



TRADE & INDUSTRIAL POLICY STRATEGIES



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

FOREIGN DIRECT INVESTMENT TRACKER

FIRST AND SECOND QUARTERS 2020

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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.

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CONTENTS

FDI Projects, Q1 and Q2 2020.....	3
New FDI projects	3
Mining	3
Energy	5
Manufacturing and construction	6
Healthcare infrastructure	7
Updates	7
FDI Trends, Q1 and Q2 2020.....	8
Investment values	8
Investment stages	9
Investment type	10
Investment by location and industry	11
Investment by country of origin.....	14
Investment environment	15
Barriers and constraints.....	19
Credibility classification	20
Investment Profiles, Q1 and Q2 2020	23
References	47
Appendix.....	51
Figure 1: Value of FDI by location, R billion, Q1 and Q2, 2020	12
Figure 2: Value of FDI projects industry by sector, R billion, Q1 and Q2, 2020	13
Figure 3: Value of FDI projects by origin, R billion for Q1 and Q2, 2020	14
Figure 4: Value (R billions) and count of FDI projects by target market, Q1 and Q2, 2020.....	15
Figure 5: South Africa’s inward investment	16
Figure 6. Gross fixed capital formation (GFCF).....	17
Figure 7. Purchasing Managers’ Index (PMI).....	18
Figure 8. SARB leading indicator.....	19
Table 1: Investment stages	9
Table 2: Investment type.....	10
Table 3: Classification of project by credibility of investment pledge	20
Table 4: Project credibility grading.....	22
Table 5. Investment-related metrics used in the analysis.....	51

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, Q1 AND Q2 2020

This report presents investment projects captured in Q1 and Q2 of 2020. Q1 and Q2 have been combined mainly because of the low number of investment projects announced in Q1 2020, combined with general delays in the release of certain data, such as those which inform the investment environment analysis. This was anticipated when investment globally was impacted by the slowdown in economic activity as strict measures were implemented in response to the COVID-19 pandemic. A total of 35 projects were recorded over the two quarters, with 27 projects identified in Q1, and eight projects in Q2. Over half the number of investments captured over the two quarters were by three companies. The total pledged investment value is R43.8 billion from 30 projects. Tracking further captured 3 320 job opportunities from eight projects, seven of which are by one company representing 3 300 jobs. These jobs are likely a mix of permanent and temporary opportunities as the company did not explicitly distinguish jobs by this segmentation. In this period seven projects were upgraded.



New FDI projects

Investment in Q1 and Q2 2020 was dominated by mining projects by both number of projects and project value. Three firms – Menar, Anglo American Platinum (Amplats) and BioTherm – accounted for over half the projects. A number of renewable energy projects were also noted. These are mix of projects related to the Renewable Energy Independent Power Producer Programme (REIPPP) and more firms investing in sustainable technologies as they move away from a reliance on coal-based grid electricity. Investments also include projects that aim to support the South African government's efforts in response to the COVID-19 pandemic. Projects are grouped by sector for the purposes of project description.

Mining

Platinum Group Metals (PTM) plans to develop the Waterberg PGM mine, an underground platinum group metals resource for about US\$1.06 billion (R18 billion) (Arnoldi, 2020a; Arnoldi, 2020d; Mining Technology, n.d.). A definitive feasibility study was approved for the project in 2019 and the company was expected to be issued the mining right within Q1 2020 to begin project engineering. The Waterberg project is a joint venture led by the Canada-based Platinum Group (50%), Implats (15%), Japan Oil, Gas and Metals National Corporation (Jogmec) (12%), Hanwa (9.7%), and BBBBEE partners Mnombo Wethu Consultants (13%).

Kropz is developing the Elandsfontein mine in the Western Cape, which was initially commissioned in 2017. It stopped production soon after to improve the processing plant, and also because of a low phosphate price at the time (Kropz, n.d.; Mining Review Africa, 2020c; Odendaal, 2020). Kropz has spent about US\$120 million since 2010 to date on developing the project, with a significant portion spent on instituting green mining practices. Kropz still plans to invest US\$16 million – mostly on equipment – up to the first ore production. Kropz does not expect to be adversely affected by the lockdown as it is waiting for the Water Tribunal to reschedule a hearing into the water-use licence for the mine. The mine has been placed under care and maintenance until then.

Menar, which is Luxembourg-headquartered, completed the expansion of the Khanye colliery in Bronkhorstspuit (Gauteng) and the Phalanndwa colliery near Delmas (Mpumalanga). These investments total about R1 billion¹ (Creamer, 2019a; 2019b). Khanye is an opencast mine with 14-year life of mine remaining. The mine will produce 2.4 million tonnes of coal from 2020. Coal from the mine is washed and used predominantly for the export market. The next project for Khanye involves the relocation of a power line, which cuts through a section of one of the future opencast pits. The Phalanndwa Colliery is an opencast mine that has been operating since 2013. It has a 400 total petroleum hydrocarbon (tph) dense medium separation processing plant for beneficiation.

Menar also announced a pipeline of six new coal projects valued at about R5.9 million² with the potential to create 3 300 jobs (Canyon Coal, 2020). The R1.5 billion Palmietkuilen will be an opencast mine producing 600 000 tons a month of coal at steady state production with a life of mine of about 22 years, expected to be online from Q4 2020. The R600 million De Wittekrans project will be both an opencast and underground mine with an estimated life of mine of about 25 years based on a run-of-mine production of about 300 000 tons/month, expected to be operational from Q2 2020. After De Wittekrans and Palmietkuilen are developed, Menar plans to initiate the R500 million Witfontein underground mine, located northwest of Bethal (Mpumalanga) and the R1.5 billion Springfield project in Vereeniging (Gauteng) in 2021. Witfontein will be developed as an underground and opencast mine. The estimated life of mine is six years based on a run-of-mine production of about 150 000 tons a month. The quality of coal is for local consumption and the export market. The mining right, environmental authorisation, and water use licence applications have been submitted and are awaiting approval. The project has an estimated life of mine of about 36 years based on a run-of-mine production of about 600 000 t/m. Finally, Menar has entered into a development agreement with Coalvent and African Onca to develop the Riversdale Anthracite Colliery (RAC) project, near Vryheid (KwaZulu-Natal) (Arnoldi, 2018; 2020c). RAC will produce low-sulphur, medium-quality anthracite coal, with coal deposits estimated to be over nine million tonnes.

Kangra Coal announced plans to extend the life of mine of the Mpumalanga Savmore/Maquasa mining operation by more than 20 years for an undisclosed sum (Bulbulia, 2020; McKay, 2020). Kangra Coal operates the opencast and underground coal mining operation in Mpumalanga. Kangra is owned by Menar, which announced a major investment in seven coal projects during the first quarter 2020 mentioned above. In addition to the underground operation, the extension will include about six mini-opencast mines. Before the lockdown, the company was awaiting the approval and issuing of the necessary environmental licences. However, since the announcement, Kangra has been placed under care and maintenance due to low thermal coal prices attributed to low demand and market disruptions from the COVID-19 pandemic.

A concept study for the R1.025 billion expansion of the Tshipi Borwa mine has been completed (Iannucci, 2020; Jupiter Mines, n.d.; Mining Review Africa, 2020a). The opencast manganese mine is operated by Tshipi é Ntle Manganese Mining in the Northern Cape's Kalahari Manganese Field. Tshipi é Ntle is owned by Australian firm Jupiter Mines. A feasibility study is planned to follow, based on increasing the current annual production level of three million tonnes by 50 percent to 4.5 million tonnes a year. The company expects to complete the study and commercial process in a year. Through

¹ For purposes of the Tracker, R600 million is allocated to the Khanye investment, while the remaining R400 million is allocated to Phalanndwa. See https://www.miningweekly.com/article/powerline-relocation-only-major-project-left-at-khanye-2019-12-13/rep_id:3650

² In other media, Menar has quoted only an aggregated total of R7 billion and 5 600 job creation from the projects. However, the individual project data on investment values and employment creation is used for the purposes of the Tracker. See https://static1.squarespace.com/static/5950c4c03a04117eb4add981/t/5e381d736ce96b4a7963eba4/1580735963205/MaroonPost_Edition_005.pdf

a phased approach, Tshipi expects to reach exports of 4.5 million tons in three years, increasing ore exports in the second and third year.

Amplats plans to undertake a series of investments at operations in Limpopo (Anglo American Platinum Limited, 2020; Creamer, 2020). Amplats has thus far spent R89 million on studies exploring expansion opportunities for three projects.³ A pre-feasibility study is underway for the expansion of Mogalakwena mine to increase platinum group metals (PGM) production. Preliminary studies have identified several options to expand production, including investing in additional concentrator capacity, new technology to improve throughput and recoveries, and developing the underground resource to maximise long-term value. Amplats further plans to install a 75 megawatt (MW) solar power plant at the mine with the approval application in progress. A feasibility study is being undertaken for the Mototolo/Der Brochen replacement project where the Mototolo's Lebowa shaft would be replaced by establishing Der Brochen South. This replacement would use the current concentrator infrastructure, and is therefore planned to be a low-cost project. The study will further evaluate construction of a third concentrator. Amplats is further exploring a possible expansion of Mototolo/Der Brochen, and a pre-feasibility study is underway to see what new technology could be introduced to improve productivity. Measures to replace and grow production, through the use of new technology, are being explored.

Amplats is also planning to invest in five⁴ capital projects that it considers "low-capex, fast payback, high-margin capital" projects. Amplats has determined that these projects will contribute to expanding its EBITDA (earnings before interest, taxes, depreciation and amortisation) margin from 20% in 2018 to 25%-28% by 2023. These include the Modikwa chrome recovery plant, the modernisation of Amandelbult and mechanisation of Tumela 15E in Limpopo. Amandelbult will receive R1.3 billion towards modernisation, digitalisation and cycle mining. It will also include the ramp-up of the Dishaba section of the mine, improvement in PGM recovery and asset maintenance. Tumela 15E is a separate mechanised section of Mogalakwena mine, and R1.1 billion will be invested for further automation of this section of the mine. Amplats will invest R200 million in the Modikwa project. The firm will also undertake a copper debottlenecking project at the Rustenburg Base Metal Refinery in the North West valued at R700 million.

Energy

Anheuser-Busch InBev (AB InBev) is installing solar power facilities at seven major breweries in South Africa. The solar plants will produce around 8.7 MW of power, which accounts for seven percent of AB InBev's current electricity supply requirements (BusinessTech, 2020; Faku, 2020; Kew, 2020). Projects are in advanced stages of completion with 2.6 MW almost complete. AB InBev signed a Power Purchase Agreement with Sola Group, which is installing the facilities. AB InBev plans a further R12.4 billion investment in additional renewables capacity over a 20-year period. The company is also testing electric trucks to mitigate emissions associated with logistics and transport.

Scatec Solar completed the development of a solar photovoltaic (PV) complex in Upington in the Northern Cape province. The complex comprises three solar plants Dyason's Klip 1, Dyason's Klip 2 & Sirius PV (Scatec Solar 2018; 2020a; 2020b). Scatec Solar and its partners invested approximately R4.76 billion in the project. The solar plants have a combined 258 MW capacity and they are in commercial operation. Each plant has a capacity of 86 MW and an expected power

³ In the Tracker analysis the R89 million is divided equally between the three projects, amounting to R29.7 million a project.

⁴ The fifth project is at the firm's Unki Platinum Mine in Zimbabwe

production of 217 gigawatts per hour (GWh). The projects were awarded to Scatec in the fourth round of REIPPP in 2015.

BioTherm Energy, which is owned by Actis based in the United Kingdom, is developing four renewable energy projects for about US\$116 million (R1.9 billion) (Construction Review Online, 2020). The projects consist of the following: the 86 MW Konkoonsies II solar photovoltaic (PV) power plant and 46 MW Aggeneys solar PV plant in Northern Cape; the 120 MW Golden Valley wind farm in the Eastern Cape; and the 32.5 MW Excelsior wind farm in the Western Cape. Investment tranches total US\$46.9 million for the Aggeneys and Konkoonsies II plants, and US\$68.9 million for the two wind power plants of Golden Valley and Excelsior. The projects are funded through the Multilateral Investment Guarantee Agency, a World Bank subsidiary.

Hyundai Automotive South Africa completed the installation of a R3 million solar energy system at the company's parts distribution in Ekurhuleni (Venter, 2020a; South Coast Herald, 2020). The investment is an effort to reduce downtime due to loadshedding, in addition to savings electricity costs in the long term, and environmental concerns. Hyundai has sought to move away from diesel consumption during loadshedding and aims to save R500 000 on electricity costs in the first year of solar substitution alone.

Multotec, a mineral processing original equipment manufacturer, has installed solar PV systems at its moulding facility in Johannesburg (Cape Business News, 2020; International Mining, 2020; Mining Review Africa, 2020b). This comprises 648 solar PV panels totalling 223kW of energy that will provide about 20% of daily energy requirements. Multotec is a subsidiary and part of the group of companies that comprise Siebtechnik GmbH, a German company that manufactures specialised industrial machinery and equipment. Given that the system has no storage, during the weekends when excess supply is available, the energy is fed into the municipality grid system at no cost to the municipality.

Manufacturing and construction

Toyota Motors South Africa has started constructing the Atlas parts warehouse in Gauteng. The R365 million expansion of the facility will double the size of the warehouse from 40 000m² to 80 000m² (Droppa, 2020). Once complete it will have the capacity to support more than 250 dealerships in the Southern African region, as well as 70 international destinations where South African-built Toyota models are exported. Toyota is further investing R91 million to increase production of the Hiace Ses'fikile minibus taxi. The investment builds on the recent upgrades of the Prospecton production facility to expand local production of the Hiace. Output will increase from 14 000 to 18 000 units a year.

Astron Energy, a subsidiary of Glencore, completed upgrades for R400 million to its Milnerton refinery in response to the new International Maritime Organization (IMO) regulations on very low sulphur fuel oil (VLSFO) (Astron Energy, 2020; Arnoldi, 2020c). The VLSFO has a sulphur content of 0.5 percent from the previous levels of 3.5 percent. The Milnerton refinery also produces petrol, diesel, jet fuel, liquid petroleum gas and other speciality products.

BMW South Africa announced plans to build a new school in the township of Ga-Rankuwa, Pretoria near the BMW Rosslyn manufacturing plant. Construction of the US\$6.6 million (R113 million) school is expected to start in 2021 (Nica, 2020; Furlonger, 2020). It will accommodate 1 600 pupils, covering grade R foundation phase to grade 12. BMW already offers employees' children a pre-primary, early learning centre, as well as graduate and training programmes for staff. The school will be an extension of the existing institutions and programmes.

Bosal Afrika opened a new emissions control systems manufacturing plant for R25 million. The 18 000 square metre plant produces exhausts, heat exchangers, silencers and manifolds for passenger

cars and commercial vehicles (Engineering News, 2020; Arnoldi, 2020b). The plant supplies major original equipment manufacturers such as Ford, Nissan, Isuzu and Volkswagen.

German chemical company BASF launched the new Tri-Metal Catalyst, a technology that enables partial substitution of palladium with platinum in light-duty gasoline vehicles (BASF, 2020). It was developed in collaboration with Sibanye-Stillwater and Impala Platinum as co-investors. The catalyst was developed with the intention of creating certainty of supply and potential reduction in costs for customers.

Mahindra South Africa has opened a new specialist fitment centre in Gauteng. It was established to enable the introduction of special edition models that are designed and tested locally (Group 1 Mahindra, 2020). The company further intends to source parts from local suppliers. The facility includes four dedicated fitment lines and employs 20 technical specialists. The value of this investment was not reported.

Healthcare infrastructure

BMW and the German government have committed to investing R76 million in the upgrading of eight South African hospitals and four clinics in Gauteng, North West and Limpopo to support the COVID-19 response (Venter, 2020b). The support consists of increasing bed capacity at Dr George Mukhari Hospital in Soshanguve, and in Bronkhorstspuit. Clinics will be supported through the supply of face masks, disinfectant and other personal protection equipment. BMW has also provided a fully equipped ambulance and cars for transporting patients to the various hospitals in the region. The project also aims to provide 320 000 medical-grade N95 masks to South Africa.

Volkswagen South Africa (VWSA) has converted an old parts facility owned by the company into a COVID-19 field hospital in the Eastern Cape. The investment is in partnership with the German Federal Ministry for Economic Cooperation and Development (Bottomley, 2020; Ellis, 2020; VW, n.d.). The partners invested a combined €6.5 million (R124 million) in the initiative. Phase one has been completed with 1 485 beds installed. The plant spans 66 000 square metres with the capacity to accommodate 3 300 patients once fully equipped and operational, including 800 beds for patients that require oxygenation. The investment also includes procurement of protective gear for staff at regional tertiary hospitals, regional Primary Care Clinics and COVID-19 test centres. Moreover, €600 000 (R11 million) of this funding will also be used to support the National Health Laboratory Service branch in Port Elizabeth.

Updates

Google has taken the decision to cease the Google Station initiative, which was a free public Wi-Fi offering. The initiative was launched in South Africa across 125 locations in the City of Cape Town in partnership with Think WiFi, a local internet service provider. Google will be transferring the station operations in South Africa to Think WiFi, which will independently manage and rebrand the project. Google will provide support to Think WiFi through the transition until the end of 2020.

WeWork's Cape Town location is operating after the investment was announced in 2019. WeWork offers workspace solutions for various types of enterprises, with other locations in Rosebank and Sandton. Globally, the company has been experiencing increasing financial challenges since it filed papers for an initial public offering in August 2019. In addition to empty office spaces and closures, employees in some locations have been retrenched. Events will be monitored as they unfold in relation to any impact on the South African operations.

Saudi Aramco has selected Richards Bay as the location for the planned US\$10 billion (R138 billion) crude oil refinery and petrochemical plant. When the project was initially announced it had not specified a location, only indicating that it would be choosing between Coega in the Eastern Cape and Richards Bay in Kwa-Zulu Natal. Saudi Aramco and the Central Energy Fund have also started working on a pre-feasibility study.

Construction at Rio Tinto's Richard Bay Minerals (RBM) R6.5 billion Zulti South project was paused when operations at RBM's mine were halted at the end of 2019. The shutdown was preceded by escalating tensions in the surrounding communities, which, while not related to the company, caused disruptions. Following an intervention by provincial authorities and a three-week shutdown, operations were being phased in at the beginning of 2020. The resumption of the Zulti South expansion project will be reviewed as operations normalise.

Orion Minerals Prieska copper/zinc project in the Northern Cape has progressed. The company was granted an environmental authorisation for the Vardocube resource in the southeast extension of the Prieska orebody. Prior to this, in 2019, a mining right was granted for a bulk of the Prieska resource. The Vardocube environmental authorisation represents a move towards securing a mining right for the southeastern extension of the ore deposit. The investment for the project comes to approximately a\$378 million (R4.4 billion). Orion Minerals had R4 billion mining right approved by the Department of Mineral Resources and Energy (DMRE) in Q4 2019 for the Prieska mine project, which is a copper-zinc mine in the Northern Cape.

Amazon Web Services (AWS) has officially launched and opened the AWS Africa Region based in Cape Town. The addition of the AWS Africa Region will enable organisations to provide lower latency to end users across Sub-Saharan Africa, and will enable more African organisations to leverage advanced technologies such as Artificial Intelligence, Machine Learning, the Internet of Things (IoT), and mobile services. The expansion allows customers to run applications and store content in South African-based data centres. Amazon also announced that the company would be hiring 3 000 people in South Africa to serve customers in North America and Europe. The personnel will be home-based and provide customer services and technical expertise support.

Since the Ivanplats Platreef project in Limpopo was added to the Tracker the development of the mine has progressed. The Platreef project consists of the Flatreef underground deposit, which contains platinum group metals, nickel, copper and gold resources. Ivanplats has completed the sinking of Shaft 1 to a depth of 996 metres below surface. The development of three primary mining access level stations have been completed, while the construction of the level station at the bottom of the shaft was expected to be complete by the end of July 2020. Ivanplats parent company Ivanhoe is further updating the 2017 Platreef project feasibility study to account for developments in relation to costs, metal prices, foreign exchange assumptions and the mines development schedule. Simultaneously, the company is finalising a Preliminary Economic Assessment for the three-phased production plan to develop the mine and associated infrastructure.

FDI TRENDS, Q1 AND Q2 2020

Investment values

Nine projects identified in this period have values that exceed R1 billion, which account for about 84% of the total investment value. These projects are largely mining investments, with the exception being the renewable energy projects by AB Inbev and Scatec Solar. The most substantial project in terms of value is the Platinum Group Metals (PTM) R18 billion Waterberg Bushveld Igneous Complex project which captures 41% of the total pledged investment value. This is followed by Ab Inbev and

Scatec Solar projects valued at R5.6 billion and R4.8 billion, respectively. Other sizeable investments include projects within Menar and Amplats pipelines, with two projects each above R1 billion. The other mining projects included in this bracket are Kropz's R1.9 billion Elandsfontein phosphate mine and Jupiter Mines R1.03 billion mine expansion.

The Tracker captured seven projects valued between R0.5 billion and R1 billion. They make up approximately 11% of the total investment value, or R4.6 billion in total. The largest of these pledges is one of Menar's coal projects, the R1 billion Witfontein underground mine. BioTherm has three renewable energy projects in this range, the R944 million Golden Valley wind farm and the Aggeneys and Konkoosies II solar PV plants that combined contribute R782 million. These are followed by a R700 million investment in the Rustenburg Base Metals Refinery (RBMR), one of Amplats capital projects. Other projects captured in this investment bracket include two additional Menar coal projects: De Wittekrans mine and Khanye Colliery, both valued at R600 million.

The majority of projects captured in this period are valued below half a billion, with 15 projects constituting close to 6% of the total investment value. Eight of these projects have values between R500 million and R100 million while seven are below R100 million. Astron Energy's refinery investment and Menar's Phalann dwa colliery expansion are the largest of these projects, individually valued at R400 million. These are followed by Toyota's warehouse expansion and Menar's Riversdale anthracite colliery project valued at R365 million and R300 million, respectively. Also included are BioTherm's Excelsior wind farm (R256 million); Amplats' Mogalakwena expansion project (R200 million); VWSA's COVID-19 field hospital (R124 million) and BMW's Ga-Rankuwa school investment (R113 million).

The seven pledges valued below R100 million account for just below 1% of the total investment value. These are led by Toyota's R91 million investment to increase output of the Toyota Hiace followed by BMW's R82 million initiative to support action against the COVID-19 pandemic. At about R29 million per project, Amplats has invested a total of R89 million in studies for three projects: Mototolo/Der Brochen replacement and expansion projects and the Modikwa Chrome recovery project. Bosal's R 25 million emission control system and Hyundai's R3 million solar energy investment round out investments in this bracket. Investment values were not available for projects by four investors: Menar (Kangra coal mine expansion), Multotec, Mahindra, and the BASF/Sibanye/Impala investment.

Investment stages

Table 1: Investment stages

Stage	Value (R billion)	Number
Announced	3.4	7
Pre-feasibility	1.1	3
Feasibility	23	8
Construction/Implementation	9.8	7
Complete	6.3	10
Total	43.8	35

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

Announced projects consisted chiefly of investments by Menar, which has four coal projects captured at this stage. Three of these projects (excluding the Kangra mine expansion) comprise 92% or approximately R3.1 billion of the total value. BMW announced two projects, including a R11 million to build a school and R82 million to upgrade hospitals and clinics in South Africa. Also among these projects is Toyota's plans to increase output of the Hiace with a R91 million investment.

Three pre-feasibility projects were captured in the analysis. The single largest project was the Tshipi Borwa manganese mine. The other investments at pre-feasibility comprise two projects within

Amplats' collection of capital investments - the studies for the expansions of two mines Mogalakwena and Mototolo/Der Brochen, accounting for approximately R59 million.

Projects at the feasibility stage account for the highest investment value with R23 billion from eight projects which constitutes 52% of the total investment value. The largest commitment was the R18 billion Waterberg Bushveld Igneous Complex PGM project. The projects at this stage largely consist of Amplats' capital projects (five out of 8), contributing a total of R3.3 billion. Also at the feasibility stage are two of Menar's projects – the Riversdale Anthracite Colliery (R1.5 billion) and the Palmietkuilen opencast thermal coal mine (R300 million).

Seven projects were identified as under construction or at the implementation stage and these totalled R9.8 billion. These were identified during the second quarter with the easing of lockdown regulations. Ab Inbev's solar energy investment is the largest project at this stage, accounting for R5.6 billion. BioTherm has four renewable projects under construction which collectively account for R2 billion. Also included is the construction of Toyota's Atlas parts warehouse valued at R365 million.

Complete projects account for the highest number of projects and contribute R6.3 billion to the total investment value. These projects are dominated by Scatec Solar's R 4.8 billion development of the Dyason's Klip 1, Dyason's Klip 2 and Sirius solar PV complex. Menar also completed two projects, the Khanye colliery and the Phalanndwa colliery, which total approximately R1 billion. These projects also comprise Astron Energy's R400 million refinery upgrade, VWWSA's R124 million investment in a COVID-19 medical facility and Hyundai's R3 million solar energy system. Three projects at this stage did not have reported values – Mahindra's fitment centre; the Bosal emissions control system; and the BASF/Impala/Sibanye's catalyst project. With exception of VWWSA's initiative, most complete projects were identified in the first quarter of the year.

Investment type

Table 2: Investment type

Type	Value (R billion)	Number
Greenfield	35.5	14
Upgrade	3.7	9
Expansion	2.7	9
Brownfield	1.8	3
Total	43.8	35

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

Analysing projects by investment type revealed that greenfield projects overwhelmingly had the highest investment value (R35.4 billion), and number of projects (14 projects) across the two quarters. PTM's R18 billion Waterberg Bushveld Igneous Complex is the single largest greenfield project captured in this period. Other significant greenfield investments include Scatec Solar and AB Inbev's renewable energy projects valued at R5.6 billion and 4.8 billion, respectively. Notably, investment by two companies, Menar and BioTherm, represent half of the number of greenfield projects. Menar's investments account for a collective R3.1 billion while BioTherm's projects amount to about R2 billion. Other greenfield projects that contribute to the value include Kropz's R1.9 billion phosphate mine and BMW's R113 million school development.

Nine upgrade projects were recorded in Q1 and Q2 2020. This was dominated by Amplats with the three projects that account for a total R3.1 billion. The largest of these is a R1.3 billion project to modernise the Amandelbult mine. This is followed by five smaller upgrades that contributed a combined R634 million. This includes Astron Energy's R400 million Milnerton refinery upgrade and the R124 million Bosal Emissions control system.

Nine expansion projects were recorded in Q1 and Q2 2020. Menar and Amplats had three expansion projects each, Toyota had two, and the largest expansion is the Jupiter Mines R1.03 billion investment in the Tshipi Borwa manganese mine. The combined value of Menar's expansion projects was R1 billion (from two projects) and about R259 million for Amplats' capital projects. Toyota's warehouse expansion and the Hiace investment together amount to R456 million.

Brownfield projects contributed the lowest investment value (R1.8 billion) and had the least number of projects. Two of these are Menar coal projects, encompassing the development of the R1.5 billion Palmietkuilen mine and the R300 million Riversdale Anthracite colliery. They also include the R29.7 million Amplats study for the Mototolo/Der Brochen replacement project.

Investment by location and industry

Figure 1 shows projects by location and industry, indicating a concentration in the mining and utilities industries in Q1 and Q2 2020. The mining investments were attributable to Menar's coal projects pipeline and the Amplats capital and expansion investments. Two locations alone are recipients of close to 60% of the projects captured in this period. Ab Inbev⁵, BMW⁶, and BioTherm Energy⁷ have projects across multiple sites, however, the companies have not specified how the investment value will be allocated geographically.

Limpopo has the highest investment value with nine projects contributing R21.5 billion. The bulk of the investment value was accounted for by PTM's R18 billion Waterberg PGM mine project. Amplats' mining investments account for the greatest number of projects in the province, with six projects that account for R2.7 billion. Other than mining, the province gains from investments in the utilities and service industries – AB Inbev's investment in a solar power plant at the Polokwane brewery and the BMW investment for the COVID-19 response. The projects will each contribute about R800 million and R27 million to the province, respectively.

The Northern Cape recorded the second-highest investment value, capturing R6.6 billion from four projects. Utilities dominate investment in the province accounting for R5.6 billion, a result of three solar PV projects. The largest project is Scatec Solar's R4.8 billion Dyason's Klip 1, Dyason's Klip 2 and Sirius solar PV complex. BioTherm's two solar power plants, Aggeneys and Konkoosies II, account for the remaining solar projects, accounting for R283 million and R529 million, respectively. The Jupiter Mines/Tshipi e Ntle R1.03 billion manganese project contributes to the province's mining industry.

Gauteng follows as the next investment province with R6.5 billion from nine of the eleven projects identified. The province is the recipient of the highest number of projects in the period of analysis. It further showed greater industry variation compared to other provinces, with projects across five industries. Mining registered the largest investment from three projects by Menar – the Khanye colliery, Palmietkuilen thermal coal mine and Springfield open-cast mine collectively accounting for R3.6 billion. This was followed by utilities, with three projects led by AB Inbev, which is installing solar power at three breweries in the province for approximately R2.4 billion. Hyundai's R3 million solar system and Multotec's project constitute the other investments in utilities. Two projects were noted in manufacturing, the R25 million Bosal emissions control system and Mahindra's fitment centre (no

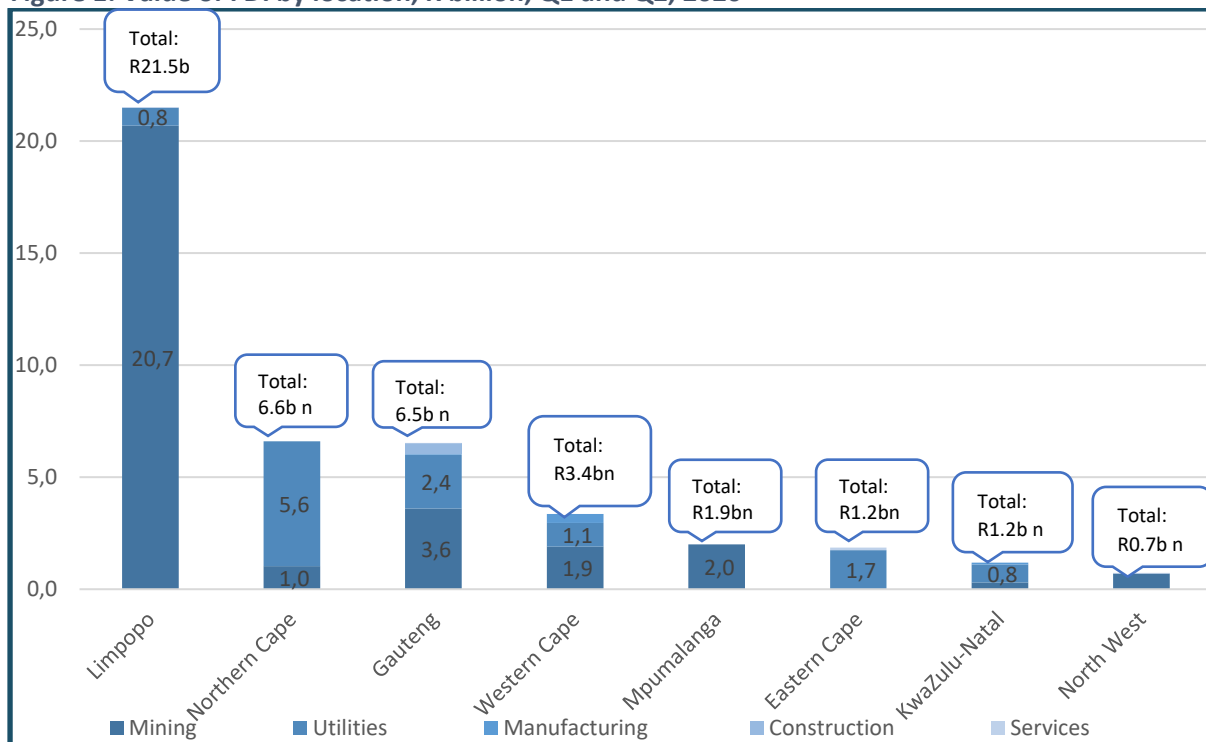
⁵ AB Inbev's total investment value is R5.6 billion. Solar power plants will be installed in seven breweries. The value has been distributed equally across these locations. This translates to approximately R800 million at each brewery.

⁶ BMW is investing R82 million to upgrade hospitals in three provinces, Limpopo, Gauteng and the North West. The value has been equally allocated across these locations. This is an estimated R27 million in each province.

⁷ BioTherm's US\$116 million (R2 billion) renewable energy projects are being rolled-out in three provinces with a total of four projects – Northern Cape (two projects), Western Cape and Eastern Cape. The value for each project is calculated proportionate to the size of each facility in terms of megawatt capacity.

reported value). Toyota’s R365 million warehouse expansion, and the R113 million school by BMW are both construction projects. BMW further contributed to services in the province with an estimated R27 million in healthcare investments for the COVID-19 response.

Figure 1: Value of FDI by location, R billion, Q1 and Q2, 2020



Source: TIPS FDI Tracker project data.

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

Four projects were identified in the Western Cape for a total of R3.4 billion. The value mainly comprises a Kropz R1.9 billion mining investment towards a phosphate mine. The province also hosts one of AB Inbev’s breweries earmarked for a R800 million solar project. This contributes to utilities in the province alongside BioTherm’s R254 million Excelsior wind facility. Astron Energy’s R400 million investment at the company’s Milnerton refinery was the only manufacturing project in the province.

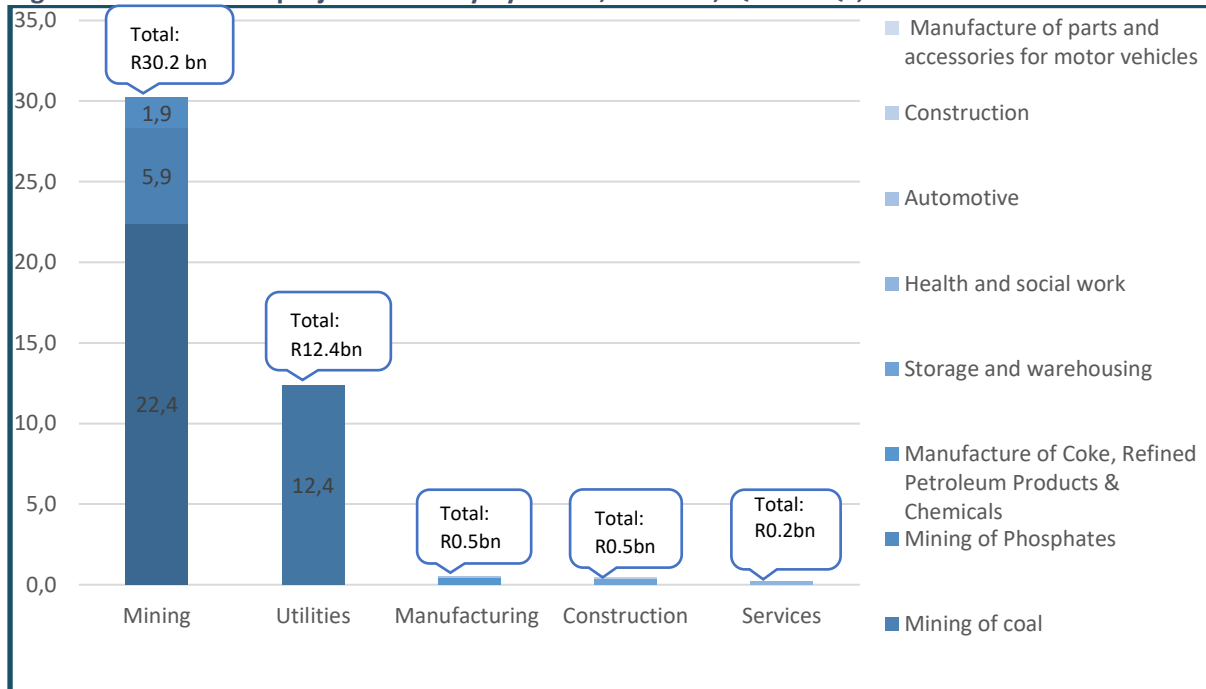
Four projects were captured in Mpumalanga, amounting to R2 billion. The investment in the province is attributed to a single firm, Menar. The company pledged R600 million to develop the Witfontein underground mine and R600 million towards the Witfontein underground mine. Menar also completed a R400 million extension of the Phalaandwa colliery and planned to expand Kangra coal mine for an undisclosed amount.

Eastern Cape also gained four projects with a total R1.9 billion pledged value. These investments were in utilities, services and manufacturing. BioTherm’s R939 million Golden Valley wind farm was the largest pledge and together with AB Inbev’s R 800 million solar projects constitutes the investment in utilities. In services, the R124 million medical facility by the VWSA COVID-19 joint initiative with the German government was the only investment. Manufacturing entails a joint investment by BASF, Impala and Sibanye to develop a tri-metal catalyst for a value that was not disclosed.

Three projects in KwaZulu-Natal account for the R1.2 billion investment in three industries. The investment in utilities is attributed to AB Inbev’s renewable energy project for around R800 million. Menar committed R300 million to develop the Riversdale Anthracite Colliery to the benefit of the mining industry. Toyota plans to increase output of the Hiace with a R91 million investment contributing to manufacturing in the province. Across quarters 1 and 2, North West had the lowest

investment value and number of projects. Two projects in mining and services comprise the R727 million investment value. The mining project was the Amplats R700 million capital investment in the RBMR. The province is also a beneficiary of the BMW-German government joint healthcare initiative which entails the R27 million investment in services.

Figure 2: Value of FDI projects industry by sector, R billion, Q1 and Q2, 2020



Source: TIPS FDI Tracker project data.

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

Figure 2 indicates the distribution of projects by subsector, within their respective industries. In the Q1 and Q2 period projects were spread across 10 subsectors. There was substantial investment in mining, which registered the highest value of R30.2 billion from 18 projects. Mining projects make up just over half of the number of investments recorded. These are concentrated in two subsectors, mining of metal ores and mining of coal. Metal ores recorded the highest value with R22.4 billion from nine projects. The largest commitment was PTM’s R18 billion project. Amplats bolsters the numbers with six projects that contributed a total R3.4 billion. These projects also include the R1.9 billion Jupiter Mine investment. The R5.9 billion in the coal subsector comprises seven⁸ of Menar’s projects. Mining also comprises the mining of phosphates represented by Kropz’s R1.9 billion investment in the Elandsfontein mine.

Utilities consists of eight renewable energy projects with a total R12.4 billion investment from seven projects. The largest of these is Ab Inbev’s R5.6 billion solar power investment, followed by Scatec Solar’s R4.8 billion solar PV project. BioTherm is the main contributor in project numbers, with four projects for a total R2 billion investment. Other projects included are Hyundai’s R3 million investment and Multotec’s projects for an undisclosed amount.

Manufacturing is typically observed among leading⁹ industries in the Tracker. Over the two quarters considerably less activity was noted in manufacturing with R500 million from four projects in two subsectors. The largest project was in the manufacture of coke, refined petroleum products and

⁸ Eight projects were recorded, however, a value was not available for the Kangra coal expansion project.

⁹ In Q1 2019 manufacturing had the highest value of pledged investment with R139 billion. It also has the most projects with eight investments. In Q2 2019, while there were only two projects, a value of R4.3 billion was recorded.

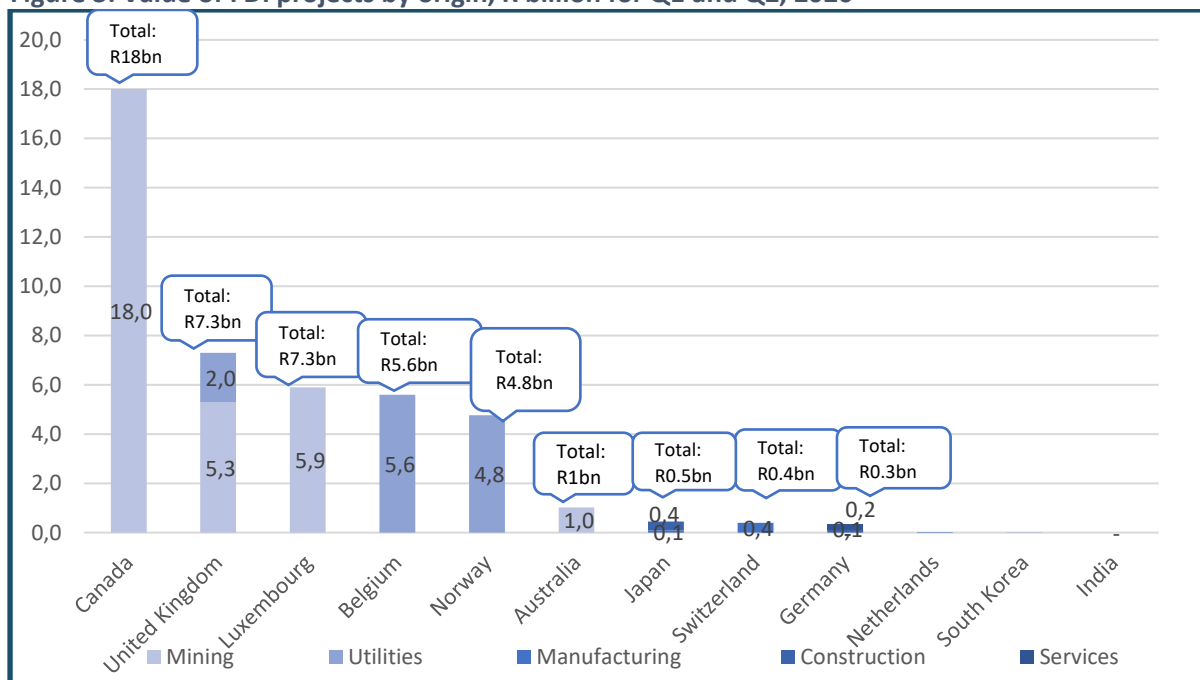
chemicals, contributing R400 million from the project by Astron Energy. Automotives has the highest number of projects in manufacturing with three projects. The reported value for the subsector comes from Toyota’s R91 million project. The other projects are by Mahindra and Bosal, and the BASF/Impala/Sibanye investment.

Construction comprises two projects in two subsectors. The R478 million investment is in warehousing and storage, and construction of other buildings. Toyota’s R365 million project comprises warehousing and storage while the R113 million for construction of other buildings is from BMW’s school project. Services has the lowest value in this period contributing R206 million to the total investment value, from two projects in the healthcare and social work subsector. These entail VWSA’s R124 million project and the BMW-German government R82 million pledge.

Investment by country of origin

Figure 3 distinguishes investment by country of origin and sector. The highest investment value from a single country is from Canada with an R18 billion project the Waterberg Bushveld Igneous Complex PGM project. Europe continues to be a source of significant investment for the country. The total investment value from the region is R24.3 billion and 29 projects were captured from seven countries. The largest investor is the United Kingdom (UK) which has 12 projects contributing R7.3 billion. This is mainly attributed to the pool of Amplats projects (R3.4 billion) and BioTherm’s R2 billion renewables projects. The other investment from the UK is a R1.9 billion mining project by Kropz. Luxembourg is represented for a second time in the Tracker by Menar through a R5.9 billion investment. Other sizeable pledges include sustainability projects by Belgium based Ab Inbev (R5.6 billion) and a R4.8 billion project by Scatec Solar from Norway. Countries with investment values on the lower end include Switzerland with Astron Energy’s R400 million investment and Germany, which has three of five investments that amount to R319 million. German investors include BMW with two projects that amount to R195 million and VWSA’s R124 million initiative. Netherlands was represented by one project – the R25 million Bosal emissions control system.

Figure 3: Value of FDI projects by origin, R billion for Q1 and Q2, 2020



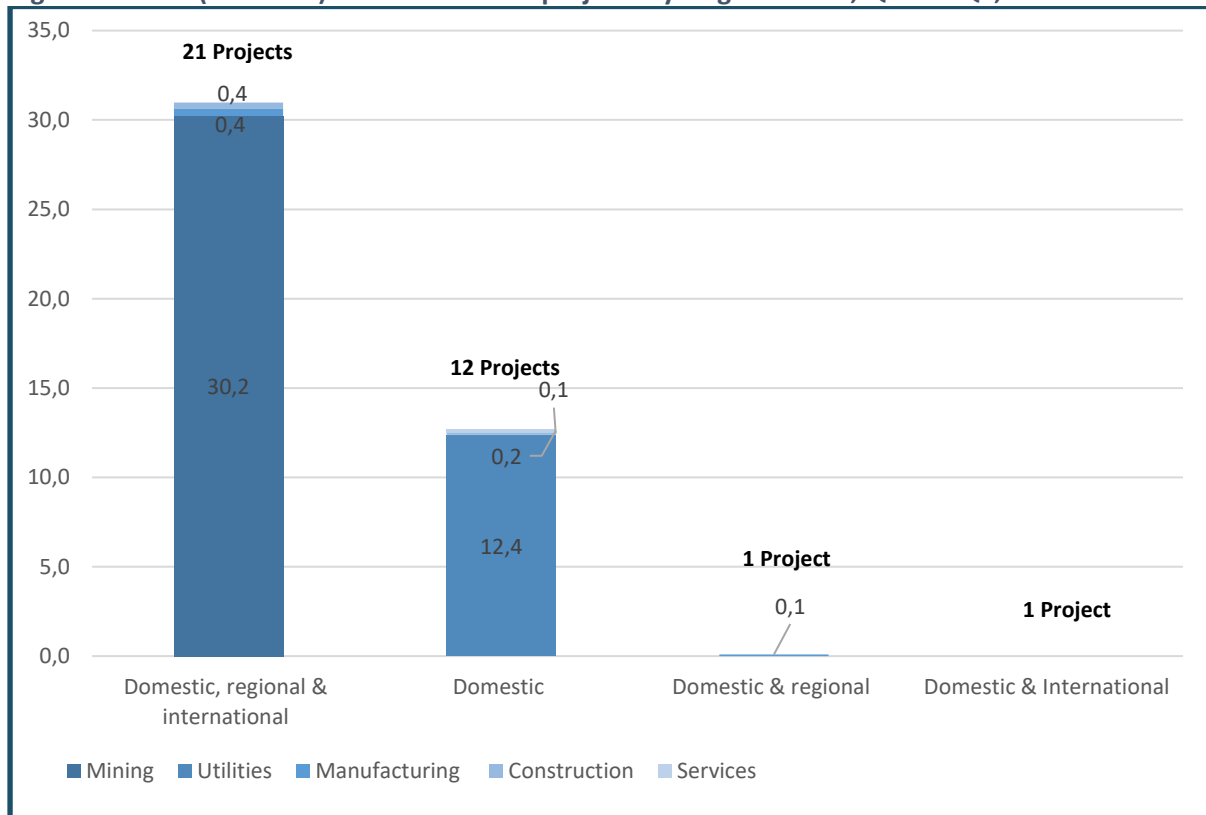
Source: TIPS FDI Tracker project data.

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

Projects also include an investment from Australia – the R1.03 billion Jupiter Mine/Tshipi e Ntle expansion of a manganese mine, captured in Q1 2020. Monitoring further identified four projects from three Asian countries. Projects noted from Japan comprise two Toyota projects that account for a R456 million investment value. Hyundai’s R3 million solar system represents investment from South Korea. The other project captured from the region is Mahindra’s fitment centre for a sum that was not disclosed.

The categorisation of projects by target market is depicted in Figure 4. It shows that the majority of projects target the domestic, regional and international market. This segment consists of 21 projects that cover three industries comprising mining, manufacturing and construction.¹⁰ Within this market segment, mining dominates in value (R30.2 billion) and the number of investments with 19 projects recorded in the industry.

Figure 4: Value (R billions) and count of FDI projects by target market, Q1 and Q2, 2020



Source: TIPS FDI Tracker project data.

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

Investment environment

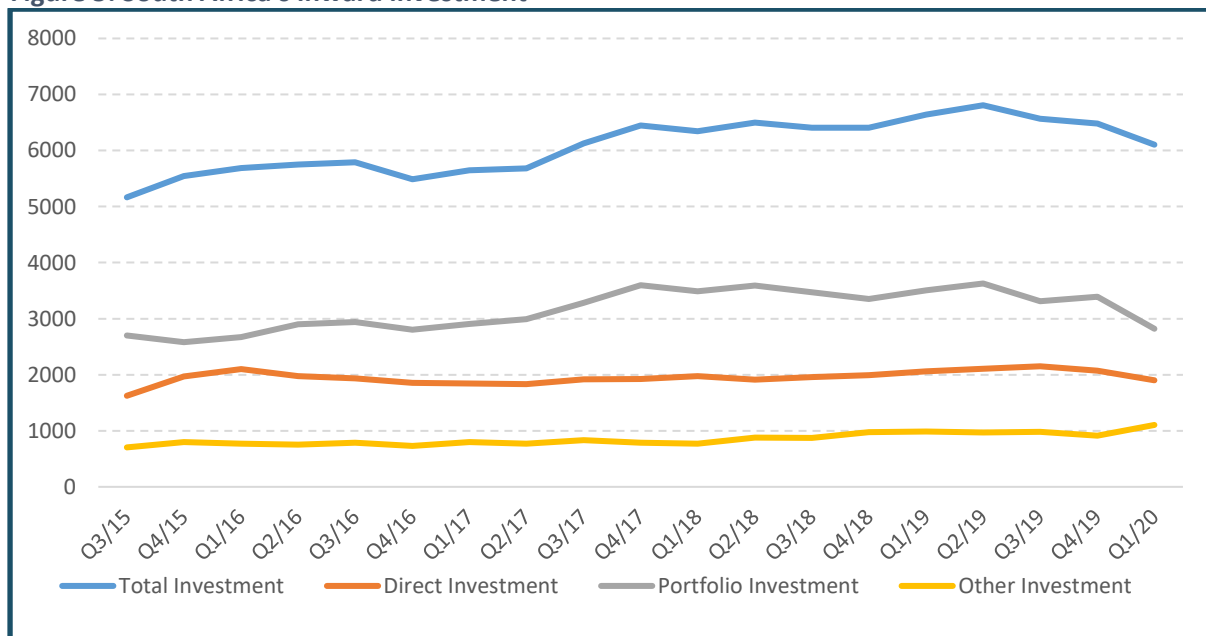
A recent addition to the FDI Tracker is the analysis of the domestic investment environment. This analysis provides insight into the general environment in which investments are being made. This is important for the following reasons. First, metrics that measure investment indicate the extent to which pledged investments materialise into actual investments. Such metrics assist in tracking the success of government investment drives. Further, analysing the investment environment provides a glimpse into investor sentiment on growth prospects in the economy. Increased levels of foreign investment send a signal to other global players, and contribute to greater levels of gross fixed capital

¹⁰ Toyota is building a parts warehouse that will serve the southern African region and support the company’s international exports market for SA-built Toyota models.

formation (GFCF). With the President’s Investment Conference held at the end of 2018, it is important from a policy point of view to monitor whether the pledges made at that event are materialising 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 recorded by the South African Reserve Bank (SARB) decreased from a revised R6 480 billion at the end of December 2019 to R6 103 billion at the end of March 2020, a decline of 5.8% between Q4 2019 and Q1 2020. The declines in inward investment were attributable to declines in direct and portfolio investments. Portfolio investments declined due to a combination of factors. The FTSE/JSE All-share index decreased by 22.1% in Q1 2020 which contributed to the decline (SARB, 2020a). Further, non-residents disposed of domestically issued debt securities, while the market value of these securities declined as bond yields increased significantly during Q1 2020. In addition, the South African government redeemed an international bond to the value of US\$1.6 billion. Financial derivatives and other investment increased between Q4 2019 and Q1 2020.

Figure 5: South Africa’s inward investment



Source: TIPS, based on South Africa’s international investment position data by SARB, 2020b.

Direct investment,¹¹ which is relevant to the FDI measured in this Tracker, as measured by the South African Reserve Bank (SARB) decreased from R2 070 billion to R1 903 billion between the Q4 2019 and Q1 2020, representing a decrease of 8%. Compared to the first quarter of 2019, direct investment was about 8% lower than the year before. Portfolio investments decreased from R3 390 billion to R2 823 billion between Q4 2019 and Q1 2020, decreasing by 17%. Other investments increased by 21%, increasing from R911 billion to R1 104 billion.

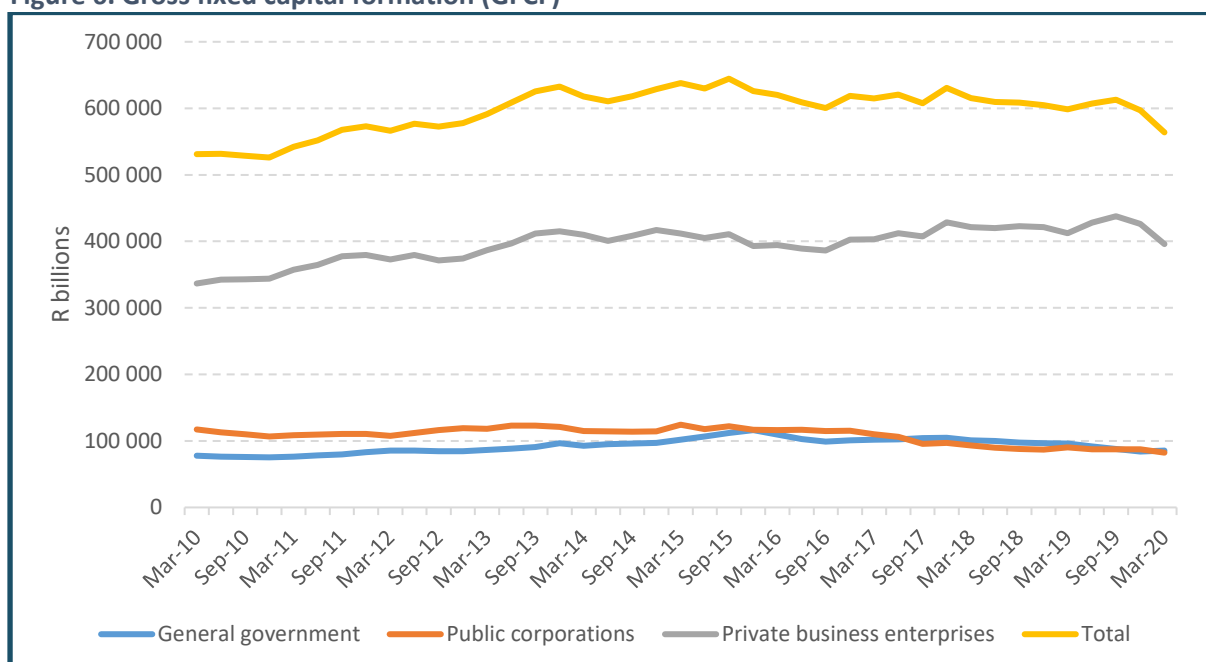
Stats SA calculates GFCF as part of the expenditure component of gross domestic product (GDP). The metric is an important measure of overall investment in the economy. It includes money spent on improvements to land, equipment purchases, and road and building construction. This decline in

¹¹ 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). (See SARB, 2019a).

direct investment was also reflected in total GFCF, which declined by 20.5% between Q4 2019 and Q1 2020, in constant 2010 prices, seasonally adjusted and annualised. This decline was the largest decline of the expenditure-side components of the GDP calculation for the quarter.

The dramatic decline in GFCF noted in Q1 2020 was in the same range seen during the 2007/08 global financial crisis (27%) (IOL, 2020b). The decline is in both government and private sector; the government austerity measures along with the ongoing economic stagnation in South Africa is evident in the lower rates of investment by both domestic and international investors. Uncertainty about South Africa’s policy environment is an oft-cited constraint. Further, there is no indication of an improvement in investment conditions with continuing challenges related to electricity supply, and the global slowdown in demand due to COVID-19.

Figure 6. Gross fixed capital formation (GFCF)



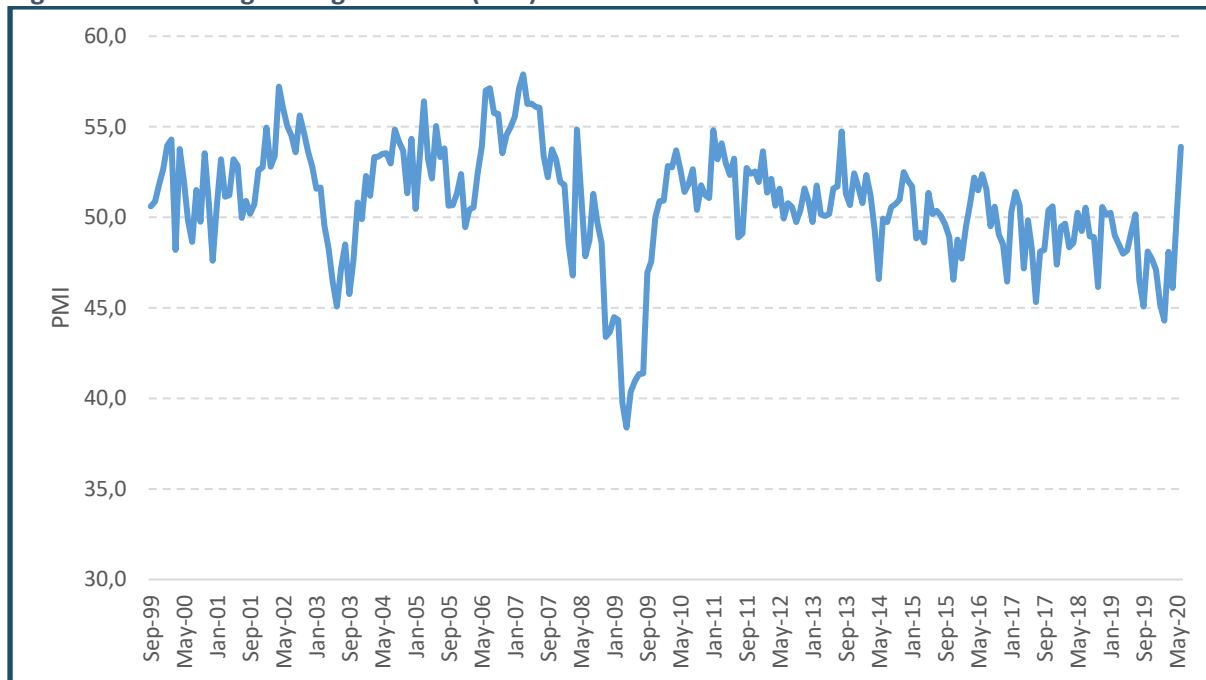
Source: TIPS, based on StatsSA, 2020a.

Notes: Values are on a constant 2010 prices, seasonally-adjusted, and annualised basis.

According to Stats SA, the main contributors to the decrease in GFCF were in transport equipment (45%), other assets (38%), and machinery and equipment (27%) (StatsSA, 2020b). Declines were noted in the previous version of the FDI Tracker (Q4 2019) and sustained declines in following quarters would indicate a lack of confidence by private firms in the economy.

Disentangling GFCF by the type of institution reveals the contributions to investment levels by the public and private sectors. In Q1 2020, private investment decreased by 25.3% from Q4 2019 in constant 2010 prices, seasonally adjusted and annualised. Public corporation investment levels declined by 20.9% between Q4 2019 and Q1 2020. Investments by general government decreased by 7.7% over the period.

Figure 7. Purchasing Managers' Index (PMI)



Source: TIPS, based on PMI data by BER, 2020a.

Note: The PMI data are seasonally adjusted by the Bureau for Economic Research (BER).

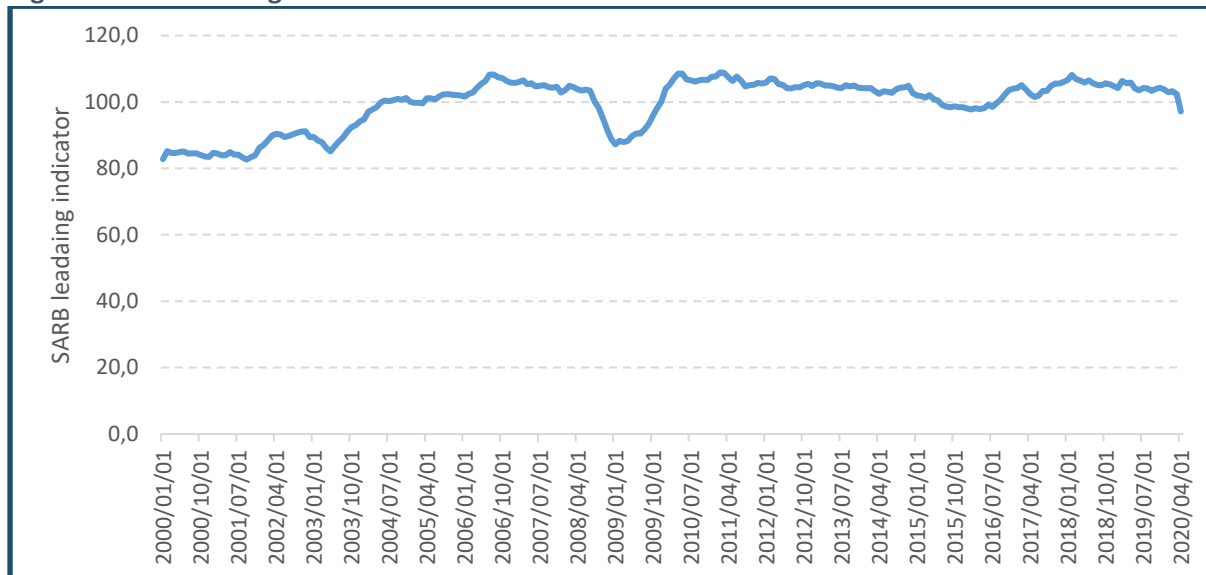
The Absa PMI focuses on business conditions in the manufacturing sector, and points to challenges within the sector. These challenges may inform and influence investor decisions in the future. A value that exceeds a value of 50 implies an improvement from the previous month, and vice versa.

In Q1 2020, the seasonally adjusted Absa PMI decreased between December 2019 and January 2020 (from 47.1 to 45.2), declined further between January and February (from 45.2 to 44.3) and subsequently increased between February and March (from 44.3 to 48.1). In Q1 2020, business activity and new sales order levels were noted as weak and indicative of weak demand. Backlogs of new sales orders, which is a predictor of future growth, reached a 10-year low. In an environment of existing pessimism, purchasing managers were noted as more pessimistic about the business environment going forward. Delays in supplier deliveries were noted due to supply chain disruptions associated with COVID-19. Sales activity was likely muted due to uncertainty about the frequency and severity of loadshedding in future and the strength of the global economy (BER, 2020b, 2020c).

In Q2 2020, the seasonally adjusted Absa PMI decreased between March 2020 and April 2020 (from 48.1 to 46.1), increased between April and May (from 46.1 to 50.2) and subsequently increased between May and June (from 50.2 to 53.9). While the high level PMI appeared reasonably stable in Q2 2020, the underlying indices were indicative of the economic havoc placed on manufacturing as a result of the lockdown. The business activity index crashed to an all-time low of 5.1 index points in April. The decline reflected the limited manufacturing output during the nationwide lockdown, noting some essential goods were being produced. Overall demand for manufactured goods also declined sharply due to the lockdown, reflected by the plunging of the new sales orders index to 8.9 index points in April (BER, 2020d). These business activity and new sales order indices were at the lowest levels ever recorded in the series. Formal-sector job losses in manufacturing are anticipated based on the current sentiment by purchasing managers. With factories returning to production in May, business activity rose, however, reduced demand for goods and services meant that factories were not operating at normal production (BER, 2020e). Manufacturing conditions improved in June as business activity and new sales increased; however, many purchasing managers noted less-than-

normal production. However, purchasing managers turned more optimistic in June about expected business conditions (BER, 2020f).

Figure 8. SARB leading indicator



Source: TIPS, based on SARB, 2019b.

The SARB also reports a useful 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 on the basis of a number of underlying datasets that predict growth (see Appendix).

The SARB leading indicator decreased in January 2020 (0.3%), thereafter marginally increasing again before declining in February (0.1%), and subsequently increasing in March (0.7%). The largest declines in Q1 2020 were attributable to a deceleration in the 12-month percentage change in job advertisement space, a decline in the BER’s Business Confidence Index, a decline in the average number of hours worked in the manufacturing sector, a decrease in the US dollar-denominated South African export commodity price index, and a deceleration in the 12-month percentage change in the number of new passenger vehicles sold (SARB, 2020c, 2020d, 2020e).

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.

The first constraint identified was Menar’s plans to develop the Palmietkuilen opencast thermal coal mine in Gauteng had been halted. Environmental authorisations and water use licences have not yet been issued. There is an appeal against the projects on grounds that the area has high agricultural potential. The Minister of Environmental Affairs has upheld the decision. In response, Menar is challenging the decision through the courts. Menar has also had to place Kangra mine on care and maintenance, attributed to constraints in local and international markets caused by COVID-19 global lockdowns. It further explained that “low thermal coal prices due to surplus supply and low demand proves unsustainable for the high-cost underground mine”. The decision has affected 359 employees. In agreement with unions, Kangra will make full retrenchment compensation. There is also a recall

agreement in place that prioritises employees for re-employment when market conditions improve and operations resume.

Firms are increasingly investing in sustainable energy infrastructure for self-generation. In Q 1 and Q 2 three companies were identified undertaking such projects – AB Inbev, Hyundai and Multotec. While challenges specific to, or that impact the implementation of, these projects have not been reported, they are in part a response to constraints and challenges to productivity that result from electricity supply shortages.

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.

Table 4 lists the projects recorded and the credibility grading designated to the investment. Following the announcement of the Kangra coal mine extension project, parent company Menar placed Kangra mine on care and maintenance.¹² The decision was attributed to challenging market conditions and the impact of the COVID-19 pandemic. However, it appears the mine plans to continue operations when conditions are more favourable. Even with the mine on care and maintenance Menar has indicated that it is still waiting for regulatory approvals for further development of the mine.¹³ The company has plans for the future development of the project, indicative of a commitment to the investment. Menar outlines sufficient details of what the project entails, however, a value for the investment was not disclosed. In this respect the project was classified as commitment as opposed to potential like the other projects.

As listed in Table 4, four projects in Menar’s project pipeline were graded as potential. These are the Palmietkuilen opencast thermal coal mine, De Wittekrans opencast and underground mine, Witfontein underground mine and the Springfield open-cast coal project. Menar is a relatively new entrant to South Africa, nonetheless it has been actively developing its assets. The company recently completed expansions of two mines also listed in Table 4. Plans for these projects are established, however, there are outstanding key licences and approvals that are still required. De Wittekrans has

¹² It is notable that Menar placed all its operations under care and maintenance at the outset of the lockdown. See <https://www.miningreview.com/coal/menar-places-all-mines-in-south-africa-on-care-and-maintenance/>. However, in the case of Kangra coal it appears to have a far-reaching impact compared to the other operations with the retrenchment of employees. (Also see footnote 9)

¹³https://static1.squarespace.com/static/5c3844a0f93fd49c7a9dedf8/t/5ec7a28c04e37806000bf3d8/1590141581645/Kangra_PressRelease_CareandMaintenance.pdf.

the necessary regulatory approvals except a water use licence. For the Witfontein and Springfield projects, the mining right, environmental authorisation, and water use licence applications have been submitted and Menar is waiting for approval. For Palmietkuilen, the company wants to proceed with the project; however, this has been delayed by an appeal against the project which was upheld by the Minister of the Department of Environmental Affairs. Menar is contesting this decision in court and, as a result, the projects are classified as potential.

Four additional projects assigned the potential grading are by Jupiter Mines/Tshipi e Ntle and Amplats. Tshipi Borwa is an established operation and has been in production since 2012. The firm plans to expand the operation; however, plans are still at an early stage of development and Jupiter has thus far completed a concept study. It plans to follow up with a feasibility study in the next year. The project grading was determined within this context. Three Amplats projects are included in this category: the Mogalakwena expansion, Mototolo/Der Brochen expansion and the Mototolo/Der Brochen replacement project. The expansion projects are at pre-feasibility stage; and a feasibility study is in progress for the replacement project. Amplats has a strong track record, with other projects in the pipeline. However, the three projects under consideration are still at a primary stage and information on these projects is currently limited.

Eight projects were graded as likely, including four Amplats capital investments: the Modikwa Chrome recovery plant, Amandelbult modernisation, Tumela 15E mechanisation and the debottlenecking at RBMR. These projects have been approved with relatively short implementation timeframes. They build on and improve existing infrastructure and operations. Furthermore, Amplats has a long been invested in South Africa's mining industry.

Other projects in the likely category include Menar's RAC project, Toyota's investment to increase output of the Toyota Hiace and PTM's Waterberg Bushveld Igneous PGM Complex. The RAC is at the feasibility stage, however, Menar is still waiting for the approval of a water use licence. Toyota concluded the upgrade and expansion of the Prospecton plant where the Hiace is manufactured in 2019, and this latest project is a follow-up to the previous investment. Toyota already aimed to increase production of the Hiace with the 2019 project. PTM completed a feasibility study for the Waterberg Bushveld Igneous PGM Complex approved in 2019. The miner is waiting to be issued with a mining right for the project, expected at the end of the lockdown period. These considerations can be interpreted as indicators for the implementation of these projects.

BMW has two projects in the likely category – a school in Ga-Rankuwa and a COVID-19 related initiative in partnership with the German government. Plans for the school appear to be progressing as a site has been selected and a construction date has been set for 2021. BMW is already engaging education experts in search of independent partners that will operate the school. Other factors that add to the likelihood of the project are BMW's history of supporting education institutions and programmes¹⁴ and the co-operation with the Gauteng Department of Education on this project. The COVID-19 initiative is a reaction to the ongoing crisis and forms part of the German government's Corona response programme in South Africa.

The Google stations initiative was classified as cancelled. Google announced the global termination of the project. Google previously signalled an expansion of the project in South Africa, which will no longer go ahead. It is notable that, despite Google's withdrawal, the project will be localised when existing operations are transferred to a South Africa company.

¹⁴ An early learning centre and training academy at the Rosslyn plant, a dealer training centre at the head office in Midrand. BMW also offers graduate programmes.

Table 4: Project credibility grading

Project	Classification
Menar Kangra coal mine expansion project	Commitment
Menar coal project pipeline: Palmietkuilen opencast thermal coal mine	Potential
Menar coal project pipeline: De Wittekrans opencast and underground mine	Potential
Menar coal project pipeline: Witfontein underground mine	Potential
Menar coal project pipeline: Springfield open-cast coal project	Potential
Tshipi Borwa manganese mine expansion project	Potential
Amplats expansion projects: Mogalakwena expansion	Potential
Amplats expansion projects: Mototolo/Der Brochen replacement project	Potential
Amplats expansion projects: Mototolo/Der Brochen expansion	Potential
Amplats capital projects: Modikwa chrome recovery plant	Likely
Amplats capital projects: Amandelbult modernisation	Likely
Amplats capital projects: Tumela 15E mechanisation	Likely
Amplats Capital Projects: Rustenburg Base Metals Refinery	Likely
Menar coal project pipeline: Riversdale Anthracite Colliery project	Likely
Toyota Hiace output increase	Likely
BMW Ga-Rankuwa school	Likely
BMW-German government initiative: South African hospital upgrades	Likely
PTM Waterberg Bushveld Igneous Complex platinum group metals (PGM) project	Likely
AB Inbev renewable solar energy plants	Construction/Implementation
Bosal Afrika emissions control system	Construction/Implementation
Kropz Elandsfontein phosphate mine project	Construction/Implementation
Toyota Atlas warehouse expansion	Construction/Implementation
BioTherm renewable projects: Aggeneys solar photovoltaic power plant	Construction/Implementation
BioTherm renewable projects: Konkoonsies II solar photovoltaic power plant	Construction/Implementation
BioTherm renewable projects: Excelsior wind facility	Construction/Implementation
BioTherm renewable projects: Golden Valley wind facility	Construction/Implementation
Menar coal operations development: Khanye colliery	Complete
Menar coal project Phalanndwa Colliery Extension Project	Complete
Scatec Solar's Dyason's Klip 1, Dyason's Klip 2 and Sirius solar photovoltaic complex project	Complete
Mahindra Special Fitment Centre	Complete
Astron Energy Milnerton Refinery investment	Complete
Hyundai solar energy system	Complete
BASF, Impala and Sibanye tri-metal catalyst R&D	Complete
Multotec renewable power project	Complete
VWSA and German Government COVID-19 Field hospital	Complete
Google Stations	Cancelled

INVESTMENT PROFILES, Q1 AND Q2 2020

AB Inbev renewable energy initiative	
Investment value (currency of investor)	Not reported
Investment Rand value	R5.6 billion
Project location: Province	Western Cape, Limpopo, Eastern Cape, KwaZulu-Natal and Gauteng
Project location: City/Town	Newlands, Polokwane, Port Elizabeth, Prospecton, Alrode, Rosslyn, Chamdor
Investor firms	Anheuser-Busch InBev (AB InBev)/Sola Group
Investor country	Belgium
Investor city	Leuven
Indicative start date	January 2020
Indicative end date	2025
Project phase	Construction/Implementation
Project type	Greenfield
Project industry	Utilities
Project sector	Renewable Energy
Permanent jobs	Not reported
Temporary jobs	Not reported
Government partnership	Not reported
Target market	Domestic
Social Development Programme	Not reported
Project description	AB InBev is installing solar power facilities at seven major breweries in South Africa. The solar plants will produce around 8.7 MW of power, approximately seven percent of AB InBev's electricity requirements. Projects are already in advanced stages of completion with 2.6 MW almost complete. AB InBev signed a Power Purchase Agreement with the Sola Group, a South African company that will build and fund the construction of the facilities. A further R12.4 billion in energy cost would be committed by AB InBev over a 20-year period. The company is also testing electric trucks for deliveries.
Motivation	Efficiency and an implementation of the company's sustainability strategy

Tshipi Borwa manganese mine expansion project	
Investment value (currency of investor)	Not reported
Investment Rand value	R1.025 billion
Project location: Province	Northern Cape
Project location: City/Town	Kalahari CBDC
Investor firms	Jupiter Mines/Tshipi é Ntle Manganese Mining
Investor country	Australia
Investor city	Perth
Indicative start date	January 2020
Indicative end date	2023
Project phase	Pre-feasibility
Project type	Expansion
Project industry	Mining
Project sector	Mining of metal ores
Permanent jobs	Not reported
Temporary jobs	Not reported
Government partnership	Not reported
Target market	Domestic, regional and international
Social Development Programme	Not reported
Project description	Jupiter Mines/Tshipi é Ntle Manganese Mining intends to expand the Tshipi Borwa mine operation. This opencast manganese mine is operated by Tshipi é Ntle Manganese Mining in the Northern Cape's Kalahari Manganese Field. A concept study has been completed and they plan to follow up with a feasibility study based on increasing the current annual production level of three million tonnes by 50 percent to 4.5 million tonnes a year. The company expects to complete the study in a year.
Motivation	Increase resource production.

PTM Waterberg Bushveld Igneous Complex platinum group metals (PGM) project	
Investment value (currency of investor)	US\$1.06 Billion
Investment Rand value	R18 billion
Project location: Province	Limpopo
Project location: City/Town	Bushveld Igneous complex (nearest town Mokopane)
Investor firms	Platinum Group Metals (PTM)
Investor country	Canada
Investor city	Vancouver
Indicative start date	January 2020
Indicative end date	January 2020
Project phase	Feasibility
Project type	Greenfield
Project industry	Mining
Project sector	Mining of metal ores
Permanent jobs	Not reported
Temporary jobs	Not reported
Government partnership	Department of Mineral Resources
Target market	Domestic, regional and international
Social Development Programme	BBBBEE Mnombo Wethu Consultants (13%)
Project description	Platinum Group Metals (PTM) plans to develop the Waterberg PGM mine, an underground platinum group metals resource. A definitive feasibility study was approved for the project in 2019 and the company expected to be issued the mining right within the first quarter 2020, to start project engineering. The Waterberg project is a joint venture led by PTM (50%), Implats 15%, Hanwa 9.7%, Japan Oil, Gas and Metals National Corporation (Jogmec) 12% and Mnombo Wethu Consultants the balance.
Motivation	The investment is aimed at boosting local production of the Hiace Ses'filkile minibus range.

Toyota Hiace Ses'fikile output increase	
Investment value (currency of investor)	Not reported
Investment Rand value	R91 Million
Project location: Province	KwaZulu-Natal
Project location: City/Town	Prospecton
Investor firms	Toyota South Africa (Toyota)
Investor country	Japan
Investor city	Toyota, Tokyo
Indicative start date	Jan-20
Indicative end date	Not reported
Project phase	Announced
Project type	Expansion
Project industry	Manufacturing
Project sector	Automotive
Permanent jobs	Not reported
Temporary jobs	Not reported
Government partnership	Not reported
Target market	Domestic and regional
Social Development Programme	Not reported
Project description	The investment builds on the recent upgrades of the Prospecton production facility to expand local production of the Hiace Ses'fikile minibus taxi. Toyota is now investing to increase the output for the taxis from 14 000 to 18 000 units a year.
Motivation	Expanding local production of the Hiace Ses'fikile minibus range.

BMW Ga-Rankuwa school	
Investment value (currency of investor)	US\$6.5 million
Investment Rand value	R113 million
Project location: Province	Gauteng
Project location: City/Town	Ga-Rankuwa
Investor firms	BMW South Africa
Investor country	Germany
Investor city	München
Indicative start date	2021
Indicative end date	Not reported
Project phase	Announced
Project type	Greenfield
Project industry	Construction
Project sector	Construction of other buildings
Permanent jobs	Not reported
Temporary jobs	Not reported
Government partnership	Gauteng Department of Education
Target market	Domestic
Social Development Programme	Not reported
Project description	The company will be building a new school in the township of Ga-Rankuwa, Pretoria, near the BMW Rosslyn manufacturing plant. The school will accommodate 1 600 pupils, from grade R foundation phase to grade 12. The school bridges BMW's Early Learning Centre at the Rosslyn facility and the company's graduate and training programmes
Motivation	BMW already offers employees' children a pre-primary, early learning centre, as well as graduate and training programmes for staff, and the school is an extension of this.

Scatec Solar Dyason's Klip 1, Dyason's Klip 2 and Sirius solar photovoltaic (PV) complex project	
Investment value (currency of investor)	Not reported
Investment Rand value	R4.76 Billion
Project location: Province	Northern Cape
Project location: City/Town	Upington
Investor firms	Scatec Solar
Investor country	Norway
Investor city	Oslo
Indicative start date	April 2018
Indicative end date	Jun-20
Project phase	Complete
Project type	Greenfield
Project industry	Utilities
Project sector	Renewable energy
Permanent jobs	Not reported
Temporary jobs	Not reported
Government partnership	Department of Energy, Eskom
Target market	Domestic
Social Development Programme	REIPPP requirements
Project description	Scatec Solar has completed the development of three solar plants that constitute a 258 MW solar PV power complex. Each plant has a capacity of 86 MW and an expected power production of 217 GWh. The projects were awarded to Scatec in the fourth round of the REIPPP in 2015.
Motivation	Participation in REIPPP.

Mahindra Special Fitment Centre	
Investment value (currency of investor)	Not reported
Investment Rand value	Not reported
Project location: Province	Gauteng
Project location: City/Town	Kempton Park
Investor firms	Mahindra
Investor country	India
Investor city	Ludhiana
Indicative start date	Not reported
Indicative end date	Not reported
Project phase	Complete
Project type	Greenfield
Project industry	Manufacturing
Project sector	Automotive
Permanent jobs	20
Temporary jobs	Not reported
Government partnership	Not reported
Target market	Domestic, regional and international
Social Development Programme	Localisation
Project description	This is a specialist fitment centre established to enable the introduction of special edition models that are designed and tested locally. The facility includes four dedicated fitment lines and employs 20 technical specialists. The value of this investment was not reported. The company intends to source parts from local suppliers.
Motivation	Growth in the South African market.

Astron Energy Milnerton Refinery investment	
Investment value (currency of investor)	Not reported
Investment Rand value	R400 million
Project location: Province	Western Cape
Project location: City/Town	Milnerton
Investor firms	Astron Energy/Glencore
Investor country	Switzerland
Investor city	Baar
Indicative start date	Not reported
Indicative end date	Feb-2020
Project phase	Complete
Project type	Upgrade
Project industry	Manufacturing
Project sector	Manufacture of coke, refined petroleum products and chemicals
Permanent jobs	Not reported
Temporary jobs	Not reported
Government partnership	Department of Energy
Target market	Domestic, regional and international
Social Development Programme	Not reported
Project description	Improvements were made to the refinery to enable it to produce very low sulphur fuel oil (VLSFO) that meets the new International Maritime Organization (IMO) regulations. The VLSFO has a sulphur content of 0.5 percent from the previous levels of 3.5 percent. The refinery also produces petrol, diesel, jet fuel, liquid petroleum gas and other speciality products.
Motivation	Compliance with stringent new IMO regulations.

Amplats expansion projects: Mogalakwena expansion	
Investment value (currency of investor)	Not reported
Investment Rand value	R29.7 million
Project location: Province	Limpopo
Project location: City/Town	Mogalakwena
Investor firms	Anglo American Platinum (Amplats)
Investor country	United Kingdom
Investor city	London
Indicative start date	2019
Indicative end date	Not Reported
Project phase	Pre-feasibility
Project type	Expansion
Project industry	Mining
Project sector	Mining of metal ores
Permanent jobs	Not reported
Temporary jobs	Not reported
Government partnership	Department of Mineral Resources
Target market	Domestic, regional and international
Social Development Programme	Not reported
Project description	A pre-feasibility study is underway for the expansion of Mogalakwena mine to increase PGM production. Project studies have identified several options to expand PGM production, by investing in additional concentrator capacity, deployment of new technology to improve throughput and recoveries, as well as developing the underground resource to maximise long-term value. Further plans are to install a 75 MW solar power plant at the mine. Applications for approvals to relevant institutions are at various stages.
Motivation	Expand PGM production and efficiency at the mine.

Amplats expansion projects: Mototolo/Der Brochen replacement project	
Investment value (currency of investor)	Not reported
Investment Rand value	R59.4 million
Project location: Province	Limpopo
Project location: City/Town	Burgersfort
Investor firms	Anglo American Platinum (Amplats)
Investor country	United Kingdom
Investor city	London
Indicative start date	2020
Indicative end date	Not Reported
Project phase	Feasibility
Project type	Brownfield
Project industry	Mining
Project sector	Mining of metal ores
Permanent jobs	Not reported
Temporary jobs	Not reported
Government partnership	Department of Mineral Resources
Target market	Domestic, regional and international
Social Development Programme	Not reported
Project description	A feasibility study is being undertaken to investigate replacing the Mototolo's mine's Lebowa shaft – coming to the end of life-of-mine – by establishing Der Brochen South. This replacement project will utilise the current concentrator infrastructure, and therefore be a low-cost replacement project. The study will assess construction of third concentrator.
Motivation	Extending a mining operation.

Amplats expansion projects: Mototolo/Der Brochen expansion	
Investment value (currency of investor)	Not reported
Investment Rand value	R29.7 million
Project location: Province	Limpopo
Project location: City/Town	Burgersfort
Investor firms	Anglo American Platinum (Amplats)
Investor country	United Kingdom
Investor city	London
Indicative start date	2020
Indicative end date	Not reported
Project phase	Pre-feasibility
Project type	Expansion
Project industry	Mining
Project sector	Mining of metal ores
Permanent jobs	Not reported
Temporary jobs	Not reported
Government partnership	Department of Mineral Resources and Energy (DMRE)
Target market	Domestic, regional and international
Social Development Programme	Not reported
Project description	Amplats is exploring a possible expansion of Mototolo/Der Brochen, and a pre-feasibility study is underway to see what new technology could be introduced to improve productivity. Technology is being assessed to enable an increase in throughput and improve grade to the concentrator, which could result in both replacement and potential growth in production. Potential to increase production by 33%.
Motivation	Extending mine the operation.

Amplats capital projects: Modikwa chrome recovery plant	
Investment value (currency of investor)	Not reported
Investment Rand value	R200 Million
Project location: Province	Limpopo
Project location: City/Town	Burgersfort
Investor firms	Anglo American Platinum (Amplats)
Investor country	United Kingdom
Investor city	London
Indicative start date	Not reported
Indicative end date	2021
Project phase	Feasibility
Project type	Expansion
Project industry	Mining
Project sector	Mining of metal ores
Permanent jobs	Not reported
Temporary jobs	Not reported
Government partnership	Department of Mineral Resources
Target market	Domestic, regional and international
Social Development Programme	Not reported
Project description	This entails the installation of a chrome recovery plant at the Modikwa operation. One of four fast payback, high-margin capital projects which will contribute to expanding the EBITDA margin from 20% in 2018 to 25%-28% by 2023.
Motivation	Maximising value and increasing earnings.

Amplats capital projects: Amandelbult modernisation	
Investment value (currency of investor)	Not reported
Investment Rand value	R1.3 billion
Project location: Province	Limpopo
Project location: City/Town	Amandelbult
Investor firms	Anglo American Platinum (Amplats)
Investor country	United Kingdom
Investor city	London
Indicative start date	Not reported
Indicative end date	2022
Project phase	Feasibility
Project type	Upgrade
Project industry	Mining
Project sector	Mining of metal ores
Permanent jobs	Not reported
Temporary jobs	Not reported
Government partnership	Department of Mineral Resources
Target market	Domestic, regional and international
Social Development Programme	Not reported
Project description	The investment at Amandelbult will go towards modernisation, digitalisation and cycle mining. It will also include the ramp-up of the Dishaba section of the mine, improvement in PGM recovery, and asset maintenance. It is one of four fast payback, high-margin projects which will contribute to expanding the EBITDA margin from 20% in 2018 to 25%-28% by 2023.
Motivation	Maximising value and increasing earnings.

Amplats capital projects: Tumela 15E mechanisation	
Investment value (currency of investor)	Not reported
Investment Rand value	R1.1 billion
Project location: Province	Limpopo
Project location: City/Town	Thabazimbi
Investor firms	Anglo American Platinum (Amplats)
Investor country	United Kingdom
Investor city	London
Indicative start date	Not reported
Indicative end date	2022
Project phase	Feasibility
Project type	Upgrade
Project industry	Mining
Project sector	Mining of metal ores
Permanent jobs	Not reported
Temporary jobs	Not reported
Government partnership	Department of Mineral Resources
Target market	Domestic, regional and international
Social Development Programme	Not reported
Project description	Entails the deployment of extra low profile mechanised mining equipment. One of five fast payback, high-margin projects which will contribute to expanding the EBITDA margin from 20% in 2018 to 25%-28% by 2023.
Motivation	Maximising value and increasing earnings.

Amplats Capital Projects: Rustenburg Base Metals Refinery	
Investment value (currency of investor)	Not reported
Investment Rand value	R700 million
Project location: Province	North West
Project location: City/Town	Rustenburg
Investor firms	Anglo American Platinum (Amplats)
Investor country	United Kingdom
Investor city	London
Indicative start date	Not reported
Indicative end date	2021
Project phase	Feasibility
Project type	Upgrade
Project industry	Mining
Project sector	Mining of metal ores
Permanent jobs	Not reported
Temporary jobs	Not reported
Government partnership	Department of Mineral Resources
Target market	Domestic, regional and international
Social Development Programme	Not reported
Project description	The firm is undertaking a copper debottlenecking project of five fast payback, high-margin projects which will contribute to expanding the EBITDA margin from 20% in 2018 to 25%-28% by 2023.
Motivation	Maximising value and increasing earnings.

Bosal Afrika emissions control system	
Investment value (currency of investor)	Not reported
Investment Rand value	R25 million
Project location: Province	Gauteng
Project location: City/Town	Pretoria
Investor firms	Bosal Afrika
Investor country	Netherlands
Investor city	Vianen
Indicative start date	Not reported
Indicative end date	April 2020
Project phase	Complete
Project type	Upgrade
Project industry	Manufacturing
Project sector	Automotive
Permanent jobs	Not reported
Temporary jobs	Not reported
Government partnership	Not reported
Target market	Domestic
Social Development Programme	Not reported
Project description	Bosal Afrika opened a new emissions control systems manufacturing plant. The 18 000 square metre plant produces exhausts, heat exchangers, silencers and manifolds for passenger cars and commercial vehicles. The plant supplies major original equipment manufacturers such as Ford, Nissan, Isuzu and Volkswagen.
Motivation	Production efficiency.

Hyundai solar energy system	
Investment value (currency of investor)	Not reported
Investment Rand value	R3 million
Project location: Province	Gauteng
Project location: City/Town	Ekurhuleni
Investor firms	Hyundai Automotive South Africa (Hyundai)
Investor country	South Korea
Investor city	Seoul
Indicative start date	Not reported
Indicative end date	Not reported
Project phase	Complete
Project type	Upgrade
Project industry	Utilities
Project sector	Renewable energy
Permanent jobs	Not reported
Temporary jobs	Not reported
Government partnership	Department of Energy
Target market	Domestic
Social Development Programme	Not reported
Project description	Hyundai completed the installation of a R3 million solar energy system at the company's parts distribution centre. The investment is an effort to reduce downtime due to loadshedding, in addition to savings in electricity costs in the long term, and environmental concerns.
Motivation	Mitigate the impact of the rising cost of electricity and loadshedding.

Kropz Elandsfontein phosphate mine project	
Investment value (currency of investor)	US\$120 million
Investment Rand value	R1.9 billion
Project location: Province	Western Cape
Project location: City/Town	Hopefield
Investor firms	Kropz
Investor country	United Kingdom
Investor city	Hitchin
Indicative start date	August 2010
Indicative end date	Not reported
Project phase	Construction/Implementation
Project type	Greenfield
Project industry	Mining
Project sector	Mining of phosphates
Permanent jobs	Not reported
Temporary jobs	Not reported
Government partnership	Department of Water Affairs (Water Tribunal)
Target market	Domestic, regional and international
Social Development Programme	Not reported
Project description	<p>Kropz is developing the Elandsfontein phosphate mine. The mine was commissioned in 2017, but production stopped soon after because of the need to improve the processing plant, as well as a low phosphate price at the time. A substantial part of the investment has gone towards implementing green mining practice. Kropz is waiting for the Water Tribunal to reschedule a hearing into the water use licence for the mine. The mine has been placed under care and maintenance. The box cut (a rectangular declining opening on the earth's surface, the initial step in excavation) has been established and the highly automated processing facility, with the capacity to deliver in excess of one million tons per annum of >31% P₂O₅ phosphate rock concentrate, is near completion. Final commissioning is dependent on further test work and design modifications. The project value reflects investment since 2010.</p>
Motivation	Resource seeking.

BASF, Impala and Sibanye tri-metal catalyst R&D	
Investment value (currency of investor)	Not reported
Investment Rand value	Not reported
Project location: Province	Eastern Cape
Project location: City/Town	Port Elizabeth
Investor firms	BASF, Impala Platinum and Sibanye-Stillwater
Investor country	Germany
Investor city	Ludwigshafen
Indicative start date	Not reported
Indicative end date	March 2020
Project phase	Complete
Project type	Greenfield
Project industry	Manufacturing
Project sector	Manufacture of parts and accessories for motor vehicles
Permanent jobs	Not reported
Temporary jobs	Not reported
Government partnership	Not reported
Target market	Domestic and International
Social Development Programme	Not reported
Project description	German chemical company BASF launched a new tri-metal catalyst, a technology that enables partial substitution of palladium with platinum in light-duty gasoline vehicles. It was developed in collaboration with Sibanye-Stillwater and Impala Platinum as co-investors. The catalyst was developed with the intention of creating certainty of supply and potential reduction in costs for customers.
Motivation	Research and development (R&D) in new technology that can result in the introduction of a new product.

Multotec renewable power project	
Investment value (currency of investor)	Not reported
Investment Rand value	Not reported
Project location: Province	Gauteng
Project location: City/Town	Johannesburg
Investor firms	Multotec/ Siebtechnik GmbH
Investor country	Germany
Investor city	Mülheim
Indicative start date	November 2019
Indicative end date	2020
Project phase	Complete
Project type	Upgrade
Project industry	Utilities
Project sector	Renewable energy
Permanent jobs	Not reported
Temporary jobs	Not reported
Government partnership	Not reported
Target market	Domestic
Social Development Programme	Not reported
Project description	Multotec is a mineral processing original equipment manufacturer. The company installed renewable power at its moulding facility, comprising 648 solar photovoltaic panels with a 223kW generating system that will provide about 20% of the facility's daily energy requirements. Multotec is a subsidiary and part of the group of companies that comprise Siebtechnik GmbH, a German company that manufactures specialised industrial machinery and equipment.
Motivation	Mitigating rising electricity costs and a commitment to environmental sustainability.

Menar Kangra coal mine expansion project	
Investment value (currency of investor)	Not reported
Investment Rand value	Not reported
Project location: Province	Mpumalanga
Project location: City/Town	Driefontein
Investor firms	Menar/Kangra Coal
Investor country	Luxembourg
Investor city	Not reported
Indicative start date	Apr-20
Indicative end date	Not reported
Project phase	Announced
Project type	Expansion
Project industry	Mining
Project sector	Mining of coal
Permanent jobs	Not reported
Temporary jobs	Not reported
Government partnership	Not reported
Target market	Domestic, regional and international
Social Development Programme	Not reported
Project description	Kangra Coal operates an opencast and underground coal mining operation at Savmore/Maquasa mine. Kangra Coal is planning an extension of the operation, which will increase the life of the mining operation by more than 20 years. Before the COVID-19 lockdown, the company was waiting for approval and the issue of the necessary environmental licences. The mine is, however, currently under care and maintenance because of the low coal price, due to low demand as the result of market disruption by COVID-19.
Motivation	Extend the life of the mine to continue operations.

BMW-German government COVID-19 initiative: South Africa hospital upgrades	
Investment value (currency of investor)	€4.3 million
Investment Rand value	R82 million
Project location: Province	Gauteng, North West, Limpopo
Project location: City/Town	Tshwane and other locations not reported
Investor firms	BMW Group South Africa and German Federal Ministry for Economic Cooperation and Development
Investor country	Germany
Investor city	Mülheim
Indicative start date	June 2020
Indicative end date	Not reported
Project phase	Announced
Project type	Upgrade
Project industry	Services
Project sector	Health and social work
Permanent jobs	Not reported
Temporary jobs	Not reported
Government partnership	Gauteng Department of Health
Target market	Domestic
Social Development Programme	Not reported
Project description	<p>BMW and the German government are assisting with improvements to eight South African hospitals and four clinics in the fight against COVID-19. The upgrades include the Soshanguve Combined Clinic to a COVID-19 testing and screening centre near BMW South Africa's Rosslyn manufacturing plant, and a fully equipped ambulance and cars for transporting patients to the various hospitals in the region. The project will also bring 320 000 medical-grade N95 masks to South Africa. Dr George Mukhari Hospital in Soshanguve, and the accident and emergency facilities will be significantly upgraded and 300 beds added.</p>
Motivation	The project is part of the Corona response programme to combat the health crisis and the economic challenges.

VWSA and German government COVID -19 Field hospital	
Investment value (currency of investor)	€6.5 million
Investment Rand value	R124 million
Project location: Province	Eastern Cape
Project location: City/Town	Uitenhage
Investor firms	Volkswagen South Africa (VWSA)
Investor country	Germany
Investor city	Wolfburg
Indicative start date	May 2020
Indicative end date	May 2020
Project phase	Complete
Project type	Upgrade
Project industry	Services
Project sector	Health and social work
Permanent jobs	Not reported
Temporary jobs	Not reported
Government partnership	Eastern Cape Department of Health, Nelson Mandela Bay Municipality and the Nelson Mandela Bay Business Chamber
Target market	Domestic
Social Development Programme	Not reported
Project description	VWSA converted an old parts facility into a COVID-19 field hospital. The plant spans 66 000 square metres with the capacity to accommodate 3 300 patients fully operational, including 800 for those who require oxygenation. Phase one has been completed with 1400 beds already installed. The investment also includes procurement of protective gear for staff at regional tertiary hospitals, regional Primary Care Clinics and COVID-19 test centres, and support of the National Health Laboratory Service branch in Port Elizabeth. The investment is in partnership with the German Federal Ministry for Economic Cooperation and Development (BMZ).
Motivation	Support the South African government in response to COVID-19.

BioTherm Energy renewable projects	
Investment value (currency of investor)	US\$116 million
Investment Rand value	R2 billion
Project location: Province	Northern Cape, Western Cape and Eastern Cape
Project location: City/Town	Aggeneys, Poffader, Swellendam and Bedford
Investor firms	BioTherm Energy/Actis
Investor country	United Kingdom
Investor city	London
Indicative start date	Jun-20
Indicative end date	Not Reported
Project phase	Construction/Implementation
Project type	Greenfield
Project industry	Utilities
Project sector	Renewable energy
Permanent jobs	Not reported
Temporary jobs	Not reported
Government partnership	Department of Energy
Target market	Domestic
Social Development Programme	REIPPP requirements
Project description	BioTherm is developing four renewable energy projects. Two of these are in the Northern Cape, the 46 MW Aggeneys solar photovoltaic power plant and Konkoonsies II, an 86 MW solar PV plant located on a 267-hectare site in Pofadder. In the Western Cape it is constructing the Excelsior wind power facility with a capacity of 32.5 MW comprising 13 wind turbines. There will also be wind farm in the Eastern Cape – the 120 MW Golden Valley facility will comprise 48 2.5 MW turbines. The projects received funding through the World Bank’s Multilateral Investment Guarantee Agency (MIGA).
Motivation	Participation in the REIPPP.

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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.