

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

FOREIGN DIRECT INVESTMENT TRACKER SECOND QUARTER 2022

Compiled by Kelello Mashiane and Rethabile Molala

TIPS TRACKERS

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

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

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

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

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ABOUT THE FDI TRACKER

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

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

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

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

FDI PROJECTS, Q2 2022

A total of 12 projects were recorded over the second quarter of 2022. The pledged investment value for the period is R8.6 billion captured from eight projects, the values of remaining four projects are not yet available. Monitoring identified one investment, the Ardagh Group's Consol Glass expansion project that could potentially generate 250 permanent employment opportunities. Developments in relation to 10 projects that are already captured in the Tracker were updated this quarter.

Projects

12 projects

R8.6 billion
8 projects

Job creation 250 1 Project

New FDI projects

This quarter's investments were led by utilities, closely followed by mining which recorded R3.4 billion and R3.2 billion respectively. Mining had the highest project count, with four projects exclusively related to mining of metal ores. The Tracker has been observing growth in projects related to information communication technology (ICT), particularly data centre developments. This quarter, three projects were registered, all for undisclosed amounts, comprising of projects in the services sector. Monitoring has noted the continued steady growth in projects that incorporate sustainable technologies. In addition to self-generation of electricity, firms across varying industries are incorporating environmentally friendly machinery, equipment and systems in their operations to reduce their impact on the environment. This quarter, this is evident in investments by firms including Sustineri Energy, Tronox and South32. Manufacturing investments were noted in gas production, glass packaging and lubricant products. Projects are categorised by sector for the purpose of project description.

Utilities

The Sola Group will finance, build and operate two solar photovoltaic (PV) projects on behalf of Tronox Mineral Sands in the North West province. The facilities will be developed for R3.2 billion. The plants constitute the first two 100 megawatt (MW) projects registered by the National Energy Regulator of South Africa (Nersa), following the amendment of Schedule 2 of the Electricity Regulation Act No.4 of 2002. This extends the limit over which private energy projects can apply for a generation licence from 1MW to 100MWs, with later amendments announced to lift the cap completely. Together the facilities will deliver 200MW of energy to Tronox's operations in South Africa through electricity wheeling. The projects could provide about 40% of Tronox's power requirements across the firm's local mines and smelters. Sola expects to reach financial close in the third quarter of 2022 and commission the projects in 2024 after a 14-month construction period. Tronox mines mineral sands that bear titanium and operates processing plants that produce titanium feedstock and pig iron, among other minerals. Tronox is a global integrated producer of titanium dioxide pigment and chemicals, and zircon based in the United States. Titanium dioxide pigment brightens and adds durability to paints, plastics, paper and other products (BusinessTech, 2022; T. Creamer, 2022; Tronox, 2022).

Sustineri Energy is a joint venture (JV) between Ireland-based Kibo Energy (65%) and local firm Industrial Green Energy Solutions (35%). The partners plan to develop and operate a 2.7MW plastic-to-syngas power plant, valued at R180 million, for a client that develops industrial business parks in

Gauteng. Sustineri Energy has a 10-year take-or-pay conditional Power Purchase Agreement (PPA) to produce baseload electricity from the facility. The plant will produce electricity through a high-temperature pyrolysis process which involves thermal degradation of non-recyclable plastic into syngas, which powers gas engines to generate heat energy and electricity. The project is one of a series of seven waste-to-energy projects planned under the JV. Financial close is expected in the third quarter of 2022 to be followed by up to 14 months of construction to complete the facility (Arnoldi, 2022a; Kibo Energy, n.d.-a; Mining Review, 2022). Kibo Energy is a company that develops green energy resources with a focus on reserve power and energy storage, in addition to renewable energy assets (Kibo Energy, n.d.-b).

Mining

Pan African Resources completed a definitive feasibility study for the development of Mintails, a resource that contains surface gold, located in Gauteng. The plan focuses on the Mogale section of Mintails which could be developed for about (US\$161 million) R2,5 billion. The study estimates a mineral reserve of 123,6 million tons of surface gold. The Mogale tailings storage facilities could add 50 000 ounces (1.4 tonnes) of production a year over a 13-year life-of-mine. This can potentially be extended to 21 years if additional Mintails Soweto Cluster is also developed. The project aims to start production 18-24 months after construction commences (M. Creamer, 2022; McKay, 2022; Pan African Resources, 2021).

A second investment by Tronox was added to the Tracker. The firm plans to expand the Fairbreeze Mine located at the company's KwaZulu-Natal Sands (KZN Sands) mineral operation, which also consists of a central processing complex. Fairbreeze Mine is a source of mine slurry — excavated by method of hydraulic mining — which is raw material for the production of heavy minerals concentrate. The current mine area is nearing depletion. The firm intends to extend the life-of-mine by expanding Fairbreeze Mine with a new development that would prolong mining activity to 2037. In addition to a refurbished mineral concentration plant, the expansion will include upgrades to the current mining system. Tronox has indicated that work is proceeding to measure additional reserves. Work on the expansion is expected to start in late 2022, targeting initial production of 800 tonnes per hour that, by the middle of 2023, would ramp up to 2 168 tonnes per hour (Parker, 2022a; Tronox, 2022). The value of the investment has not been reported.

Eastern Platinum, the Canadian platinum group metals and chrome producer, has filed a technical report detailing plans to reopen and restart underground mining operations at the Zandfontein section of the firm's Crocodile River Mine, located in the North West province. The estimated value of the project is US\$21 million (R360 million). The section will be treated as a standalone underground mining operation at the Crocodile River Mine. This extends to the processing of a tailings storage facility. The section was previously placed under care and maintenance in 2013. The Zandfontein section has a measured and indicated resource of about 3.9 million ounces (122 tonnes) of platinum, palladium, rhodium and gold (Arnoldi, 2022b; Eastplats, n.d.).

South32 has commenced the rollout of the AP3XLE energy efficiency project at its Hillside Aluminium smelter in KwaZulu-Natal. The company intends to complete the project with an investment of US\$18 million (R314 million). The AP3XLE technology will be installed together with the smelter's pot relining programme during the 2023. The projects contribute to South32's plans for decarbonisation. The project will further be beneficial to operational efficiency. South32 is further exploring renewable energy options to supply power at the smelter. Technical feasibility studies have been completed in this regard (Parker, 2022b; South 32, 2022).

Afro Energy, a local subsidiary of Australian oil and gas exploration firm Kinetiko Energy, has partnered with the Industrial Development Corporation (IDC) to develop a gas field in Mpumalanga, adjacent to the company's existing Amersfoort wells. The development will be implemented through a special purpose vehicle, Afro Gas Development (AGDSA). The estimated total project value is R155 million. Afro Energy will contribute R85 million¹ (55%) and the IDC will contribute R70 million (45%). The proposed gas field will consist of about 20 wells that could potentially produce about 500 million standard cubic feet (14 million cubic metres) of gas per annum. Kinetiko Energy is a gas exploration company focused on advanced shallow conventional gas and coal bed methane opportunities in Southern Africa (Esau, 2022; Kinetiko Energy, n.d.; Nelson, 2022).

Manufacturing

The Ardagh Group announced plans to invest US\$200 million (R3 billion) in two new glass furnaces committing to a third furnace at its Nigel facility, which will add to the existing N2 expansion project (announced at the investment conference) due to begin in quarter 2, 2022. The project will create over 250 employment opportunities. This commitment follows the firm's acquisition of Consol, approved by the Competition Commission this quarter. The Ardagh Group is a supplier of recyclable metal and glass packaging headquartered in Luxembourg (Ardagh Group, 2022; Burger, 2022; Morris, 2022).

Germany-based Fuchs Lubricants South Africa has commenced the implementation of Phase 2 of the firm's expansion project on the back of the recently completed first phase of the initiative. The investment of R500 million for Phase 2 includes a new lubricants plant. Phase 1 of the project has been completed on time and within budget. Construction of Phase 2 is underway, with design and conceptualisation completed and construction to begin in stages. Phase 2 will comprise of a new lubricants plant to bolster the company's strong growth and expansion plans for the continent (Barradas, 2022).

Services

Africa Data Centres plans to build a second data centre in the Western Cape for an undisclosed sum. The 20MW facility will span 15 000 square meters in eight data halls (Property Wheel, 2022). Africa Data Centres is part of Cassava Technologies, a technology group headquartered in the United Kingdom. The ICT company further announced plans to expand capacity of the firm's operations in Gauteng to 100MW of IT load. The ICT developer plans to expand hyper-scale and enterprise-focused facilities at the firm's Midrand and Samrand campuses. The firm is further acquiring land for a third location still to be disclosed (Africa Data Centres, 2021; Illidge, 2022). The value of both investments has not yet been reported.

Acronis is a global provider of cyber protection solutions headquartered in Switzerland. The company offers on-site cloud software for purposes including data access, recovery and back up. The company opened its first data centre in South Africa for an undisclosed sum. The new facility, the Cyber Cloud Data Centre, is one of 111 being developed by Acronis globally. The project is part of the Acronis Global/Local Initiative, a global effort which includes management for all data centres (Acronis, n.d.; Malinga, 2022).

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¹ In the FDI trend analysis, the Tracker will only make reference to Afro Energy's R85 million contribution as it is the FDI component for this project.

Updates

Progress

The Kerry Group has completed a new €38 million (R650 million) manufacturing facility named Ikusasa in KwaZulu-Natal. The 10 000 square meter plant includes sustainable features such as solar power generation, and waste heat capture. The group initially pledged R600 million of the investment during the 2019 Presidential Investment Conference, and thereafter followed up with an additional R50 million. The facility is said to create 232 job opportunities.

Swedish battery operator Polarium has opened a manufacturing plant in the Western Cape following an investment of R30 million. The facility will produce lithium battery modules, of which 90% will be exported to the rest of Africa. It will further create about 200 jobs. The investment was among those announced at the 2022 Investment Conference.

Equites Property Fund has completed the construction of a logistics campus named Khomanani in Gauteng. The project was completed for Swedish mining and excavation engineering firm Sandvik which will lease the property. The facility was completed for about R317 million and, in addition to being Sandvik's South Africa headquarters, it includes a warehouse and specialised workshops.

Pan African Resources commissioned a 10MW solar photovoltaic plant in its Evander Gold Mine in Mpumalanga. The R150 million plant covers 20.1 hectares and comprises 26 640 solar modules. Electricity supply to the Elikhulu gold tailings retreatment plant has started. It will provide 30% of the complex's power needs, reduce the firm's carbon footprint and reliance on the grid. During construction, 202 temporary employment opportunities were created. Pan African Resources has plans to extend the solar facility by about 12MW in future.

Vedanta Zinc International has approved a R7 billion investment into the Gamsberg Phase 2 expansion project in the Northern Cape, which will double the mine and plant capacity from four million tons to eight million tons a year. Construction of the project will take 18 to 22 months with 2 000 to 2 500 jobs during construction and 800 to 1 000 permanent jobs on completion. The project is part of Vedanta's R21 billion commitment announced at the inaugural Investment Conference.

Enaex Africa has completed and commissioned its expanded bulk emulsion explosives plant in Mpumalanga. The R10 million facility will enable Enaex Africa to increase production output and manufacturing capacity at the plant by about 20%, and storage capacity by 50%. The initiative is part of the first phase of future manufacturing expansion. The project was completed under a JV with Enaex, Sasol and Afris. The firm is further building the R16 million Enaex Electronic Initiation Systems assembly plant, set for completion at the end of 2022.

Fuchs Lubricants has launched the firm's newly constructed R250 million warehouse and head office in Gauteng. The development formed Phase 1 of a broader expansion programme initiated five years ago. The new facilities will support and serve the South African market and also exports.

The Competition Commission approved Ardagh Group's acquisition of Consol. At the 2022 Investment Conference, Consol/Ardagh announced a R1.5 billion expansion of the Nigel facility which was suspended but has since started up again.

Ford, in partnership with SolarAfrica, has completed the first of Ford South Africa's Project Blue Oval renewable energy programme. SolarAfrica installed solar PV carports providing parking bays for about 3 610 vehicles at the firm's Silverton Assembly Plant. The carports comprise 30 226 solar panels, 120 inverters and eight transformers that generate 35% of the Silverton plant's electricity requirements. The company is evaluating the next steps for the project to become 100% energy self-sufficient.

FDI TRENDS, Q2 2022

Investment values

Three projects have values between R1 billion and R5 billion. These make up the bulk of the total pledged value for the quarter, close to 83% or R7.2 billion. The R3.2 billion Tronox solar PV project represents the highest value recorded for Q2 2022, followed by Pan African Resources' R2.5 billion Mintails investment. The other project in this group is the R1.5 billion Consol expansion planned by new owners Ardagh Group.

In number, investments valued at and below R500 million constitute the majority of projects added to the Tracker this quarter. Fuch Lubricants' expansion project contributes R500 million to the total value. There are four projects under R500 million whose combined values total R1 billion. Eastern Platinum leads the projects valued under R500 million with plans to restart operations at a section of the Crocodile River Mine for approximately R360 million. It is closely trailed by South32's R314 million desalination plant. Sustineri's and Afro Energy's individual gas projects contribute R180 million and R85 million respectively.

Investment values were not available for four projects including three data centre investments by Acronis and Africa Data Centres (developing two facilities). Tronox similarly has not yet disclosed the project value for the Fairbreeze Mine expansion.

Investment stages

Table 1: Investment stages

STAGE	VALUE (R BILLION)	NUMBER
Announced	5.2	5
Feasibility	2.5	2
Construction/Implementation	0.8	2
Project-preparation	0.1	2
Complete	0	1
Total	8.6	12

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

A breakdown of projects by investment stage shows that announced projects represent the majority of the commitments recorded this quarter. These cumulatively contribute about R5.2 billion (60%) – excluding one project – to the total pledged value. The highest announced commitment is by Tronox, with R3.2 billion invested to develop solar PV facilities, followed by the Ardagh Group's R1.5 billion pledge towards Consol's expansion. Other projects announced this quarter include Eastern Platinum's R360 million pledge to restart mining at a section of firms Crocodile River Mine and Sustineri's R180 million plastic-to-syngas plant. Africa Data Centres concludes the projects at this stage with the expansion plant for its Johannesburg facilities to be completed for an undisclosed sum.

The total value of projects at the feasibility stage – R2.5 billion – is attributed to the Pan African Resources Mintails gold project. The other project at the feasibility stage is the Tronox Fairbreeze Mine expansion. The two projects under construction are Phase 2 of Fuch Lubricants' R500 million expansion and a desalination plant by South32 for R314 million. Investments captured at the project preparation stage comprises Afro Energy's R85 million gas project, which constitutes the entire value at this stage, and Africa Data Centre's expansion of the company's Cape Town facilities. The Acronis Cyber Cloud data centre represents the one complete project captured in this reporting period. The value of the investment was not reported.

Investment type

Table 2: Investment type

ТҮРЕ	VALUE (R BILLION) NUMBER	
Greenfield	5	5
Brownfield	3.2	3
Expansion	0.5	4
Total	8.6	12

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

Projects clustered by type indicate greenfield investments have the largest representation in value and project count. Four of the five greenfield projects make up close to 58% (over R5 billion) of the quarter's total pledged value. Tronox's R3.2 billion renewable energy project is the largest greenfield investment recorded over this reporting period, followed by the Ardagh Group's R1.5 billion expansion of Consol's operations. Projects in this category also include gas projects by Sustineri and Afro Energy, contributing R180 million and R85 million respectively. Another greenfield investment added to the Tracker that did not disclose an investment value is the Acronis Cyber Cloud data centre.

Brownfield investments comprise three mining projects that cumulatively account for R3.2 billion, which is a little over 36% of the total value for this quarter. Over half of the investment value for brownfield projects is attributed to the Pan African Resources' R2.5 billion Mintails gold project. South32 and Eastern Platinum individually contribute R360 million and R314 million to brownfield investment due to the firms' planned projects at their respective operations.

Four investors announced expansion projects, however, only one reported an investment value. Fuch Lubricants is implementing Phase 2 of the company's expansion for approximately R500 million. Africa Data Centres is expanding the firm's facilities in Cape Town and Johannesburg, both for undisclosed sums. Completing projects in this category is the Tronox Fairbreeze Mine expansion, for which the firm has not yet reported the investment value.

Investment by location and industry

Figure 1 shows projects distinguished according to location and industry. This quarter, investments were recorded in five provinces. Gauteng captured just over half of the total investment value, half of the projects and, furthermore, these are across all four of the industries in which commitments were identified for the Q2 2022 reporting period. In addition to Gauteng, KwaZulu-Natal and Western Cape comparatively continue to garner investment. Two investors plan to roll out projects in more than one location with plans by Tronox and Africa Data Centres to individually roll out projects in two provinces each.

Gauteng garnered approximately R4.7 billion from four of six projects registered in the province. As indicated, investments were captured across four industries recorded this quarter. The largest contributor to the province is mining with R2.5 billion from the Pan African Resources Mintails gold project.

Not too far behind, manufacturing has the second highest investment value, comprising expansion projects by the Ardagh Group (R1.5 billion) and Fuch Lubricants (R500 million). Utilities recorded R180 million, attributed to Sustineri Energy's plastic-to-syngas power project. Two investors contribute to the province services sector. Acronis and Africa Data Centres are investing in their respective data centre operations for undisclosed sums.

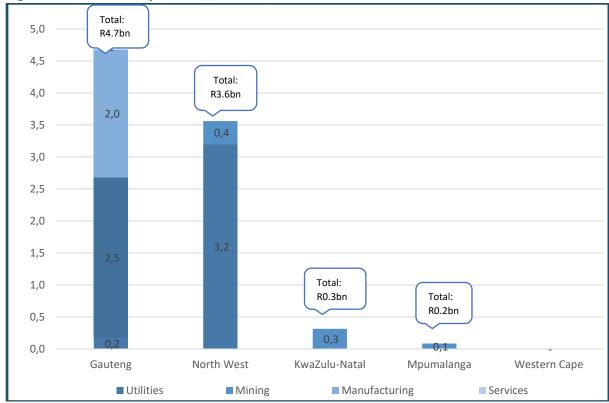


Figure 1: Value of FDI by location, R billion, Q2 2022

Source: TIPS FDI Tracker project data.

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

Two projects were recorded in the North West that contributed a total R3.6 billion to utilities and mining in the province. Investment is primarily in utilities due to the Tronox R3.2 billion solar project. Mining captured R360 million on account of Eastern Platinum's plan to restart underground mining at the Zandfontein section of the company's Crocodile River Mine.

KwaZulu-Natal captured two projects in the mining industry. The entire investment value in the province is attributed to a R314 million desalination plant announced by South32. The other commitment recorded in the province is another project by Tronox added this quarter, the Fairbreeze Mine expansion.

Mpumalanga and Western Cape registered one project each. In Mpumalanga, Afro Energy intends to invest R85 million to develop the AGDAS Amersfoort gas project. Africa Data Centres' second project registered in the Tracker contributes to investment in the Western Cape. The value of the investment has not yet been reported.

Figure 2 illustrates projects differentiated by subsector within their respective industries. Projects this quarter were represented in the Tracker's four key industries for investment: mining, manufacturing, utilities, and services. Projects were further dispersed across six subsectors.

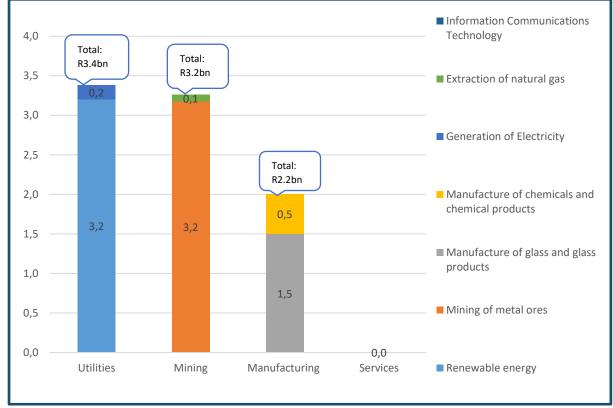


Figure 2: Value of FDI projects industry by subsector, R billion, Q2 2022

Source: TIPS FDI Tracker project data.

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

Utilities captured the highest pledged value in two subsectors. A sizeable share of the R3.4 billion captured in utilities is in the renewable energy subsector represented by the Tronox R3.2 billion solar plant project. Sustineri Energy's R180 million plastic-to-syngas project composes investment in the other subsector – generation of electricity.

Five projects were identified in the mining industry across two subsectors, metal ores and extraction of natural gas. Four of the commitments make up the total R3.2 billion investment value, which mainly comprises Pan African Resources' R2.5 billion Mintails Mogale gold project, comprising metal ores. The subsector also includes Eastern Platinum's R360 million project that will reopen the firm's Zandfontein underground operation and a desalination plant at South32's Hillside smelter valued at R314 million. The other metal ores project, the Tronox Fairbreeze Mine expansion, has not yet reported an investment value. Afro Energy's R85 million for a gas project is the only project that represents the extraction of natural gas.

Manufacturing recorded R2.2 billion across three subsectors, each comprising one project. Glass packaging received the highest value, R1.5 billion, due to the Ardagh Group's expansion of Consol's operations. The R500 million captured in the chemicals and chemical products is on account of Fuch Lubricants' Phase 2 expansion.

Services consists entirely of investment in the ICT subsector. Africa Data Centres will be expanding two facilities in Gauteng and Western Cape while Acronis completed the Cyber Cloud data centre.

Investment by country of origin

3,5 Total: R3.2bn 3,0 Total: R2.5hn 2,5 2,0 Total: R1.5bn 1,5 1,0 Total: 1,5 R0.5bn Total: Total: R0.5bn R0.4bn Total: 0,5 R0.2bn 0,5 0,4 0,0 **United States** United Luxembourg Germany Australia Canada Ireland Switzerland of America Kingdom Utilities Mining Manufacturing Services

Figure 3: Value of FDI projects by origin, R billion, Q2 2022

Source: TIPS FDI Tracker project data.

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

In Figure 3, projects are analysed by country of origin and industry. Investments were captured from eight countries. This quarter, the highest investment value was captured from the United States. Two projects make up investment from the country and both will be implemented by one company, Tronox. The firm plans to expand the Fairbreeze Mine for an undisclosed amount while its R3.2 billion solar project represents the total value for the United States.

A significant share of investment was recorded from Europe. In total, seven projects were identified from five European countries. The sum of investment from the region amounts to about R4.7 billion. The United Kingdom has the highest number of projects (3) and value of R2.5 billion which is entirely attributed to Pan African Resources' gold project. African Data Centres' expansions in Cape Town and Johannesburg constitute the other two projects registered from the United Kingdom. Luxembourg, Germany, Ireland and Switzerland each recorded one project. Expansion projects planned by The Ardagh Group (R1.5 billion) and Fuch Lubricants (R500 million) respectively represent investment from Luxembourg and Germany. The Sustineri Energy R180 million plastic-to-syngas operation and the Acronis data centre – completed for an undisclosed amount – constitute investment from Ireland and Switzerland respectively.

The Tracker further identified investment from Canada and Australia. The Eastern Plats Zandfontein mine renewal project comprises the R360 million investment from Canada while Afro Energy's gas project represents the R85 million commitment from Australia.

Investment by target market

4,0 5 Projects 4 Projects 3,5 0,5 3,0 2,5 2,0 3 Projects 1,5 2,9 1,5 1,0 0,5 0,4 0,0 Domestic Domestic, regional & international Domestic & regional Utilities Mining ■ Manufacturing Services

Figure 4: Value (R billions) and count of FDI projects by target market, Q2 2022

Source: TIPS FDI Tracker project data.

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

Figure 4 presents projects categorised by target market. The segment is composed of investment in the services and utilities sectors. There are five projects that have an exclusively domestic outlook and only two of these comprise the R3.4 billion investment value for this grouping. A large portion of the value, R3.2 billion, derives from the Tronox solar power project, and Sustineri Energy's R180 million syngas power project makes up the rest of the value. Four projects focus on the domestic regional and international market segment. Three of these compose the total value for the category of R3.4 billion across the mining and manufacturing industries. Over half the value is attributed to the Pan African Resources R2.5 billion Mintails mining project. Other investors with this market outlook include Fuch Lubricants (R500 million), Eastern Platinum (R360 million) and Tronox. Projects targeting the domestic and regional markets were recorded in manufacturing and mining. The Ardagh Group's R1.5 billion expansion commitment comprises manufacturing. South32's R314 million desalination plant and the Afro Energy gas project – R85 million – represent mining in this target market.

Investment environment

Analysis of the domestic investment environment provides insight into the general environment in which investments take place. This analysis is important. First, because metrics that measure investment indicate the extent to which pledged investments actually materialise. Second, because analysing the investment environment provides a glimpse into investor sentiment which will ultimately have an impact on future growth prospects of the economy.

A flurry of investment activity is typically a sign of future growth. During periods of lacklustre growth, investors tend to withhold investments, given a pessimistic view of future growth and the risk of tying up capital — hampering the returns on that capital. With the President's annual investment conferences, it is important from a policy point of view, to monitor whether the pledges made at that event materialise and result in substantial improvement in investment levels. To evaluate the investment environment, a number of key investment metrics have been incorporated, which are further detailed in the Appendix.

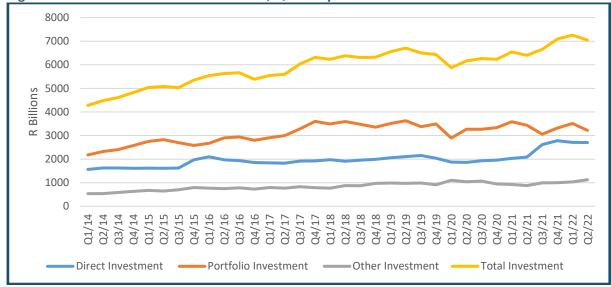


Figure 5: South Africa's Inward Investment, Quarterly

Source: TIPS, based on South Africa's international investment position data by (SARB, 2022a).

Direct investments decreased by 0.44%, from R2 712 billion in Q1 2021 to R2 700 billion in Q2 2022. Other investments increased by 8.79% from R1 035 billion in Q1 2021 to R1 126 billion in Q2 2022.

Compared to Q2 2021, Direct investments were about 22.74% higher at the end of Q2 2022. Other investments were 28.1% higher at the end of Q2 of 2022 compared to the end of Q2 2021.

Statistics South Africa (Stats SA) calculates Gross Fixed Capital Formation (GFCF) as part of the expenditure component of Gross Domestic Product (GDP) and it depicts how much of new value added in the economy is invested rather than consumed (OECD, 2001). This metric measures the key overall investment in the economy and is made up of money spent on improvements to land, equipment purchases, and road and building construction.

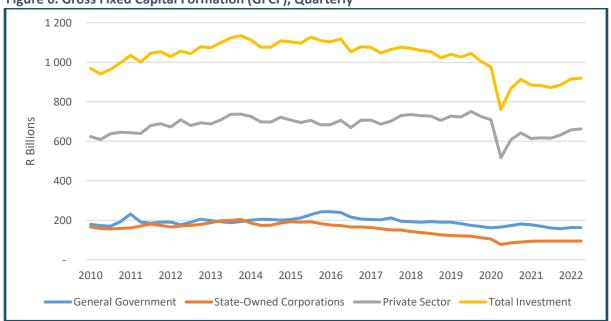


Figure 6. Gross Fixed Capital Formation (GFCF), Quarterly

Source: (TIPS, 2022), based on StatsSA GDP data.

Notes: Values are on a constant 2022 prices, seasonally adjusted, and annualised basis. Value are deflated using an implicit deflator, rebased to Q2 2022.

GFCF increased by 0.5% in Q2 of 2022 (Stats SA, 2022). The Reserve Bank explains that this small increase is due to private business capital spending having occurred at a slower pace, which involved increased investment in non-residential buildings and computer equipment, offset by reduced outlays on equipment and machinery, as well as residential buildings. Fixed investment by state-owned corporations and general government both decreased, contributing to the small growth of this indicator in Q2 2022. Regardless of the small growth, real GFCF was 3.7% higher in the first half of 2022 compared to the first half of 2021 (SARB, 2022b).

In summary:

- General government investment decreased by 1.22% from R164 billion in Q1 2022 to R162 billion in Q2 2022.
- Investment by state-own corporations decreased slightly by approximately 0.13% from R94.33 billion in Q1 2022 to 94.21 billion in Q2 2022.
- Investments by the private sector increased slightly by 0.75% from R658 billion in Q1 2022 to R663 billion in Q2 2022.
- Total investment increased slightly by 0.44% from R916 billion in Q1 2022 to R920 billion in Q2 2022.



Figure 7. Purchasing Managers' Index (PMI), Monthly

Source: TIPS, based on PMI data by (BER, 2022).

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 out the prevalent trends. These trends may inform and influence investor decisions in the future. A value that exceeds 50 implies an improvement in manufacturing conditions from the previous month, and a value below 50, implies a decline.

In Q2 2022, the seasonally adjusted Absa PMI experienced a sharp decline in April 2022, mainly due to a drop in new sales orders and business activity indices. The decline was from 58.6 index points in March 2022 to 50.7 index points in April 2022. In May 2022, the PMI rose by 4.1 index points to 54.8. This is predominantly due to recovery in the new sales orders index. In addition, domestic demand

conditions normalising contributed to this increase along with export sales returning to a positive terrain. In June of 2022, PMI declined to 52.2 index points, although it was still above 50 points and in the positive terrain. This decline was mainly attributable to a decline in new sales orders, a sharp decline in the suppliers' deliveries index, and a decrease in the business activity index.

On the upside, the employment index indicated a rise in staffing levels with an average of 51 points. This suggests that the manufacturing sector may continue to add jobs even after five consecutive quarters of formal job growth (BER, 2022).

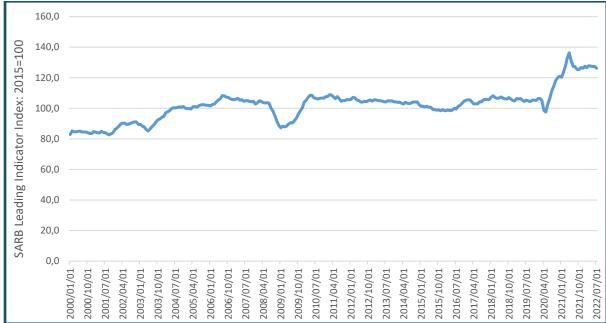


Figure 8. SARB Leading Indicator

Source: TIPS, based on (SARB, 2022c).

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

The leading indicator depicted a 0.3% decrease in April 2022, a 0.7% decrease in May 2022, and a slight increase of 0.4% in June 2022 (SARB, 2022d, 2022e, 2022f).

The largest detractors in April 2022 were a deceleration in the six-month smoothed growth rate of new passenger vehicle sales, a decrease in the US dollar-dominated export commodity price index, and an acceleration in the six month-smoothed growth rate of job advertisement space and a widening in the interest rate spread.

In May 2022, the largest detractors were decreases in the US dollar-dominated export commodity price index and the number of building plans approved. The positive contributors included the widening of the interest rate spread and an acceleration in the six month-smoothed growth rate in the job advertisement space.

In June 2022, the largest detractors were a decrease in the dollar-dominated export commodity price index and the narrowing of the interest rate spread. The largest positive contributors to the slight increase in the index were an acceleration of the six-month smoothed growth rate in new passenger vehicle sales and an increase in the approved number of residential plans.

Barriers and constraints

The FDI Tracker aims to inform and improve policymaking by assisting the state to better understand the environment in which investors operate. To gain deeper insight into investor experiences, the FDI Tracker captures concerns and challenges investing companies encounter. 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.

For projects captured this quarter, there were no reported challenges. Monitoring, however, noted one project previously captured in the Tracker where the investor is ceasing operations in South Africa. DiDi is closing down its South Africa operations due to strategy adjustment from the firm's managerial level. The e-hailing service provider established local operations in April 2021. Following a pilot project in Gqeberha in Eastern Cape, the company expanded to other cities. DiDi further announced a R1.2 billion expansion investment at the 2022 South African Investment Conference.

Credibility classification

FDI pledges are subject to frequently changing plans and may not take place 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 in Table 3.

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 projects according to the assigned credibility rating. The two data centre operations that Africa Data Centres plans to expand were classified as Potential. The company has been expanding its presence and services in South Africa and the region. Basic information in relation to the outcome of the projects and location has been provided, however, detailed project plans including specifics such as investment value and project timelines are lacking.

Six projects were graded as Likely. Broadly, these projects feature companies that are established, present sufficiently detailed development plans or information with certain aspects that are in progress. The Afro Energy/IDC Amersfoort gas project is at project preparation stage, approvals for the joint development agreement with the IDC are in place, fieldwork is expected to start at the end of 2022, and exploration has been underway since 2014. It is notable that Afro Energy is partnering with the IDC, South Africa's main development finance institution. The Ardgah Group received approval from the Competition Commission for the acquisition of Consol this quarter. One of the conditions for the approval requires Ardagh Group to invest in Consol's local operations. The

third furnace would add to the existing expansion of the Nigel facility project which the Group plans to start this quarter.

Regulatory processes have been concluded for the Tronox solar power project and Nersa has registered the 100MW projects in line with the amended Schedule 2 of the Electricity Regulation Act. In relation to the firm's other project, the Fairbreeze Mine expansion, Tronox is in the process of quantifying additional reserves. The project aims to extend the life-of-mine to 2037 and Tronox expects to start work this year. Regarding Pan African Resources Mintails Mogale gold project, the definitive feasibility study is complete. Sustineri Energy has finalised a PPA for the electricity that will be supplied through the plastic-to-syngas project. It is noted that this is the first project by Sustineri's JV partners, Kibo Energy and Industrial Green Energy Solutions, a local firm. Eastern Platinum has filed a technical report for the development of the Zandfontein section of the Crocodile River Mine.

Table 4: Project credibility grading

Project	Classification
Africa Data Centres – Cape Town facilities	Potential
Africa Data Centres – Johannesburg facilities	Potential
AGDAS Amersfoort project	Likely
Consol expansion project: furnace project	Likely
Tronox Fairbreeze Mine expansion	Likely
Tronox Mineral Sands solar PV plants	Likely
Pan African Resources Mintails Mogale Gold Project	Likely
Sustineri Energy plastic-to-synthesis gas power project Likely	
Crocodile River Mine: Zanfontein underground	Likely
Fuchs Lubicants operation expansion: Phase 2 Construction/Im	
South 32 Hillside Aluminium smelter desalination plant	Construction/Implementation
Acronis Cyber Cloud data centre	Complete



PROJECT NAME	AGDAS AMERSFOORT PROJECT	CONSOL EXPANSION : FURNACE PROJECT	
Investment value	Rand value only	US\$100 million	
Invest Rand Value	R85 million	R1,5 billion	
Project location: Province	Mpumalanga	Gauteng	
Project location: City/Town	Amersfoort	Nigel	
Investor firms	Kinetiko Energy/ Afro Energy/Industrial Development Corporation (IDC)	Ardagh Group	
Investor country	Australia	Luxembourg	
Investor city	Subiaco	Luxembourg	
Indicative start date	April 2022	May 2022	
Indicative end date	Not reported	Not reported	
Project phase	Greenfield	Greenfield	
Project type	Project preparation	Announced	
Project industry	Manufacturing	Manufacturing	
Project sector	Manufacture of gas	Manufacture of glass and glass products	
Permanent jobs	Not reported	250	
Temporary jobs	Not reported	Not reported	
Government partnership	IDC	Competition Commission, Department of Trade, Industry and Competition	
Target market	Domestic and regional	Domestic and regional	
Social development programme	Broad-Based Black Economic Empowerment (BBBEE), Phefo Power Scheme expansion, preferred supplier programme: prioritising procurement from previously historically disadvantaged persons. Employee Share Ownership Programme which will hold 7% of the share Cullet Owner Driver.		
Project description	Afro Energy, local subsidiary of Australian oil and gas exploration firm Kinetiko Energy, has partnered with the IDC to develop a gas field located adjacent to the company's existing Amersfoort wells. The development will be implemented through a special purpose vehicle, Afro Gas Development (AGDSA). Afro Energy will contribute R85 million (55% stake) and the IDC R70 million (45% stake). The proposed gas field will comprise of about 20 wells with the capacity to produce approximately 500 million standard cubic feet per annum. Kinetiko Energy is a gas exploration company focused on advanced shallow conventional gas and coal bed methane opportunities in Southern Africa.		
Motivation	Resource seeking and market opportunity for expansion		



PROJECT NAME	TRONOX MINERAL SANDS SOLAR PV PLANTS	TRONOX FAIRBREEZE MINE EXPANSION	
Investment value	Rand value only	Not reported	
Invest Rand Value	R 3.2 billion	Not Reported	
Project location: Province	North West	KwaZulu-Natal	
Project location: City/Town	Ditsobotla Local Municipality	Empangeni	
Investor firms	Tronox Mineral Sands/Tronox/	Tronox KwaZulu Natal Sands/Tronox/	
Investor country	United States	United States	
Investor city	Stamford, Connecticut	Stamford, Connecticut	
Indicative start date	May 2022	March 2022	
Indicative end date	2023	Not reported	
Project phase	Greenfield	Expansion	
Project type	Announced	Feasibility	
Project industry	Utilities	Mining	
Project sector	Renewable energy	Mining of metal ores	
Permanent jobs	Not reported	Not reported	
Temporary jobs	Not reported	Not reported	
Government partnership	National Energy Regulator of South Africa (Nersa), The Presidency, Department of Mineral Resources and Energy	Department of Mineral Resources and Energy	
Target market	Domestic	Domestic, regional and international	
Social development programme	Not reported	Not reported	
Project description	The Sola Group will develop, finance, build and operate two solar photovoltaic projects for Tronox Mineral Sands. The 100MW projects are the first registered by (Nersa) following the amendment of Schedule 2 of the Electricity Regulation Act allowing power generation project below 100MW to proceed without a licence. Tronox is a global US-based vertically integrated producer of titanium dioxide and inorganic chemicals. Tronox Kwa-Zulu Natal Sands plans to extend the firm's Fairbreeze Min 2037. Work is ongoing to quantify Kwa-Zulu Natal mine additional reser mine area is nearing depletion. The new expansion project will includ the current mining system and the mineral concentration facility. Tronox mines and processes titanium ore, zircon and other mate titanium bearing products as raw material to the firm's international that manufacture titanium dioxide pigments, which brighten and a paints, plastics, paper and other products.		
Motivation	Electricity self-generation, sustainability targets, amendment of Schedule 2 of the Electricity Regulation Act allowing private power generation projects below 100MW to proceed without a licence	lowing private power generation projects below	



PROJECT NAME	AFRICA DATA CENTRES – CAPE TOWN FACILITIES	AFRICA DATA CENTRES – JOHANNESBURG FACILITIES
Investment value	Not reported	Not reported
Invest Rand Value	Not reported	Not reported
Project location: Province	Western Cape	Gauteng
Project location: City/Town	Cape Town	Multiple locations
Investor firms	African Data Centres/Cassava Technologies	African Data Centres/Cassava Technologies
Investor country	United Kingdom	United Kingdom
Investor city	London	London
Indicative start date	June 2022	November 2021
Indicative end date	2023	Not reported
Project phase	Expansion	Expansion
Project type	Project preparation	Announced
Project industry	Services	Services
Project sector	Information Communications Technology	Information Communications Technology
Permanent jobs	Not reported	Not reported
Temporary jobs	Not reported	Not reported
Government partnership	Not reported	Not reported
Target market	Domestic	Domestic
Social development Programme	Not reported	Not reported
20MW facility will span 15 000 square meters with eight data halls. Africa Data 100MW of IT load. The ICT firm further plans to expan		Africa Data Centres announced the expansion of data centre operations in Gauteng to 100MW of IT load. The ICT firm further plans to expand hyper-scale and enterprise focused facilities at two existing campuses and a third location, still to be determined.
Motivation	Market opportunity for expansion	Market opportunity for expansion



PROJECT NAME	ACRONIS CYBER CLOUD DATA CENTRE	PAN AFRICAN RESOURCES MINTAILS MOGALE GOLD PROJECT
Investment value	Not reported	US\$161 million
Invest Rand Value	Not reported	R2.5 billion
Project location: Province	Gauteng	Gauteng
Project location: City/Town	Johannesburg	Johannesburg
Investor firms	Acronis	Pan African Resources
Investor country	Switzerland	United Kingdom
Investor city	Schaffhausen	London
Indicative start date	Not reported	June 2022
Indicative end date	January 2022	2025
Project phase	Greenfield	Brownfield
Project type	Complete	Feasibility
Project industry	Services	Mining
Project sector	Information Communications Technology	Mining of metal ores
Permanent jobs	Not reported	Not reported
Temporary jobs	Not reported	Not reported
Government partnership	Not reported	Department of Mineral Resources and Energy
Target market	Domestic	Domestic, regional and international
Social development programme	Not reported	Not reported
Project description	Acronis is a global provider of cyber protection solutions. The new data centre is one of 111 being developed by Acronis globally. The opening of the South African data centre is part of the Acronis Global/Local Initiative, an effort that includes global management of data centres, local unemployment and, control for local partners.	Pan African Resources has completed a definitive feasibility study for the development of Mintails, a resource that contains surface gold. The plan focuses on the Mogale section of Mintails. The study estimates a mineral reserve of 123.6 million tons of surface gold and production of 50 000 ounces a year over 13 years.
Motivation	Market entry and expansion	Resource seeking and market opportunity



PROJECT NAME	SUSTINERI ENERGY PLASTIC-TO-SYNTHESIS GAS POWER PROJECT	CROCODILE RIVER MINE: ZANDFONTEIN UNDERGROUND RE-MINING
Investment value	Rand value only	US\$21 million
Invest Rand Value	R180 million	R360 million
Project location: Province	Gauteng	North West
Project location: City/Town	Not reported	Brits
Investor firms	Sustineri Energy – Kibo Energy JV with Industrial Green Energy Solutions	Eastern Platinum
Investor country	Ireland	Canada
Investor city	Galway	Vancouver
Indicative start date	February 2022	May 2022
Indicative end date	2024	2022
Project phase	Greenfield	Brownfield
Project type	Announced	Announced
Project industry	Utilities	Mining
Project sector	Generation of electricity	Mining of metal ores
Permanent jobs	Not reported	Not reported
Temporary jobs	Not reported	Not reported
Government partnership	Department of Mineral Resources and Energy, Nersa	Department of Mineral Resources and Energy
Target market	Domestic	Domestic, regional and international
Social development programme	Not reported	Related to social labour plans
Project description	Sustineri Energy is a joint venture between Ireland-based Kibo Energy (65%) and local firm Industrial Green Energy Solutions (35%). Sustineri will develop and operate a 2.7MW plastic-to-syngas power plant. The facility will produce electricity through a high-temperature pyrolysis (thermal degradation of a solid or liquid) process which degrades on recyclable plastic-to-syngas that feeds gas engines to generate electricity and heat energy. There is potential to sell the heat energy directly to customers inside the industrial park, as well as to expand the project to 8MW of installed capacity after 24 to 26 months.	Eastern Platinum has filed a technical report detailing plans to reopen and restart underground mining operations at the Zandfontein section of the firm's Crocodile River Mine. The technical report details a hybrid mining method. The section will function as a standalone underground operation at the mine, including the re-mining and processing of a tailings storage facility. The section was previously placed under care and maintenance in 2013. The Zandfontein section has a measured and indicated resource of 3.9-million ounces of platinum, palladium, rhodium and gold.
Motivation	Resource seeking and market expansion	Resources seeking and market expansion



PROJECT NAME	FUCHS LUBICANTS OPERATION EXPANSION: PHASE 2	SOUTH32 HILLSIDE ALUMINIUM SMELTER DESALINATION PLANT
Investment value	Rand value only	US\$18 million
Invest Rand Value	R500 million	R314 million
Project location: Province	Gauteng	KwaZulu-Natal
Project location: City/Town	Isando	Hillside
Investor firms	Fuchs Lubricants South Africa/Fuchs Petrolab SE	South 32
Investor country	Germany	Australia
Investor city	Manheim	Perth
Indicative start date	May 2022	May 2022
Indicative end date	2032	2027
Project phase	Expansion	Brownfield
Project type	Construction/Implementation	Construction/Implementation
Project industry	Manufacturing	Mining
Project sector	Manufacture of chemicals and chemical products	Mining of metal ores
Permanent jobs	Not reported	Not reported
Temporary jobs	Not reported	Not reported
Government partnership	Not reported	Department of Mineral Resources and Energy
Target market	Domestic, regional and international	Domestic and regional
Social development programme	Not reported	Not reported
Project description	Fuchs Lubricants South Africa has commenced the implementation of Phase 2 of the firm's expansion project on the back of the recently completed first phase of the investment. Phase 2 includes a new lubricants plant to boost the company growth and expansion plans for the continent. Design and conceptualisation are complete and construction is set to begin in stages.	South32 has reached a final investment decision on the roll-out of the AP3XLE energy efficiency project at its Hillside Aluminium smelter. The AP3XLE technology at Hillside alongside the smelter's pot relining programme during the 2023 financial year are envisioned as part of a plan to decarbonise the operation. The project will provide both volume and efficiency benefits, while reducing carbon emissions.
Motivation	Market expansion	Operational efficiency and environmental sustainability



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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.