



TRADE & INDUSTRIAL POLICY STRATEGIES



Tracking quarterly trends and analysing foreign direct investment, imports and exports

FOREIGN DIRECT INVESTMENT TRACKER

SECOND QUARTER 2021

Compiled by Kelello Mashiane and Muhammed Patel

TIPS TRACKERS

TIPS FDI Tracker monitors inward foreign direct investment projects. It reports on new FDI projects, analyses these, and adds them to an ongoing list of investment projects.

TIPS Export Tracker provides updates on export trends, and identifies sectors and products that are performing well and those that are lagging.

TIPS Import Tracker provides an overview of import patterns and looks at the causes of surges in manufacturing imports, and their likely impact on industry.

Trade & Industrial Policy Strategies (TIPS)
info@tips.org.za | +27 12 433 9340 | www.tips.org.za

CONTENTS

FDI Projects, Q2 2021	2
New FDI Projects	3
Utilities	3
Manufacturing	3
Mining	4
Services and research and development	5
Updates	5
Progress	5
FDI Trends, Q2 2021	6
Investment values	6
Investment stages	7
Investment type	7
Investment by location and industry	8
Investment by country of origin	10
Investment environment	12
Barriers and constraints	16
Credibility classification	16
Investment Profiles, Q2 2021	19
References	i
Appendix	iii
Figure 1: Value of FDI by location, R billion, Q2 2021	8
Figure 2: Value of FDI projects industry by subsector, R billion, Q2 2021	9
Figure 3: Value of FDI projects by origin, R billion, Q2 2021	10
Figure 4: Value (R billions) and count of FDI projects by target market, Q2 2021	12
Figure 5: South Africa’s inward investment	13
Figure 6. Gross fixed capital formation (GFCF)	14
Figure 7. Purchasing Managers’ Index (PMI)	14
Figure 8. SARB leading indicator	15
Table 1: Investment stages	7
Table 2: Investment type	7
Table 3: Classification of project by credibility of investment pledge	17
Table 4: Project credibility grading	18
Table 5. Investment-related metrics used in the analysis	iii

ABOUT THE FDI TRACKER

The FDI Tracker traces the foreign direct investments that are made in South Africa every quarter, based on publicly available and published data. This information is synthesised into a database and categorised across a number of important variables. These include investment values, project timeframes, number of jobs created, and the identity of the investor, among others. The Tracker also includes an analysis of the investment environment within the country, analysing key metrics of investment activity. Due to the sensitivity of private investment data, all variables cannot be publicly accessed, and when this is the case, the absence of data and assumptions are noted.

The FDI Tracker aims to assist policymakers and other relevant stakeholders in understanding the types of investments made each quarter. It also assists in assessing the extent to which pro-investment policies support actual investments. Extracting the barriers and constraints investors face indicates policy blockages that can be removed to improve the investment environment and hence economic growth.

New Investments refer to investments that were not previously captured in the database. The investment is dated from when it first appears in the database. Updated Projects refer to any substantial change in a project already profiled.

The new projects for the quarter are included as comprehensive profiles at the end of the report.

FDI PROJECTS, Q2 2021

Ten projects were captured in the second quarter 2021. The total pledged investment value came to approximately R19.8 billion, from five projects. Potential employment opportunities for the projects captured in this reporting period, if any, were not disclosed. Ten projects were updated in this quarter, while some are complete or progressing, others are experiencing challenges.



New FDI Projects

The investment projects in Q2 2021 were led by one major project in utilities, followed by manufacturing. Manufacturing recorded the highest number of projects with four investments in the industry this quarter. Mining and services each captured two projects, while one project was identified in research and development. Projects are grouped by industry for the purposes of project description.

Utilities

Scatec was announced as the latest preferred bidder in the Risk Mitigation Independent Power Producer Procurement Programme (RMIPPPP) by the Department of Mineral Resources and Energy. The project is valued at about US\$1 billion (R14.8 billion).¹ The Norwegian firm will be developing three projects in the Northern Cape, collectively named Kenhardt (1-3) (Scatec, 2021). The plants will consist of a total of 540 megawatts (MW) solar and 225 MW/1140 MW per hour battery storage. Scatec has a 20-year Power Purchase Agreement with Eskom. The projects have a total 150 MW contracted capacity. Scatec will own 51% equity of the project with black-owned H1 Holdings owning the 49% balance. Scatec will also provide engineering, procurement and construction services to the power plants. It will further operate, maintain and deliver asset management services for the facilities. The project is planned to supply power to the grid by the end of 2022 as stipulated by the RMIPPPP.

Pan African Resources is undertaking a feasibility study to explore the installation of a solar power plant at the miner's Barberton Mines, similar to the Evander/Elikhulu solar photovoltaic (PV) power project currently under construction (Pan African Resources, 2021). A site for the Barberton solar power plant been selected. The value of the investment has not yet been reported.

Manufacturing

German Mercedes-Benz announced a further R3 billion investment to expand on the development of the East London manufacturing facility in the Eastern Cape. This follows the recently completed R10 billion upgrades to the plant in preparation for the production of the new C-Class model. Details of what the current investment entails have not yet been disclosed.

AB Inbev subsidiary South African Breweries (SAB) has reinstated a R2 billion investment programme for its South Africa operations. The programme was cancelled in the 2020 financial year, with another

¹ The Tracker notes that 80% of the project will be funded through debt financing from commercial banks and development finance institutions (DFIs) – of which the identities are not yet known. Scatec has in the past with previous projects provided information on lending partners. At the time of reporting, the Tracker is not able to extricate local from foreign financing the full investment value has been applied. This detail will be updated as and if the in information becomes available.

cancellation in early 2021 due to COVID-19 pandemic-related impacts (Head, 2021). This new round of investment, however, will make up for 40% of the funding withdrawn (total R5 billion) during the pandemic. The project entails upgrades to operating facilities, new equipment at select plants, innovation of new products, and other necessary operating systems. SAB has seven major facilities across the country in Gauteng, KwaZulu-Natal, Western Cape, Limpopo and the Eastern Cape. Projects earmarked for this investment programme will be completed in 2022.

Enertronica Santerno is an Italian technology company that operates in the power electronics and energy sectors. The firm develops solar photovoltaic power technology including construction of power plants, associated embedded software, and mechanical components (Enertronica Santerno, 2021). Santerno also designs, manufactures and installs conversion systems (inverters). Services offered include project management and engineering in the design and installation of utility scale plants, and operations management services. Through a €1 million (R17.3 million) investment, Santerno is expanding manufacturing capacity for inverters used in standard photovoltaic applications and electricity storage systems with a maximum initial production capacity of 500 MW per year, gradually ramping up to higher capacity. The Group aims to deliver these locally assembled inverters from the end of 2021. The project will also allow for an extension of the range of local service offerings, which is expected to reduce lead times to customers and raise the value of services provided.

Fodere Titanium is a minerals technology company based in the United Kingdom. It plans to develop a titanium processing plant that will produce titanium dioxide and vanadium pentoxide, with alumina oxide and magnesium sulphate as by-products. Titanium dioxide is commonly used as a colourant. In the form of a white pigment it is an important raw input for paint and coatings. Used as a photocatalyst, it has the effect of decomposing pollutants in substances such as cement and paint. It has other applications in cosmetics, pharmaceuticals, plastics and food (Fodere, n.d.). Vanadium pentoxide has applications in products that range from electronics, construction material inputs to cosmetics (PubChem, n.d.). The firm will use an internally developed low-carbon proprietary process to extract titanium from steel slag and refine titanium and industrial minerals and chemicals. The process was developed to deliver a technology that can extract these compounds by sustainable methods with near zero waste. Fodere Titanium has applied the process to other feedstock including titanomagnetite concentrate and tailings, roast-calcine and hard-rock ilmenite, as well as complex titania slag. The facility will be located in Emalahleni in Mpumalanga in an industrial park where transportation and energy infrastructure is already established.

Mining

Diamcor Mining Inc. is a junior diamond mining company focused on the identification, acquisition, and operation of diamond projects with near-term production potential rather than traditional exploration. Diamcor announced that it would be proceeding with plans to expand processing facilities at the Krone-Endora at Venetia project (Diamcor, 2021). The mine is located adjacent to De Beers Venetia Diamond Mine in Limpopo. The expansion, planned for 2020 initially, was delayed by the COVID-19 pandemic and restrictions implemented in response to it. Krone Endora consists of the prospecting rights over the farms Krone 104 and Endora 66, which represent a combined surface area of approximately 5 888 hectares. Diamcor has a mining right for 657 hectares of the total project area and submitted an application for the remaining project area. The main aim of the project is to increase processing volumes and improve mining and processing efficiency. The project will be rolled out in two phases, the first aiming to double current processing volumes in the near term. The second phase finalises the project's mining and processing system to boost processing capabilities towards the company's overall long-term mineral project management strategy. A 2015 technical report estimates

resource volumes of 57 981 000 tonnes of diamond-bearing gravels with 1 387 000 carats of diamonds for the areas of the project in which work has been done to date.

Services and research and development

Mahindra launched two recently completed projects in Gauteng, a training centre and a national parts warehouse. Mahindra's new training facility is more than double the size of the first centre (Mahindra, 2021a). It will be used for internal and dealer training inclusive of employees from the Southern African Development Community (SADC). In addition to training rooms, the centre is equipped with a workshop and simulated sales environment. It further offers full training certification for all technical and interpersonal training developed internally by Mahindra's technical specialists tailored for South Africa. Training will be offered through a mix of interactive online and in-person training, on account of lockdown conditions. The parts warehouse is strategically located near the intersection of the N1, M1 and N3 highways (Mahindra, 2021b). It is 30% larger than the previous warehouse and features a special shelving system that doubles the available storage space and centralises parts storage. The warehouse was designed to accelerate the process of ordering and dispatching parts. It is equipped with advanced technology that tracks parts in real time and creates a paperless environment in which parts are traced and dispatched electronically.

Investors, including Illovo Sugar Africa, Metair, The Foschini Group (TFG) and Toyota South Africa Motors (TSAM), pledged a collective R18 million² in investment towards the Toyota Wessels Institute for Manufacturing Studies (TWIMS). The investment aims to create four dedicated research chairs that will focus on issues that advance manufacturing in South Africa and Africa (Barnes, 2021). The four key areas of research entail African Trade and Industrialisation, Green Manufacturing, Future Manufacturing and Lean Management. They will be funded by Illovo Africa, Metair, TFG and TSAM respectively. TWIMS is an academic partnership with the Gordon Institute of Business Science (GIBS). It is a business school and research institution focused solely on manufacturing. TWIMS was established to address the shortage of business managers with manufacturing expertise and to support research, policy creation and industrialisation of South Africa and the continent.

Updates

Progress

Mercedes-Benz started production of the new C-class, the W206. Approximately R10 billion has been invested since 2018 to upgrade the manufacturing plant in East London in preparation for the production of the new model. Improvements to the facility include changes to the assembly line, the warehouse and a new body shop containing over 500 robots. The project created 600 new jobs.

The €200 million (R3.1 billion) Nxuba Wind Farm reached commercial operation. It was developed by Italian multinational Enel's renewable arm Enel Green Power in the Eastern Cape. Nxuba is a 140 MW wind farm that is expected to generate 460 gigawatts per hour (GWh) of energy annually. The project is a participant in the Renewable Energy Independent Producer Power Procurement Programme (REIPPPP).

² The source (Barnes, 2021) does not provide a breakdown of the value by individual investor, therefore an accurate distinction between the foreign and local contribution could not be determined. For purposes of analysis the Tracker estimates that each investor contributed an equal amount of about R4.5 million. Two investors, Toyota (Japan) and Illovo Sugar Africa (United Kingdom), are foreign therefore the foreign contribution totals R9 million (half the total R18 million).

Nissan commenced manufacturing the new Nissan Navara following a R3 billion upgrade to the production plant in Rosslyn. Work on improvements to the facility began in 2018. Production was meant to start sooner, however, factors related to the pandemic delayed the process.

Anglo American completed the Polokwane sulphur dioxide (SO₂) abatement project at the Polokwane Metallurgical Complex (PMC) Limpopo. The plant will be commissioned in the course of 2021. The US\$108 million (R1.548 billion) technology was developed to capture SO₂ from the PMC smelter furnaces and converts it into sulphuric acid. This is expected to reduce emissions by 96%.

Leroy Merlin has opened a fourth store as part of a R1 billion investment to establish operations in South Africa. The expansion began in 2019 with all the stores located in Gauteng. The latest opened in Fourways. The French home improvement retailer specialises in hardware, bathroom, home décor and kitchen products among others and targets South Africa's do-it-yourself (DIY) market. Leroy Merlin is owned by Groupe Adeo.

ACWA Power announced the start of construction for the Redstone concentrated solar power plant. The 100 MW power plant will be developed for US\$800 million (R11.6 billion) in the Northern Cape. The construction of Redstone is expected to create about 2 000 jobs and 100 permanent jobs once it reaches operation, which is scheduled for 2023.

Gold miner Pan African Resources has started constructing a 10 MW solar photovoltaic power plant at the firm's Evander mine in Mpumalanga. It is expected to provide 30% of the Elikhulu Tailing Retreatment Plant's energy requirements. The R 140 million plant is to be commissioned in the third quarter of 2021.

There are three projects whose updates relate to challenges and constraints that have risen in the lead up to or in the course of implementing the project. The affected investments are Rio-Tinto/Richards Bay Minerals' Zulti South mine project, Karpowership SA's RMIPPPP floating power stations and the Khanyisa coal power station. The challenges are fully discussed in the section on barriers and constraints.

FDI TRENDS, Q2 2021

Investment values

A single project makes up considerable share of the of the total investment value captured this quarter, Scatec's Kenhardt (1-3) R14.8 billion RMIPPPP projects account for just over 74% of the investment value recorded.

The Tracker captured two projects valued between R1 billion and R5 billion – The Mercedes Benz R3 billion expansion project and SAB's R2 billion capital investment across the firm's facilities. Together they constitute about 25% of the pledged value. Two projects recorded values below R50 million – Enertronica Santerno's €1 million (R17.3 million) manufacturing capacity expansion project is the largest of these, followed by the R9 million TWIMS investment.

Only half the projects captured this quarter reported investment values, so the total investment in the quarter is likely undervalued significantly. Those with values that have not yet been disclosed comprise Diamcor Mining's Krone-Edora expansion project, Fordere Titanium's processing plant, and a solar PV project by Pan African Resources planned for the Barberton Mines. Further included among these are two projects by Mahindra, an investment into a new warehouse and a training facility.

Investment stages

Table 1: Investment stages

	VALUE (R BILLION)	NUMBER
Announced	19.8	5
Project preparation	0.02	2
Pre-feasibility	<i>Not reported</i>	1
Complete	<i>Not reported</i>	2
Total	19.8	10

Note: Values may not always sum to the total due to rounding.

An examination of projects by investment stage indicates that announced projects comprise almost the entire total investment value, about 99%, they also make up the highest number of projects. This is on account of three projects with the largest, Scatec's RMIPPPP project, contributing US\$1 billion (R14.8 billion). The R3 billion manufacturing plant expansion by Mercedes Benz, SAB's R2 billion planned capital investment, and the TWIMS R9 million investment make up the balance of the pledged value from projects announced this quarter. Fordere Titanium's processing plant was the only project at this stage where the investment value was not disclosed.

Only one of the two projects at the project-preparation phase comprises the investment value – the €1 million (R17.3 million) production capacity expansion project by Enertronica Santerno. The other project identified at this stage is the Krone Edora mining expansion project by Diamcor Mining. The investment value for the project has not been reported.

The Tracker identified a single project at pre-feasibility, Pan African Resources' Barberton Mines solar power project. The projects completed this quarter are Mahindra's two projects – a newly constructed training facility and a warehouse. The value of investment for the projects at the respective stages was not disclosed.

Investment type

Table 2: Investment type

TYPE	VALUE (R BILLION)	NUMBER
Greenfield	14.8	4
Upgrade	5	2
Expansion	0.2	3
Brownfield	<i>Not Reported</i>	1
Total	19.8	10

Note: Values may not always sum to the total due to rounding.

A breakdown of projects by investment type showed that greenfield projects lead investment this quarter both in value and number of projects. However, the value is attributed to one project, Scatec's R14.8 billion Kenhardt (1-3) renewable projects. Investment values for the other greenfield projects were not disclosed, including Fodere Titanium's processing plant and Mahindra's training facility and warehouse.

Two investors announced plans to upgrade their manufacturing facilities – Mercedes Benz with a R3 billion pledge and a R2 billion commitment from AB InBev subsidiary SAB.

Expansions were announced for three projects, out of which two make up the total value for this category. The largest is Enertronica Santerno's €1 million (R17.3 million) commitment to grow the

firm’s manufacturing capacity followed by the R9 million TWIMS research institution investment. The other expansion project identified is the Krone-Edora at Venetia project, for which investor Diamcor Mining has not yet disclosed a value for the investment.

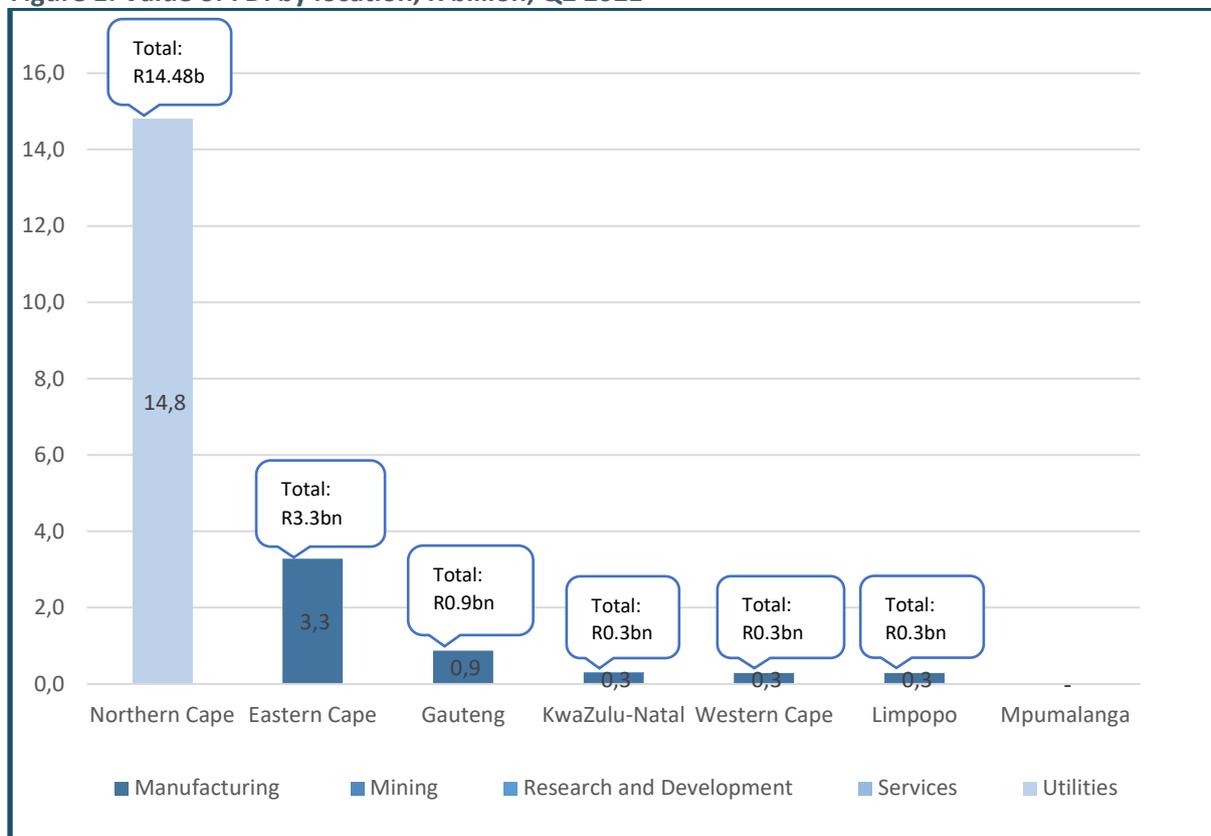
Brownfield investment is represented by Pan African Resources’ Barberton Mines planned solar power project. The investment value for the project was not reported.

Investment by location and industry

An analysis of projects by location and industry is presented in Figure 1. Eastern Cape, KwaZulu-Natal, Limpopo and Mpumalanga recorded an equal number of projects, with two initiatives identified in each province. It is notable that SAB’s investment programme will be across the manufacturer’s various operations. This is reflected in the location data.³

Northern Cape has the highest investment value this quarter, including Scatec’s Kenhardt (1-3) US\$1 billion (R14.8 billion) project under the RMIPPP programme contributing to the utilities sector.

Figure 1: Value of FDI by location, R billion, Q2 2021



Source: TIPS FDI Tracker project data. Note: Numbers may not always sum to the exact total investment amounts due to rounding.

Monitoring identified two projects in the Eastern Cape that account for about R3.3 billion in the province’s manufacturing industry. These investments are the planned upgrades to production facilities by Mercedes Benz and SAB, which contribute R3 billion and R286 million respectively.

The highest number of projects were captured in Gauteng with four investments in the manufacturing and services industries. The total investment value recorded in the province was R1.03 billion

³ Specific detail of the allocation of funds into individual facilities and operations has not been provided. SAB has seven major facilities (three in Gauteng) across five provinces. Therefore, the R2 billion investment value has been divided equally between seven major facilities, that is an estimated R286 million for each location.

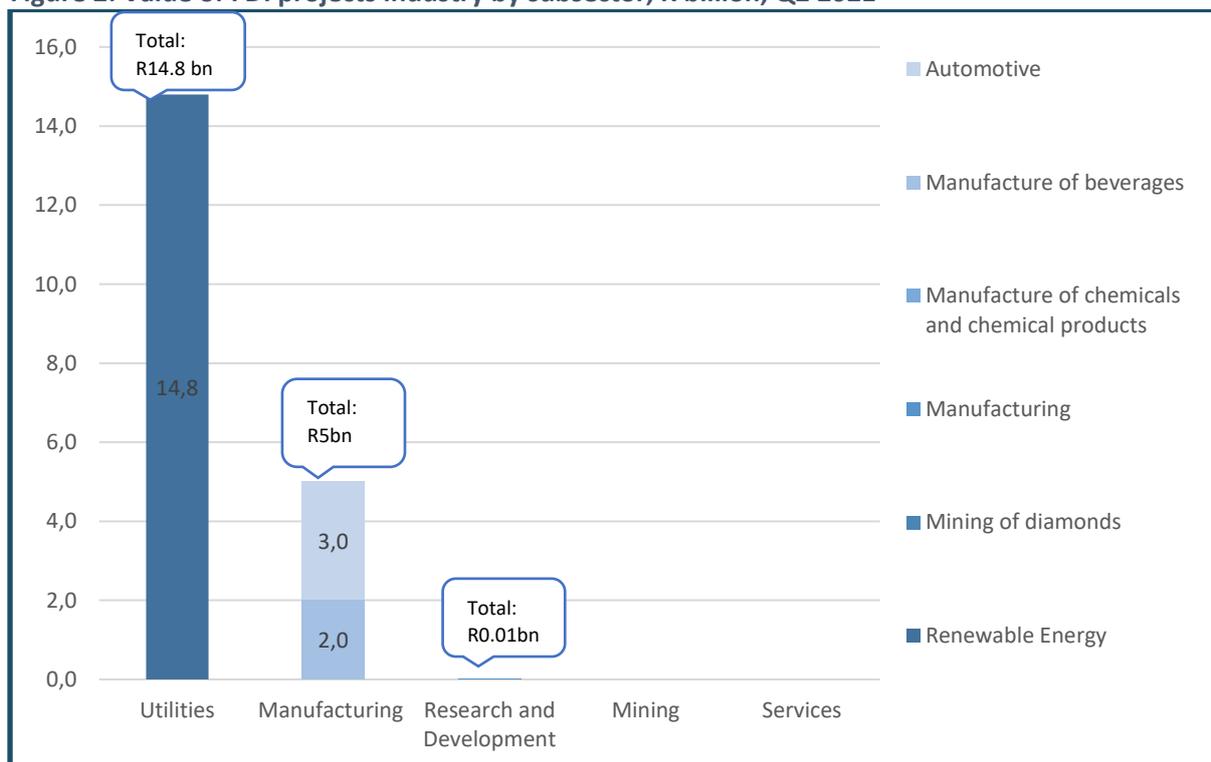
attributed entirely to two projects in manufacturing, due to unavailable value data for the other projects. Gauteng is potentially the recipient of the largest portion of SAB’s operation-wide investment programme, gaining R857 million. The other investment in manufacturing is Enertronica Santerno’s €1 million (R17.3 million) to expand production capacity. Mahindra’s training facility and warehouse account for investment in the services industry.

The two investments identified in KwaZulu-Natal amount to R300 million from manufacturing and research and development. The province is among beneficiaries of SAB’s investment programme, with R256 million making up the investment in manufacturing. The R9 million commitment towards TWIMS constitutes investment in research and development.

Western Cape recorded one project. The province is among locations identified to benefit from the SAB’s investment programme with R256 million in the manufacturing industry. Similarly, Limpopo is expected to receive the same amount, R256 million, through SAB. While two projects were identified in the province, the SAB project represents the total investment value captured in the province. The other investment identified is in mining – the Krone-Edora mining expansion project by Diamcor Mining.

Two projects were identified in Mpumalanga, neither of which had a reported investment value. They encompass two industries, manufacturing and utilities. Fordere Titanium’s processing plant represents the former while Pan African Resources’ Barberton solar project constitutes the utilities investment in the province.

Figure 2: Value of FDI projects industry by subsector, R billion, Q2 2021



Source: TIPS FDI Tracker project data. Note: Numbers may not always sum to the exact total investment amounts due to rounding.

Figure 2 distinguishes projects by subsector, within their individual industries. In the second quarter 2021, investment was spread across five industries and 10 subsectors. Manufacturing was the most represented in the number of projects. This is now an industry that frequently appears in the Tracker alongside mining, services and utilities.

Two investments were identified in utilities, both of which are renewable energy projects. The notable industry and subsector value is wholly attributed to Scatec’s US\$1 billion (R14,8 billion) Kenhardt (1-3) project under the RMIPPP programme. The other renewable project relates to self-generation, Pan African Resources’ solar PV power project at Barberton Mines.

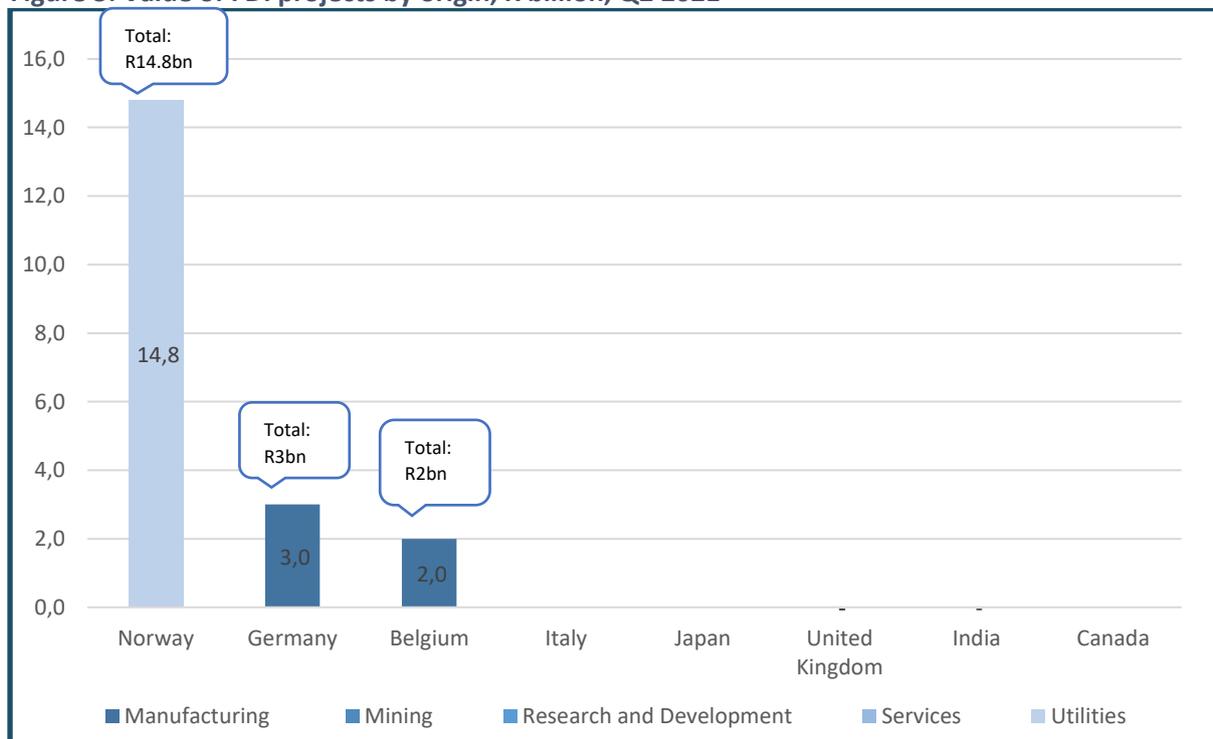
Projects in manufacturing were captured across four subsectors with one project recorded in each subsector. The largest investment is in automotives on account of the Mercedes Benz investment in the firm’s manufacturing plant. SAB’s investment programme contributes to manufacture of beverages while renewable energy is represented by Enertronica Santerno’s production capacity expansion project. Fodere’s Titanium processing plant accounts for the project identified in the manufacture of chemicals and chemical products.

Research and development registered one project in manufacturing as a subsector. It recorded R9 million as a result of investment in TWIMS to establish four new research chairs for the institute. Mining is another industry that comprises one project, in the mining of diamonds subsector. It is represented by the Krone-Edora project expansion, planned by Diamcor Mining for an undisclosed amount. Services comprise the warehouse and training centre completed by Mahindra, which account for the two projects in the automotive subsector. The value of these investments was not reported.

Investment by country of origin

Figure 3 differentiates projects by country of origin and industry. As has been noted in previous quarters, Europe continues to be a key investor in the country.

Figure 3: Value of FDI projects by origin, R billion, Q2 2021



Source: TIPS FDI Tracker project data. Notes: Numbers may not always sum to the exact total investment amounts due to rounding.

Out of the total eight countries identified as sources of investment five are from the region and a combined seven projects were recorded from these countries. It is also notable that they make up almost the entire investment value captured in this reporting period. Norway dominated investment with US\$1 billion (R14.8 billion) from the Scatec RMIPPPP project. The Tracker captured R3 billion from Germany and R2 billion from Belgium, attributed to the projects by Mercedes-Benz and SAB respectively. Enertronica Santerno represents investment from Italy with its €1 million (R17.3 million) commitment. The pledged value captured from the United Kingdom is R4.5 million⁴ from one out of three projects identified in the country. The investment is ascribed to Associate British Foods AB Sugars subsidiary Illovo Sugar Africa's contribution to the TWIMS research investment. The other projects from the country are Fordere Titanium's processing plant and Pan African Resources' solar PV project.

Japan and India represent investment from Asia in this reporting period. An estimated R4.5 million⁵ was registered from Japan, attributed to Toyota's estimated commitment towards the TWIMS research project. Mahindra's investment in a warehouse and training facility accounts for two projects from the country. Canada is represented by one project, Diamcor Mining's Krone-Endora project expansion, for which an investment value was not available.

Figure 4 demonstrates projects classified according to target markets. Quarter 2 2021 projects that focus exclusively on the domestic market recorded the highest investment value. The segment comprised four projects distributed between three industries, from which US\$1 billion (R14.8 billion) was captured from two projects. A large bulk of the value was recorded from utilities due to the Scatec Kenhardt (1-3) investment. The other projects with a solely domestic outlook are in manufacturing and services, through Enertronica Santerno's project and the Mahindra training facility, respectively.

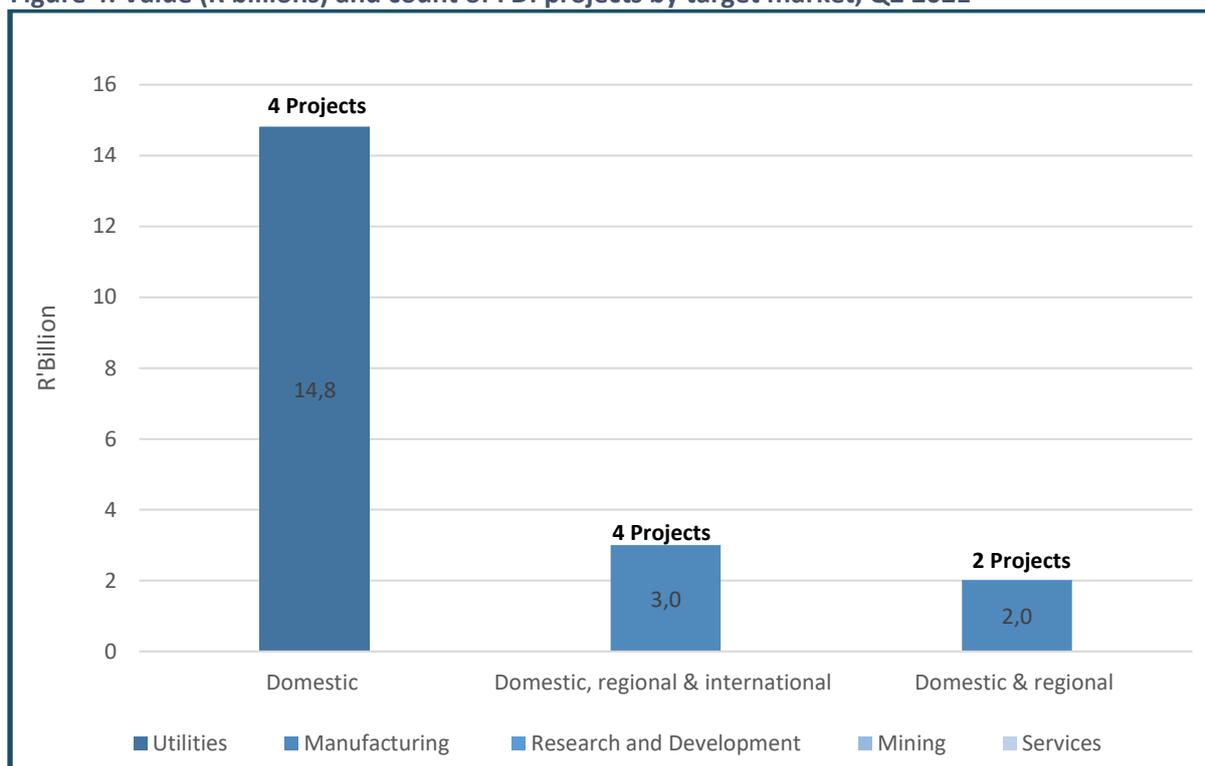
Four projects concentrate on the domestic, regional and international markets. They are in manufacturing, mining and services. The Mercedes-Benz R3 billion commitment accounts for the investment value recorded in this category. It represents manufacturing along with Fordere Titanium's project for which an investment value was not disclosed. Projects by Diamcor Mining and Mahindra (the warehouse) respectively represent investment in mining and services. Neither project has a reported investment value.

The domestic and regional target market comprises two projects that recorded just over R2 billion in manufacturing and research and development. The value is mainly from manufacturing through SAB's R2 billion investment while the TWIMS research investment constitutes the R9 million for research and development.

⁴ See footnote 2

⁵ See footnote 2

Figure 4: Value (R billions) and count of FDI projects by target market, Q2 2021



Source: TIPS FDI Tracker project data. Note: Numbers may not always sum to the exact total investment amounts due to rounding.

Investment environment

Examining the investment environment provides insight into the general environment in which investments happen. This analysis is important for the following reasons. First, metrics that measure investment indicate the extent to which pledged investments materialise into actual investments. This assists in tracking the extent to which investment drives materialise into actual investments. Second, analysing the investment environment provides a glimpse into investor sentiment on future growth prospects in the economy. A flurry of investment activity is typically a sign of future growth, as investors tend to hold back investments during times of lacklustre growth, given a pessimistic view of future growth and the risk of tying up capital and hampering returns on that capital.

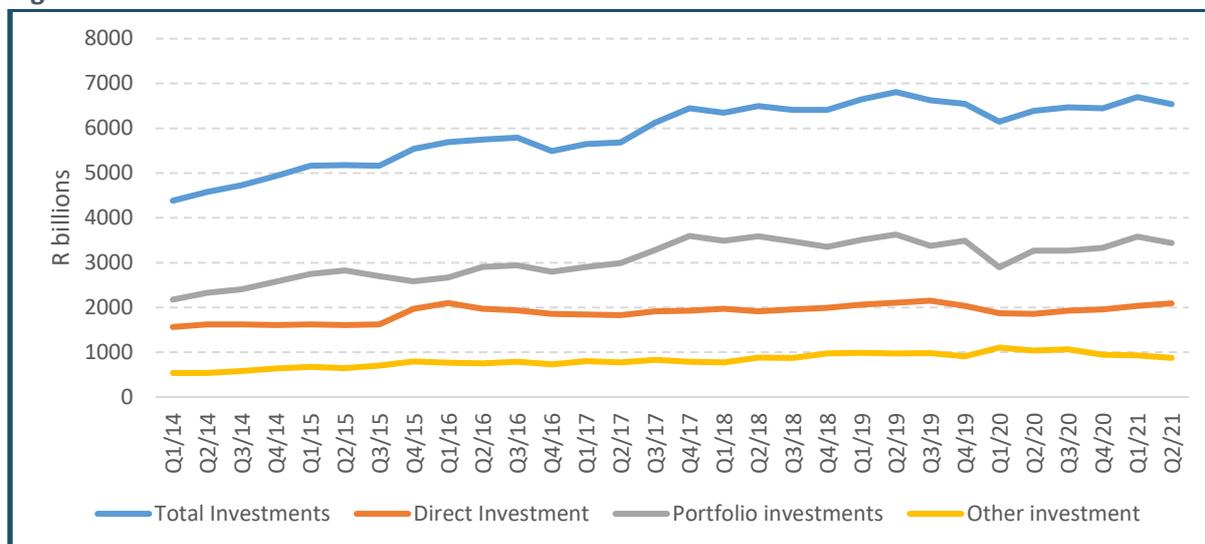
With the President’s annual investment conferences, it is important from a policy point of view to monitor whether the pledges made at that event are materialising as a substantial improvement in investment levels. To evaluate the investment environment, a number of key investment metrics have been incorporated, which are further detailed in the Appendix.

The total market value of South Africa’s inward investment decreased from a revised R6 696 billion at the end of March 2021 to R6 541 billion at the end of June 2021, a decrease of 2.3% between Q1 2020 and Q2 2021. The decrease in inward investment between the quarters was attributable to declines in all investment categories except direct investments. Direct⁶ investment increases were driven by net asset values of companies improving in the second quarter. Portfolio investment decline was driven by a decrease in the FTSE/JSE All-share Index in Q2 2021 (SARB, 2021a). Other investments

⁶ Direct investment is defined as: the objective of obtaining a lasting interest by a resident entity in one economy (direct investor) in an entity resident in an economy other than that of the investor (direct investment enterprise). This refers to foreign investment into South Africa (see SARB, 2019).

declined mainly due to the withdrawal of non-resident deposits from the domestic banking sector, which was partly shielded from further declines by a US\$1 billion loan by the national government from the New Development Bank.

Figure 5: South Africa's inward investment



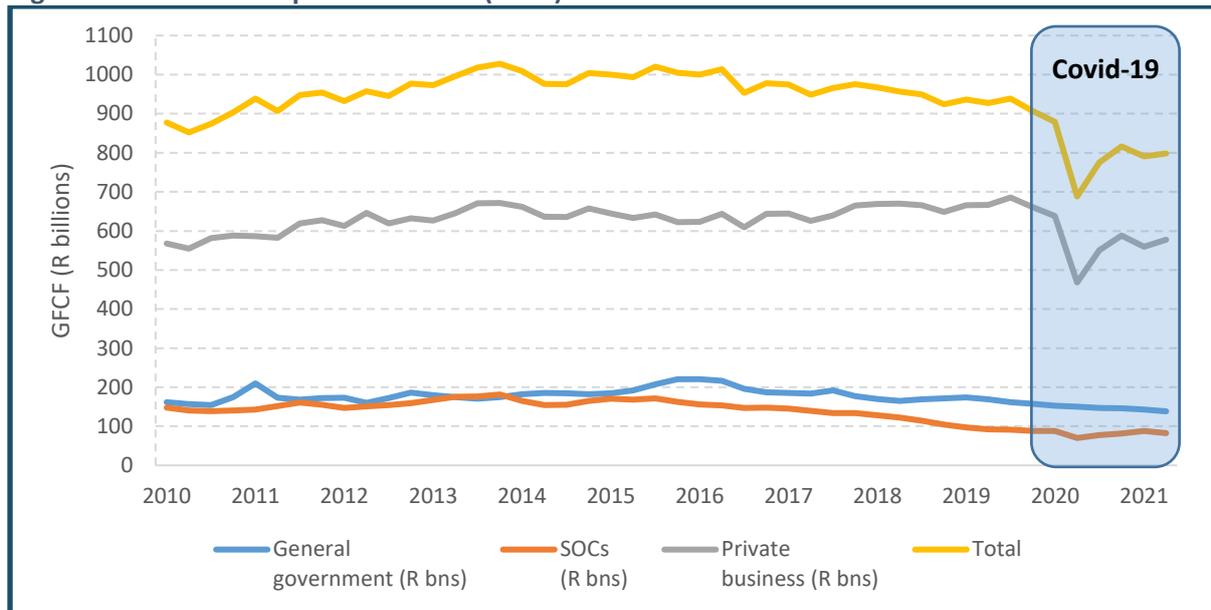
Source: TIPS, based on South Africa's international investment position data by SARB (2021b).

Over the period, portfolio investments decreased from R3 584 billion in Q1 2021 to R3 437 billion in Q2 2021, representing a decrease of 4%. Direct investments increased from R2 034 billion in Q1 2021 to R2 093 billion in Q2 2021. Other investments declined by the highest percentage in the quarter, declining by 6% from R927 billion to R870 billion over the period.

The decrease in total investment followed an increase in total investment of 4% between Q4 2020 and Q1 2021. Compared to the Q2 2020, total investments were 2% higher in Q2 2021. The rise was driven by dramatic changes in the underlying datasets. Direct investments were 13% higher in Q2 2021 compared to Q2 2020. Portfolio investments were 5% higher in Q2 2021 compared to Q2 2020. The largest decline was noted in other investments, which declined by 16% over the annual period.

Stats SA calculates gross fixed capital formation (GFCF) as part of the expenditure component of gross domestic product (GDP). The metric is an important measure of overall investment in the economy. It includes money spent on improvements to land, equipment purchases, and road and building construction. The total GFCF increased by 0.9% between Q1 2021 and Q2 2021 in constant 2021 prices, seasonally adjusted, and annualised. This increase was supported by the associated increase in GDP over the period and the increase in production numbers (Liedtke, 2021). GFCF levels still remain below pre-COVID levels, however. Further, the Q2 2021 growth rate is below the growth rates witnessed in Q3 2020 (12.8%) and Q4 2020 (4.3%) (Stats SA, 2021).

Figure 6. Gross fixed capital formation (GFCF)



Source: TIPS, 2021, based on StatsSA GDP data. Notes: Values are on a constant 2021 prices, seasonally-adjusted, and annualised basis. Value are deflated using an implicit deflator, rebased to Q2 2021.

Disentangling GFCF by the type of institution reveals the contributions to investment levels by the public and private sectors. In Q2 2021, private investment increased by 3.3% from Q1 2021 in constant 2021 prices, seasonally adjusted and annualised basis. Public corporation investment levels decreased by 6.7%, and investments by general government decreased by 3.5%.

According to Stats SA, the marginal increase in total GFCF was driven by opposed movements in the underlying datasets. Increases were driven by other assets⁷ (6.4%), machinery and equipment (1.8%), transport equipment (1.1%) (Stats SA, 2021). Declining datasets were non-residential buildings (2%), construction works (1.8%), transfer costs (0.9%) and residential buildings (0.2%).

Figure 7. Purchasing Managers' Index (PMI)



Source: TIPS, based on PMI data by the Bureau for Economic Research (BER, 2021a). Note: The PMI data are seasonally adjusted by BER.

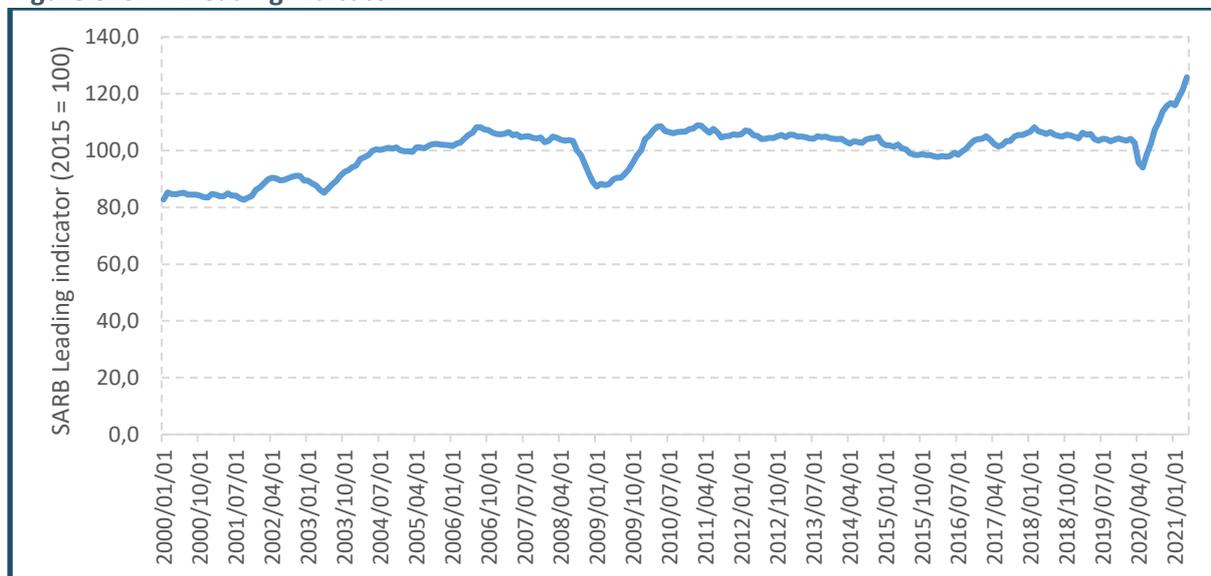
⁷ Other assets includes research and development, computer software, mineral exploration and cultivated biological resources.

The Absa PMI focuses on business conditions in the manufacturing sector, and points to challenges within the sector. These challenges may inform and influence investor decisions in the future. A value that exceeds a value of 50 implies an improvement from the previous month, and vice versa.

In Q2 2021, the seasonally adjusted Absa PMI rose and declined throughout the quarter, however, on average was higher than the PMI noted in Q1 2021. The PMI decreased between March 2021 and April 2021 (from 57.4 to 56.2), increasing between April and May (from 56.2 to 57.8) and subsequently increasing again between May and June (from 57.8 to 57.4) (BER, 2021b; 2021c; 2021d). The average reading of the headline PMI during Q2 2021 was higher than the recorded average in the first quarter of 2021. According to BER, this was indicative of a manufacturing output recovery with another quarterly expansion likely.

In April, all five subcomponents of the PMI were in positive terrain, for the first time since 2012. This included the employment index, which tended to be below the 50-point mark in recent times, pointing to an improvement in job creation for the month. Business activity and new sales orders increased, however, at a slower pace than the month before. Export sales rose during the month, on the back of a global recovery led by the United States (US), that is anticipated to accelerate throughout 2021, according to BER (BER, 2021b). Expected business conditions in six months' time also improved based on this sentiment. An improvement in the exchange rate contributed to cheaper imports; however, fuel price increases raised concerns. In June domestic demand increased, while purchasing managers reported an export sales decline. Concerns over the third wave of COVID-19 and further loadshedding resulted in a decline in expected business conditions. Higher electricity and fuel prices, with another diesel price hike, added to the upward pressure on costs. Towards the end of June South Africa went into a level 4 lockdown, which resulted in a deterioration of business conditions in the manufacturing sector. Exporters into US and European Union markets, however, reported increasing sentiment due to the recoveries in those economies in the month.

Figure 8. SARB leading indicator



Source: TIPS, based on SARB, 2021c.

The South African Reserve Bank (SARB) also reports a composite leading indicator that aims to predict future growth in the economy and serves as supplementary evidence for future changes in the economy. The composite leading business cycle indicator is calculated based on a number of underlying datasets that predict growth (see Appendix).

In Q2 2021, the SARB leading indicator consistently increased throughout the quarter. The leading indicator increased in April 2021 (2%), increased again in May (1.7%) , and subsequently rose in June (3.0%) (SARB, 2021d; 2021e; 2021f).

The largest drivers of increases in the leading indicator in Q2 2021 were: the number of building plans approved; an acceleration in the 12-month rate of increase in job advertisement space; the composite leading business cycle indicator for South Africa's major trading-partner countries; the commodity price index for South Africa's main export commodities; and an increase in the RMB/BER Business Confidence Index.

Barriers and constraints

The FDI Tracker aims to inform and improve policymaking by assisting the state in better understanding the environment in which investors operate. To gain deeper insight into investor experiences, the FDI Tracker captures concerns and challenges of companies. Challenges include those related to the business environment, infrastructure blockages and service constraints. In addition to barriers and constraints, the analysis highlights challenges that have been unblocked or resolved.

In the second quarter 2021, monitoring did not find reports of challenges and constraints in relation to new projects added to the Tracker. However, there are existing projects – previously captured by the Tracker – that have had challenges that may have implications for the development or continuation of the project.

Rio Tinto declared a force majeure on customer contracts at Richards Bay Minerals (RBM) due to an escalation in the security situation at the operations. The Zulti South project has been on full suspension since 2019 due to security and community-related issues. All mining and smelting operations at RBM have been halted. Zulti South is a R6.7 billion project.

The Department of Forestry, Fisheries and the Environment refused environmental authorisation for all three of Karpowership SA's floating powership projects on environmental grounds. Karpowership is among selected preferred bidders in the RMIPPPP. Together with other projects RMIPPPP projects, the project is part of a R45 billion investment.

A high court ruling declared the environmental approval for the Khanyisa coal power station project expired. The ruling is the outcome of a 2017 legal challenge by environmental justice group groundwork. Khanyisa's water use licence was also set aside by the Water Tribunal. South African banks have also withdrawn funding from the project. To legally start construction, the project requires a valid environmental authorisation or a water use licence. The plant was supposed to be completed at the end of 2020 and would have garnered a R1.03 billion investment. The project developers are ACWA Power in partnership with a group of South African companies.

Credibility classification

FDI pledges are subject to frequently changing plans and may not happen in the form initially announced. For this reason, the FDI Tracker assigns a subjective measure of credibility to each project, based on the standard described below.

Table 3: Classification of project by credibility of investment pledge

GRADING	EXPLANATION
Commitment	Project has been announced, but the plan lacks details (such as company commitment or clear development plan) or is too early to be substantive.
Potential	Project has been announced, shows possibility for future development and the company has a strong track record, but the plan lacks some details or there are doubts on specific aspects of the announcement.
Likely	Project has been announced, and is highly credible, often with plans that are partially in progress, such as completed feasibility studies or regulatory approval.
Construction/implementation	Projects that are underway. Figures will be updated to reflect changes to the project during the construction/implementation period.
Cancelled	The project is no longer moving ahead.

As Table 4 indicates, four projects were categorised as “potential” while three were classified as likely this quarter. The discussion that follows outlines the project-specific factors and considerations that led to the grading allocated to the respective projects.

Potential

Fordere Titanium has provided a detailed development plan for a plant to process primarily titanium dioxide and vanadium pentoxide, however, the facility will be the first project in South Africa. The status of regulatory or legislative approvals relevant to the project have also not yet been indicated. The Barberton solar power PV project is included in this grading. Pan African Resources has a strong track record. While the company is still conducting a feasibility study, a site has been selected for the facility. It is being modelled based on the Pan African Resources Evander (Elikhulu) solar power plant currently under construction.

SAB is an established company in South Africa’s economy. The brewer has provided some indication on the focus of investment. However, SAB’s previous decision to cancel about R5 billion in planned capital expenditure, due to the impact of the pandemic and resulting lockdown regulations that affected the liquor industry, has the effect of creating some measure of uncertainty concerning the investment. Mercedes-Benz is investing further into the company’s East London plant on the back of a R10 million investment to upgrade the facility. The investment is an extension of, or builds on, this recently completed investment. However, details of the activities or development plan relating to the current investment have not yet been disclosed.

Likely

Diamcor Mining’s Krone-Endora at Venetia project has several processes and plans in progress or established. A mining right was issued in 2014 for 657.71 hectares of the project’s 5 888 total project area. An application for a mining right for the remaining project area has been submitted. On account of the project’s location near the Venetia Mine, there is existing infrastructure and services that the project can leverage. The company further has a long-term alliance and first right of refusal with Tiffany & Co. Canada to purchase up to 100% of rough diamonds produced from the Krone-Edora project.

Scatec is well invested in South Africa’s renewable sector. The company entered the South African market in 2010 and has 448 MW of solar infrastructure in operation. Financial close of the project is expected by late 2021. Conditions for participating in the programme include the specifications that stipulate project plans be fully developed, or that the company should be able to get the project operation ready within a short time frame and be set to connect to the national grid by the end of

2022, at the latest. These projects have submitted relevant regulatory applications that have either been approved or are pending.

Enertronica Santerno is established in South Africa’s renewable energy industry, implementation plans are in place, and activities to expand manufacturing capacity for inverters utilised in standard photovoltaic applications and electricity storage system are being finalised. The Group aims to deliver these inverters from the end of 2021.

Table 4: Project credibility grading

PROJECT	CLASSIFICATION
Fodere Titanium processing plant	Potential
Barberton Mines solar PV power project	Potential
SAB investment programme	Potential
Mercedes Benz manufacturing plant - extended investment	Potential
Krone-Endora at Venetia project expansion	Likely
RMIPPPP: Scatec Kenhardt (1 -3)	Likely
Enertronica Santerno manufacturing capacity expansion	Likely

INVESTMENT PROFILES, Q2 2021

PROJECT NAME	FODERE TITANIUM PROCESSING PLANT	MAHINDRA TRAINING FACILITY
Investment value	Not reported	Not reported
Invest Rand value	Not reported	Not reported
Project location: Province	Mpumalanga	Gauteng
Project location: City/Town	Emalaheni	Centurion
Investor firms	Fodere Titanium	Mahindra South Africa
Investor country	United Kingdom	India
Investor city	London	Mumbai
Indicative start date	Not Reported	Not Reported
Indicative end date	2021	April 2021
Project phase	Announced	Complete
Project type	Greenfield	Greenfield
Project industry	Manufacturing	Services
Project sector	Manufacture of chemicals and chemical products	Automotive
Permanent jobs	Not reported	Not reported
Temporary jobs	Not reported	Not reported
Government partnership	Not reported	Not reported
Target market	Domestic, regional and international	Domestic
Social Development Programme	Technology transfer	Employee training and development
Project description	Fodere is a minerals technology company. The facility will produce titanium dioxide and vanadium pentoxide, with alumina oxide and magnesium sulphate as by-products. Fodere will use an internally developed low-carbon proprietary process to extract titanium from steel slag and refine titanium and industrial minerals and chemicals. The process was developed to create a technology that can extract these compounds by sustainable methods with near zero waste. The process has successfully been applied to other feedstock including titanomagnetite concentrate and tailings, roast-calcine and hard-rock ilmenite, as well as complex titania slag. The facility will be situated in an industrial park where transportation and energy infrastructure is already established.	The new training facility is more than double the size of the first centre. It will be used for internal and dealer training inclusive of Mahindra employees from the Southern African Development Community (SADC). In addition to training rooms the centre is equipped with a workshop and simulated sales environment. It offers full training certification for all technical and interpersonal training developed internally by Mahindra's technical specialists and tailored for South Africa. Training will be offered through a mix of interactive online and in-person training, this is on account of lock down conditions.
Motivation	Resource and strategic asset seeking: South Africa has commercial advantages including the quantities of available feedstock that will reduce risk for the company as opposed to undertaking a mining operation to source feedstock.	Market expansion: South Africa is Mahindra's regional hub and second headquarters outside of India, and the investment is part of Mahindra's planned expansion in Africa.

PROJECT NAME	MAHINDRA WAREHOUSE	TOYOTA WESSELS INSTITUTE FOR MANUFACTURING STUDIES
Investment value	Not reported	Not reported
Invest Rand value	Not reported	R18 million (R9 million is the estimated foreign contribution)
Project location: Province	Gauteng	KwaZulu-Natal
Project location: City/Town	Johannesburg	Kloof
Investor firms	Mahindra South Africa	Toyota South Africa Motors (TSAM), Illovo Sugar Africa, Metair, and The Foschini Group (TFG)
Investor country	India	Japan, United Kingdom and South Africa
Investor city	Mumbai	Aichi, Toyota and London
Indicative start date	Not reported	Apr-21
Indicative end date	Apr-21	Not reported
Project phase	Complete	Announced
Project type	Greenfield	Expansion
Project industry	Services	Research and Development
Project sector	Automotive	Manufacturing
Permanent jobs	Not reported	Not reported
Temporary jobs	Not reported	Not reported
Government partnership	Not reported	Not reported
Target market	Domestic, regional and international	Domestic & regional
Social Development Programme	Not reported	Not reported
Project description	The new national parts warehouse is 30% larger than the previous warehouse, featuring a special shelving system that doubles the available storage space and centralises parts storage. It is equipped with advanced technology that tracks parts in real time creating a paperless environment in which all parts are traced and dispatched electronically. It was designed to accelerate the process of ordering and dispatching parts. The warehouse is strategically located near the intersection of the N1, M1 and N3 highways.	Investors including Illovo Africa, Metair, TFG and Toyota pledged a collective R18 million in investment towards the Toyota Wessels Institute for Manufacturing Studies (TWIMS). TWIMS is an academic partnership with the Gordon Institute of Business Science (GIBS). It is a business school and research institution focused solely on manufacturing, established to address the shortage of business managers with manufacturing expertise, and to support research, policy creation and industrialisation of South Africa and the continent. The investment aims to create four research chairs that will focus on issues that advance manufacturing in South Africa and Africa. The four key areas of research entail African Trade and Industrialisation, Green Manufacturing, Future Manufacturing and Lean Management. They will be funded by Illovo Africa, Metair, TFG and TSAM respectively.
Motivation	Market expansion: South Africa is Mahindra's regional hub and second headquarters outside of India, and the investment is part of Mahindra's planned expansion in Africa.	Support the advancement of manufacturing through research

PROJECT NAME	BARBERTON MINES SOLAR PV POWER PROJECT	KRONE-ENDORA AT VENETIA PROJECT EXPANSION
Investment value	Not reported	Not reported
Invest Rand value	Not reported	Not reported
Project location: Province	Mpumalanga	Limpopo
Project location: City/Town	Barberton	Alldays
Investor firms	Pan African Resources	Diamcor Mining Inc.
Investor country	United Kingdom	Canada
Investor city	London	Kelowna
Indicative start date	April 2021	May 2021
Indicative end date	Not reported	Not reported
Project phase	Pre-feasibility	Project preparation
Project type	Brownfield	Expansion
Project industry	Utilities	Mining
Project sector	Renewable Energy	Mining of diamonds
Permanent jobs	Not reported	Not reported
Temporary jobs	Not reported	Not reported
Government partnership	Not reported	Department of Mineral Resources and Energy (DMRE), National Energy Regulator of South Africa (Nersa), Eskom
Target market	Domestic	Domestic, regional and international
Social Development Programme	Not reported	Not reported
Project description	Pan African Resources is undertaking a feasibility study to explore the installation of a solar power plant at the miners Barberton Mines similar to the Evander/Elikhulu solar PV power project currently under construction. A site for the Barberton solar power plant been selected. The value of the investment has not yet been reported	Diamcor is a junior diamond mining company focused on the identification, acquisition and operation of diamond projects with near-term production potential rather than traditional exploration. Diamcor announced that it would be proceeding with plans to expand processing facilities at the Krone-Endora at Venetia Project. The mine is located adjacent to De Beers Venetia Diamond Mine in Limpopo. The expansion, planned for 2020 initially, was delayed by the COVID-19 pandemic and restrictions implemented in response to pandemic. Krone-Endora consists of the prospecting rights over the farms Krone 104 and Endora 66, which represent a combined surface area of approximately 5 888 hectares. Diamcor has a mining right for 657.1 hectares of the total project area and submitted an application for the remaining project area. The main aim of the project is to increase processing volumes and improve mining and processing efficiency. The project will be rolled out in two phases. The first phase aims to double current processing volumes in the near-term. The second phase finalises the project's mining and processing system to boost processing capabilities towards the company's overall long-term mineral project management strategy. A 2015 technical report estimates resources volumes of 57 981 000 tonnes of diamond-bearing gravels with 1387 000 carats of diamonds for the areas of the project on which work has been done to date
Motivation	Energy security and reduced energy costs	Resource seeking: the project aims to increase processing volumes and improve mining and processing efficiency

PROJECT NAME	RMIPPPP: SCATEC KENHARDT (1 -3)	SAB INVESTMENT PROGRAMME
Investment value	US\$1 billion	Not reported
Invest Rand value	R14.8 billion	R2 billion
Project location: Province	Northern Cape	Multiple Locations
Project location: City/Town	Not reported	Multiple Locations
Investor firms	Scatec Solar	SAB/ AB InBev
Investor country	Norway	Belgium
Investor city	Oslo	Leuven
Indicative start date	June 2021	Jun-21
Indicative end date	2022	2022
Project phase	Announced	Announced
Project type	Greenfield	Upgrade
Project industry	Utilities	Manufacturing
Project sector	Renewable Energy	Manufacture of beverages
Permanent jobs	Not reported	Not reported
Temporary jobs	Not reported	Not reported
Government partnership	Department of Mineral Resources and Energy (DMRE), National Energy Regulator of South Africa (Nersa), Eskom	Not reported
Target market	Domestic	Domestic & regional
Social Development Programme	RMIPPPP economic development commitments criteria: Local content, BBBEE (49% black-owned).	Not reported
Project description	Scatec was announced as the latest preferred bidder by the Department of Mineral Resources and Energy in the Risk Mitigation Independent Power Producer Procurement Programme (RMIPPPP). Scatec has a 20-year Power Purchase Agreement with Eskom. It will be developing three projects in the Northern Cape – Kenhardt (1-3). The projects have a total 150 MW contracted capacity. They will consist of a total 540 MW solar and 225 MW/1 140 MWh battery storage.	AB Inbev subsidiary South African Breweries (SAB) has reinstated a R2 billion investment into the manufacturer’s South Africa operations. The investment programme was cancelled last year and in early 2021 due to challenges including the impact of the pandemic. The projects earmarked for this investment will be completed in 2022. The project entails upgrades to operating facilities, new equipment at select plants, innovation of new products and other necessary operating systems. This new round of investment, however, will make up for 40% of the funding withdrawn during the pandemic.
Motivation	Risk mitigation independent power producer procurement programme	Modernisation and operational improvements for productivity recovery

PROJECT NAME	MERCEDES BENZ MANUFACTURING PLANT – EXTENDED INVESTMENT	ENERTRONICA SANTERNO MANUFACTURING CAPACITY EXPANSION
Investment value	Not reported	€1 million
Invest Rand value	R3 billion	R17.3 million
Project location: Province	Eastern Cape	Gauteng
Project location: City/Town	East London	Midrand
Investor firms	Mercedes Benz South Africa	Enertronica Santerno
Investor country	Germany	Italy
Investor city	Stuttgart	Bologna
Indicative start date	June 2021	June 2021
Indicative end date	Not reported	2024
Project phase	Announced	Project preparation
Project type	Upgrade	Expansion
Project industry	Manufacturing	Manufacturing
Project sector	Automotive	Renewable Energy
Permanent jobs	Not reported	Not reported
Temporary jobs	Not reported	Not reported
Government partnership	Department of Trade, Industry and Competition	Department of Mineral Resources and Energy, National Energy Regulator of South Africa (NERSA))
Target market	Domestic, regional and international	Domestic
Social Development Programme	Not reported	Local content (40%)
Project description	Mercedes-Benz announced further investment into the development of the East London manufacturing facility in addition to recently completed R10 billion upgrades in preparation of the production of the new C-Class, initially announced in 2018. Details of what the current investment entails have not yet been disclosed.	Enertronica Santerno operates in the power electronics and energy sectors. Santerno was established as a company that designs, manufactures and installs conversion systems (inverters). The firm is involved in the development of solar photovoltaic power technology including construction of power plants, associated embedded software and mechanical components. Santerno service offerings entail project management and engineering for the design and installation of utility scale plants as well as operations and management services. Through this investment Santerno will be expanding manufacturing capacity for inverters used in standard photovoltaic applications and electricity storage systems with a maximum initial production capacity of 500 MW per year, gradually ramping up to higher capacity. The Group aims to deliver these locally assembled inverters from the end of 2021. The project will additionally – among other things – allow for an extension of the range of local service offerings, which is expected should result in reduced lead times to customer and increase the value of services provided.
Motivation	Modernisation and expansion of new product line.	Market expansion: expanding local service and product offerings. Supply inverters with a local content exceeding minimum requirements imposed in REIPPPP Bid 5 framework.

REFERENCES

- Barnes, J. 2021. TWIMS receives multi-million rand investment for the advancement of manufacturing in SA and Africa [WWW Document]. Toyota Institute for Manufacturing Studies. April 2021. Available at: <https://twimsafrica.com/2021/04/29/twims-receives-multi-million-rand-investment/> (Accessed 15 November 2021).
- BER. 2021a. ABSA PMI (History Data). Bureau for Economic Research. Available at; <https://www.ber.ac.za/BER%20Documents/ABSA-PMI/?doctypeid=1100&year=2021#15000> (Accessed 11.2.21).
- BER, 2021b. Absa PMI, April 2021. Bureau for Economic Research. Available at: <https://www.ber.ac.za/knowledge/pkviewdocument.aspx?docid=12952>
- BER, 2021c. Absa PMI, May 2021. Bureau for Economic Research. Available at: <https://www.ber.ac.za/knowledge/pkviewdocument.aspx?docid=13809>
- BER, 2021d. Absa PMI, June 2021. Bureau of Economic Research. Available at: <https://www.ber.ac.za/knowledge/pkviewdocument.aspx?docid=14906>
- Diamcor, 2021. Diamcor Resumes Expansion Plans to Increase Processing Volumes . Diamcor Mining Inc. News. 27 May 2021. Available at: <https://www.diamcormining.com/news/diamcor-resumes-expansion-plans-to-increase-processing-volumes> (Accessed 15 November 2021).
- Enertronica Santerno. 2021. Enertronica Santerno: expansion of production activities in South Africa to support photovoltaics and storage. Enertronica Santerno. 15 June 2021. Available at: enertronicasanterno.it/enertronica-santerno-ampliamento-delle-attivita-produttive-in-sudafrica-a-supporto-del-fotovoltaico-e-dello-storage/ (Accessed 17 November 2021).
- Fodere. n.d. The Project. Fodere Titan. Available at: <https://foderegroup.com/the-project/> (Accessed 15 November 2021).
- Head, T. 2021. Drink up! SAB to pour R2 billion investment back into South Africa. The South African 8 June 2021. Available at: <https://www.thesouthafrican.com/news/finance/sab-sa-breweries-investment-south-africa-billions-how-much-no-alcohol-bans/> (Accessed 15 November 2021).
- Liedtke, S. 2021. Second-quarter GDP grew by 1.2%. Engineering News. 7 September 2021. Available at: <https://www.engineeringnews.co.za/article/second-quarter-gdp-grows-by-12-2021-09-07> (accessed 11.3.21).
- Mahindra. 2021a. Mahindra invests in skills development. Mahindra South Africa News. 19 April 2021. Available at: <https://mahindra.co.za/news/mahindra-invests-in-skills-development/> (Accessed 15 November 2021).
- Mahindra. 2021b. Mahindra opens new state-of-the-art warehouse in Linbro Park. Mahindra South Africa News. 8 April 2021. Available at: <https://mahindra.co.za/news/mahindra-opens-new-state-of-the-art-warehouse-in-linbro-park/> (Accessed 15 November 2021).
- Pan African Resources. 2021. Progress Report: Five Exciting ESG Milestones in 2021. Pan African in the News. 19 April 2021. Available at: <https://www.panafricanresources.com/2021/04/19/esg-milestones-in-2021/> (Accessed 15 November 2021).
- PubChem. n.d. Vanadium pentoxide. Available at: <https://pubchem.ncbi.nlm.nih.gov/compound/14814> (Accessed 9 November 2021).
- SARB. 2021a. South Africa’s international investment position – June 2021. South African Reserve Bank. Available at: <https://www.resbank.co.za/content/dam/sarb/publications/international-investment-position/2021/IIP%20internet%20summary%20-%20June%202021II.pdf> (Accessed 3 November 2021).

SARB. 2021b. Economic and financial statistics for South Africa – Last Update Period: 2021-06-30. South African Reserve Bank. Available at: <https://www.resbank.co.za/en/home/what-we-do/statistics/releases/economic-and-financial-data-for-south-africa> (Accessed 6 July 2021).

SARB. 2021c. Composite Business Cycle Indicators – June 2021. South African Reserve Bank. Available at: <https://www.resbank.co.za/en/home/publications/publication-detail-pages/composite-business-cycle-indicators/2021/CompositeBusinessCycleIndicatorsJune2021> (Accessed 2 November 2021).

SARB. 2021d. Composite business cycle indicators for South Africa – 20 April 2021. South African Reserve Bank. Available at: <https://www.resbank.co.za/content/dam/sarb/publications/composite-business-cycle-indicators/2021/april-/Composite%20Business%20Cycle%20Indicators%20Apr%202021.pdf>

SARB. 2021e. Composite business cycle indicators for South Africa - 25 May 2021. South African Reserve Bank. Available at: <https://www.resbank.co.za/content/dam/sarb/publications/composite-business-cycle-indicators/2021/Composite%20Business%20Cycle%20Indicators%20May%202021.pdf>

SARB. 2021f. Composite business cycle indicators for South Africa - 22 June 2021. South African Reserve Bank . Available at: <https://www.resbank.co.za/content/dam/sarb/publications/composite-business-cycle-indicators/2021/Composite%20Business%20Cycle%20Indicators%20June%202021.pdf>

SARB. 2019. Currency and Exchanges guidelines for business entities – 2019-07-18. South African Reserve Bank.

Scatec. 2021. Scatec awarded 540 MW solar plant with storage in a government tender in South Africa. Scatec Stock Exchange Notice. 1 June 2021. Available at: <https://scatec.com/2021/06/01/scatec-awarded-540-mw-solar-plant-with-storage-in-a-government-tender-in-south-africa/> (Accessed 15 November 2021).

Stats SA, 2021. Gross domestic product 2nd quarter 2021 7 September 2021. Media presentation. Statistics South Africa. Available at: [http://www.statssa.gov.za/publications/P0441/GDP%202021%20Q2%20\(Media%20presentation\).pdf](http://www.statssa.gov.za/publications/P0441/GDP%202021%20Q2%20(Media%20presentation).pdf) (accessed 3.11.21).

TIPS. 2021. The Real Economy Bulletin – Second Quarter 2021. Trade & Industrial Policy Strategies. Available at: <https://www.tips.org.za/manufacturing-data/the-real-economy-bulletin/quarterly-bulletin/item/4204-the-real-economy-bulletin-second-quarter-2021> (Accessed 11.2.21).

APPENDIX

Table 5. Investment-related metrics used in the analysis

METRIC	SOURCE	FREQUENCY	DESCRIPTION
Inward investment data	SARB	Quarterly	Inward investment is composed of direct investments, portfolio investments, financial derivatives, and other investments.
Gross fixed capital formation	Stats SA	Quarterly	GFCF is a component of GDP that groups transactions on the net acquisitions (acquisitions less disposals) of capital assets, both existing and new, by general government, private enterprises (i.e. private and quasi-corporations) and public corporations and in addition households and unincorporated enterprises.
Purchasing Managers' Index (PMI)	Absa/BER	Monthly	The survey is conducted by way of questionnaires to a panel of purchasing managers in the manufacturing sector. The questionnaire consists of nine questions on the monthly changes in business conditions in the manufacturing sector. Respondents indicate qualitatively whether a particular activity has increased, decreased or remained unchanged.
Leading indicator Index	SARB	Monthly	The leading indicator index aims to predict future economic activity. The index is based on job advertisements, building plans passed, interest rate spread, real M1 money supply, an index of commodity prices for export commodities, the composite leading business cycle indicator of South Africa's major trade partners, gross operating surplus as a percentage of GDP, the RMB/BER Business Confidence Index, the average number of hours worked per factory worker, the net balance of manufacturers observing an increase in the volume of domestic orders received, and the number of new passenger vehicles sold.