind energy were installed in 2023, accounting for the vast majority of new generation capacity. As the cost of renewable energy further declines (and climate policy tightens), this trend is expected to continue for the foreseeable future. While more haphazard, South Africa has also witnessed the rise of renewable energy and battery storage technologies. The share of renewable energy technologies rose from less than 1% in 2000 to 7% in 2022. The market is set to increase further with massive investment in utility-scale renewable energy generation capacity and the drive by the private sector as well as households to install and/or procure renewable energy for their own use and, increasingly, export to the grid.

Growing demand comes with growing supply, and a set of challenges, risks and opportunities. The renewable energy and battery storage industrial value chain has already gone through some restructuring. Initially dominated by Global North manufacturers, the renewable energy industry is now much more diversified and competitive. The entry of Chinese (and to some extent Indian) manufacturers into the market has reshuffled the cards. The scramble for access to the raw materials needed to manufacture solar panels, wind turbines, batteries and many other green products is also shifting power in the value chain. With virtually every major country witnessing a (rapid) increase in the demand for renewable energy, many have also attempted to capture a share of manufacturing production, at least for their domestic market, notably through extensive green industrial policy packages in support of local manufacturing in the United States, the European Union and China.

In South Africa, the rise of renewable energy has created opportunities to drive industrial development in the value chain.

The renewable energy and battery storage value chain is made up of a wide range of inputs, parts and services. It is structured around key systems and components, such as panels and mounting structures, wind towers, nacelles and rotors, battery cells and packs, transformers, inverters, cables and fasteners. In turn, manufacturing such key elements requires a vast array of inputs (such as silver paste, copper wiring, glass, polysilicon, steel, aluminium, magnets, polymers, concrete, carbon fibre, manganese metal, nickel sulphate, and vanadium pentoxide), themselves dependent on a range of raw materials and fuels. Manufacturing-related services, such as testing and certification, research and development and skills development, but also end-of-life management, support the growth of the value chain.

Combined with South Africa's broad industrial capabilities in connected or related value chains (such as mining, steel, aluminium, automotive, shipbuilding, capital equipment and electrotechnical equipment), the historical rollout of renewable energy has displayed wide-ranging domestic capacity in supplying the solar energy, wind energy and battery storage sectors.

In the solar PV value chain, local industries have capabilities in the assembly of mounting structures and trackers as well as modules. Production capacity is, however, often limited and at times mothballed. Cell and wafer productions, which are heavily dependent on raw materials sourcing and economies of scale, are at exploratory stages. The production of green polysilicon, leveraging South Africa's silica deposits, should be investigated in the future. In the wind energy value chain, the manufacturing of both steel and concrete towers as well as some internals and the assembly of rotors can be provided locally. As with the solar PV value chain, much of these capabilities have been idle due to lack of demand, but can be supplied by local steel manufacturers. The production of blades, which existed previously, constitutes the next frontier, while hub manufacturing and the production and assembly of nacelles could be considered in the medium term.

Apart from battery cells (mainly imported from China), the lithium-ion battery value chain is well developed, with capabilities in mineral beneficiation, casing and assembly and electrical systems, including battery and energy management systems. The vanadium-based battery value chain, although nascent domestically, also boasts material local capabilities, including vanadium mining and refining, electrolyte production and vanadium-redox flow battery assembly.

Across the value chains, local capabilities also exist in the manufacturing of inverters, civil works, balance of plant such as cables and fasteners, as well as numerous services such as some testing and certification. Transformers, combiner boxes and switchgears are additional components that can be procured locally.

Considering market dynamics and existing capabilities, select industrialisation opportunities can be identified for short-term prioritisation. To be viable, the majority of component manufacturing investments require a minimum annual demand ranging from 500MW to 1GW, for a period for five years.

A TIPS Policy Brief by Gaylor Montmasson-Clair on South Africa's capacity in the renewable energy value chain can be found_here: Bridging the gap between aspiration and reality: What would it take to localise the renewable energy value chain in South Africa

A TIPS Development Dialogue on the Renewable Energy Value Chain took place on 30 May 2024, a link to the seminar and presentations can be found here: Development Dialogue