INTEGRATED ANNUAL REPORT
for the year ended 31 December 2022
The integrated reporting process is an ongoing journey. We constantly strive to improve on the quality of the JSE's reporting.

Report objectives

This report is intended for our stakeholders and aims to tell the value creation story of the JSE. This report provides information that also enables our stakeholders to make an informed assessment of our ability to create sustainable value over time.

This report was compiled with information that the Board and management believe is relevant to stakeholders and provides a comprehensive view of the Group's performance for the financial year ended 31 December 2022.

We welcome feedback from stakeholders on this report and invite you to contact ir@jse.co.za should you have any questions or recommendations.

Scope and boundary

The information presented in this report describes the JSE and the five financial markets operated by the Group, and the investor protection funds¹ associated with its markets. The report excludes details on our associate, Strate, in which the JSE holds 44.55%, as Strate has an independent board and management team. The JSE equity accounts for Strate. The Group legal structure is available on page 148.

This report outlines the Group’s risk management processes and overall risk profile and considers the reasonable and legitimate needs and concerns of our stakeholder groups. The Board approved the material matters for this report (page 2).

¹ These funds consist of the JSE Guarantee Fund Trust, the JSE Derivatives Default Fund Trust and the JSE Debt Guarantee Fund Trust.
The JSE’s reporting framework for this report is informed by a range of local and
ternational requirements, standards and guidance, including, but not limited to the:

- International Integrated Reporting Framework;
- Companies Act, 71 of 2008 (as amended) (the Companies Act);
- King Report on Corporate Governance™ for South Africa, 2016 (King IV);
- Relevant indicators of FTSE Russell’s ESG ratings methodology as applied for purposes of the FTSE/JSE Responsible Investment Index Series, of which the JSE is a constituent;
- UN Global Compact (UNGC);
- UN Principles for Responsible Investment;
- Sustainable Stock Exchanges Initiative;
- CDP (formerly known as the Carbon Disclosure Project);
- JSE’s Sustainability and Climate Change Disclosure Guidance; and
- Task Force for Climate-related Financial Disclosures (TCFD).

Internal assurance over the report

Our reporting suite contains a range of information governed by a diverse set of
regulations and frameworks. Management decides and applies significant
judgement in deciding what to report, based on principles of materiality and
stakeholder inclusiveness.

The Board’s responsibilities include oversight of financial and non-financial
value drivers against agreed performance measures and the annual
corporate scorecard.

The Board, supported by its committees, is ultimately accountable for the JSE’s
systems of internal control, designed to identify, evaluate, manage and provide
reasonable assurance against material misstatement. Executive management
and internal audit provide the Board with formal confirmation of the effectiveness
of the internal control environment.

Financial information in this report is drawn from the annual financial
statements prepared in accordance with the relevant standards. These are
audited by the Group’s external auditors, Ernst & Young Inc., in accordance
with international auditing standards. Non-financial information in this report
is reviewed and approved by the relevant Board committee.

AQRate verification service, an accredited BBBEE verification agency, has verified
our BBBEE performance. It has confirmed a Level 2 rating and the verification
certificate is available at https://www.jse.co.za/investor-relations/jse-bee.

The Board is satisfied that internal oversight sufficiently ensures the reliability
of the information presented in this report and did not obtain additional external
assurance over this report.

Over time, we plan to strengthen internal assurance over all reported information
through our combined assurance model with the ultimate goal of adding external
assurance in the future.

Reporting suite

Our full reporting suite is available at https://group.jse.co.za/investor-relations/reporting-suite
and comprises the following reports:

Integrated annual report
Sets out how the JSE creates value in the context of our business model, strategy,
operating context, governance and operational performance.

Annual financial statements
Set out our financial results, with the
GAC report, director’s report and annual
financial statements prepared in
accordance with IFRS.

Sustainability report
Sets out our approach to sustainability
and our commitments to support and
drive sustainable value creation.

Remuneration report
Sets out the JSE’s remuneration
philosophy and policy, and how it was
implemented in 2022.

Notice of AGM and proxy form
Sets out the notice of the JSE’s AGM of
shareholders to be held on 9 May 2023,
together with the summarised report
containing the required financial
disclosures.

Disclaimer

Many of the statements in this report constitute forward-looking statements. These are not
guarantees or predictions of future performance. The information on which forward-looking
statements were based was not audited. Like all businesses, the JSE faces risks and other
factors outside of its control. This may lead to outcomes unforeseen by the Group.
These are not reflected in the report.

Readers are cautioned not to place undue reliance on forward-looking statements.
MATERIAL MATTERS
SHAPING OUR THINKING

Our material matters shape our Group strategy and serve as a filter for determining the material information to be included in this report.

JSE Limited (the Group or the JSE) revisits material matters annually in the fourth quarter of the year. The material matters are workshopped by senior management and approved by the Board of Directors (Board). This process considers various inputs as listed below.

Our material matters are similar to last year, with some enhancements to the definitions to reflect changes in our context and to provide more clarity.

Sustainability is a broad domain with various environmental, social and governance (ESG) elements. The JSE considered these elements when evaluating its material matters, both from our role as an Exchange and how we address these as a business. Therefore, we do not have a material matter called sustainability, but rather the specific elements we consider material.

Transformation and socio-economic advancement is not a material matter as it is part of the JSE’s approach to business and enshrined in its mission, purpose and strategy to create a diverse Group over time to support value creation. Refer to the JSE’s strategy (page 28) and the transformation and socio-economic advancement chapter (page 65).

Our top risks
Page 91

Level of our control over the matter
H high  M medium  L low

Change in level of impact since 2021
Increased impact  Unchanged impact
1. **Attractiveness of the JSE as a capital-raising and investment platform**

   The JSE’s sustainability depends on a healthy Primary Market where the Exchange is seen as an attractive destination for raising capital in both public and private markets. Perceptions about the Exchange's attractiveness are impacted by:
   - The global context within which the Exchange operates.
   - The South African macro-economic and political environment – markets with high listings activity typically have supportive policies.
   - The demand for non-traditional asset classes and the need to raise capital while remaining a private entity.
   - The Exchange's ability to provide and oversee an effective regulatory environment, ensuring regulatory requirements add value and create an enabling environment for new and existing listings.
   - The JSE's compliance to laws and regulations.
   - The JSE's approach to ESG matters through its regulations, product offering, and advocacy role.
   - South Africa's high local market concentration.

   Pages 4 to 18

2. **Level of trading activity**

   The value and number of transactions directly impact financial performance. The level of trading activity and market quality are assessed through measuring liquidity, transparency, price discovery and transaction costs, among others. Trading activity is impacted by:
   - The local and global macro-economic environment. The South African market is also highly event driven, impacting volatility.
   - The influence of the South African political environment and fiscal stability.
   - Changes in regulation that allows institutional investors to invest more offshore.
   - Emerging markets sentiment and our relevance in financial markets.
   - Most trading activities take place in a limited number of shares, and there is a limited number of buy- and sell-side participants.

   Pages 4 to 18, 50 to 59

3. **Operational availability and stability**

   The JSE's ability to operate trusted markets depends on its ability to provide a reliable, stable and secure trading and clearing environment that is competitive and meets its clients' requirements. The reliability, effectiveness and efficiency of systems, processes, controls and employees have a direct impact (positive or negative) on the JSE's reputation and earnings.

   The JSE's complex operating ecosystem and dependency on third parties can impact strategic project execution, or the speed thereof.

   Pages 60 to 64, 137 to 143

4. **Enabling technology to provide innovative solutions**

   Future value creation is impacted by the extent to which the JSE can be nimble and agile in adopting or deploying new technology that is cost-effective and aligned with clients' requirements. The interdependency with key stakeholders, including suppliers and clients, impacts the JSE's ability to deliver these solutions and their time to market.

   Pages 60 to 64

5. **Attractiveness of the JSE as an employer**

   The JSE needs to attract, retain and develop a motivated, skilled and diverse workforce that is suited to its current and future needs. This includes scarce and specialised skills in regulation, operations, technology and futuristic thinking. Being an attractive employer requires progressive policies and a dynamic employee value proposition considering the evolving work landscape.

   Pages 71 to 81

6. **Robust clearing and settlement for all transactions**

   The JSE’s systems and processes must ensure that cash equities transactions are settled within three days while achieving simultaneous, final and irrevocable delivery versus payment. The JSE provides settlement assurance for trades executed on the central order book, as governed through its rule book.

   JSE Clear (the clearing house and central counterparty (CCP)), now licensed as an Independent Clearing House, must ensure that all transactions in listed derivatives and listed cash bond securities are settled. JSE Clear needs to clear and risk manage transactions in securities listed on the JSE’s Derivatives, Interest Rate, and Currency markets.

   Pages 55 to 56, 83

7. **Competition and disruptors**

   The JSE faces local and global competition as an investment destination, and competes against organisations that provide alternative capital-raising, trading, clearing or settlement platforms and data functions. The traditional stock exchange business lines are impacted by technological and behavioural disruption and changes in regulation.

   Page 16
On 8 November 2022, the JSE celebrated its 135 anniversary since it was established to facilitate funding for South Africa’s first gold rush. Since then, the JSE has contributed significantly to South Africa’s economic development and the growth of hundreds of listed companies.

While our purpose remains relevant today, the JSE is at a critical inflection point in its history. Our business model continues to evolve to meet the changing needs of capital market participants.

Against this backdrop, stock exchanges must reposition themselves to capture new revenue streams, streamline operations and adopt emerging technologies. These technologies include blockchain, big data analytics, cloud and artificial intelligence. We have much to gain by collaborating with other stock exchanges as we grapple with this repositioning. The future presents both challenges and exciting opportunities.

2 https://www.institutionalinvestor.com/article/b1h1smy1jgjff/ Private-Equity-Changes-Everything.
Trends impacting financial markets

Disintermediation of market infrastructures: Companies are generating capital from an increasing range of alternative venues that offer attractive and competitive means of accessing capital. Increasing internalisation\(^1\) and aggregation of trading are also on the rise, disintermediating current market infrastructures globally.

Sustainability: Sustainability remains a global priority, as evidenced by the increasing demand for sustainability-linked products. New sustainability-related disclosure requirements are developing.

Financial inclusion and retail: Globally, as technology evolves, there is increased interest and participation in trading from retail investors. This trend is visible locally, with a growing number of retail offerings. Retail is increasingly self-directed as financial services companies empower retail investors to participate in trading activities.

Shifting economies: Emerging market trading activity lags the scale and volume of developed markets. Relative positioning to other emerging markets is an important enabler in stimulating flows to emerging economies.

Digital assets: Many major global digital asset firms have experienced bankruptcy or liquidity issues, resulting in concerns regarding the credibility of digital asset players. In South Africa, the Financial Services Conduct Authority (FSCA) has recognised crypto assets as financial products as the first step towards developing an appropriate regulatory framework. This framework will unlock increased local participation in the digital assets space.

Digitisation: Digitisation is a major enabler in traded markets, whether for new asset types or digitised workflows for traditional asset classes.

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Our 2026 strategy – capturing new revenue streams

Our refreshed 2026 strategy, which the Board approved in 2022, considers the evolving global environment and South Africa’s unique situation. The strategy was developed following a robust process that involved consulting internal and external stakeholders, and a market review of other stock exchanges. It outlines our primary goal of securing and growing sustainable, high-quality earnings and the strategic initiatives and investments required to reshape the business while protecting competitive relevance and mitigating strategic risks.

The concept of data as a strategic asset has gained momentum in the past years since data scientist Clive Humby coined the phrase “data is the new oil” in 2006. Organisations increasingly use data analytics and rely on third-party data sets to inform their decision-making.

A core component of this strategy is providing highly customisable market data services, using technology to serve clients the exact data mix they require. We already have a well-established Information Services business contributing 16% of Group revenue. However, we have not yet capitalised on its full potential. We are in the unique position of accessing valuable data that is unavailable elsewhere. However, like oil, data has to be extracted, refined and distributed to be useful. This year, we planned the roadmap, including considering the technological tools and allocating capital expenditure, to deliver an enhanced customer experience around data access, analysis and collaboration. This year was an important foundation year, which we will build on in 2023. Read more on page 28.

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\(^1\) Internalisation refers to the practice of traders matching trades through their own internal books, rather than trading through an exchange.
Showcasing value in our local markets

In 2022, we extended the reach of our annual SA Tomorrow Investor Conference to include Mainland China. We partnered with the Bank of China to leverage relationships, paving the way for business development opportunities in both the primary and secondary markets in Hong Kong, Singapore and Australia.

In October 2022, we hosted the South African Reserve Bank (SARB) Governor Lesetja Kganyago and other senior public sector officials at our first SA Macro Seminar in New York. During that trip, we signed a historic memorandum of understanding (MOU) with the New York Stock Exchange, committing the two exchanges to collaborate on marketing dual listings, share information on various topics, and explore the potential of new products in the ESG, exchange-traded fund (ETF) and digital asset spaces. The agreement allows teams to identify the specific outcomes we wish to pursue with this major global market player.

Our strategy also includes scaling JSE Private Placements (JPP) to become a significant alternative capital-raising platform. JPP can play an important role in addressing the capital needs in a market segment where companies are too small to qualify for a listing. We are already seeing interest and traction in this space. Read more on page 50.

We believe we can contribute to solving some of South Africa’s challenges. This includes providing a platform for struggling state-owned enterprises to list and secure much-needed funding. Our electricity crisis, highlighted by a year of unprecedented load shedding, continues to dampen our economic prospects. According to the Presidential Climate Commission, South Africa requires an initial funding of about R1.5 trillion over the next five years to transition to a low-carbon and resilient climate society. Here, the JSE is investigating developing a carbon trading market that would contribute a potential source of funding for South Africa’s energy transition. This market would meet the needs of new power producers seeking capital and existing companies looking to scale up their operations. Read more on page 17.

Performance in 2022

The JSE’s solid performance reflects the quality of our earnings and the resilience of our operating platforms within a challenging trading environment. I am pleased to report that net profit after tax (NPAT) increased by 4% YoY to R749 million, with headline earnings per share (HEPS) increasing by 4% YoY to 917.7 cents per share (2021: 878.9 cents). Earnings before interest, tax and depreciation (EBITDA) of R1.07 billion increased by 1% YoY. The business remains strongly cash generative and this has enabled the Board to declare an ordinary dividend of 769 cents per share for 2022, resulting in a distribution to shareholders of R688 million. These results demonstrate the value of our investment strategy and provide momentum for future growth.

Our growth areas, Information Services, JIS and JPP, continue to deliver operationally and strategically. Our non-trading revenue is up from 2021, in line with our strategic intent to diversify Group revenue.

Our operational resilience and systems uptime have exceeded our service-level agreement commitments and show marked improvement over the prior year. This sound performance is due to our multi-year investments in system resilience and improvements in internal processes. This is another indicator that our business’s ability to adapt and respond to change has improved.

2022 was a good year for stakeholder relationships, especially for clients, as we recorded notable improvements to our net promoter score (NPS). Employees responded positively to our hybrid work policy. Our teams successfully use the collaborative spaces in the office, with support from the IT and change management teams.

1 Load shedding refers to planned power outages by South Africa’s state-owned energy company, Eskom.
Listings and delistings

The number of listed companies on the JSE has more than halved over the past 30 years, largely due to the number of delistings outpacing new listings. However, despite the decline in the total number of listings, there has been little impact on JSE’s market cap, value traded, or earnings, mostly due to the profile of companies that have delisted. We are taking various actions to counter the delisting trend. Read more on page 50.

JSE Clear: Progress with strategy

In January 2023, JSE Clear began operating as an independent clearing house and CCP. Under the new licence granted by the FSCA in August 2022, JSE Clear will operate under its own rules, having previously operated as an associated clearing house in terms of the JSE’s rules. It will also manage its own fully capitalised balance sheet and will be governed by an independent Board. This change elevates our clearing to global best practice, as global regulators acknowledge CCP clearing as the preferred approach for risk management, clearing and settlement of capital markets.

ESG leadership

We are a leading voice in sustainability, making significant inroads in sustainable investing and local disclosure guidance. We launched our sustainability and climate change disclosure guidance in June 2022. It received the Thought Leadership in Sustainable Investing: Africa award at the 2022 Environmental Finance Awards.

Read more in our sustainability report, available online.

Improving our ecosystem

In 2023, we embarked on a series of targeted engagements with private and public sector leaders. These engagements aim to promote further capital markets reform and highlight current ecosystem challenges. The engagements began with a roundtable discussion with local banking sector group CEOs, followed by discussions with the National Treasury and, separately, the Presidency. One of the central topics of discussion was South Africa’s greylisting.

Presenting South Africa as an attractive destination for international investment is always a priority. We also advocate for the reforms required to enhance this positioning.

Announced in February 2023, South Africa’s greylisting by the Financial Action Task Force (FATF) is a major setback for the country’s international competitiveness. While international investors do not have any additional compliance obligations due to the greylisting, a broader reputational impact will compound the already negative sentiment regarding South Africa as an investment destination. Fortunately, the depth of our financial markets and the strength of our financial system will offset some of the direct economic consequences of greylisting.
As the JSE, we prioritise contributing to public and private sector initiatives to exit the greylist. The JSE is already working with authorities on some of the measures needed to comply with FATF requirements, and have provided inputs into the decision to exempt listed companies from the beneficial ownership requirements. Secondly, we hope to play our role in communicating how the FATF’s issues of concern are primarily around money laundering and terrorist financing investigations and prosecutions, rather than the risks of the financial system facilitating these activities.

**Appointment to the Board**

The Board is actively involved in succession planning and the mentoring of executives.

In January 2023, Fawzia Suliman joined the JSE as Group chief financial officer (CFO) and executive director. Fawzia is a Chartered Accountant who has held various executive roles in a 20-year career in stockbroking and financial services, including chief operating officer (COO) and CFO positions. She brings deep strategic and industry knowledge and extensive experience navigating complex operating environments. We welcome Fawzia to her new role and look forward to her contribution to the Board.

**Appreciation**

I thank my fellow Board members for their leadership and insights into shaping the JSE’s new strategy in 2022.

At our upcoming AGM in May 2023, Dr Mantsika Matooane is retiring from the Board after serving diligently for a ten-year term as independent non-executive director. The Board and I are grateful for her contribution to the JSE’s affairs over the past decade.

I also thank our Group chief executive officer (CEO), Leila Fourie, and her executive team for a year of sound leadership and continued execution of strategy.

**The JSE is well-positioned to deliver value to its stakeholders and contribute to our vision of growing shared prosperity.**

Despite the challenges of recent years, the JSE’s employees remain resilient, passionate and hard-working. Their commitment ensures that the JSE, a small organisation, makes an outsized contribution to the South African economy.

Phuthuma Nhleko
Chairman
Board approval of this report

The directors of the JSE acknowledge responsibility for the integrity of this integrated annual report (report). The Board, supported by the Group Audit Committee, endorsed the reporting frameworks utilised in this report and approved the material matters determined by management.

The directors have applied their minds to the report and believe that it covers all material matters, that the information contained in this report is reliable and that it fairly presents the integrated performance of the Group.

Phuthuma Nhleko
Independent non-executive chairman

Dr Suresh Kana
Lead independent director

Zarina Bassa
Independent non-executive director

Siobhan Cleary
Independent non-executive director

Nolitha Fakude
Independent non-executive director

Faith Khanyile
Independent non-executive director

Ian Kirk
Independent non-executive director

Ben Kruger
Independent non-executive director

Dr Mantsika Matooane
Independent non-executive director

Dr Leila Fourie
Executive director
(Group chief executive officer)

Fawzia Suliman
Executive director
(Group chief financial officer)
An overview of 2022

Much like the previous two years, the JSE operated against a backdrop of extreme volatility, with macro-economic and geopolitical events having a significant impact on our markets. Throughout this challenging period, the JSE delivered on its commitment to operating orderly markets and providing innovative products and services (such as the SME Accelerator, Trade Explorer and others) that create long-term value for the participants in our markets.

Global markets took strain in 2022 as the COVID-19 pandemic left a lingering mark on global supply chains and geopolitical tensions raised important questions about global connectedness. These factors contributed to a global spike in inflation which triggered an upward interest rate cycle across developed and developing markets, in many for the first time since 2008.

South African equity markets tracked global declines for a large portion of the year, followed by a partial recovery in the fourth quarter which saw the JSE end the year ahead of many global markets. Despite the intense market activity driven by global conditions, our systems functioned as intended, maintaining uptime well within targets and providing a reliable platform for the trading, clearing and settlement of transactions.

Leila Fourie
Group CEO

The JSE operating model continues to prove its resilience through the peaks and troughs of volatile markets. Our financial performance in 2022 was supported by sound technology infrastructure and operational processes, exceptional market quality and a growing contribution from inorganic initiatives.
2022 was the year that heralded the start of what many economists refer to as the polycrisis – causing us to focus on a spectrum of events including pandemics, conflict, climate change and energy security. The JSE has the chance to play a meaningful role in how business responds to these changing dynamics, through access to innovative capital formation, effective regulation and stable and secure platforms.

Effective regulation serves as both an enabler and a guardrail to ensure our markets remain safe and trusted. In the past year, we have made substantial progress in updating our Listings Requirements to accommodate new products and in streamlining regulation through the Cutting Red Tape project.

Our focus remains on operating fair, stable and orderly markets while continuing to deliver high-quality earnings through inorganic and organic growth. The digital age presents both risks and opportunities for the stock exchange business, and the launch of JSE Private Placements is just one example of how we have applied our investment in innovative fintech.

We also continue to investigate how technology can improve our business (whether in new markets such as carbon or in post-trade risk management), build trust, and align with global developments. Throughout all of this, our people and our clients remain the golden thread that anchors our business.

Context to our performance

2022 signalled an important shift for the global economy. The accommodative monetary policy and increased liquidity of the pandemic years was replaced with tighter monetary policy amid a surge in global inflation. The MSCI World Equity Index shed ~20% of its value during 2022, with added pressure on bonds and technology stocks. Under these circumstances, investors largely displayed a preference for safe-haven assets over perceived high-risk, high-growth asset classes and emerging economies. It was a similarly challenging environment for new listings in the equity market.

On the local front, challenges in some quarters contrast with progress in others. State-owned enterprises, particularly energy, ports and rail, remain under pressure. Policy changes in support of the liberalisation of electricity generation are welcomed, but will take time to scale. Despite this, the economy benefited from an accelerated positive fiscal trend, becoming one of the few markets to improve the national debt outlook over the year.

The FTSE/JSE All Share Index reached its 2022 low on 29 September (-14% YTD), in line with declines in major international markets. However, it recovered much of its losses through the fourth quarter, ending the year at -0.9%. This compares well with the performance of the S&P 500 (-19%), Nasdaq Composite (-33%), FTSE 100 (+0.9%) and MSCI EM EMEA Index (-23%). From an industry perspective, the JSE’s Financial 15 was up 5% and the Resources 10 was down 0.2%. The Industrials 25 ended the year down 5%.

Net foreign flows in the bond market continue to track ahead of 2020 and 2021 at R27 billion in inflows for the year. The South African 10-year government bond yield ended the year at 11%, still ahead of most developed and emerging market yields. Net foreign flows of R85 billion in the equity market come on the back of net outflows in 2019, 2020 and 2021, albeit at a significantly slower pace.

Our Capital Markets division recorded revenue growth of 3% on the prior year. All drivers of trading revenue in the secondary markets ended the year flat or positive. BDA revenue is billed based on equity transactions, which were down year-on-year. For more detail on our revenue performance per market, please refer to our CFO report starting on page 38.

The JSE welcomed five new listings on the equity market. Incremental capital raised topped R13.3 billion, bringing total market capitalisation to R21 trillion at the end of 2022. We saw continued activity in the sustainability segment. Green bond issuance in 2022 reached R37 billion (2021: R21 billion), with 65 issues (2021: 37).
Delivering on our 2022 strategy focus areas

In 2022, our corporate scorecard was realigned to reflect a refreshed 2026 strategic vision. There are four main elements to the scorecard, each of which supports the strategic objectives of the business.

For more detail, refer to pages 28 to 31.

Generate sustained, high-quality earnings

Our solid performance reflects the quality of our earnings and the resilience of our operating platforms within a challenging trading environment. I am pleased to report year-on-year growth of 4% in headline earnings per share, and a strong ROE of 18%, well within our long-term target range. Our strategy to diversify revenue continues to gain traction, with non-trading revenue up 13% year-on-year to 25% of total operating revenue. The business remains strongly cash generative and this has enabled the Board to declare an ordinary dividend of 769 cents per share for 2022, resulting in a distribution of R668 million to shareholders. These results demonstrate the value of our investment strategy and provide momentum for future growth.

Protect and grow our core business

As a financial market infrastructure (FMI) provider, it is imperative that the JSE remains open, operational, and responsive to fluctuations and risks in the market. Consistent investment in technology allows us to maintain operational resilience and ensures stable systems during periods of extreme volatility.

We continue to invest in technology and our people. The real-world stress tests of the past two years have proved the value of those investments.

Overall system stability during 2022 came in well ahead of service level agreements (SLAs), and serious market failures or priority 1 incidents were down year-on-year. This is a result of direct action to remedy vulnerabilities in technology and enhance internal operational processes.

Operational availability/resilience and technology initiatives

Our technology initiatives in 2022 were balanced between rejuvenation, resilience and growth initiatives. Some of this work relates to near-term stability and some of it relates to long-term strategic objectives. Technology remains the critical enabler to our effectiveness as a regulated marketplace. Investment in technology is vital for realising our vision of a future-fit, resilient and profitable Exchange.

Multi-year investments in system resilience and improvements in internal processes significantly reduced downtime and failure. In addition, our ability to adapt and respond to change improved.

The JSE recorded improvements on multiple metrics that measure operational performance against SLAs and its own historic performance. At year-end, market availability was 99.90%, well ahead of our long-term average performance.

The increasing frequency and severity of load shedding events has led us to increase scheduled preventative maintenance activities and review our proactive fuel management to ensure we continue operating within acceptable risk levels.

Please refer to the technology chapter starting on page 60 for more detail.
Transform our business

Over the past two years, we have taken decisive steps toward growing the share of non-trading-related revenue through diversification. While we have executed acquisitions that support this strategy, we remain laser-focused on driving efficiencies and growing those businesses to unlock shareholder value.

*We measure the progress made towards achieving our long-term vision through acquisitions, innovation and development. Quality earnings, inorganic growth and new approaches to capital formation are key themes that underpin our strategy.*

JSE Investor Services

**JIS Strategic milestones achieved in 2022**

- New clients onboarded
- AGM market share of 60% of virtual and hybrid meetings (supported by Virtual AGM functionality)

The integration and full-year financial consolidation of JSE Investor Services (JIS) has been successfully completed. JIS has performed well since acquisition, acquiring new clients and improving operational efficiencies in line with business case targets. We will begin relocating JIS employees to our Sandton offices during 2023, which will allow a more consistent Group-wide culture.

JIS reported revenue growth of 28% and is discussed in more detail in the CFO report on page 38. Looking ahead, the focus will be on growing market share and attracting new clients. Refer to page 58 for more detail.

JSE Private Placements in collaboration with Globacap

In November 2020, the JSE acquired a minority stake in Globacap, a UK fintech company. This investment has provided us with an opportunity to drive the development of a private market initiative, broadening the scope of services provided by the JSE.

The JSE’s wholly-owned subsidiary, JSE Private Placements (JPP), was awarded its financial service provider licence by the Financial Sector Conduct Authority (FSCA) in December 2021, and launched services to the market in March 2022 by utilising the innovative technology provided by Globacap. JPP’s equity fund raising platform for small and medium enterprises (SMEs), corporates and infrastructure has 22 live deals on the platform seeking to raise an accumulative amount of R4.6 billion. Deals include a South African synthetic diamond business, a material recycling facility and an established school looking to open three new branches.

As we focus on scaling the business, a healthy pipeline of deals and investors are joining the platform.

Information Services market data strategy

JSE’s growth strategy for Information Services is starting to gain momentum. JSE Trade Explorer was launched in collaboration with global trade analytics provider, Big xyt. Trade Explorer is the first exchange-provided solution globally that allows exchange members to analyse their own private order data directly on the desktop. The platform provides an interactive tool for equity market data, including market overviews, concentration analysis, security and pre-trade analytics, as well as a range of broker-specific information. The market data-to-the-cloud initiative is also gaining momentum following the completion of the Cloud Foundations initiative.

*This is a critical phase in the strategic vision for Information Services as we build our capabilities in this space.*

The team is well-equipped to tackle the next phase of the roadmap in 2023, which will expand the data domain and further build technology capability. This includes migrating data-to-the-cloud, enabling self-service analytics, delivering streaming data and expanding Trade Explorer.
New products and services: Initiatives to support our core business

Our vision for the future focuses on several new growth initiatives.

Colocation
We sold six new racks and added four new clients. This added new annuity revenue, over and above the uplift to trading revenue. To date, we have sold 47 of the 71 available colocation racks.

Commodities
- We implemented data feed enhancements for more accurate and efficient reporting of spread trades.
- We enhanced our sunflower seeds contract specifications to recognise foreign-origin stock for physical delivery in completion of a futures contract.

Equity derivatives
We introduced a new global benchmark for the foreign exchange fixing rate for equity derivative options. This will support the growth of international futures and out-of-currency options.

Primary markets
We launched actively managed exchange-traded funds (ETFs) and certificates and welcomed the first issuance.

Sustainability segment
We launched the transition segment to fund projects related to the transition to a low-carbon economy, and sustainability-linked bonds that allow for the cost of capital to be directly linked to sustainability outcomes and impacts. The segment has been doubling in issuances for the past two years and market capitalisation is over R35 billion.

ESG ratings
We extended our coverage of environmental, social and governance (ESG) ratings assessments from about 100 listed companies to about 160 companies, thereby allowing more companies to interact with an ESG rating and get exposure to peer benchmarking.

Fixed income
African currency pairs were approved, and we expect to introduce two new currency pairs (Ghana and Mauritius).
Becoming an attractive capital-raising destination

The JSE published a consultation paper in October 2022 to obtain public comment on various proposals on the equity market listings framework. The proposed initiatives aim to support the Exchange's relevance and competitiveness. Comments closed on 30 November 2022, followed by an FSCA public consultation process early in 2023. More detail is on pages 85 to 86.

Post-Trade Services

We have maintained our focus on generating income from sources outside the primary and secondary markets and are making progress in our post-trade services offering:

- We implemented the required operating and technical changes to enable securities collateral in the derivatives markets. This initiative will go live once regulatory approval is received.
- JSE Clear was granted a licence to operate as an independent clearing house and central counterparty (CCP) by the FSCA, in agreement with the Prudential Authority and the South African Reserve Bank (SARB). This is the final step in a multi-year, complex journey in which we had to implement organisational, operational and technical adjustments.
- We continue to investigate and explore opportunities in the CCP space. The concept of a Bond CCP supports JSE Clear’s objectives of diversifying and growing revenues, while supporting trade liquidity and improving risk management of local markets.

For further detail, please refer to pages 55 to 56.

Partner for a sustainable marketplace

This element of our scorecard considers three key drivers: people, clients and transformation.

The work environment has evolved more in the past two years than it has in the prior decade, largely spurred by the COVID-19 pandemic. We have become more agile in the client space and our management team is more alive to the needs of employees. We support these capabilities by gaining regular survey data and qualitative feedback.

Relationships with employees, market participants and regulators are the vital force of the Exchange business. In a digital world, where technology enables us to be faster and more efficient, our business needs to provide matching, responsive and quality interactions.

We have increased our focus on strengthening our employee and organisational resilience. Remote work and the increased stress and pressure caused by the pandemic made this essential. As we look ahead, we will focus on improving the physical, mental, financial and social wellbeing of our people.

Our employee engagement and client service

2022 brought the need to adapt to a post-lockdown environment with fewer restrictions on physical interactions. We introduced our hybrid work policy and launched a refreshed office and event space. Our policy is designed to enable business continuity and guide managers and teams on how to design their own work manifestos aligned to the JSE Ways of Work. For more detail, please refer to the chapter on employees starting on page 71.

We maintained our Level 2 BBBEE status for the third year.
Competing for the future

The competitive landscape continues to evolve as new entrants, regulations and technology have an impact on the structure of markets. Some peer exchanges have focused on acquisitions in market data, ESG, digital marketplaces and strategic partnerships to widen their offering and compete more effectively across the value chain.

Despite the emergence of local entrants, the JSE has retained 99.84% of value traded since 2017. The JSE has focused on market quality and service levels. We have introduced improvements to our existing capabilities and new functionalities that support depth of market, provide tight bid-offer spreads and enable us to execute large orders. The JSE has proven itself over a number of extremely volatile periods, working with all stakeholders to achieve the best outcome for the market.

The JSE will continue to closely monitor its pricing and to take a pragmatic approach to ensure value for money.

Over the years, we have introduced several price cuts and billing changes, including our tiered billing model. These have significantly reduced the cost of on-screen trading since 2018.

Progressing our refreshed strategic direction

The JSE remains appropriately capitalised, well regulated, cost-effective and technologically robust, with deep and liquid markets. We delivered a solid and resilient performance in line with our objectives. We have made strides in our diversification strategy and in improving the resilience of our technology and systems.

We have, together with the Board, refined our 2026 strategic vision and begun to lay the foundation for more advanced work to begin in 2023 and beyond. This is discussed in more detail on page 28. While we are focusing on growth, we also prioritise the core elements that require rejuvenation and replacement. We are confident that our refined strategy maintains a good balance between these needs.

The 2023 corporate scorecard, which is discussed in more detail on page 32, focuses on:

- generating sustained, high-quality earnings;
- protecting and growing our core business;
- transforming our business; and
- partnering for a sustainable marketplace.
Exploratory work: Carbon markets

Investigations into opportunities in the voluntary carbon market have progressed. Our work has focused on identifying the elements of the value chain that align with our ambitions and value proposition.

Many countries have initiated carbon-related schemes, but there are still many with no path. In South Africa, carbon taxation was introduced in 2019, allowing companies to offset up to 10% (increasing to 15% in 2026) of their taxable emissions by buying offsets.

As the clean energy industry grows, so does the need for specific incentives or policy. A South African voluntary carbon market could accelerate the creation of carbon offset projects, help meet the demand for credits by emitters seeking to offset their emissions, and contribute meaningfully to helping to grow the economy and improve sustainability practices.

There are three proposed elements to our carbon strategy:

1. Carbon credit futures: We aim to list a physically settled carbon credit future contract for trading on our Commodity Derivatives Market.
2. Voluntary carbon market: We are investigating the feasibility of launching a voluntary carbon market through partnerships with trading platform providers.
3. Renewable energy certificates (RECs): We are investigating the feasibility of launching an RECs market through partnerships with trading platform providers. Tradable RECs incentivise decarbonisation of the electricity grid.
Expressing my appreciation

I am grateful to all my colleagues for their energy, resilience and dedication throughout the year. We delivered on our objectives and our people have remained enthused, engaged and focused on contributing to the sustainability of our business.

Thank you to the Board and my executive team for their support and commitment. I also extend my appreciation to our regulators and policymakers for their collaboration, partnership and support.

We are thankful for the support of market participants, regulators and the broader investment community. We look forward to the continued service of South Africa’s capital markets in the year ahead.

Leila Fourie
Group CEO

Reflecting on leadership changes

At the May 2022 Board meeting, we said goodbye to two colleagues whose time at the JSE has added great depth and insight to the boardroom.

Our esteemed chairman, Nonkululeko Nyembezi, stepped down after 12 years on the Board. She was instrumental in my journey at the JSE, particularly during the COVID-19 pandemic. Her composed and thoughtful leadership style steered us through an unprecedented period of uncertainty, and I am forever grateful for her support.

Our chief financial officer (CFO), Aarti Takoordeen, resigned to pursue new opportunities. We are grateful for her contribution during her 8 years with the exchange.

At the AGM on 4 May 2022, Phuthuma Nhleko assumed the chairmanship, having joined the JSE as an independent non-executive director during 2021. We are grateful for his deep commercial experience, insights and perspectives in guiding our strategic vision. We look forward to this exciting new chapter under his leadership.

Subsequent to year-end, the Board appointed Fawzia Suliman as Group CFO and executive director. Her portfolio also includes Strategy and Mergers & Acquisitions. Fawzia’s experience and deep institutional knowledge on both buy- and sell-side have positioned her well to take on this role. We are excited about the contribution she will make to our senior leadership team.
The JSE is a self-regulatory multi-asset class stock exchange that offers listings, trading, clearing and settlement (post-trade), and information services, as well as issuer services. The JSE is based in South Africa and is the largest stock exchange by market capitalisation in Africa and the 19th largest stock exchange in the world. It has been operating as a marketplace for the trading of financial products for 136 years.

### Our Purpose
People with passion, powering a trusted marketplace for an inclusive and prosperous future.

### Our Mission
To be the best globally connected platform for inclusive and sustainable value creation that enriches lives and enables a positive future.

### Our Values
We deliver on our purpose through our core values of servant leadership, connecting for co-creation and growing together.

### Our Ethical Culture
We remain focused on adhering to the applicable legislation and being an ethical and environmentally responsible business.

### Our Role: Providing a Trusted Marketplace
Our value creation process is embedded in our vision of growing shared prosperity and driven by our strategy.

The JSE is uniquely positioned as a:
- critical product and service provider to South Africa’s financial market;
- facilitator between those who provide capital, those who need capital to fund their businesses and those who rely on returns for short-, medium- or long-term purposes; and
- frontline regulator of the financial markets that it operates.

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<table>
<thead>
<tr>
<th><strong>Market Capitalisation (JSE Limited)</strong></th>
<th><strong>R9.4 bn</strong></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th><strong>Equity Securities Available on the JSE</strong></th>
<th><strong>1 247</strong></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th><strong>Average Liquidity</strong></th>
<th><strong>46%</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(JSE Limited)</strong></td>
<td><strong>(2021: 61%)</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Companies Listed on the Main Board</strong></th>
<th><strong>272</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(2021: 288)</strong>, including 57 foreign-domiciled companies</td>
<td><strong>(2021: 62)</strong></td>
</tr>
</tbody>
</table>

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1. The JSE is a self-regulatory organisation (SRO), licensed in terms of section 8 of the Financial Markets Act, 19 of 2012 (FMA) and responsible for regulating the financial markets that it operates.
2. Liquidity is the ratio between total value traded and market capitalisation annualised.
The need for financial markets

Exchanges and clearing houses are critical role-players in a market economy, fostering economic growth and strengthening market integrity. As market infrastructures, they enable the efficient allocation of capital by providing the marketplaces for raising capital and connecting buyers and sellers.

South Africa is a developing country with several social and economic challenges:

- Low growth, high unemployment and high levels of inequality;
- High and increasing dependence on social welfare payments for income;
- Increasing government debt and a growing account deficit; and
- Low levels of domestic savings.

The solution to these challenges lies directly or indirectly in financing.

The JSE's role

The JSE's integral function is to:

- Provide facilities for the listing of securities (including securities and debt securities issued by domestic or foreign companies); and
- Provide the JSE's users with an orderly marketplace for trading in such securities and regulate the market accordingly.

1. As a critical service provider to South Africa's financial markets, the JSE provides a cost-effective, efficient, well-regulated, transparent and trusted platform for financial transactions to take place. These contributions are among the tools needed to spur growth and deal with the challenges South Africa faces and enable value creation.

2. As an interface between those who provide capital and those who need capital, the JSE actively promotes sustainable and transparent business and responsible investment, including:

   - Being a global thought leader in the field of governance and sustainability and the related standards and disclosure;
   - Evolving and expanding our responsible investment product offering through indices, bonds and other initiatives; and
   - Continued enhancement of regulatory regimes and disclosure to ensure that investors are equipped with transparent information to make informed investment decisions.

The JSE's key differentiating factors

- Largest stock exchange by market capitalisation in Africa
- Robust regulation
- Market quality (liquidity, price, speed)
- Highly cash generative
- Growing diversified revenue stream
- Thought leader in the ESG space
JSE provides public marketplaces for raising capital and trading in equities, bonds, derivatives, currencies and commodities, while JSE Clear provides clearing services for listed derivatives.

**LISTING SERVICES**
- Primary Market

**TRADING SERVICES**
- Secondary Market
  - Equity Market
  - Equity Derivatives Market
  - Currency Derivatives Market
  - Interest Rate Market
  - Commodity Derivatives Market

**POST-TRADE SERVICES**
- (equity and bond market)
  - Clearing and settlement services
  - Broker-Dealer Accounting services

**JSE CLEAR**
- (derivatives market)
  - Independent Clearing House licensed to provide central counter-party clearing services for transactions in listed derivatives.

**INFORMATION SERVICES**
- Promotion, licensing and sale of data and statistics

**JSE INVESTOR SERVICES**
- Share registry, custody and investor service provider, maintaining the registers of listed and unlisted companies

**TECHNOLOGY INFRASTRUCTURE**
- Fully electronic, efficient and secure market with world-class regulation, trading and clearing systems, settlement assurance and risk management (pages 60 to 64)

**PRIVATE MARKETS**
JSE Private Placements supports private markets by providing a forum to raise equity and debt through Globacap’s automated and digitised platform.

The focus is on SME and infrastructure funding.

**REGULATORY OVERSIGHT**
- The JSE is the frontline regulator of issuers and trading and clearing members (page 82)

**ISSUER SERVICES**
- Venue hire
- AGM facilitation
- Training
- Secretarial services
Growth across business segments

<table>
<thead>
<tr>
<th>Segment</th>
<th>2022 Revenue</th>
<th>2021 Revenue</th>
<th>Growth YoY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital markets</td>
<td>1 067</td>
<td>1 036*</td>
<td>3%</td>
</tr>
<tr>
<td>Equity market: trading**</td>
<td>512</td>
<td>517</td>
<td>(1%)</td>
</tr>
<tr>
<td>Equity derivatives</td>
<td>160</td>
<td>150</td>
<td>9%</td>
</tr>
<tr>
<td>Primary market</td>
<td>158</td>
<td>153</td>
<td>3%</td>
</tr>
<tr>
<td>Bonds and financial derivatives</td>
<td>124</td>
<td>113</td>
<td>10%</td>
</tr>
<tr>
<td>Commodity derivatives</td>
<td>103</td>
<td>97</td>
<td>6%</td>
</tr>
<tr>
<td>JIS</td>
<td>159</td>
<td>125</td>
<td>28%</td>
</tr>
<tr>
<td>Post-trade services</td>
<td>884</td>
<td>854</td>
<td>3%</td>
</tr>
<tr>
<td>Equity market: clearing and settlement</td>
<td>438</td>
<td>423</td>
<td>3%</td>
</tr>
<tr>
<td>BDA</td>
<td>351</td>
<td>351</td>
<td>0%</td>
</tr>
<tr>
<td>Funds under management</td>
<td>95</td>
<td>81</td>
<td>18%</td>
</tr>
<tr>
<td>Information services</td>
<td>388</td>
<td>350</td>
<td>11%</td>
</tr>
</tbody>
</table>

Figures contain rounding differences
* Includes Company Services revenue.
** Includes Colocation revenue.
Our products and services

CAPITAL MARKETS (page 50)
Capital Markets operates the markets under the JSE's exchange license.

Primary Market
Seeks new equity and debt listings on the JSE's Equity and Interest Rate Markets.

How money is made
Fees for new issuances, annual listing fees for existing issuers and documentation fees for dealing with specific corporate actions that companies undertake.

Listing fees for Specialist Securities include:

- once-off listing fee for warrants and structured products based on preselected ‘listing packages’; or
- a fixed annual maintenance fee for exchange-traded notes (ETNs) and Actively Managed Certificates (AMCs); or
- Asset Backed Securities (ABSs), exchange-traded funds (ETFs) and Actively Managed Exchange-Traded Funds (AMETFs) are charged an annual listing fee based on a basis point, capped at +/-R546k (incl VAT).

Sponsored Depository Receipts are charged on the same basis as an issuer of equity securities and will not incur additional listing fees. Un-sponsored Depository Receipts’ annual fees have been waived until further notice.
## Capital Markets

Capital Markets operates the markets under the JSE’s exchange license.

### Secondary Market
Provides trading, colocation and market development services in the Equity, Bonds, Financial Derivatives and Commodity Derivatives Markets.

### The Equity Market
Provides trading in equities. Products include primary and secondary-listed ordinary shares, preference shares, depository receipts, property entities like real estate investment trusts, special-purpose acquisition companies, warrants, structured products and exchange-traded products (ETFs and exchange-traded notes (ETNs)).

#### How money is made
Trading fees* are charged on a tiered and value traded basis:

- Six cascading tiers with a trade cap of R525.93 for central order book trades (range: 0.48 to 0.37 bps)
- Complex order suite: 0.48 bps, with a R525.93 cap
- Rest of reported trades: 0.48 bps, with a R525.93 cap

The rental fee for colocation racks is charged across all markets, not just the Equity Market.

### The Equity Derivatives Market
Includes index and single-stock futures and options, exotic futures and options, exchange-traded contracts for difference and other international derivative instruments.

#### How money is made
Revenue is generated through a range of fee models based on the number of contracts traded, the market value of transactions or the value of the applicable index.

To promote on-screen trading, the fee for on-screen trading is generally lower than for reported trades and some derivatives markets offer market-making schemes on specific contracts.

### The Currency Derivatives Market
Offers derivative instruments on a range of rand-linked currency pairs. These are broadly futures, options, and exotic options.

#### How money is made
Revenue is generated through a range of fee models based on the number of contracts traded, the market value of transactions or the value of the applicable index.

To promote on-screen trading, the fee for on-screen trading is generally lower than for reported trades and some derivatives markets offer market-making schemes on specific contracts.

### The Interest Rate Market
Provides cash bonds, floating rate bonds, commercial paper and hybrid instrument, interest rate derivatives and a green bond segment. An electronic trading platform is made available to Primary Dealers for execution and meeting Primary Dealer (National Treasury) obligations.

#### How money is made
Revenue is generated through a transactional charge based on the nominal traded. There are two fee bands for lower-volume and higher-volume participants. Transactions on the ETP are charged at a flat fee per million with no tiering. There is an additional pass-through fee for Strate (settlement).

### The Commodity Derivatives Market
Offers derivatives instruments on a range of physically-settled soft commodities, and cash-settled rand-denominated derivatives on various international benchmark commodities, including softs, energy, and metals.

#### How money is made
Revenue is generated through transactional fees, based on a flat fee per contract traded, flat fee per contract physically delivered and a sliding scale fee model based on number of contracts traded.

To promote on-screen trading, the fee for on-screen trading is normally lower than that of reported trades and some derivatives markets offer market-making schemes on specific contracts.

* Pricing for 2022, VAT inclusive.
Responsible for the risk management, clearing and settlement assurance of markets operated by the JSE. The JSE acts as the settlement authority for the exchange-traded Equity Market and as the clearing house for the exchange-traded Derivatives Market (via the CCP and JSE Clear Proprietary Limited (JSE Clear)).

**Post-Trade Services**

- Manages key risks, particularly counterparty credit risk, credit contingent market risk and liquidity risk, through a comprehensive risk management framework. It provides accurate measurement, control and appropriate protection from all identifiable risks arising in the markets cleared.
- Manages the BDA for the Equity Market which provides the JSE with surveillance capabilities, allowing the JSE to see certain transactions at client level in real time. Equity members are mandated to use the system, which keeps the securities records and books of individual broking firms and their clients. The system enables the JSE to provide settlement assurance for central order book equity transactions.

**How money is made**

A clearing and settlement fee* is charged on equity trades, set at a 0.0036% value-based charge, with a maximum fee per transaction leg of R225.18.

In the Derivatives Markets, the clearing and settlement fee is incorporated into a single bundled contract fee (including a trading fee) and is accounted for in the Capital Markets division. A risk management fee is derived based on the margin collected for derivatives transactions (a percentage of the interest earned on the investment of the margin).

BDA revenues are somewhat linked to the number of equity transactions that take place on the Cash Equity Market. BDA transaction fees are mostly charged on a per BDA transaction basis, while connectivity, subscription and dissemination fees are charged separately.

* Pricing for 2022, VAT inclusive.
**JIS** (page 58)
Provides transfer secretarial services to issuers, including share register maintenance, issuer communication, the handling of corporate actions, share scheme management, administration and financial management, shareholder analytics, as well as a central securities depository participant offering.

*How money is made*
JIS charges fees for:
- registry services and share plan administration;
- corporate actions; and
- shareholder analytics, financial management for trusts, asset reunification and directors’ board apps.

It generates revenue from margin income.

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**INFORMATION SERVICES** (page 56)
Provides market data, reference data, corporate actions, client data, indices, valuations, business intelligence, statistics and analytics. Information Services is responsible for the promotion, licensing and sale of all JSE information products and services across all JSE markets, currently weighted towards the Equity Market.

Data products and licenses are billed in either rands or US dollars.

*How money is made*
Selling data products across the JSE’s markets and licensing the distribution and use of these data products.

Licensing fees include end-user terminal fees, non-display use fees and fees for passively tracking products on indices.

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**JSE PRIVATE PLACEMENTS** (page 50)
Supports private markets by providing a forum to raise equity and debt through Globacap’s automated and digitised platform.

*How money is made*
Raising capital: Sliding scale pricing per deal placed on the JPP platform.

- Four cascading tiers with a setup fee\(^1\) (range: R20 000 – R150 000) and success fee\(^2\) (range: 1% – 0.25%).
- The above fees are indicative pricing.

Investors: Zero cost joining fee.

---

\(^1\) Fixed fee for assessing the deal, commencing investor engagement and compliance.

\(^2\) Fundraising fee for matching and successfully closing the deal with approved investor(s).
Factors impacting our ability to create value

We need to use our inputs responsibly and manage certain key dependencies and resource constraints while delivering our products and services. We also need to proactively consider and manage material trade-offs between the various resources we rely on. Refer to material matters on page 2.

What we require to deliver our products and services

- Financial resources to operate the business and support growth, expansion and innovation.
- Technology that enables the delivery of products and services in a secure and stable environment.
- Clients who view the JSE and South Africa as an investment destination of choice.
- Skilled employees who can deliver on the JSE’s strategy.

Key dependencies and resource constraints

**Economic environment**
We need an economic environment that is conducive to Capital Market activity, a licence to operate a market infrastructure and the participation of a range of clients (issuers and the broader investor community).

**Healthy markets**
Our viability depends on a healthy primary market in which the JSE is an attractive venue for raising capital. The liquidity and quality of our Secondary Market trading directly impact our financial performance.

**Technology delivery**
The JSE brand relies on technology delivery and positive relations with our stakeholders.

**Skills**
This includes scarce and specialised skills in regulation, operations, technology and futuristic thinking.

How we consider material trade-offs

The JSE aims to balance the interests of stakeholders, particularly in relation to the following:

- Achieving efficiencies for clients.
- Optimising shareholder value.
- Reinvesting internally in people and technology.

This means balancing prices to clients, dividends to shareholders and rewards to employees.
OUR STRATEGY: GENERATING SUSTAINABLE AND QUALITY EARNINGS

LOOKING TOWARDS OUR 2026 GOALS AND AMBITIONS

A deepened understanding of the global and local geographical, economic and financial market infrastructure landscape informed our new strategy to ensure it is relevant and robust in new and emerging markets.

Trends shaping our strategy

Increasing disintermediation of market infrastructures, an upward trend in the uptake of sustainability-linked products, and global growth in retail investment facilitated by technology, are among the trends that were considered. The JSE also considered that emerging market activity lags behind that of developed markets in scale and volume.

As new and enhanced disclosure requirements and regulations seem to be continuous, we anticipate that the distrust in digital asset players (engendered by the recent bankruptcies and liquidity issues in the digital asset space) will lead to the development of more regulatory frameworks. Nonetheless, electronification and digitisation continue to be key enablers for traded markets and the FSCA's recognition of digital assets as financial products as an interim investor protection measure was welcomed.

The JSE aims to ensure its strategy remains resilient and competitive, considering this evolving and competitive landscape. For more detail on the JSE’s operating environment, refer to the chairman’s report starting on page 4, and the Group CEO’s report starting on page 10.

A strategy that addresses changes in the industry

Our strategy considers our purpose, vision, mission, and core values (refer page 19), which remain entrenched in the business. The new long-term strategy provides clear direction and momentum for the Group’s strategic direction for the next five years. It is anchored by key initiatives and supported by foundational enablers, and the successful delivery of these will result in sustainable and high-quality earnings in the long term.
Outcome of the successful delivery of core strategic initiatives supported by effective management of foundational elements

Core strategic initiatives
- Shift the needle towards desired outcomes
- Change the shape and archetype of the JSE
- Ensure ongoing competitive relevance
- Mitigate strategic risk

Foundational elements
- Embedded core enablers
- Business as usual execution
- Ongoing base investment

SUSTAINABLE, high-quality earnings

PROTECT and grow our core business

TRANSFORM our business

PARTNER for a sustainable marketplace

Technology

People and other stakeholders
- Employees
- Clients
- Shareholders
- Communities

Regulatory integrity

Economic and political environment
Strategic pillars

**Pursuing strategic initiatives that either protect, grow, or transform the business, while partnering for sustainable quality earnings.**

We aspire to return high-quality earnings while protecting and growing our core business to ensure the Group’s growth and sustainability, enabled by the three strategic pillars. Based on the revision of the 2022 strategy, our strategic priorities are geared towards maximising short-term opportunities and future proofing the business.

For performance against our 2022 scorecard metrics, refer to pages 34 to 37.

### PROTECT AND GROW our core business

**Strategy**
- Advance market products and services with efficiency and quality for growth
- Digitise, transform and simplify technology

#### 2023 objectives
- Maintain operational resilience and stability
- Launch automation and digitisation programme
- Upgrade securities trading and technologies (STT) system
- Deliver core products and services

For more detail on our 2023 scorecard, refer to pages 32 to 33.

### TRANSFORM our business

**Strategy**
- Expand our business footprint on digital platforms
- Build an adjacent market data business
- Diversify revenue through inorganic growth and scaling of embedded acquisitions

#### 2023 objectives
- Deliver:
  - Inorganic growth strategy
  - JIS growth strategy
  - IS 2026 growth strategy
- Enable the development of new markets

### PARTNER for a sustainable marketplace

**Strategy**
- Facilitate SME growth and access to capital
- Accelerate international connections and partnerships
- Become the emerging market sustainability exchange of choice

#### 2023 objectives
- Satisfied clients
- Attract and retain top talent and engaged employees
- Execute the core elements of the SME incubator
- Maintain level 2 BEE scorecard rating
- Deliver the sustainability strategy

For more detailed information, refer to pages 56 to 57.

### Building an adjacent market data business

The JSE’s growth strategy for market data business was reformulated in 2021. There are several focus areas aimed at sustaining high operational effectiveness, modernising data architecture, expanding the range of data services, and supporting Group initiatives through market digitalisation or new market opportunities.

The immediate strategic initiatives intend to establish a modern data and cloud foundation that enables us to become the go-to financial market information provider in South Africa.

The medium-term initiatives will deliver the following key outcomes:

- **Modern data capabilities** deliver an enhanced customer experience with regard to data access, analysis, and collaboration.
- **Cloud migration** improves efficiency, reduces costs and improves our ability to scale.
- **Data business transformation** targets higher demand for analytics and new lines of business.

For more detail, refer to pages 56 to 57.

---

**PROTECT AND GROW**

our core business

**TRANSFORM**

our business

**PARTNER**

for a sustainable marketplace

**GENERATE SUSTAINABLE, HIGH-QUALITY EARNINGS**

HEPS growth above that of the prior reporting period
NPAT margin 29%
ROE 19%
Diversify revenue through inorganic growth and scaling of embedded acquisitions

We are scaling the acquisitions that are embedded in our business, while monitoring market opportunities that generate long-term value for JSE stakeholders.

JSE Investor Services

JIS has performed well since its acquisition, acquiring new clients and improving operational efficiencies in line with the operational business case targets. For more information on JIS, refer to the CEO report on page 13.

JSE Private Placement

Our vision

Be the leading private markets platform in Africa.

Our mission

To accelerate Africa’s growth by facilitating capital formation and liquidity in private markets.

Our strategy

To expand JPP’s growth and distribution through strategic partnerships within our ecosystem.

JPP has achieved a number of operational milestones. We continue to focus on scaling the business and have a healthy pipeline of deals in progress. For more information on JPP, refer to the CEO report on page 13.

Leading on sustainability

The JSE has affirmed its sustainability mission of creating an enabling environment for growing better sustainability practices and disclosure, with four focus areas.

Four core focus areas

1. Guide markets on the importance of ESG disclosure and incorporating ESG into investment considerations

2. Behave in a manner that explicitly considers sustainability across our value chain as an exchange and as a central player in the South African economy

3. Provide the tools and services that facilitate responsible investing and the re-orientation of capital flows to more sustainable development

4. Use our central role as connector to facilitate engagement and advocacy in relation to sustainability

For more detail, refer to page 16 and the Sustainability Report.
Our scorecard for 2023 includes initiatives that address all our material matters. The Group scorecard for 2023 was approved by the Board in March 2023 and is articulated below. We have assigned weightings as well as on-target deliverables, above-target deliverables, and performance moderators to FY2023 metrics for the four categories of the scorecard.

### Generate sustained, high-quality earnings

<table>
<thead>
<tr>
<th>On-target deliverables</th>
<th>Above-target deliverables</th>
<th>Performance moderators</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Positive operating leverage on reported results for FY2023</td>
<td>• Positive operating leverage of 2% or better on reported results for FY2023</td>
<td>• Restatement of earnings (misrepresentation)</td>
</tr>
<tr>
<td>• Reported NPAT growth of CPI over reported results for FY2022</td>
<td>• Reported NPAT growth of CPI+2% over reported results for FY2022</td>
<td>• Breach of Group risk appetite on earnings and capital</td>
</tr>
<tr>
<td>• Reported NPAT margin of 29% for FY2023</td>
<td>• Reported NPAT margin of &gt;29% for FY2023</td>
<td></td>
</tr>
<tr>
<td>• Reported ROE of 19% for FY2023</td>
<td>• Reported ROE of &gt;19% for FY2023</td>
<td></td>
</tr>
</tbody>
</table>

To take account of the uncertainty in market conditions, the financial scorecard measures will be aligned to a rolling forecast to be approved by the Board in H2 2023.

### Protect and grow our core business

<table>
<thead>
<tr>
<th>On-target deliverables</th>
<th>Above-target deliverables</th>
<th>Performance moderators</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Overall annual operational/systems stability of 99.7% (SLA to the market)</td>
<td>• Overall annual operational/systems stability &gt; 99.8% (SLA to the market)</td>
<td>• Extended market-facing service interruptions or loss of sensitive data</td>
</tr>
<tr>
<td>• Deliver asset class upgrade on STT platforms in 2023 in line with project plan approved by Board (subject to Bond CCP and levies bill)</td>
<td>• Deliver asset class upgrade on STT platforms in 2023 under budget (subject to Bond CCP and levies bill)</td>
<td>• Breach of risk appetite on operational resilience</td>
</tr>
<tr>
<td>• Progress core products and services</td>
<td></td>
<td>• Significant penalties imposed by Information Regulator or FCSA in relation to a Data incident</td>
</tr>
<tr>
<td>• Delivery against planned systems maintenance initiatives</td>
<td></td>
<td>• Significant cyber breach with market-facing impact</td>
</tr>
<tr>
<td>• Initiate and progress an organisation-wide programme of work on automation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Transform our business

**On-target deliverables**
- Achieve the JIS growth strategy
- Drive the IS 2026 growth strategy
- Progress delivery on market data of prioritised asset classes into the cloud
- Launch the JSE Market Data Shop in the cloud
- Progress enablement of new markets

**Above-target deliverables**
- Exceed on-target growth strategies for JIS
- Drive the 2026 IS growth strategy (targets in addition to on-target performance)
- Transition of history for essential data sets within the Market Data Lake
- Launch XBRL for JSE-listed company results
- Realise revenue from new data services of an agreed amount with Board
- Deliver prioritised real-time market data over the cloud

**Performance moderators**
- An impairment on JIS
- Failure to deliver all phases of the Market Data Lake in the Cloud

### Partner for a sustainable marketplace

**On-target deliverables**
- Maintain a staff culture engagement score in line with the 2022 score
- Maintain a client NPS survey score in line with the 2022 score
- Maintain a regrettable attrition ratio below our risk appetite
- Execute the core elements of the SME incubator support model and expand the service proposition for SMEs
- Maintain a BEE scorecard rating of level 2
- Meet on-target performance levels for selected key metrics in Sustainability dashboard

**Above-target deliverables**
- Improve on the 2022 staff culture engagement score
- Improve on the 2022 Client NPS score
- Fully implement Incubator support model with all elements and partnerships in place
- Improve BEE scorecard rating as determined by Group Remco
- Deliver above-target performance levels on a majority of the selected key metrics in Sustainability dashboard

**Performance moderators**
- Significant decline in staff culture engagement score
- Significant decline in BEE scorecard rating
- Significant decline in client NPS survey score
OUR PERFORMANCE: TRACKING PROGRESS AGAINST STRATEGY

Reflecting on the 2022 scorecard
Reviewing our financial performance
Delivering our operational objectives
• Capital Markets insights
• Post-Trade Services insights
• Information Services insights
• JIS insights
Ensuring technology resilience
Contributing toward transformation
Empowering our employees

2022 strategic performance

Our 2022 corporate scorecard was approved by the Board in February 2022 and included initiatives that addressed our material matters. The scorecard underwent some realignment to better reflect our refreshed 2026 strategic vision. There are four main elements to the scorecard, each of which supports the strategic objectives of the business. For the first time, GRC has assigned weights to each of the four pillars in line with the materiality of the metrics. Specific metrics and targets apply for on-target and above-target performance levels, with performance moderators for below-target delivery.

A self-assessment of our strategic delivery was undertaken by Exco and interrogated by the GRC. The self-assessment directly informs the size of the discretionary bonus pool for 2022. For further information, please refer to the online remuneration report.

Overall, the JSE has produced a solid and resilient performance in 2022 (as rated by GRC). The increase in performance rating for 2022 is driven by the achievement of all on-target and two above-target metrics for the protect and grow core business element.
Performance against each deliverable for 2022 is set out in the snapshots below. Further detail is unpacked in the CEO report on pages 10 to 18.

Corporate scorecard 2022 is aligned to the refreshed 2026 strategic vision. Each scorecard element carries a weighting in line with materiality. Specific metrics and targets apply for “on-target” and “above-target” performance levels, with “performance moderators” for below-target delivery.

A **SOLID AND RESILIENT** performance delivered for 2022. The improvement in performance for 2022 (86%) versus 2021 (73%) is driven by the achievement of all on-target and two above-target metrics for “Protect and grow core business”.

**Financial:** Delivered growth in HEPS while achieving ROE and NPAT margins in line with targets. Slowdown in revenue growth due to global and local market drivers negatively impacted operating leverage for the 2022 year.

**Operations:** Operational resilience and systems uptime has exceeded our SLA commitments and shows a marked improvement on the prior year.

**Growth:** Headline growth initiatives JIS and JPP delivered operationally and strategically, despite missing financial targets by a small margin. Annuity revenue is up from 2021 in line with strategic intent to diversify Group revenue.

**Stakeholders and staff:** Have performed well with stakeholders and recorded improvements in our Net Promoter Score (NPS).

**JSE Clear:** Received approval to begin operating JSE Clear as an independent clearing house. This will be made official from January 2023.

**Return to office:** There has been a positive response to our hybrid work policy. The staff is successfully utilising the collaborative space in the office with support from the IT and change management teams.
### Our 2022 Corporate Scorecard – Detailed performance

**STRATEGY ELEMENT: Generate sustained, high-quality earnings**

**Rated as ON TARGET with score of 38/45**

<table>
<thead>
<tr>
<th>On-target deliverables</th>
<th>Performance assessment</th>
<th>Remco decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Balanced operating leverage on reported results</td>
<td>1. Negative operating leverage</td>
<td>Below target</td>
</tr>
<tr>
<td>2. Reported HEPS growth over prior reporting year</td>
<td>2. HEPS growth up 4%</td>
<td>On target</td>
</tr>
<tr>
<td>3. Reported NPAT margin 26% – 28%</td>
<td>3. NPAT margin of 28%</td>
<td>On target</td>
</tr>
<tr>
<td>4. Reported ROE range of 17% – 18</td>
<td>4. ROE of 18%</td>
<td>On target</td>
</tr>
</tbody>
</table>

**Above-target deliverables**

1. Deliver a shift towards annuity revenue in reported results (versus the transactional revenue reported in the prior year)
2. Leverage, HEPS growth, NPAT margin and ROE

1. Non-trading revenue increased by 13% over 2021 to 25% of total operating revenue
2. Operating leverage, HEPS growth, NPAT margin and ROE did not meet the above-target performance levels

**No performance moderators apply**

**STRATEGY ELEMENT: Protect and grow core business**

**Rated as ABOVE TARGET with score of 20/20**

<table>
<thead>
<tr>
<th>On-target deliverables</th>
<th>Performance assessment</th>
<th>Remco decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Overall annual operational/systems stability of 99.7% (SLA to the market)</td>
<td>1. 99.90% market availability (better than the SLA set for 2022)</td>
<td>On target</td>
</tr>
<tr>
<td>2. Overall number of material priority one incidents</td>
<td>2. Five material priority one incidents at Group level (three in IT, two in data)</td>
<td>On target</td>
</tr>
<tr>
<td>3. Commence the asset class migration on STT platforms</td>
<td>3. Delivered in line with the project plan</td>
<td>On target</td>
</tr>
</tbody>
</table>

**Above-target deliverables**

1. Overall annual operational/systems stability > 99.8% (SLA to the market)
2. Overall number of material priority one incident

1. 99.90% market availability (better than the SLA set for 2022)
2. Five material priority one incidents

**No performance moderators apply**
### STRATEGY ELEMENT: Transform the business
Rated as ABOVE TARGET with score of 18/20

<table>
<thead>
<tr>
<th>On-target deliverables</th>
<th>Performance assessment</th>
<th>Remco decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Drive the 2026 market data strategy</td>
<td>Delivered all 2022 targets</td>
<td>On target</td>
</tr>
<tr>
<td>3. Progress core products and services</td>
<td>Range of new products delivered to support market quality, product breadth and availability</td>
<td>On target</td>
</tr>
<tr>
<td>4. Implement the SME Accelerator platform</td>
<td>First cohort graduated with an increase in revenue and headcount</td>
<td>On target</td>
</tr>
</tbody>
</table>

**Above-target deliverables**

<table>
<thead>
<tr>
<th>On-target deliverables</th>
<th>Performance assessment</th>
<th>Remco decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Progress securities collateral functionality (subject to legislation)</td>
<td>JSE is ready to launch once regulatory approval is granted</td>
<td>Above target</td>
</tr>
<tr>
<td>2. Drive the 2026 market data strategy (targets in addition to on-target performance)</td>
<td>Some above-target items delivered</td>
<td>Above target</td>
</tr>
</tbody>
</table>

No performance moderators apply

<table>
<thead>
<tr>
<th>On-target deliverables</th>
<th>Performance assessment</th>
<th>Remco decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Failure to meet JIS and Globacap business case and FY2022 targets</td>
<td>Targets partially met</td>
<td>Marginally below target</td>
</tr>
</tbody>
</table>

### STRATEGY ELEMENT: Partner for a sustainable marketplace
Rated as ON TARGET with score of 10/15

<table>
<thead>
<tr>
<th>On-target deliverables</th>
<th>Performance assessment</th>
<th>Remco decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Achieve a staff culture engagement score in line with financial services industry average for 2022</td>
<td>JSE engagement score within the pre-set range, but slightly below financial services industry average</td>
<td>Marginally below target</td>
</tr>
<tr>
<td>2. Maintain or improve client NPS survey score above 2021 score</td>
<td>NPS survey score above the 2021 score</td>
<td>On target</td>
</tr>
<tr>
<td>3. Operate successfully in a hybrid working model (measured through staff engagement survey in Q4 2022)</td>
<td>Successfully delivered hybrid working model</td>
<td>On target</td>
</tr>
<tr>
<td>4. Maintain a regrettable attrition ratio below a pre-set average</td>
<td>Regrettable attrition ratio below pre-set average</td>
<td>On target</td>
</tr>
<tr>
<td>5. Maintain BEE scorecard rating of Level 2</td>
<td>Maintained BEE scorecard rating of Level 2</td>
<td>On target</td>
</tr>
</tbody>
</table>

**Above-target deliverables**

<table>
<thead>
<tr>
<th>On-target deliverables</th>
<th>Performance assessment</th>
<th>Remco decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Achieve a staff culture engagement score better than the financial services industry average for 2022</td>
<td>Staff culture engagement score below financial services average for 2022</td>
<td>Marginally below target</td>
</tr>
<tr>
<td>2. Improve client NPS survey as determined by Group Remco</td>
<td>NPS survey score improved by +2 points</td>
<td>Did not meet above-target deliverable</td>
</tr>
<tr>
<td>3. Improve BEE scorecard rating as determined by Group Remco</td>
<td>BEE scorecard rating improved by +3 points within Level 2</td>
<td>Above target</td>
</tr>
</tbody>
</table>

No performance moderators apply
The JSE delivered a solid financial performance in 2022, with headline earnings per share up 4% YoY, supported by strong cash generation across our business segments. The contribution of inorganic growth initiatives to Group earnings continues to grow in line with our long-term strategic intent. Our business model is centred around healthy cash generation, which has enabled us to remain soundly capitalised while allowing us to grow through acquisitions and new business.”

The year in review – 2022 key financial highlights

The JSE has a resilient business model underpinned by a healthy cash position.

Overview

Profitability

Operating revenue
+5%
to R2.7 billion
(2021: R2.5 billion)

Total OPEX
+7.5%
to R1.9 billion
(2021: R1.8 billion)

EBITDA
+1%
at R1.07 billion
(2021: R1.06 billion)

Net finance income
+40%
to R203 million
(2021: R146 million)

HEPS and EPS
+4%
917.7 cents and 911.1 cents
(2021: HEPS 878.9; EPS 874.1 cents)

Cash and capital allocation

Net cash generated
R978 million
(2021: R917 million)

Capex
R127 million
(2021: R165 million)

Regulatory capital
Solvency: R1.2 billion
(2021: R1.1 billion)

Supported by R822 million in cash, R143 million in bonds

Cash balance
R2.2 billion
(2021: R2.4 billion)

Ordinary dividend per share*
769 cents
(2021: 754 cents)

Ordinary dividend payout ratio*
89%
(2021: 92%)

* Distributable profit.
Key highlights are unpacked below:

**Profitability**
- Operating revenue grew 5% to R2.7 billion, with an 11% increase in revenue from Information Services and a 28% increase in revenue from JIS.
- Total operating expenditure increased by 7.5% YoY to R1.9 billion, driven by operating environment pressures, including inflation.
- Earnings before interest, tax and depreciation (EBITDA) of R1.07 billion increased by 1% YoY, with headline earnings per share (HEPS) up 4% to 917.7 cents per share.
- Rising interest rates and growth in margin deposits have supported higher net finance income which increased 40% YoY to R203 million (2021: R146 million).
- Net profit after tax (NPAT) increased by 4% YoY to R749 million.

**Cash and capital allocation**
- Continued strong cash generated from operations of R978 million has enabled the Board to declare an ordinary dividend of 769 cents per share for 2022, an increase of 2% YoY.
- Capital expenditure of R127 million focused on operational resilience and growth initiatives.
- The Group maintains a robust balance sheet and cash of R2.2 billion at 31 December 2022. Ring-fenced and non-distributable cash (regulatory capital and investor protection) amounts to R1.2 billion. Of the remaining R1 billion, R668 million will be distributed as dividends.

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The JSE delivered a solid performance in 2022. Operating revenue grew across business segments with operational resilience being a key strategic enabler. This has been supported by positive momentum gained in Information Services, JSE Investor Services (JIS) and JSE Private Placements (JPP) demonstrating the value being created from our inorganic growth strategy. The JSE further increased the proportion of its revenue derived from non-trading activity (non-trading revenue* grew by 13% from R590 million to R668 million in 2022), in line with our strategic intent to diversify Group revenue.

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*Non-trading revenue: non-trading related revenue earned in capital markets, post-trade services, Information Services and JIS.
Revenue growth across business segments

Market dynamics and strategic focus drive performance.

The Group’s revenue performance was achieved through the following:

**Capital markets**
+3% YoY
(R1 067 million)
Global market volatility, increased hedging

**Post-trade services**
+3% YoY
(R884 million)
Equity market activity, growth in funds under management

**Information services**
+11% YoY
(R388 million)
Solid growth across indices and derivative markets, positive FX

The JSE’s performance drivers are detailed below:

**Capital Markets**

- **Primary Market**: Revenue increased by 3% largely owing to an overall increase in the market capitalisation of companies listed on the JSE (up 4%).
- **Equity trading**: Revenue decreased by 1% due to flat published value traded and a price reduction in the Complex Order Suite trade-types. Central Order Book trade activity pulled back from strong H1 2022 performance as Russia-Ukraine-induced market volatility gave way to risk-off sentiment at the back of rising global inflation and aggressive central bank policy rates tightening.
- **Equity Derivatives**: Revenue increased by 9%. The increase in trade activity was driven largely by the main indices, with an uptick seen in the total return indices, IDX contracts and offshore index products.
- **Currency derivatives**: Revenue remained flat YoY. Contracts traded increased by 15% to 52 million. The increase in trade activity was driven by high volatility in the rand, underpinned by global inflation risk.
- **Bonds**: Revenue increased by 16% owing to an increase in bond nominal value traded (up 4% to R37 trillion). Growth was largely attributed to rand volatility caused by the war in the Ukraine and rising interest rates making South African bonds attractive from a yield perspective.
  - Bond repo increased by 4% to R25.8 trillion (2021: R24.9 trillion).
  - Standard bonds increased 6% at R11.0 trillion (2021: R10.4 trillion).
- **Interest rate derivatives**: Revenue increased by 15% owing to a higher number of interest rate derivative contracts traded (up 14%), with the most growth coming from Bond Futures. The increase in trade activity was driven by the JIBAR futures product, which has seen increased activity from both local and foreign players.
  - Includes colocation revenue.
- Commodity derivatives: Revenue increased by 6% owing to an increase in the number of contracts traded (up 2% to 3.6 million) and physical deliveries (3.9 million tons). This was largely due to the volatility in the market driven by escalations of the Russia-Ukraine war and an increase in hedging activity, coupled with local and global weather factors.
- Issuer Services: Revenue increased by 19%, largely driven by our AGMs, training and venue hire offerings.

Post-trade services
- Clearing & Settlement: Revenue increased by 3% while published value traded remained flat YoY. The increase in revenue is largely owing to an increase in the option delta’s (OD’s) trade type (which is charged for under clearing and settlement and not in the trading fee line). Additionally, funds under management increased 18%, largely owing to growth in JSE Trustee’s cash balances.
- BDA: Revenue remained flat, driven by a lower number of equity transactions (down 1%).

Information Services
- Revenue increased by 11% owing to solid growth across indices and the derivative markets, with a positive FX impact (~R19 million).

For more detail on the businesses’ operational performance, refer to pages 50 to 59.

### Cost growth reflects our strategic initiatives and operating environment pressure

**Overall OPEX guidance**

We guide to an FY2023 OPEX growth of between 5% – 8%.

Total operating expenditure grew by 7.5% YoY. We unpack in more detail our strategic growth areas, Information Services, JIS and JPP, to diversify revenue on pages 13, 50 to 54, and 56 to 59. We continue to implement cost optimisation strategies in a bid to drive efficiencies and maintain sustainable operating cost levels.

### Personnel costs

Personnel costs guidance

In 2022 and 2023, average salary increases were limited to inflation estimates. There are no current plans to change headcount structure unless a business case supports revenue.

Personnel costs increased by 7% to R693 million (2021: R650 million).

- Gross remuneration increased due to annual salary increases and an increase in the average headcount from the Share Plans business. We have successfully integrated the Share Plans business acquired in September 2021. This acquisition has established JIS as the leading share plans provider in South Africa and allowed us to tap into the unlisted registry market.

Average headcount at 545 (2021: 518)

Refer to the employee profile on page 72.
Technology costs

**Technology costs guidance**

The bulk of costs are contractual, with annual inflationary increases. Cybersecurity spend is typically more than inflation. Aligning with the Group’s strategy, we continue to enhance and evolve our IT strategy to deliver appropriate technologies to the Group. A focus on cloud adoption and the use of new digitisation technologies form part of the strategy to ensure the JSE remains technically relevant into the future. Please refer to pages 60 to 64 for more detail.

Technology costs increased by 2% to R345 million (2021: R337 million), largely driven by:

- New growth initiatives, including JIS and JPP.

Depreciation and amortisation

**Depreciation and amortisation guidance**

We have provided a multi-year depreciation profile of known CAPEX in the graph below.

Depreciation and amortisation increased by 6% to R273 million (2021: R258 million), owing to accelerated depreciation on software licences due to new solutions implemented and on leasehold improvements.

Depreciation profile and outlook for FY2023

Other operating expenses

**Other operating expenses guidance**

We manage general expenses through close cost monitoring, reporting and contract leveraging. Managing the cost growth trajectory remains a key priority.

- Other operating expenses increased by 12% to R601 million (2021: R534 million), largely owing to:
  - Impact of operating environment pressures across the board, including an increase in electricity and building utilities (e.g., diesel).
  - Low base effects owing to COVID-19.
  - Strategic initiatives and implementation costs JIS administration fees related to revenue generating activities.
  - Imposed Regulatory related costs and compliance costs.
3 Strong cash generation

Cash flows and investments

The Group continued to be cash generative, with a cash balance of R2.2 billion at the end of December 2022 (2021: R2.4 billion) held in cash and cash equivalents. Net cash generated from operations increased by 7% to R978 million (2021: R917 million). The cash available for distribution is unpacked in detail on page 48.

Strong cash generation

Cash flows and investments

Strong balance sheet underpinned by healthy cash generation

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**Financing activities include:**
- Purchase of treasury shares and forex fluctuations on cash.
- Lease liability repaid.

**Investing activities include:**
- Largely intangible assets (including the renewal of multi-year licenses), plant and equipment.
- Investment in government bonds.

* Including effect of exchange rate fluctuations on foreign-denominated cash and proceeds from sale of treasury shares.

** Excluding dividend paid to JSE Empowerment Fund (JEF).
Dividends
The ordinary dividend of 769 cents per share represents a 2% increase on the 754 cents per share paid in 2021. The ordinary dividend pay-out ratio corresponds with 89% of distributable profits in 2022 (2021: 92%).

The graph below shows our ordinary dividend payments over the past five years.

Change to the dividend policy
The JSE has refined its dividend policy to reflect a more appropriate balance between cash returns to shareholders and reinvestment into the business. As such, we have updated the annual dividend policy from a progressive approach to a pay-out ratio (67% – 100% of earnings). The Board is confident that the updated dividend policy is congruent with the Group’s growth strategy over the medium term.

<table>
<thead>
<tr>
<th>Dividend per share (cents)</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ordinary dividend</td>
<td>725</td>
<td>754</td>
<td>769</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special dividend</td>
<td>840</td>
<td>840</td>
<td>854</td>
<td>725</td>
<td>655</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total ordinary dividend per share (cents)</td>
<td>655</td>
<td>690</td>
<td>725</td>
<td>754</td>
<td>769</td>
</tr>
<tr>
<td>Total dividend (R million)*</td>
<td>730</td>
<td>730</td>
<td>630</td>
<td>741</td>
<td>668</td>
</tr>
<tr>
<td>Ordinary dividend pay-out ratio (%)</td>
<td>62</td>
<td>87</td>
<td>83</td>
<td>92</td>
<td>89</td>
</tr>
<tr>
<td>Total dividend pay-out ratio (%)</td>
<td>80</td>
<td>101</td>
<td>83</td>
<td>104</td>
<td>89</td>
</tr>
</tbody>
</table>

* Includes dividends to JSE Empowerment Fund.
Continued investments in operational resilience and growth

Capital allocation
Capital allocation is divided into the following four pillars, namely:
- regulatory capital held for the Exchange and clearing house;
- CAPEX for the maintenance and upgrade of infrastructure and systems, as well as organic growth initiatives;
- capital retained for inorganic growth; and
- capital to be returned to shareholders, currently in the form of dividends.

CAPEX
Capital expenditure totalled R127 million (2021: R165 million), in line with JSE guidance, and was focused on operational resilience and growth initiatives. All planned investments for 2023 and 2022 capital requirements can be funded from the Group’s cash resources.

Investments planned and made in 2022 included:
- Rejuvenation of infrastructure and systems
- Regulatory enhancements
- Operational resilience
- Information Services growth strategy
- Securities collateral
- Leasehold improvements

CAPEX guidance
We have provided FY2023 CAPEX guidance of between R130 million and R150 million. These investments are focused towards:
- The Information Services growth strategy
- The Bond CCP
- Rejuvenation of infrastructure and systems maintenance
- Clearing enhancements
- Regulatory enhancements

CAPEX profile and FY2023 outlook (R million)

* Lower range (R130 million) | Higher range (R150 million).
5 Strategic growth areas diversify revenue

Our growth areas, Information Services, JIS and JPP, continue to deliver operationally and strategically.

We have successfully integrated JIS and its revenue continues to grow. JIS now contributes 6% to Group revenue. For more detail on business operations and strategy, refer to pages 58 to 59.

The growth strategy for Information Services is starting to gain traction with 11% growth in revenue to R388 million, representing 16% of the JSE’s Group’s revenue. This is a critical phase in the strategic vision for Information Services as it lays the groundwork for monetisation and improving our data capabilities. Refer to CAPEX focus areas listed on page 45 and the Information Services growth strategy on pages 56 to 57.

Our strategy also includes scaling JSE Private Placements (JPP) to become a significant alternative capital-raising platform. Given that the fee structure is heavily weighted towards deal closure, there is revenue upside potential in 2023 and onwards. As we focus on scaling the business, a healthy pipeline of deals and investors is joining the platform. For more detail on business operations and strategy, refer to pages 13 and 50.

6 Soundly capitalised Group

The JSE and JSE Clear are sufficiently capitalised.

The JSE and JSE Clear are required to hold regulatory capital. The Group calculates and holds regulatory capital in the form of equity capital – this amounts to R1.2 billion in total for JSE Limited and for JSE Clear, of which R822 million is held in the form of restricted cash and cash equivalents and R143 million in SA government bonds. At the reporting date, JSE and JSE Clear are adequately capitalised.

The investor protection and other funds (non-distributable) are disclosed separately in the graph titled Breakdown of cash balances. The graph below shows the breakdown of the Group’s cash balance and the profile of the allocation of funds.

### Breakdown of cash balance (R billion)

<table>
<thead>
<tr>
<th></th>
<th>December 2020</th>
<th>December 2021</th>
<th>December 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investor Protection funds and other funds (non-distributable)</td>
<td>2.5</td>
<td>2.4</td>
<td>2.2</td>
</tr>
<tr>
<td>Regulatory capital</td>
<td>0.76</td>
<td>0.79</td>
<td>0.82</td>
</tr>
<tr>
<td>Remaining cash</td>
<td>0.39</td>
<td>0.39</td>
<td>0.40</td>
</tr>
</tbody>
</table>

- **Dividend**: R668 million.
- **CAPEX**: R150 million.

**Investor protection and other funds (non-distributable)**

- JSE Derivatives Fidelity Fund
- JSE Guarantee Fund
- BESA Guarantee Fund
- JSE Empowerment Fund
- JSE Reserve Portfolio

**Regulatory capital (regulatory minimum)**

- JSE Limited: 6 months OPEX held in cash and government bonds*
- R115 million additional capital injection into JSE Clear, ICH**

**Remaining cash balance**

- CAPEX (R0.15 billion)
- Return to shareholders through an ordinary dividend (R0.67 billion)
- Other investment and working capital

* Not included in cash balance, but R143 million held in Bonds.
** Independent Clearing House.
Appreciation and future focus

As I reflect on 2022, I would like to thank the finance team for their energy, resilience, and dedication. Aarti Takoordeen resigned as CFO and executive director on the 20th of May 2022 and the Board subsequently appointed Carmini Kander as acting CFO. During this period, Carmini has led the finance team during a challenging year and I would like to thank her for her excellent leadership and for her strategic contribution and financial insights.

I was appointed as the new Group CFO on the 9th of January 2023 and will lead the Finance Division and serve as a member of the Group Exco. My portfolio will include Group Strategy and M&A, in collaboration with business.

I am particularly pleased about the automation projects that have been delivered in 2022 and those being planned for 2023, not only for our finance team, but for the broader business. We know that technology is one of the foundational elements of the JSE Strategy and the successful implementation of automated processes across the business will be a key enabler for our business by improving the accuracy and quality of our financial data as well as the cadence of information flow.

Looking ahead, the team will continue to focus on prudent management of the cost base and enhancing the control environment through automation efforts.

The JSE is a financial market infrastructure that enables efficient and optimum functioning of the capital markets in South Africa. To this end, we will continue to balance the needs of our diverse range of stakeholders, including making sound and considered investments to ensure the JSE Group’s sustainability and a continued beneficial outcome for all our stakeholders.

Our long-term strategic objectives are to grow and diversify revenue streams, invest in operational robustness and resilience, as well as further entrench sustainability in the business.

Our business model continues to evolve to meet the changing needs of capital market participants. Our operational resilience and systems uptime have exceeded our service level agreement commitments and show marked improvement over the prior year. This solid performance is due to our multi-year investments in system resilience and improvements in internal processes.

Our Group scorecard for 2023:

Generate sustained, high-quality earnings

Weighting: 45%

On-target deliverables

1. NPAT margin of 29%
2. ROE range of 19%

Refer to page 32 for more detail.

Fawzia Suliman
Group CFO
### Income statement performance

<table>
<thead>
<tr>
<th></th>
<th>2022 R’000</th>
<th>2021 R’000</th>
<th>Δ %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating revenue</td>
<td>2 650</td>
<td>2 517</td>
<td>5%</td>
</tr>
<tr>
<td>Other income</td>
<td>54</td>
<td>59</td>
<td>(8%)</td>
</tr>
<tr>
<td>Total revenue</td>
<td>2 704</td>
<td>2 576</td>
<td>5%</td>
</tr>
<tr>
<td>Personnel expenses</td>
<td>693</td>
<td>650</td>
<td>7%</td>
</tr>
<tr>
<td>Other operating expenses</td>
<td>946</td>
<td>871</td>
<td>9%</td>
</tr>
<tr>
<td>EBITDA</td>
<td>1 066</td>
<td>1 055</td>
<td>1%</td>
</tr>
<tr>
<td>EBITDA (%)</td>
<td>39%</td>
<td>41%</td>
<td>(2 pts)</td>
</tr>
<tr>
<td>Depreciation and amortisation</td>
<td>273</td>
<td>258</td>
<td>6%</td>
</tr>
<tr>
<td>Total operating expenses</td>
<td>1 912</td>
<td>1 779</td>
<td>7.5%</td>
</tr>
<tr>
<td>EBIT</td>
<td>792</td>
<td>798*</td>
<td>(1%)</td>
</tr>
<tr>
<td>EBIT (%)</td>
<td>29%</td>
<td>31%</td>
<td>(2 pts)</td>
</tr>
<tr>
<td>Net finance income</td>
<td>203</td>
<td>146</td>
<td>40%</td>
</tr>
<tr>
<td>Share of profit from associate</td>
<td>41</td>
<td>52</td>
<td>(21%)</td>
</tr>
<tr>
<td>Profit before tax</td>
<td>1 037</td>
<td>995</td>
<td>4%</td>
</tr>
<tr>
<td>Income tax expense</td>
<td>288</td>
<td>272</td>
<td>6%</td>
</tr>
<tr>
<td>NPAT</td>
<td>749</td>
<td>723</td>
<td>4%</td>
</tr>
<tr>
<td>Attributable to JSE minority shareholders</td>
<td>0</td>
<td>1</td>
<td>(100%)</td>
</tr>
<tr>
<td><strong>Attributable to JSE Group</strong></td>
<td><strong>749</strong></td>
<td><strong>722</strong></td>
<td><strong>4%</strong></td>
</tr>
<tr>
<td>NPAT (%)</td>
<td>28%</td>
<td>28%</td>
<td>0 pts</td>
</tr>
<tr>
<td>EPS (cents)</td>
<td>911.1</td>
<td>874.1</td>
<td>4%</td>
</tr>
<tr>
<td>HEPS (cents)</td>
<td>917.7</td>
<td>878.9</td>
<td>4%</td>
</tr>
</tbody>
</table>

* Figures contain rounding differences.

**Other income**: Other income decreased to R54 million (2021: R59 million), owing to a lower USD balance from a sale in May 2022. The JSE held USD 4.4 million in cash at the end of December 2022 (2021: USD 6.8 million).

**Net finance income**: Net finance income increased by 40% YoY, owing to higher yields on the JSE’s cash balances, following multiple repo rate increases and an increase in JSE Clear margin deposits driven mainly by an increase in net notional exposures and, to some extent, price volatility.

**Share of profit from associate**: NPAT decreased, owing to an increase in spend related to Strate’s strategic initiatives.
**Our 2022 report**

INTEGRATED ANNUAL REPORT 2022

MATERIAL MATTERS NAVIGATING CHANGE DRIVING OUR STRATEGY OUR ROLE OUR STRATEGY PERFORMANCE OUR REGULATORY ROLE OUR RISK ENVIRONMENT OUR STAKEHOLDERS OUR GOVERNANCE APPENDICES

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**Robust balance sheet**

<table>
<thead>
<tr>
<th></th>
<th>31 December 2022</th>
<th>30 June 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets</strong></td>
<td><strong>R’000</strong></td>
<td><strong>R’000</strong></td>
</tr>
<tr>
<td><strong>Non-current assets</strong></td>
<td>1 992</td>
<td>1 967</td>
</tr>
<tr>
<td>Property and equipment</td>
<td>165</td>
<td>176</td>
</tr>
<tr>
<td>Intangible assets</td>
<td>696</td>
<td>727</td>
</tr>
<tr>
<td>Investment in associate</td>
<td>329</td>
<td>328</td>
</tr>
<tr>
<td>Other non-current assets</td>
<td>801</td>
<td>736</td>
</tr>
<tr>
<td><strong>Current assets</strong></td>
<td>59 345</td>
<td>59 071</td>
</tr>
<tr>
<td>Margin deposits</td>
<td>55 793</td>
<td>55 413</td>
</tr>
<tr>
<td>JSE Clear Derivatives Default Fund collateral deposits</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>Trade and other receivables</td>
<td>793</td>
<td>593</td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>2 223</td>
<td>2 393</td>
</tr>
<tr>
<td>Other current assets</td>
<td>36</td>
<td>172</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>61 336</td>
<td>61 038</td>
</tr>
<tr>
<td><strong>Total equity</strong></td>
<td>4 173</td>
<td>3 845</td>
</tr>
<tr>
<td>Stated capital</td>
<td>(119)</td>
<td>(109)</td>
</tr>
<tr>
<td>Reserves</td>
<td>755</td>
<td>757</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>3 537</td>
<td>3 237</td>
</tr>
<tr>
<td><strong>Non-current liabilities</strong></td>
<td>191</td>
<td>258</td>
</tr>
<tr>
<td><strong>Current liabilities</strong></td>
<td>56 972</td>
<td>62 166</td>
</tr>
<tr>
<td>Margin deposits</td>
<td>55 793</td>
<td>55 413</td>
</tr>
<tr>
<td>JSE Clear Derivatives Default Fund collateral contribution</td>
<td>400</td>
<td>400</td>
</tr>
<tr>
<td>Other current liabilities</td>
<td>780</td>
<td>748</td>
</tr>
<tr>
<td><strong>Total equity and liabilities</strong></td>
<td>61 336</td>
<td>66 238</td>
</tr>
</tbody>
</table>

The above represents a condensed version of the Group's balance sheet. Please refer to the condensed consolidated financial statements for the statutory version.

---

**Other investments:**

- **JSE Guarantee Fund Trust:** Bonds – The current year bonds value includes an investment in South African Government Bonds executed by the Group in the current year as part of the highly liquid investment held for regulatory capital purposes.

**Intangible Assets:** Impairment losses relate to an intangible asset which was reserved for an untraded commodities product and the intangible asset is currently idle. The recoverable amount shall be reassessed if the product is brought into production and future economic benefits become probable in subsequent periods.

**Margin and collateral deposits:** Margin and collateral deposits received are managed and invested on behalf of members in terms of the JSE’s rules. These funds have been placed with F1/A1 and F1+/A1+ rated banks. A corresponding liability has been raised (which is due to market participants) against these margin and collateral deposits, as the JSE only manages these assets to facilitate the clearing of the equity and derivative markets.

- **Collateral Deposits:** The JSE acts as an agent in equity securities lending transactions necessary to facilitate electronic settlement of equity trades in the Strate environment. At 31 December 2022, interest-bearing collateral deposits of R20.3 million (2021: R170.0 million) have been lodged as security against securities lending transactions with a market value of R5.7 million (2021: R105 million).
This section focuses on the revenue elements in the business and is not a complete operating view. More detail on our products and services is on pages 19 to 26. More information on JSE initiatives and operational performance can be found throughout this report, in addition to the Group CEO’s and CFO’s reviews (pages 10 and 38, respectively) and the strategy section (page 28).

**Capital Markets insights**

Valdene Reddy, Director of Capital Markets

**Q** What were your performance highlights for 2022?

**A** A new wave of uncertainty and heightened volatility characterised 2022. The global post-pandemic recovery, high inflation and geopolitical concerns formed the background to this. However, South Africa once again proved to be a deep, liquid, resilient and high-quality emerging market, underpinned by a diverse economy and a strong market ecosystem.

We have seen increased investor interest and activity across our asset classes, which offer deep value and opportunity through prevalent market cyclicality. International investor interest and investment have seen an uptick, with the JSE All-Share index outperforming most of its emerging and developed market peers and delivering its best performance in more than a decade.

Merger and acquisition activity across various sectors increased, demonstrating the reignited investment appeal and attractiveness of South Africa as an investment destination.

Varying client demand, coupled with a fast-changing investment landscape, has been the basis for innovative and relevant product and market development. We introduced actively managed certificates and actively managed ETFs which are seeing great demand within our local ecosystem.

In response to this fast-changing landscape, we are reviewing our regulatory and product frameworks in the public markets in collaboration with other market participants.

Our Sustainability Segment, established in 2020, provides a platform for companies to raise debt for green, social and other sustainable initiatives. At year end, this segment had 65 sustainability bonds with a market capitalisation of R37 billion. The first gender-linked bonds were listed on the JSE, with the aim of increasing female participation in leadership structures and the supply chain. In October 2022, we welcomed the first Shariah-compliant sustainable note, which is focused on unlocking development and growth in the agricultural sector.

As capital formation and allocation shift, the JSE has launched JPP to address the growth in private markets. JPP, which received its financial services provider licence in December 2021, enables efficient, transparent and accessible private capital formation by connecting private companies and issuers directly to investors. The platform attracted capital of more than R12 billion for deployment, with 22 projects under way. JPP focuses on capital raising in two critical segments underpinning the South African economic recovery: the small and medium business sector, and infrastructure projects, most of which have an ESG objective.

**JPP is a high-priority undertaking, central to our strategy of growing and diversifying the JSE. We believe private markets will continue to show strong growth in capital formation and allocation.**
Although the public markets listings pipeline has built up significantly through the year, the local macro-environment and capital-raising conditions for equity markets remain strained. We have also seen higher demand for issuances in our private market supplement, which offset, to an extent, the delisting trend in the small and midcap sectors of the public markets.

We remain focused on attracting listings by reviewing our listings requirements. In 2022, after extensive consultation with market participants and with the approval of the FSCA, we amended the JSE Listings Requirements to reduce red tape and create a more enabling environment for listed companies. The amendments provide significant regulatory and cost relief for issuers, while still protecting investors through appropriate safeguards. For more detail, please refer to pages 85 to 86.

Q What is the biggest challenge you face?

A Delivering significant and impactful growth remains our biggest challenge as a country. Within capital markets, this translates into focusing on better value creation and unlocking investment opportunities. South Africa remains discounted to both its emerging market and developed market peers. Efficient market ecosystems are pivotal to unlocking value to support the country’s growth ambitions.

The JSE contributes to and prioritises positioning South Africa as an appealing and relevant investment destination offering deep, liquid, quality markets. As local investors seek alternative investment opportunities through increased offshore exposure or alternative asset allocations, we aim to supplement this by diversifying the South African investor base and attracting foreign inflows. Against a backdrop of low economic growth, the critical need for enabling structural reforms, and South Africa’s size relative to larger global markets, this remains a challenge.

As part of our efforts to showcase the South African investment opportunity, we led and participated in conferences with public and private sector representation to champion investment. This included the 10th SA Tomorrow conference in June, covering expanded regions across the UK, UAE, Singapore and Hong Kong, in which more than 180 international institutional investors participated.

In October, we led the South African delegation to the SA Macro Seminar in New York. The discussions focused on boosting economic interest and investment. High levels of interest were noted from quality investors, who acknowledged the exemplary calibre of South African companies and corporate leadership.

At the seminar, we signed a memorandum of understanding with the New York Stock Exchange to jointly progress reciprocal and beneficial areas targeting growth and development in capital markets.

Q Where are you focusing your attention in 2023?

We are committed to collaborating and co-creating responsive solutions to market needs.

A Next year, our focus will be on translating client interest into broader activity to channel flows into our markets, all in an effort to support broader economic growth.

We have several initiatives to enhance South Africa’s attractiveness and the investment opportunity our country offers to investors. These include working with regulators and policymakers to create enabling environments and innovative solutions through product and marketplace design.

Enhancing the Exchange’s operational excellence and functionality to deepen market quality and resilience remains a high priority. We remain committed to leading changes to evolving market structures and standards in a responsive and progressive way to position South Africa as an investment destination of choice.

We also seek to diversify our offering by adding new products, services and markets. As sustainable investing takes higher priority and demand for it increases, we will continue to develop relevant products to attract capital. This includes exploring ways in which the JSE can support local and continental carbon markets and green economy initiatives (please refer to page 17).

We also seek to promote capital raising through our growing and diversified public market offerings or JPP as an alternative capital-raising solution.
Primary Market
6% of total Group revenue (2021: 6%)

Primary Market (R million)

<table>
<thead>
<tr>
<th>Year</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>155</td>
<td>147</td>
<td>152</td>
<td>153</td>
<td>158</td>
</tr>
</tbody>
</table>

Performance

- Number of new listings in 2022 at 5 (2021: 8).
- Additional equity capital raised: R13.3 billion (2021: R25.4 billion).
- Aggregate market capitalisation of all equity-listed instruments on the JSE increased by 4% from last year’s close to 31 December 2022.
- 774 new bond listings (2021: 706) for a nominal value of R289 billion (2021: R239 billion).
- Total nominal value for total listed bonds: R4.3 trillion (2021: R4.0 trillion).
- Sustainability segment: 32 new bond listings.
- Other products:
  - 9 new ETFs (2021: 9): Total of 95, with a market capitalisation of R123 billion.
  - 360 warrants and structured products (2021: 323).
  - New AMCs: 9 (Total: 22).

Refer to page 40.

JSE Private Placements

Performance

- There are currently 22 deals live on the platform.
- These deals range from a solar power plant looking to expand to a new fintech business looking to launch in the Taxi industry.
- To date, our investor appetite has grown to over R12 billion.

Refer to page 13 and 52.

Secondary Market: Equity Trading
20% of total Group revenue (2021: 22%)

Equity Trading (R million)

<table>
<thead>
<tr>
<th>Year</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>499</td>
<td>432</td>
<td>492</td>
<td>489</td>
<td>479</td>
</tr>
</tbody>
</table>

Published value traded and effective rate*

- Effective rate: Revenue divided billable value traded.
- Tiered billing model impact.

Performance

- Published value traded flat (2021: up 1.3%), ADV flat 1.28% per 2021 Dec Daily Market Stats file.
- Number of transactions/deals down 1% (2021: down 12%).
- Complex Order Suite activity increased by 22% with Block Trades (up 9%) and Central Order Book Cross (up 35%) and Iceberg Orders (up 45%) indicating growing usage of non-displayed trade-type functionality.
- Foreign investors were net sellers of equities, with R85 billion in outflows (2021: R153 billion).
- Colocation activity contributed 68% to overall value traded (2021: 58%), with 47 racks (2021: 42).

Refer to page 40 and 52.
Secondary Market: Bonds and Financial Derivatives Trading

12% of total Group revenue (2021: 11%)

**Equity Derivatives and value traded**

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue (R million)</th>
<th>Equity Derivatives value traded (R trillion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>143</td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>143</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>145</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>160</td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td>163</td>
<td></td>
</tr>
</tbody>
</table>

* Recalculation of statistics to obtain alignment between equity derivatives and currency derivatives markets.

**Currency Derivatives and contracts traded**

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue (R million)</th>
<th>Currency Derivatives contracts traded (million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>48</td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>47</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>41</td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td>41</td>
<td></td>
</tr>
</tbody>
</table>

* Recalculation of statistics to obtain alignment between equity derivatives and currency derivatives markets.

**Interest Rate and bond nominal value**

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue (R million)</th>
<th>Bond nominal value traded (R trillion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td>37</td>
<td></td>
</tr>
</tbody>
</table>

**Performance**

- Value traded up 13% to R6.5 trillion.
- Open Interest: 24 million contracts.

Refer to page 40.

- Increase in total volume driven by options traded.
- Open interest is up 61%.

Refer to page 40.

- Increase in bond nominal value traded (up 4% to R37 trillion).
  - Bond repo increased by 4% to R25.8 trillion (2021: R24.9 trillion).
  - Standard bonds increased 6% at R11.0 trillion (2021: R10.4 trillion).
- Higher number of Interest Rate Derivative contracts traded (up 14% YoY), with the most growth coming from Bond Futures.
- Interest Rate Derivative open interest is up 32%.
- Continued net inflows in the bond market.

Refer to page 40.
Secondary Market: Commodity Derivatives Trading

4% of total Group revenue (2021: 4%)

Commodity Derivatives and contracts traded

Performance

- Number of contracts traded was up 2% to 3.6 million.
- Value traded was up 32%.
- Physical deliveries: 4 million tons.

Issuer Services

0% of total Group revenue (2021: 0%)

Performance

- Revenue increased by 19.26% to R7.3 million (2021: R6.1 million).

Refer to page 41. 60 and 61.
Post-Trade Services insights

Dr Alicia Greenwood, Director of Post-Trade Services and CEO of JSE Clear

Q What was your most significant achievement in 2022?

A The standout strategic highlight was JSE Clear receiving its license to operate as an independent clearing house and CCP. The FSCA granted this licence in September 2022 in agreement with the Prudential Authority and the SARB. This approval acknowledges our strong track record of delivering robust post-trade services to the listed derivatives markets and opens the door to new markets, including clearing for other trading venues.

Under the new licence, JSE Clear fulfils its licensed functions and regulatory responsibilities in terms of its own rule book, having previously operated as an associated clearing house in terms of the JSE’s rules. JSE Clear also manages its own fully capitalised balance sheet and is governed by an independent Board. JSE Clear began operating under the new licence in January 2023.

JSE Clear is South Africa’s only licensed CCP and independent clearing house. Global regulators acknowledge CCP clearing as the preferred and most appropriate approach for risk management, clearing and settlement of capital markets. Since 2016, JSE Clear has been formally recognised by various international regulatory bodies as meeting the global standards set for CCPs.

We pride ourselves in making markets safer by providing unique and sophisticated risk management capabilities and advanced clearing and settlement systems.

Q What are your priorities for 2023?

A Our primary priority will always be to ensure the smooth running of the settlement of the markets. In 2022, we enjoyed a good year with no material disruptions to our operations and successful implementations of core systems’ upgrades. We intend to continue this trajectory in 2023.

We have three key strategic transformation projects planned for 2023. The first big-ticket item is our plans to implement a CCP infrastructure for bonds. In November 2022, the JSE and JSE Clear Boards approved the business case for this infrastructure and the project commenced in January 2023. It is anticipated to go live in 2025. Implementing the CCP infrastructure will elevate the clearing of local bonds to an international standard. It will make this market safer and more transparent and will improve liquidity by attracting more international investors. This is a material step forward for the appeal of South Africa’s bonds to international investors. In addition, it offers a new and diversified income stream for the JSE as we currently do not charge for post-trade services for bonds. We will be able to materially leverage the existing JSE Clear infrastructure and operating model to enable central clearing of the Bond Market.

Secondly, a focus area for 2023 will be going live with our capability to accept non-cash collateral (securities such as government bonds) from investors to meet their margin call obligations in the Equity Derivative and Currency Derivative Markets. Investors will benefit from this change as it allows them to use less liquid assets rather than holding expensive cash. A key enabler of this initiative was achieved in April 2022 when the legislative amendments to the Insolvency Act were approved as part of the Financial Sector Laws Amendment Bill. JSE Clear has completed the technical implementation of the securities collateral project, and now has the systems and processes in place to accept securities. Once regulatory approval of the enabling amendments to the JSE and JSE Clear rules is received, we will go live with this initiative.

Thirdly, we will begin developing the road map to transform the way we surveil and risk manage the Equity Market, and this will be accompanied by a material transformation of the underlying technical infrastructure. Here, we aim to move from a bespoke, South Africa-centric capital adequacy approach to the global standard of CCP risk management. While we already have a high-level strategy, 2023 will be a year of design and collaboration with market participants to ensure all implications of the roadmap are adequately considered and catered for. The Equity Market transformation will be a complex multi-year project, with substantial implications for our members and partners, and one that we will approach with caution and consideration.
These exciting projects demand strategic thinking, project management skills and technical know-how. Over recent years, we have built our bench strength by developing our people and placing key resources in strategic roles. These projects give our people significant opportunities to grow and develop as individuals, while contributing to the transformation of the JSE and the South African capital markets.

**Clearing and Settlement**

18% of total Group revenue (2021: 18%)

Clearing and Settlement* and effective rate**

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue (R million)</th>
<th>Effective rate (bps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>4.1</td>
<td>0.26</td>
</tr>
<tr>
<td>2019</td>
<td>3.6</td>
<td>0.25</td>
</tr>
<tr>
<td>2020</td>
<td>4.6</td>
<td>0.27</td>
</tr>
<tr>
<td>2021</td>
<td>4.3</td>
<td>0.25</td>
</tr>
<tr>
<td>2022</td>
<td>4.3</td>
<td>0.25</td>
</tr>
</tbody>
</table>

* Clearing and Settlement revenue only reflects equity market clearing fees.

** Effective rate: revenue divided by billable value traded.

**Performance**

- Published value traded flat (2021: up 1.3%), ADV down 1.28%.
- Funds under management increased 18% to R95 million (2021: R81 million).

Refer to page 57.

**BDA**

14% of total Group revenue (2021: 15%)

Back-Office Services and cents per transaction

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue (R million)</th>
<th>Cents per transaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>0.60</td>
<td>0.69</td>
</tr>
<tr>
<td>2019</td>
<td>0.64</td>
<td>0.64</td>
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<tr>
<td>2020</td>
<td>0.64</td>
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<tr>
<td>2021</td>
<td>0.64</td>
<td>0.64</td>
</tr>
<tr>
<td>2022</td>
<td>0.64</td>
<td>0.64</td>
</tr>
</tbody>
</table>

* Revenue (R million)

**Information Services insights**

**Q** What stands out as your top achievement for 2022?

**A** We better understood the governance, people and technology requirements to build a cloud-based solution for our data products and services.

We kicked off our market data to the cloud initiative, which has been in the pipeline for some time. In the medium term, we aim to transition our data products and services from our transactional system-based approach into a cloud-based solution. This year, we spent time learning what is working for other exchanges and markets, which vendors are successful in this space, and what human resources and technology are required to achieve our objectives. It has been exciting to move from an aspirational strategy into this implementation phase, where we allocate funding and carve out execution time for the project.
This project is critical to achieving our five-year Information Services strategy, built around flexibility and highly customisable data services. Our current data systems are not designed for analytics, new ways of monetising data or generally thinking about data in a modern way. A cloud-based solution offers major benefits. Firstly, it will enable the JSE to derive business insights from our data, including understanding trends and our clients’ trading patterns and needs. We believe that this will allow us to build better markets. Secondly, while we already have a well-established data sales team and understand how to monetise data, our growth objectives rely on developing new products, reaching new clients, opening new data channels and providing new analytics capabilities.

Like any new business, there is an investment phase, where you spend but do not make money. As we execute our five-year strategy, we understand that 2022 and 2023 are important foundation years where we put the right building blocks in place. We expect to accelerate sales and ramp up the growth from 2024.

**Q** How are you finding the right skills to implement your strategy?

**A** Finding specialised skills is always challenging in a competitive financial services sector, and getting the right people onboard is costly and takes time. The work in Information Services is deeply specialised, and no other South African organisation does precisely what we do. We invest heavily in upskilling our recruits through good documentation and control frameworks, but more importantly, by creating an environment that supports and recognises a love for lifelong learning. Fortunately, we have a cohort of employees with long tenures, which assists with transferring institutional knowledge.

We sit at the centre of South Africa’s capital markets ecosystem, and our employees contribute to making the markets more efficient and attractive for investment. We come to work knowing we can make a real difference to South Africa’s economy. Having a meaningful purpose and working on game-changing projects helps to attract top talent. Our work is varied and complex – there is always something new to learn.

We have a strong but lean team to implement this strategy. We are mindful of balancing spending our time on ensuring the operational delivery of our daily responsibilities while being innovative and future orientated.

**Q** How is the environment for Information Services changing?

**A** We operate in a fast-changing capital markets environment, which creates significant opportunity if you are on the right side of the wave and can react quickly. We must respond to new opportunities while upholding our trusted reputation of being credible, consultative, and fair to all market participants. We operate in an ecosystem where what is good for one player may be difficult for another. We have to be deliberate on how we make changes to market infrastructure.

The credible operational delivery of market data must continue while we respond to the rapidly evolving way our clients consume data and think about analytics. Here, the Exchange can improve the ecosystem by offering products that do not exist today, reducing costs or offering data through more flexible delivery options to new clients, ultimately following the mass customisation trend.

The challenge with a rapidly shifting environment is deciding what opportunities to explore and what to ignore. We have to think about different technology options, potential partners, the right investments in talent, and the different geographic opportunities. We are embracing an agile way of looking at growth, acknowledging that some of our ventures will be successful and others will not.

**Information Services**

16% of total Group revenue (2021: 15%)

**Performance**

- Positive exchange rate impact.
- Solid growth across indices, cash equities, equity derivatives and commodity derivatives.

Refer to page 13 and 30.
Carol Crozier, CEO of JIS

Q What were the most significant strategic highlights for 2022?

A The market share growth we experienced with the onboarding of 21 new clients is something we are very proud of. We have grown our market share from when we acquired the business in 2022. This growth was achieved in a difficult operating environment with several JSE delistings, intense competition for transfer secretarial services and many potential clients locked into long-term contracts.

We attribute our growth to the value proposition we offer clients. This includes our commitment to service excellence, investment in client relationships, quick problem-solving and competitive and transparent pricing. Unlike many of our competitors, being a South African-owned business allows us to respond quickly to local demands. At the same time, our Level 2 BBBEE status is also an important value add for our clients.

With growth comes the challenge of resourcing to respond to new demands. Scaling any business is hard, and you shed the nimbleness of being a small business, but have not yet achieved the stability of the grown-up phase. We need to grow sustainably by expanding our capacity alongside client acquisition activity.

A second strategic highlight was the successful integration of the share plans business acquired from Investec in September 2021. This acquisition established JIS as the leading share plans provider in South Africa and allowed us to tap into the unlisted registry market. In 2022, we spent significant time onboarding Investec’s 30 employees and 80 clients, embedding our culture and streamlining operations. With these additional employees, we grew our call centre to 60 people and implemented new SLAs and metrics to measure and improve client service.

Q What opportunities do you see in the marketplace?

We collaborate with clients to shape our service offering and respond to needs in the listed and unlisted environments.

A Many of the opportunities we have identified developed from discussions with our JSE Issuer Advisory Committee, which includes 20 clients as members.

We believe we can play a role in asset reunification. Unclaimed dividends for JSE-listed companies total R1.5 billion, with about R167 million relating to the BEE schemes of listed companies. Tracing beneficiaries is an enormous challenge. With proven experience in facilitating unclaimed dividends and share register clean-up campaigns, we have returned approximately R700 million in unclaimed funds to about 110,000 shareholders in the last five years.

Over 150,000 South African workers own shares through employee share ownership schemes (ESOPS). We have an association with William Radcliff, our enterprise development agency, to help companies manage and administer their ESOP and BEE scheme shareholder registries. We see growing demand for expertise in setting up these schemes, financing their administration and training trustees, beneficiaries and employees. In 2023, we will launch a BEE verification service to verify the race of potential and existing investors. There is already significant interest in this service.

Finally, we are excited about the untapped potential of ShareHub, a centralised hub and communications platform that provides a full record of shareholder activity. ShareHub is an excellent tool for tailored communications campaigns, investor education and preventing the issue of ‘lost shareholders’ in the first place.
Q Where are you focusing your attention in 2023?

A We will focus on growing our business, offering new products and services and digitising, where possible, to unlock greater efficiencies. There is still significant scope to grow JIS by attracting new unlisted clients and cross-selling within our client base. In addition, we have a suite of standalone products that we can sell across the market. For example, BoardPAC is a software application for digitised board packs that aims to improve Board and committee meeting management and administration.

We will continue to invest in digitalisation to automate manual back-office tasks and consolidate systems. This includes exploring the potential of artificial intelligence and robotics. We will also conclude a gap analysis on the technology solutions required to enable registry services for JPP, the JSE’s digital platform that connects private companies and issuers directly to investors.
ENSURING TECHNOLOGY RESILIENCE

“For 2023 the primary focus is defining a revised IT strategy in support of the business. It will be a fit for purpose, business-aligned technology strategy that encompasses core modernisation and simplification, data foundations, cloud, cyber resilience, and digital capabilities.”

Resilient operations

The JSE seeks to achieve business resilience, innovation and growth while protecting and enhancing its value.

Business continuity is the ability to continue delivering the JSE’s core products and services at a predetermined level in the event of a material business incident/disruption. It also includes the protection of employees and the JSE’s reputation.

Robust business continuity management (BCM) programme

BCM policy
Sets out the strategic governance framework that directs the BCM as an integral part of day-to-day business operations. Business continuity is a core management competency and responsibility.

Standards and guidelines that guide the BCM policy
- The Business Continuity Institute’s Good Practice Guidelines (GPG2018)
- The FMA
- King Report on Corporate Governance™ for South Africa, 2016 (King IV)¹
- IOSCO guidelines and/or requirements

Crisis management policy
Provides guidance on the processes and procedures for a coordinated response to unexpected circumstances that have negative strategic implications, ensuring that the JSE brand, image credibility and stakeholder confidence are protected and managed.

¹ Copyright and trademarks are owned by the Institute of Directors in South Africa NPC and all of its rights are reserved.
Governance and management of BCM

The Board is ultimately responsible for BCM and has delegated its authority in this regard to the Group Risk Management Committee (GRMC).

The JSE Exco is responsible for implementing the BCM programme. Each Exco member is responsible for establishing and maintaining business continuity plans relating to their areas of responsibility. Resilience champions are appointed per division to support the Exco head; coordinate divisional recovery efforts; ensure the appropriateness of business continuity arrangements; and coordinate divisional BCM activities.

The IT Division, supported by the Enterprise Risk Management (ERM) function, is responsible for implementing IT disaster recovery strategies and plans.

The crisis management team is led by the Group COO, working alongside other executives.

The ERM team and chief risk officer provide oversight, assurance and measurement of the conformance of the various business units with BCM policy and business continuity best practice.

We consider the following key pillars of our operations when developing response plans:

- JSE infrastructure;
- employees;
- critical third parties;
- socio-economic impact;
- industry; and
- market operations impact.

This ensures that we anticipate how each of these operational resilience pillars is likely to be impacted and deliver appropriate interventions to ensure business continuity and swift recovery of operations in the event of a crisis.

Business continuity activities in 2022

We prioritised maturing various elements of our business continuity programme and this will continue to receive focus in the coming year. Notably, these efforts resulted in more efficient disaster recovery and business continuity testing processes and outcomes.

Three disaster recovery and business continuity tests were conducted in 2022, including a mandatory market-facing test where our clients are required to test their ability to connect to the JSE’s secondary site.

The JSE’s BCM policies, plans and crisis management structures played an essential role in responding to the impact of the Russia-Ukraine conflict on our markets and the heightened load shedding. They will continue to be important as the JSE addresses the systemic impacts of these types of events in the medium to long term.

As part of our mandate to provide safe and secure markets, JSE representatives and market participants, collaborate in the Financial Sector Contingency Forum. One of the forum’s key focus areas is preparing for a potential Eskom blackout. While this is considered a remote risk, the JSE has plans to oversee an orderly shutdown and restart of the capital markets should the risk materialise. Apart from the blackout scenario, the JSE has developed appropriate, scenario-based responses for higher levels of load shedding which could impact market continuity.

Future focus

The JSE is committed to implementing and maintaining a robust BCM programme to ensure the recovery of critical services/systems in the event of disruptive events and incidents. One of the key tenets of any operational resilience programme is organisational learning derived from disruptive events. To this end, our focus is to continue to mature our BCM programme, optimise our testing capabilities and the processes that govern them, and embed continuous learning.
Robin Tucker – Head: Solution delivery – Trading, Clearing and Information Services

**Technology and information**

*We provided secure and resilient technology platforms for the JSE markets.*

The JSE provides a secure, resilient, and highly available marketplace for trading, post-trade clearing, settlement, and market data to the broader capital markets in South Africa. Acutely aware of our responsibility as a financial market infrastructure, we focus on providing appropriate, secure, and robust technologies that fulfil the expected levels of service.

We successfully implemented the new JSE hybrid ways of work without any major disruptions or risks to market operations, achieving a 99.9% market availability (2021: 99.85%).

**Strategy**

*Fit-for-purpose technologies, aligned with business needs, ensure the JSE remains relevant in an ever-changing digital world.*

Aligned with the Group’s strategy, we continue to enhance and evolve our IT strategy to deliver appropriate technologies to the Group. A focus on cloud adoption and the use of new digitisation technologies form part of the strategy to ensure the JSE remains technically relevant into the future.

Our multi-year rejuvenation journey to upgrade, replace or decommission ageing technical infrastructure continues to be a focus. We have successfully deployed significant enhancements and upgrades to core system infrastructure. Our focus on automation, machine learning and the use of digital technologies to deliver robust and resilient solutions for our business remain priorities going forward.
Continued technological enhancements

Cloud enablement

The shift to the cloud has taken shape with the introduction of secure network links, paving the way for future client service offerings in the market data space. Leveraging Platform as a Service and Software as a Service in the cloud as a ‘cloud-first’ approach remains the design philosophy, where appropriate.

Enhanced cybersecurity capabilities

Cybersecurity is a top priority, with executive support and investment into proactive security capabilities in response to new and emerging threat vectors. Multiple cybersecurity technologies, both on-premise and in cloud Software as a Service, are used to bolster our defences against potential threats.

Automation

Process automation remains important to eliminate human error and increase predictable operational resilience.

Digital

We explore the digitisation of capabilities as part of the JSE’s digital journey, using technologies such as blockchain, tokenisation, robotics and low-code solutions.

Artificial intelligence

We continue to leverage and evolve the use of artificial intelligence, machine learning and enhanced analytics within our cyber defence capabilities.

Notable system upgrades and implementations

The equity clearing system underwent a major system upgrade resulting in increased processing capacity capabilities and enhanced resilience for anticipated market activity volumes. The real-time clearing system, the clearing platform for Equity and Currency Derivatives, was successfully upgraded to cater for securities as collateral. We are awaiting final approval from the regulators to enable this service.

The technology that underpins the market trading and clearing platforms for the Interest Rate, Commodity Derivatives and Bonds markets is being upgraded, with a planned go-live implementation in the third quarter of 2023. This is a significant upgrade as it has a direct impact on all respective market participants.

The JSE continues to focus on its technology rejuvenation initiatives to ensure ageing technology is maintained and kept in line with appropriate support levels, and that risks are managed appropriately. We successfully implemented the foundational cloud services to ensure appropriate secure network links in support of the JSE’s future business strategies.

Other technology priorities delivered in 2022

News Data Handler replacement (SENS)

We redesigned the delivery of SENS messages for the Equity Market from the trading system gateway, removing complexity and latency from the legacy solution and improving reliability. This is the first phase of a broader initiative to upgrade the SENS service end-to-end.

Enablement

Supported the business with planning for the 2023 business strategy initiatives, refer to pages 28 to 33.

IT risks and controls

Various operational risk mitigation actions and a risk controls framework were implemented to improve the overall IT operational risk profile.
Challenges experienced in 2022

Market availability and performance remain our highest priority. In 2022, we moved from a 100% remote working environment to a hybrid working model. However, we suffered seven priority 1 incidents of which three were material, impacting the availability of market trading and clearing systems. Additional enhancements and controls were implemented to mitigate the risk of subsequent reoccurrences.

With the increased levels of load shedding, we continued our proactive maintenance schedules to ensure the JSE’s backup power generation capabilities remain effective to manage the risk to market availability.

Three material priority 1 incidents

The 6th of April incident impacted the Commodity Derivatives, Interest Rate Derivatives and Bonds markets. The 6th of July incident impacted Equity, Commodity and Interest Rate Derivatives and Bonds. The 24th of October incident impacted the Commodities market.

In total, the priority 1 incidents were lower than our internal SLA commitment to the market.

Cybersecurity

We need to ensure we maintain strong cyber resilience through proactive focus and investment. We continued to enhance the cybersecurity defences by completing the network segmentation initiative, which introduces a further layer of defence within the JSE’s network, and the first phase of backup to the cloud was successfully tested.

Through the introduction of new cloud capabilities, the JSE continues to enhance current resilience capabilities in a quest to achieve a “zero-trust” security posture with backups to the cloud.

There were several internal awareness training campaigns and communication to all employees regarding cybersecurity and their role in ensuring the JSE’s posture remains appropriate.

Driving PoPIA compliance

The JSE has implemented a range of policy, structural, training and awareness responses since the Protection of Personal Information Act (PoPIA), 4 of 2013, came into effect on 1 July 2021. PoPIA calls for accountability and oversight of how personal information is collected, processed, stored, and retained, and creates an imperative for the JSE to respect the rights of data subjects, both as a responsible party and as an operator.

The JSE has progressed on its data privacy journey by creating a heightened sense of privacy awareness across the Group. This has been primarily achieved through digital training material with targeted in-person reinforcement, and complemented through mandatory content classification and, where appropriate, consequence management for policy breaches. The information governance, legal counsel, compliance, and IT information security teams, along with our privacy champions, have remained focused on key activities and tasks to operationalise the data privacy compliance programme and ensure that compliance is maintained.

Data governance is managed through a cross-functional and multidisciplinary approach to ensure that privacy compliance is effective. This approach has been underpinned by several policy enhancements, technological security control implementations and control framework enhancements.

The assessment of privacy risks and associated control improvements is an entrenched part of the JSE business.

During 2022, we reported on data incidents where the personal or confidential information of customers or other stakeholders was accessed by an unauthorised party, of which 2 were classified as material. The JSE reported all of these data leaks to the relevant regulator, either the Information Regulator or the FSCA. There were no substantiated complaints received concerning breaches of customer privacy.

Future focus areas

For 2023, the primary focus is defining a revised IT strategy in support of the business. It will be a fit-for-purpose and business-aligned technology strategy that encompasses cloud, cyber resilience, and digital capabilities.

We will continue to focus on the legacy technology rejuvenation initiatives, delivery of key strategic initiatives in line with the Group strategy and continued cybersecurity enhancements in line with known threats and industry trends.

Enhancements to existing systems and services will carry on through the implementation of automation, digital and new technologies.

We will also continue the focus on new cloud services and solutions, partnering with best of breed providers through a multi-cloud strategy.
What is the broader role that the JSE plays in society?

As the largest stock exchange on the continent, the JSE’s role goes beyond convening and regulating capital markets. We act as a changemaker in the South African economy by driving social and economic development through multiple initiatives.

We invest in financial literacy programmes, support organisations through corporate social investment (CSI) and contribute to the growth of small and medium enterprises. This all aims to create a progressive, empowered and inclusive society.

Our transformation achievements have grown over the years, underpinned by a strategy to drive inclusivity and growth in a sustainable manner in South Africa. Transformation is less about the points on the scorecard, but how we continue to play a critical role in developing the socio-economic landscape in South Africa through activities that drive BBBEE.

We aim to be the champion of change and influence the direction and speed at which financial services and listed companies progress BBBEE. We are committed to meeting the Amended Financial Sector Codes requirements and identifying other ways of enhancing transformation internally and externally beyond the legislated codes.

At the JSE, transformation is both a moral and strategic business imperative as we want to be a progressive and inclusive Group. We value equity, fairness and diversity, and are active in driving the appropriate mindset and behaviour.

The JSE focuses its development activities on areas it believes are relevant to the South African national agenda (for example, poverty alleviation, job creation and youth and community development), the Sustainable Development Goals and its business activities (such as enterprise development and financial literacy).

Promotion of gender equality

In 2022, the JSE developed a gender mainstreaming strategy, focused on promoting gender equality in South Africa.

Over the past years, the JSE has been recognised for its efforts in gender-based transformation, including the composition of its Board and Executive team. The strategy aims to augment our achievement in promoting gender equality internally and externally.

The pillars of the strategy are based on research and best practice guidance for exchanges that was published by the Sustainable Stock Exchanges in January 2022. This guidance highlights the catalytic role that stock exchanges can play in promoting gender equality. It proposes an action plan premised on the focus areas on pages 68 to 69, which the JSE adopted and progressed through its initiatives and programmes.

Going forward, we will continue to implement activities and initiatives that further promote gender equality and drive women empowerment in the Group and in the country.
## Achievements in promoting gender equality: Market-focused

<table>
<thead>
<tr>
<th>Strategic areas</th>
<th>Actions required</th>
<th>JSE contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Promote gender-focused products and services</strong></td>
<td>Enable the listing of gender-focused products</td>
<td>• Listed two gender-linked bonds targeted at increasing female representation in its leadership structures and supply chain.</td>
</tr>
<tr>
<td></td>
<td>Adopt SME offerings for gender-inclusiveness</td>
<td>• 63% of supplier development grants in 2022 were allocated to women-owned SME businesses for business development purposes.</td>
</tr>
<tr>
<td></td>
<td>Collaborate to provide training and development opportunities</td>
<td>• In August, JSE and the Gender-based Violence and Femicide Response Fund 1 hosted a seminar on the Code of Good Practice on the Elimination and Prevention of Harassment in the Workplace to raise awareness on the issue.</td>
</tr>
<tr>
<td></td>
<td>Strengthen market literacy and investment programmes for gender-inclusiveness</td>
<td>• JSE hosted its first hybrid format of the #SheInvests conference under the theme “Fearlessly owning the markets”, which positions financial education as a vehicle for growing women’s confidence in making investment decisions.</td>
</tr>
<tr>
<td><strong>Strengthen market performance on gender equality</strong></td>
<td>Promote transparency on the gender performance of your market</td>
<td>• In the 2022’s Sustainable Stock Exchange Initiative’s report, the Top 100 JSE-listed companies ranked eight in female representation on boards among the G20, and joint first with Thailand among 35 markets in the percentage of female CEOs (15%).</td>
</tr>
<tr>
<td></td>
<td>Set gender targets for listed companies</td>
<td>• Our Sustainability Disclosure Guidance, launched in August 2022, promotes the measurement of board diversity across demographic factors such as gender.</td>
</tr>
<tr>
<td></td>
<td>Collaborate to promote broader action in the market on gender equality</td>
<td>• JSE listing requirements require the nomination committee of a board to have a policy on the promotion of diversity at a board level – including gender – and report on how they have applied this in their board appointments.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• JSE holds a market opening every year on International Women’s Day in support of promoting gender equality.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Sponsored the Gender Mainstreaming Award, recognising efforts by companies and individuals to progress gender equality at the workplace and in the community.</td>
</tr>
</tbody>
</table>
Achievements in promoting gender equality: Exchange-focused

Strategic category: Lead by example

**Actions required**  | **JSE contribution**
---|---
Evaluate and disclose the exchange's own progress in gender equality  | • The 2022 employee engagement survey showed improved scores towards the JSE’s approach to promoting gender equality.
• Women represent 54% of the JSE workforce.
Implement internal measures to promote gender equality  | • Annual pay parity adjustments are made to ensure there is pay parity among employees in similar jobs. For 2021 and 2022, 99 staff members received pay parity adjustments resulting in a payroll uplift of more than 5.3 million ZAR. This continues to be an area of priority.
• When recruiting new employees, in addition to skills and experience, the market median of the role is used to determine the starting salary to minimise discriminatory practices around pay.
• 69% of employees who have received training in 2022 are women.
• JSE was a finalist for Top Gender-Empowered Organisation in the Standard Bank Top Women Awards in 2022.
• All people managers received awareness training on harassment in the workplace and prevention practices in October 2022.
• Partnered with various organisations on training programmes for women: FASSET’s Women’s Leadership Development Programme and Women’s Legacy Programme and Novia One’s Women in Leadership Programme.
• 25 women living with a disability are on our learnership programme.
Demonstrate commitment to gender equality beyond the exchange  | • JSE introduced a CSI category focused on promoting gender equality and addressing women’s issues. 66% of the beneficiaries across all our CSI programmes are female.
• Procurement from black women-owned businesses has been maintained at 15% for FY2021 and 2022.

Independent BBBEE status verification

We are measured under the Amended Financial Sector Code, which evaluates our performance along six pillars of BBBEE.

AQRate Proprietary Limited (AQRate), an independent South African National Accreditation System (SANAS)-accredited verifier, conducted a review of the JSE scorecard and related supporting documents in accordance with the requirements of SANAS R47-02 and the gazetted verification manual.

In 2022, we achieved a Level 2 rating, maintaining our position in 2021 as a Level 2 rated Group. The summary of our scorecard from 1 January 2022 to 31 December 2022 is below, with further detail provided on each pillar. This accreditation is valid until March 2024.

**Scorecard element**

<table>
<thead>
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<tr>
<td>Socio-economic development and consumer education</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>91.45</strong></td>
<td><strong>91.11</strong></td>
</tr>
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</table>

1 FASSET is the Finance and Accounting Services Sector Education and Training Authority.
Focus areas

Enterprise development and supplier development
Grow the number and size of sustainable businesses in South Africa.

The JSE’s Black Stockbroker programme provides financial assistance to emerging black stockbroking firms to support them in sustainably growing their businesses. This is done through cash rebates from equity trading fees and application programme interface connectivity fees.

The JSE provided grants to organisations to grow their businesses, expand their customer base, increase their turnover and profitability, and scale their operations to be more sustainable.

R8.3 million spent towards supporting 12 black stockbrokers, equating to 1.15% of NPAT (2021: R9.1 million; 1.11% of NPAT).

Supplier development financial support to 17 organisations: R5.8 million (0.8% of FY2022 NPAT).

Consumer education
Drive for improved financial literacy among South African individuals.

The JSE Investment Challenge remains our flagship initiative for financial literacy.

The challenge, which has run for the past 49 years, is a fun, interactive, online trading game aimed at introducing South African high school learners and university students to the world of finance and investments in JSE-listed instruments.

The number of high school participants increased from 18 542 to 20 361 and the number of university participants increased from 3 523 to 4 049.

Spend: R3.4 million (2021: R3.1 million).

Schools

<table>
<thead>
<tr>
<th>Year</th>
<th>Schools</th>
<th>Learners</th>
<th>Teams</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>411</td>
<td>18 391</td>
<td>4 894</td>
</tr>
<tr>
<td>2019</td>
<td>421</td>
<td>19 024</td>
<td>5 127</td>
</tr>
<tr>
<td>2020</td>
<td>250</td>
<td>9 429</td>
<td>2 599</td>
</tr>
<tr>
<td>2021</td>
<td>302</td>
<td>18 542</td>
<td>5 151</td>
</tr>
<tr>
<td>2022</td>
<td>448</td>
<td>20 361</td>
<td>5 848</td>
</tr>
</tbody>
</table>

Universities

<table>
<thead>
<tr>
<th>Year</th>
<th>Universities</th>
<th>Students</th>
<th>Teams</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>70</td>
<td>4 083</td>
<td>1 617</td>
</tr>
<tr>
<td>2019</td>
<td>95</td>
<td>4 038</td>
<td>1 578</td>
</tr>
<tr>
<td>2020</td>
<td>69</td>
<td>2 588</td>
<td>1 010</td>
</tr>
<tr>
<td>2021</td>
<td>62</td>
<td>3 523</td>
<td>1 390</td>
</tr>
<tr>
<td>2022</td>
<td>83</td>
<td>4 049</td>
<td>1 498</td>
</tr>
</tbody>
</table>

Preferential procurement
Increase the support of Black-owned vendors in our supply chain.

Our procurement policy promotes preferential procurement practices that consider the BBBEE credentials of potential suppliers.

Over the years we have seen an improvement in the number of suppliers that meet the BBBEE, Black and/or Black woman ownership, or exempt micro-enterprise and qualifying small enterprise criteria.

Black-owned exempt micro-enterprise and qualifying small enterprises are further supported by 15-day payment terms to support their cash flow management.

Recognisable procurement spend in the supply chain is 74% of total measured procurement spend (TMPS), R703 million (2021: R733 million; 75% of TMPS).
Socio-economic development
Contribute towards positive social outcomes for disadvantaged communities through initiatives that focus on education, social welfare, gender equality and conservation.

The JSE enabled 15 chartered financial analyst (level 1) students to attend extra classes through Novia One Group.

Fundisa funding was provided to learners from low-income families to pay for quality accredited qualifications at a public college or university.

30 not-for-profit organisations were supported in the categories of investment prioritised in the JSE’s CSI strategy.

The JSE Empowerment Fund (JEF Trust) provides academically deserving black South African students with the finance and support to acquire appropriate qualifications for entering the financial services sector on completion of their university training.

CSI spend: R9.2 million (2021: R9 million)

**JEF Trust**

Spend: R10 million (2021: R10.5 million).

Beneficiaries: 57 (2021: 66).

Since the inception of the trust in 2009, it has supported 705 students with total disbursements of R83 million.

Employment equity
Promote diversity and demographic representation through the Company’s people practices.

Our programmes promote diversity and wellness and enable us to promote an equitable workplace. Diversity management in the form of a Young Professionals Programme and Prevention and Elimination of Harassment in the workplace (Section 60 of the Employment Equity Act) training sessions were conducted with employees in 2022.

The JSE monitors progress against employment equity targets and we are progressing well towards the goals and objectives in our employment equity plan.

We are 93% on the target at the skilled technical occupational level. We are 16% away from achieving our target at the professionally qualified occupational level (2021 was 4%).

We are making good progress at the senior (68% from 17% in 2016) and top management occupational levels (80% from 33% in 2016) for ACI representation.

Refer to page 76 for more detail.

Management control
Build a transformed Board and Exco with diverse backgrounds and skills.

We focus on employment equity appointments at Exco level.

As at year end 2022, the JSE Board comprises 60% ACI and 60% female members.

As at year end 2022, representation at Exco level is at 70% ACI and 78% female members.

Refer to page 76 for more detail.

Ownership
Increase Black Ownership of the JSE to drive economic participation

Upon listing in 2006, the JSE settled 2.5% of its issued share capital with the JSE Empowerment Trust, which funds bursaries for black South African students (see socio-economic development).

Marginal improvements have been seen in the number of black people owning JSE shares.

<table>
<thead>
<tr>
<th></th>
<th>2022</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voting rights of black people</td>
<td>20.37%</td>
<td>19.10%</td>
</tr>
<tr>
<td>Voting rights of black women</td>
<td>8.93%</td>
<td>8.37%</td>
</tr>
<tr>
<td>Economic interest of black people</td>
<td>14.85%</td>
<td>13.79%</td>
</tr>
<tr>
<td>Economic interest of black women</td>
<td>5.63%</td>
<td>5.22%</td>
</tr>
</tbody>
</table>

1 Includes the acting chief financial officer who stepped down from the role in January 2023.

Skills development
Implement strategic talent management initiatives and develop skills for unemployed learners and people with disabilities.

46 learners completed their learnership. All participants in the learnership were black people with disabilities.

A new cohort of 25 black females with disabilities commenced a learnership in September 2022.

Various skills programmes were introduced for our employees, including FASSET-funded initiatives such as the Wits Development Programme and International Women in Leadership.

46 black females participated in learnership programmes. R7.9 million, 91.5% of our training spend for 2022, was allocated to ACI employees.

Total skills development spend: R8.6 million, of which R3.09 million is for disabled learners’ training and salaries.

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</thead>
<tbody>
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<td>Economic interest of black women</td>
<td>5.63%</td>
<td>5.22%</td>
</tr>
</tbody>
</table>

1 Includes the acting chief financial officer who stepped down from the role in January 2023.
**SME acceleration programme**

Cleola Kunene, head of CX, SME and Strategic Initiative Incubation

**Q Why did the JSE launch this initiative?**

**A** We launched the programme in 2021 to sustainably grow SMEs so that they can support job creation and economic development. The SME Acceleration Programme fast-tracks the growth of medium-sized companies to become the next generation of large enterprises. We support their growth through mentorship, masterclasses, market access support, capital readiness and access, and enhance their strategy.

After conducting extensive research and in-depth engagement with SMEs, incubators, government and other stakeholders, we launched a pilot of the Acceleration programme with a cohort of five medium-sized enterprises. Since then, we have one cohort of 11 companies that have completed the programme.

**Q What are the outcomes of this programme to date?**

**A** The numbers below reflect the successful outcomes for the 16 companies in our pilot and first cohort:

- An average of 56% in revenue growth in 18 months, with a total R2 billion in revenue generated
- A combined R944 million capital raised
- An average increase of 32% in the number of new employees

**Q What are the future focus areas?**

**A** Our plans include growing our capacity to support more companies per year through partnerships with government entities and business associations. Capital access is an important driver of sustainability for SMEs. Therefore, we aim to leverage our role as a convenor and capital marketplace to support their capital-raising efforts.

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1 Published statistics as at the end of August 2022.
EMPOWERING OUR EMPLOYEES

The JSE strives to be an employer of choice and we continue to build capabilities that help us remain a future-fit organisation, where teams and individuals thrive.

Our values and culture drive how we attract, develop, remunerate, engage, and retain diverse talent. This is essential because we need a motivated, skilled and diverse workforce that is suited to our current and future needs.

We implement progressive policies that consider the changing work landscape, to ensure that we can fulfil our current and future talent requirements, enable business transformation, and meet the needs of our changing and diverse society.

We continued to review our capabilities and invested in our culture, employee engagement and wellbeing initiatives to enable employees to be more productive, effective, and efficient, while continuing to work within our chosen hybrid model.

All dimensions of employee wellbeing are addressed to support the effectiveness of our teams, as well as individual resilience. Our ethical capabilities continued to receive focused attention.

In 2022, our HR efforts were concentrated on building employee resilience, advancing the right talent and running a sound HR operation by deploying technology to manage volume or manual processes. We are in the process of introducing a BOT to respond to high-volume and simple queries in Shared Services and Learning and Development.

In conversation with our new director of human resources: Palesa Ntoagae

Q What has made the biggest impression on you in your new role?
A I joined the JSE in January 2022 and was immediately impressed by how welcoming and helpful everyone is. The warmth of my colleagues certainly makes navigating my role easier. In addition, the JSE’s culture allows for a high level of role autonomy. This empowers employees to own their space, facilitating quicker decision-making. I am proud to work for a company that makes an outsized contribution to South Africa’s national agenda. This is notable considering that the JSE has a relatively small employee base, and yet delivers on its strategy while providing platforms to raise capital and support economic growth. That is a feel-good factor that does not come with every job.

Q What are the three things that will drive success in your department?
A Firstly, our success relies on having the right employees in the right roles while ensuring that their skills evolve to meet current and future business requirements. Employees must be encouraged to embrace learning and unlearning. Secondly, employee wellness is critical. We need to protect and strengthen the resilience of our teams; this is especially important as many employees are still facing challenges stemming from the pandemic. Thirdly, we need to build the employee experience, which can be challenging in a more hybrid environment. This means being intentional about creating real moments that matter.

Q What excites you most about how human resources will evolve in 2023?
A In 2022, I focused on understanding the business and people landscape. For 2023, we have exciting plans to enhance the employee experience. These plans were developed in response to the feedback from the culture and employee engagement surveys. Specifically, we can do more to enhance recognition, strengthen our value proposition and formalise interventions to develop young talent and alternative career streams. Creating an environment that encourages the development of specialised skills is especially important given our small employee base.
Our employee complement

Permanent employees

JSE Group

<table>
<thead>
<tr>
<th>Total permanent employees*</th>
<th>Fixed-term contract employees**</th>
<th>Female</th>
<th>Employees with disabilities***</th>
</tr>
</thead>
<tbody>
<tr>
<td>544</td>
<td>59</td>
<td>54%</td>
<td>12</td>
</tr>
<tr>
<td>Male</td>
<td>ACI</td>
<td>46%</td>
<td>83%</td>
</tr>
<tr>
<td>(2021: 43%)</td>
<td>(2021: 81%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>46%</td>
<td>83%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Average age of JSE employees

(2021: 41)

40

Employee turnover

(2021: 13%)

14.4%

Workman's compensation claim

(2021: 2)

2

The average length of service across all categories

(2021: 8)

7

Attracting and retaining diverse top talent

Hybrid working model

We see the office as a tool and as such, employees work from their homes or JSE offices based on their work day. To protect our Culture, the teams have autonomy to decide how and when they make use of the office. We have mandatory in-office sessions with all leaders every second month.

The JSE’s hybrid working policy was approved and implemented in 2022.

Attracting and retaining diverse top talent is a strategic priority for the JSE. In 2022, we continued to make progress in building the diversity and skills of our workforce and have successfully integrated employees from the JSE’s acquisitions into our workforce.

We took over the HR activities for JIS and they are now served by the JSE’s Group HR function. We performed a job profiling and salary benchmarking exercise for JIS employees to right-size the roles.

Some JIS policies have been aligned with those of the JSE, including recruitment and disciplinary policies. The JIS maternity leave policy was enhanced to four months’ paid maternity leave instead of unpaid leave, and parental leave was increased from five days’ unpaid leave to 10 days’ paid leave. Other benefits are still being reviewed and aligned.

* Includes JSE (382), JIS (139), JSEC (21) and JPP (2).
** JIS.
*** JIS: 11; JSE: 1.
Developing our people
Learners and providing equal opportunities

<table>
<thead>
<tr>
<th></th>
<th>Learners (2021: 21)</th>
<th>People with disabilities (2021: 21)</th>
<th>Female (2021: 21%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACI</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Learnership programme spend (2021: R1.9 million)</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

The JSE remains committed to investing in the development of the skills, knowledge and capability of its employees with its learning and development interventions. This included 557 learning interventions, which included short courses, sponsored education (tertiary studies), coaching, on-the-job training and leadership training.

ACI accounted for 84% of employees trained, and females accounted for 58%.

To foster an environment of continuous learning, we introduced new learning and development interventions during the latter part of 2022.

These included:

- A programme for young professionals, targeted at people between the ages of 25 and 35, aimed at providing tools for a resilient mindset and healthy state of mind.
- Seven high-potential women employees benefited from a FASSET-funded Executive Development programme.
- Two emerging young leaders attended the One Young World Summit, a programme centred around young leaders with the intention of building a new base of leadership for South Africa for accelerated social impact. This annual event brings more than 2 000 young leaders and global figures from 196 countries together over four days to develop solutions to the world’s most pressing issues.
- A programme developed and facilitated by Novia One for women in leadership, targeting newly promoted women and aimed at developing them to lead in a way that continues to break biases in the workplace.
- The International Women’s Federation South Africa partnered with FASSET and the Duke Corporate Education Institution for the Women in Leadership Programme to sponsor a leadership programme for two women leaders, which included a global immersion module.
- Three successors identified for Exco positions attended the Leading with Humanity programme, a personal experience that encourages living a life of purpose and authenticity.

Learning and development

<table>
<thead>
<tr>
<th></th>
<th>Learning and development interventions (2021: R8.4 million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>JSE Group</td>
<td>R8.6m</td>
</tr>
</tbody>
</table>

The JSE Group

Learning and development interventions (2021: R8.4 million)
JEF Trust bursaries

JEF Trust bursaries provide financial assistance for education initiatives targeted at bringing black people into the financial services sector and to contribute to sustainable growth of our industry. Preference is given to students completing specific Bachelor of Accounting Science, Bachelor of Economic Science and Bachelor of Commerce or (Business) Science degrees.

For more detail refer to page 69.

Our redefined culture

Our culture is fundamental to the successful execution of our strategy.

To build a great culture, we need to know the elements of how we work and how each of these inhibits or undermines our success or advances success. In 2022, a series of workshops and surveys enabled employees to identify and rank elements that enable or disable the JSE from achieving success. Enabling elements are important for executing the strategy and strengthening our culture, and disabling elements are likely to erode the positive impact of the enabling elements.

The outcome was a unique culture formula that encapsulates the top-line enablers and bottom-line disablers. Employees will be invited periodically to rate the degree to which each element in the formula is being lived.

Each business unit has developed action plans to minimise or eliminate the disabling elements and maintain efforts to strengthen the enabling elements. It is envisaged that there will be a shift in the formula over time and the enabling elements of the JSE culture will be amplified.

Employee wellbeing

Statistics from our medical aid partners show that the JSE’s overall health profile compares relatively well with that of the financial services industry. Financial stress levels of JSE employees also range lower than the ICAS average.

We proactively used data provided by our benefit partners to assist with overall employee wellbeing. These include, amongst others, encouraging mobility (by offering yoga and hiking initiatives etc), COVID-19 and flu vaccinations, webinars to assist employees with various elements of mental health, family issues and work-life integration.

During 2022, we also piloted the Panda Mental wellbeing app for employees. This platform enables employees to have access to assistance at any time via their mobiles. The app provides support in the form of assessments, anonymous group sessions as well as one on ones with a therapist and text-based chat support. Going forward, we will be offering this to all permanent JSE employees.

We have also introduced a secondary medical aid scheme for employees, effective form January 2023. This enhancement to our employee value proposition will give our employees choice in terms of the best healthcare suited for them and provides more cost-effective medical aid plans, given South Africa’s tough economic conditions.

Employee engagement and experience

The JSE strives to be an employer of choice and one of the ways we gauge and measure employee sentiment is by using cutting-edge employee engagement technology.

In 2022, we implemented Peakon for our annual employee engagement survey to measure engagement and sentiment. It also empowers line managers to drive actions in support of improving engagement in the Group.
The participation rate and overall scores remain positive for the business. Areas where we are doing well are goal setting, the environment and meaningful work. Areas that require focus for improvement are workload, growth and reward.

**Celebrating the JSE**

Proudly JSE Day aims to ensure that all business units are kept abreast and aligned on the key aspects of our business, celebrate divisional successes, recognize individual achievements, and celebrate key milestones in the lives of employees.

**Reinforcing our ethics**

The JSE Group has a zero tolerance for bribery and corruption, fraud, misconduct, theft and unethical behaviour. We hold ourselves to a high ethical standard and are committed to conducting our business with integrity and in an honest and transparent manner, taking into account social and environmental concerns. The JSE Group Code of Conduct and Ethics and the associated policies and training material set out the manner in which breaches are handled, which may include disciplinary and/or criminal prosecution. It is incumbent on all employees to report potential and actual breaches to senior management, the Head of Group Compliance, or the whistle-blower hotline.

No calls were received during 2022 (2021: 1).

**Ethics oversight and standards**

The JSE Board Charter reflects the JSE’s commitment to the King IV principles of accountability, integrity, fairness and transparency, and the Board is responsible for ensuring that all JSE employees conduct themselves in an ethical manner.

Ethical conduct is an integral part of our corporate culture and is underpinned by our commitment and desire to do “the right thing”. Ethical leadership and an awareness that the “right” actions and decisions of all employees in our interactions with all stakeholders, whether internal or external, must be at the basis of this commitment. Our behaviour in the performance of our day-to-day duties is reinforced by our values and is indicative of how we think and feel about doing business and interacting in the broader economic and social environment.
Strengthening diversity and fostering equality

Diversity

Employment Equity

Race breakdown*

| Occupational level | Male | | | | Female | | | | Foreign national | | |
|-------------------|------|---|---|---|------|---|---|---|---|------|---|---|
|                   | African | Coloured | Indian | White | African | Coloured | Indian | White | African | Coloured | Indian | White | Male | Female | Total |
| Top Management     | 1     | 0   | 2   | 3   | 4     | 1   | 2   | 3   | 0   | 0   | 16  |      |
| Senior Management  | 7     | 2   | 6   | 16  | 8     | 2   | 7   | 10  | 0   | 0   | 58  |      |
| Professionally Qualified and Experienced Specialists and Mid-Management | 61 | 6 | 21 | 32 | 55 | 11 | 19 | 23 | 2 | 0 | 230 |      |
| Skilled Technical and Academically Qualified Workers, Junior Management, Supervisors, Foremen and Superintendents | 56 | 10 | 9 | 5 | 88 | 31 | 14 | 8 | 1 | 0 | 222 |      |
| Semi-skilled and Discretionary Decision Making | 5 | 2 | 1 | 1 | 3 | 1 | 1 | 0 | 0 | 0 | 14 |      |
| Unskilled and Defined Decision Making | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 4 |      |
| Total Permanent    | 130   | 20  | 39  | 57  | 162   | 46  | 43  | 44  | 3   | 0   | 544 |      |

* Data includes all JSE subsidiaries (JIS, JPP and JSE Clear).

Female representation at Board and Exco as at year end December 2022 (%)

<table>
<thead>
<tr>
<th>Year</th>
<th>Board</th>
<th>Total management (Exco)</th>
<th>Senior management</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>33%</td>
<td>2%</td>
<td>36%</td>
</tr>
<tr>
<td>2019</td>
<td>33%</td>
<td>42%</td>
<td>54%</td>
</tr>
<tr>
<td>2020</td>
<td>33%</td>
<td>48%</td>
<td>59%</td>
</tr>
<tr>
<td>2021</td>
<td>39%</td>
<td>46%</td>
<td>52%</td>
</tr>
<tr>
<td>2022</td>
<td>60%</td>
<td>70%</td>
<td>84%</td>
</tr>
</tbody>
</table>

1 Includes chief financial officer that was appointed in January 2023.
2 Includes the acting chief financial officer who stepped down from the role in January 2023.
The JSE supports the country’s transformation objectives and is committed to becoming demographically representative in knowledge, skills and experience, race, gender and disability, while redressing historical inequality. We have an employment equity policy that aims to eliminate unfair discrimination.

We conduct mandatory diversity, inclusion, equality and belonging workshops and training sessions for employees and specific ones for our leadership group. The training and workshops aim to facilitate discussion and a shared understanding of diversity and the JSE’s transformation priorities.

We have completed the second year in the new successive three-year employment equity plan and are making progress towards our December 2023 objectives. As at 31 December 2022, 83% of our employees were African, Coloured or Indian (ACI), and we continue to improve representation in senior and top management.

Our focus on disabled learners assists in driving transformation. Refer to the transformation chapter on page 65 for more detail.

To ensure the fairness and equality of our working environments, we reviewed various policies and practices to ensure fairness regardless of gender and race.

The JSE subscribes to the Code of Good Practice on the Prevention and Elimination on Harassment in the Workplace (Code on Harassment), which was introduced in March 2022, and has a harassment policy that is aligned with this code. To reinforce these, we offered practical and interactive training to all leaders of people to equip them with updated knowledge and skills on harassment in the workplace. In addition, all employees attended webinars for awareness.

**Fair and responsible remuneration**

During 2021, the JSE embarked on an internal pay parity exercise covering JSE Limited and JSE Clear employees. The target was to ensure a 90% comparable employee ratio of comparable employee groups in terms of job grade, performance rating and tenure. We will continue to monitor pay parity in support of fair and responsible remuneration across the Group, particularly in our subsidiaries, JSE Clear and JIS.

In 2022, the JSE performed a pay parity exercise in line with our commitment. This included JSE Clear as well as JPP. We also embarked on a complete job evaluation and benchmarking exercise for JIS in which all roles were graded, and employees were granted salary adjustments to align their remuneration to that of their roles. A phased approach will be taken to adjust the pay for these employees.
Performance and remuneration outcomes

The Group’s financial performance targets aim for year-on-year growth in headline earnings per share (HEPS), a return on equity (ROE) of 17% – 18% and a shift towards annuity revenue.

The JSE has reported year-on-year growth of 4% in HEPS and a strong ROE of 18%, well within our long-term target range. Our strategy to diversify revenue continues to gain traction, with non-trading revenue up 13% year-on-year to 25% of total operating revenue.

The business remains strongly cash generative and this has enabled the Board to declare an ordinary dividend of 769 cents per share for 2022, resulting in a distribution to shareholders of R668 million.

In this context:

TGP for 2022

- Group Remco approved a 5% increase to total guaranteed pay (TGP) for 2022 (2021: 4.5%), inclusive of a pay parity adjustment of 0.94% of payroll (R3.9 million in aggregate) to address parity adjustments where merited. Group Remco also adjusted guaranteed pay levels for selected senior executives during 2022 so as to be competitive with the market for key talent.

Corporate performance for 2022

- These results underpin our variable reward model, which for the first time is based on profit before interest, tax and incentives (PBITI), rather than net profit after tax (NPAT) as per our previous practice. Group Remco approved a bonus pool of R82 million (2021: R74.3 million) for the Group, which includes the annual discretionary bonus allocation for our wholly-owned subsidiary, JSE Investor Services (with a headcount of 139 staff in 2022).

Long-term performance

- Group Remco determined the vesting percentage for share awards that vested at end 2022, based on performance against pre-set corporate targets over the measurement period 2019 – 2022. The vesting for these two share allocations was assessed at 43.3% and 44% with the balance of the share awards being forfeited.

Malus and clawback

- No malus or clawback conditions were triggered in 2022.

TGP for 2023

- Group Remco approved a 5% increase to TGP for 2023 (2022: 5%), inclusive of a pay parity adjustment of 0.4% of payroll (R2.1 million in aggregate) to address parity adjustments where merited.
Remuneration philosophy objective

The JSE’s remuneration philosophy and policy governs the remuneration of executive management (executive directors and prescribed officers) and other employees. We are committed to observing the concept of fair and responsible remuneration for executive management in the context of overall employee remuneration.

Remuneration is structured in a fair and reasonable manner, recognising individual contributions and collective results. There is a clear differentiation between executives and employees based on line-of-sight responsibility, accountability, competencies, work performance and scarcity of skills.

Inherent in this philosophy is the linkage between performance and short- and long-term remuneration (both at an individual and corporate level).

In order to drive a pay-for-performance approach, there is also an increasing element of variable pay at senior management levels.

We aim to:

- Align pay to performance against corporate strategy
- Promote a culture that supports innovation, enterprise and the execution of Group strategy
- Align the interests of employees with attaining profitable (and sustainable) long-term growth of the business for the benefit of all stakeholders
- Offer an equitable remuneration mix that attracts, motivates and retains the appropriate calibre of executives and employees

Our philosophy creates sustainable value as it is:

- Aligned with stakeholder interests
- Congruent with strategic priorities and values
- Linked to corporate and individual performance
- Competitive with market norms and benchmarks
- Transparent and understandable

Our remuneration philosophy accounts for:

- Reality of the JSE’s size and its significant role in the South African financial sector
- Nature of the business, its risk profile, the competitive environment and financial affordability
- Balancing of rewards with the funding of capital to maintain and grow the JSE, dividend payments to shareholders and payments to wider society (through taxation and corporate social responsibility)
Corporate performance 2022

KEY OUTCOME: Group Remco considered the evidence supporting management’s self-assessment of corporate performance, and rated overall performance for 2022 as “Solid and resilient”

Our corporate scorecard for 2022 included initiatives to address all our material matters. Our strategic priorities for 2022 formed the basis of the corporate scorecard for 2022 which was approved by Group Remco and the Board.

For each of the four scorecard elements, Group Remco determines various deliverables, at both an “on-target” and “above-target” performance level. “Performance moderators” that represent “below-target” delivery are also identified.

Group Remco assessed corporate performance for 2022 as **SOLID & RESILIENT** with a score of **86/100** (2021: 73/100). Key outcomes are summarised below:

**Financial:** Delivered growth in HEPS while achieving ROE and NPAT margins in line with targets. Slowdown in revenue growth due to global and local market drivers negatively impacted operating leverage for the 2022 year.

**Operations:** Operational resilience and systems uptime has exceeded our SLA commitments and shows a marked improvement on the prior year.

**Growth:** Headline growth initiatives JIS and JPP delivered operationally and strategically, despite missing financial targets by a small margin. Annuity revenue improved by 13% to 25% of total operating revenue in line with the strategic intent to diversify Group revenue.

**Stakeholder and staff:** Solid stakeholder engagements in 2022 with an improvement in our Net Promoter Score (NPS).

**JSE Clear:** Granted independent clearing house licence for JSE Clear, effective from January 2023.

**Return to office:** There has been a positive response to our hybrid work policy. The staff is successfully utilising the collaborative space in the office with support from the IT and change management teams.

Annual incentives awarded for 2022

KEY OUTCOME: Discretionary bonus pool for the Group of R82 million awarded for 2022 (2021: R74.3 million)

A discretionary bonus pool is created annually at the discretion of Group Remco, and the quantum of the DB pool is linked to the quality of the overall corporate performance for the year in question, including the JSE Group’s financial performance, as measured against the approved corporate scorecard.

In our new (approved) DB policy:

- On-target performance equates to a DB pool of 8% – 10% of PBITI (subject to Remco discretion)
- Above-target performance would translate to a DB pool above 10% of PBITI (also subject to Remco discretion)
- Below-target performance would result in a DB pool of less than 8% of PBITI (determined by Remco)
Long-term incentives vesting in 2022

KEY OUTCOME: Group Remco assessed long-term incentive scheme performance as at the end of 2022 at a below-target level. For the four-year assessment period 2019 to 2022, the LTIS allocation 2(2) vested at 43.3% while for the three-year assessment period 2020 – 2022, the LTIS allocation 3(1) vested at 44%. The vesting of both these LTIS allocations is significantly below the on-target vesting level of 70%. The balance of the shares that did not vest are forfeited by all scheme participants.

To drive sustained financial performance over a longer-term horizon, Group Remco has implemented a conditional equity scheme. LTIS 2018 is designed to provide selected senior JSE staff with an incentive to remain with the JSE and, collectively, to deliver superior performance over time. This performance is assessed against a pre-set LTIS scorecard of four corporate yardsticks (ROE performance, HEPS growth, relative TSR performance and a strategic metric).

LTIS 2018 vesting profile (%)

Average vesting to date under the LTIS 2018 scheme is at 45% which is significantly below the on-target level of 70%. Targets for in-flight awards cannot be amended retrospectively.

The efficacy of LTIS 2018 as a retention tool is undermined by the low vesting rates recorded since 2020. Targets for in-flight awards cannot be amended retrospectively.

Areas of future focus

During 2023, Group Remco will focus on:

- Continued oversight of the JSE’s implementation of pay parity in support of fair and responsible remuneration across the Group, particularly in our subsidiaries JSE Clear and JSE Investor Services
- Enhancing the JSE’s key staff retention model and continuing to oversee the JSE’s talent management plans and pipeline, and employee value proposition
- Monitoring the effectiveness, productivity and employee response to the JSE’s new hybrid way of work
- Reviewing the effectiveness of the new corporate scorecard model and the associated metrics and targets
- Considering whether to introduce an element of deferral for short-term incentives
- Monitoring compliance with the revised MSR policy for all executives
- Reviewing the total reward framework and any additional enhancements that might be required post-AGM
- Maintaining the dialogue with our institutional shareholders on remuneration matters to promote alignment with stakeholder requirements
Financial market infrastructures are key components of any financial system and are responsible for delivering services that are critical to the smooth and secure functioning of financial markets.

As a licensed financial market infrastructure, the JSE has the statutory responsibility to ensure that it:

- Provides facilities for listing of securities, including equities and debt securities issued by domestic or foreign companies.
- Provides the JSE’s users with an orderly and secure marketplace for trading, clearing and settling transactions in those listed securities.
- Regulates both the listing of securities and the trading, clearing and settling of transactions in a fair, transparent and consistent manner.

Maintaining a balance

In discharging our responsibilities as a financial market infrastructure and pursuing our strategic objectives as a commercial entity, the JSE seeks to maintain an appropriate balance between the regulation of the markets that it operates and the pursuit of shareholder returns.

We have adopted practices, norms and procedures to strengthen the responsible management of our business. This includes providing reliable and scalable technology platforms for our users, maintaining rigorous operating protocols, ensuring the integrity and security of company and customer information, remaining compliant with financial market legislation and regulations, and adhering to rulings issued by our regulators.

The JSE

The JSE is both a listings authority of the markets that it operates and a commercial entity. Within the Group, the JSE is licensed as an exchange, while JSE Clear (a wholly-owned subsidiary) is licensed as an independent clearing house.

Cash Equities Market

The JSE rules provide for a range of measures to ensure that settlement takes place. These include the payment of a margin on unsettled transactions by member firms, and the ongoing monitoring of the regulatory capital of members of the Exchange to ensure they can meet settlement obligations.

Derivatives Markets

The JSE rules prescribe how transactions in listed derivative instruments are cleared through our clearing house, JSE Clear.
JSE Clear

The JSE appointed JSE Clear as a licensed clearing house (in terms of the FMA) to clear transactions in listed derivatives effected through the Exchange. JSE Clear is a CCP for trades executed on the JSE’s Derivatives Markets.

JSE Clear manages counterparty credit risk, liquidity risk, operational risk and regulatory compliance risk. One of its critical processes is an annual clearing member default simulation to ensure that JSE Clear and the clearing members have the necessary processes in place to manage a potential clearing member default. The November 2022 simulation exercise again demonstrated the resilience of the clearing house’s processes and systems. It focused on testing the newly established procedure for using securities collateral within the overall default management process. The outcome of the simulation was positive and indicative of JSE Clear’s ability to effectively manage a potential default event in the derivatives markets.

JSE Clear became a licensed independent clearing house in accordance with section 110 of the FMA in 2022. Under the new licence, JSE Clear fulfils its licensed functions and regulatory responsibilities in terms of its own rule book, having previously operated as an associated clearing house in terms of the JSE’s rules. It also manages its own fully capitalised balance sheet and is governed by an independent Board. JSE Clear began operating under the new licence in January 2023. For further insight, refer to page 55.
The Issuer Regulation division is the custodian of the Listings Requirements and is responsible for their interpretation, application and enforcement. The Listings Requirements apply to companies seeking a listing of securities for the first time and to companies that already have securities listed on the JSE (shares or other specialist securities, such as debt securities or ETFs). Pursuant to the FMA, the Listings Requirements are binding on issuers, their directors, officers, agents and employees.

The Market Regulation division is responsible for overseeing trading in the markets operated by the JSE, with the primary aim of identifying potential market abuse, including insider trading and market manipulation. The JSE does not have the power to investigate market abuse. Market abuse is a statutory offence in terms of the FMA. The statutory powers to conduct market abuse investigations and to initiate enforcement action, if necessary, are vested in the FSCA.

Where the JSE finds that an issuer or its director(s)/officer(s) has contravened or failed to adhere to the Listings Requirements, the JSE may:

- censure the issuer and/or the issuer’s director(s)/officer(s), individually or jointly, by means of private or public censure;
- impose a fine on the issuer and/or the issuer’s director(s)/officer(s), individually or jointly;
- disqualify an issuer’s director(s)/officer(s) from holding the office of a director or officer of a listed company for any period of time; and
- issue any other penalty that is appropriate under the circumstances.

The sanctions that may be imposed by the JSE are in addition to any sanctions, fines or prosecution that may be sought or imposed by the FSCA.

The protection of investors (retail and wholesale) takes precedence when setting regulatory standards, as does promoting investor confidence in standards of disclosure and corporate governance. The Listings Requirements must achieve an effective and appropriate level of regulation for all issuers. Similarly to its global peers, the JSE does this by ensuring that:

- All applicant issuers meet minimum entry requirements. Compliance is determined based on the input of various role players.
- Sufficient disclosure of relevant information is made available publicly and timeously so that investors are able to inform themselves of all relevant facts before deciding whether to trade in securities.

The Market Regulation division monitors trading in all JSE-listed securities using surveillance systems designed to detect and analyse suspicious trading activity. If it identifies trading activity that it believes warrants further scrutiny, the findings are discussed with the FSCA. The FSCA determines whether the identified trading activity should be formally investigated.

The FSCA can also initiate a market abuse investigation based on information referred by another licensed exchange or by any other party.

The Market Regulation division also supervises the compliance of authorised JSE member firms with the rules dealing with the use of the JSE’s trading systems, with the regulated services provided to their clients, and with the financial soundness of the member firms, as well as with various governance, risk management and internal control arrangements.
Our regulators

Integral to the performance of our licensed functions and the exercise of our regulatory authority is the relationships we have with our regulators. We are committed to adhering to all applicable legislation, and maintaining open, honest and constructive engagements with our regulators.

The Financial Sector Regulation Act, No. 9 of 2017 (FSRA) established the South African twin peaks regulatory model which sets out our regulatory framework:

• The Financial Sector Conduct Authority (FSCA) is the lead regulator of the JSE and JSE Clear in terms of our performance of our licensed functions, which includes oversight of our conduct and the regulation and surveillance of our markets.
• The Prudential Authority (PA) regulates the JSE and JSE Clear on a prudential basis in terms of their mandate for the maintenance and enhancement of financial stability and promoting the safety and soundness of market infrastructures.

The PA conducted online and hybrid supervisory meetings with the JSE and JSE Clear executives and senior members of our finance, risk, operations, IT, internal audit and compliance teams in 2022. In addition, the JSE and JSE Clear submit detailed prudential reports on a quarterly and monthly basis. The Prudential Authority also engaged directly with the CEOs, board chairs, and the full boards of the JSE and JSE Clear on matters related to strategy and risk management.

The JSE publishes an annual report in terms of the performance of our self-regulatory functions, which sets out the processes for the identification and management of any conflict of interests that could arise between our regulatory and commercial functions. This report is approved by the Group SRO Oversight Committee, submitted to FSCA and the PA, and published as part of our integrated reporting suite.

Key developments in 2022

Consultation and its outcomes

The JSE issued a consultation paper to obtain public input on various proposals on the listing’s framework of the JSE, considering recent international developments and internal JSE initiatives.

We were pleased with the level of views, opinions and comments received through this inclusive and transparent approach, to advance the relevance and attractiveness of South Africa’s financial markets. Commentators included a diverse group of private individuals, institutional investors, audit firms, listing sponsors, issuers and regulatory bodies.

The proposals received favourable support from an overwhelming majority of commentators. The JSE issued a roadmap to guide the market on the implementation of the proposals.
Amendments to the Listings Requirements and Debt Listings Requirements

**Sustainability instruments**

The JSE remains focused on its social obligations in relation to new products. We amended the Debt Requirements to expand the current Sustainability Segment (now comprising Sustainability Use of Proceeds Debt Securities and Sustainability-Linked Debt Securities) and introduced the Transition Segment, which came into effect on 11 April 2022.

**Cutting red tape**

In 2021, the JSE issued a consultation paper on proposals for cutting red tape to achieve a level of effective and appropriate regulation, for existing listings on the Main Board and the Alternative Exchange. The paper resulted in certain amendments to the Listings Requirements, which came into effect 1 June 2022.

**Annual improvement project**

During 2021, the JSE proposed general amendments to the Listings Requirements through the Annual Improvement Project 2021, which came into effect from 1 July 2022.

**Actively managed exchange-traded funds and certificates**

The JSE amended the Listings Requirements to expand the current specialist securities offerings by including specific requirements for the listing of (i) actively managed exchange-traded certificates and (ii) actively managed ETFs, which came into effect 1 July 2022 and 11 October 2022 respectively.

- An actively managed certificate is a non-interest paying debt instrument that pays the investor the performance of a basket of securities that is actively managed by a portfolio manager according to a specific investment mandate.
- Actively managed ETFs are funds traded on a market where the manager uses an actively managed strategy to produce a return for the investor instead of passively tracking an index or other type of asset.

Publication of public censures and penalties

In the interests of transparent regulation, the JSE’s investigations unit has published a summary of public censures and penalties imposed on companies that have transgressed the Listings Requirements – this is intended to contribute to heightened awareness of the need for improved governance within corporate South Africa.
Looking forward to 2023

The JSE will prioritise the amendments to the Listings Requirements and Debt Listing Requirements market referred to on page 86, addressing:

• Dual class shares
• Free float for new listings and free float assessment
• Review of special-purpose acquisition companies
• Financial reporting disclosures
• The annual improvement project for Debt Requirements

Regulatory developments on the horizon impacting our business

Crypto Asset framework

Some progress has been made on the recommendations included in the Intergovernmental FinTech Working Group Position Paper on Crypto Assets. As an interim step, the FSCA amended the Financial Advisory and Intermediary Services Act, declaring crypto assets as a financial product with immediate effect. The amendments to the Schedules to the Financial Intelligence Centre Act, which, inter alia, designates crypto asset service providers as accountable institutions, came into effect on 29 November 2022. It is likely that the holistic regulation of crypto assets will be included within the scope of the CoFI Bill and the review of the Financial Markets Act. The legitimisation of crypto assets as an asset class and crypto asset exchanges through a regulatory framework introduces additional competition for existing market infrastructures.

Benchmarks

The SARB announced the publication of the South African Rand Overnight Index Average (ZARONIA) for observation purposes. The ZARONIA is the successor rate to replace the Johannesburg Interbank Average Rate (Jibar) – in due course. The JSE is the current calculation agent for Jibar and will be required to make changes to systems and processes when ZARONIA replaces Jibar. The FSCA published the revised Conduct Standard on the Provision of Benchmarks for public comments. The Conduct Standard and revised Benchmark Regulations are likely to come into effect simultaneously. The JSE will be required to be licensed as a benchmark administrator in respect of benchmarks and indices provided.

Companies Act

Amendments to the Companies Act to address the technical deficiencies identified in the Financial Action Task Force Mutual Evaluation Report, relating to the identification and disclosure of ‘beneficial owners’, will come into effect on 1 April 2023. The revised Companies Amendment Bill is expected to be tabled in Parliament before the end of 2023 and will address additional disclosure requirements, such as the requirement for the publication of a company’s remuneration policy and remuneration report. These requirements will place an additional regulatory burden on listed companies and may influence decisions to list or remain listed on the JSE.
GOVERNING ENTERPRISE RISK MANAGEMENT

Qiniso Mthembu, Group chief risk officer

“The volatility and uncertainty that we have observed during the last few years are set to continue with more disruptions expected to happen simultaneously. Therefore, it is vital we build on the lessons learned from the past while we focus on the JSE’s predictive risk-monitoring capabilities. We want to make the ERM function more visible and demonstrate real value through strong partnerships with business to solve relevant challenges and assist in risk-informed decision-making. Through this, we will build a risk-conscious JSE with a strong and positive risk culture.”
The JSE continues to mature and strengthen its risk and resilience framework, ensuring that our risk approach is aligned with the Group’s strategy, and that an effective risk culture is embedded.

The Group maintains a robust enterprise-wide risk management framework (ERMF) which sets out the Group’s approach to risk management and its appetite for taking risks. It also defines the risk roles, responsibilities and governance structures. Our regulated entities, including subsidiaries, manage their risks in line with applicable regulations and internal risk and investment policies.

### Key focus areas 2022

1. Ensuring effective risk responses to risk events with potential to negatively affect markets, specifically the Russia-Ukraine conflict and increased load shedding
2. Positing ERM as a driver of effective strategic decision-making
3. Embedding ERM in subsidiaries in a fit-for-purpose manner
4. Coordinating and monitoring the closure of priority gaps emanating from the 2021 risk culture assessment

### Future focus areas

1. Continue to drive an integrated, proactive and continuous approach to risk management
2. Further roll out the enterprise risk approach across subsidiaries and any new acquisitions
3. Further roll out of the control management framework as part of our organisational resilience programme
4. Further consider sustainability risks in our Enterprise Risk Management (ERM) framework. This will include the identification and assessment of climate risks and opportunities

### Risk culture

A strong risk culture requires everyone to understand and embrace their role in managing risks. Risk culture is a key enabler of our combined assurance model, used to provide assurance on the effectiveness of risk within JSE. It is promoted by the ERMF as it:

1. Sets expectations by articulating risk appetite and desired behaviours through policies.
2. Ensures risk is considered in key business decisions through frameworks and tools.
3. Ensures risk is made transparent and included in regular reports at division and Exco levels, as well as to the Board oversight structures.

Our combined assurance model (page 141) provides appropriate segregation of duties and clear roles and responsibilities across JSE business divisions, corporate functions, risk, legal, compliance and internal audit. It clearly defines roles and responsibilities, with accountability for risk management sitting within the first line (management/business).

The JSE’s regulators, the SARB’s Prudential Authority and the FSCA, conduct regular supervisory on-site reviews to satisfy themselves on the efficacy of the JSE’s risk management processes which enable it to effectively and responsibly exercise its key role as a financial market infrastructure.

### Risk management approach

The ERMF supports the ongoing and systemic identification, evaluation, management, monitoring and reporting of the significant risks and the related mitigating controls. This process is supported by robust risk governance, designed to give a coherent view of risk across the Group.
The JSE’s risk universe is an inventory of all types of risk that are identified as inherent in business strategies and objectives, including strategic, non-financial and financial risks. This contributes to an effective and consistent approach to risk management.

The risks are reflected in the risk appetite statements (page 92) and are managed through principles set out in the Group’s policies. Risk assessments determine whether risks are within the appetite set by the Board, and are reported to Exco and the Board.

Our integrated risk and resilience programme facilitates structured coordination of processes and plans pertaining to proactive risk identification, measurement, management and monitoring, as well as the business continuity elements. Business continuity planning (page 60) means that crises events’ impact will be minimised through effective crisis planning and testing processes, ensuring our resilience during a crisis event.

We have started the process of explicitly considering sustainability risks in our Enterprise Risk Management (ERM) framework. This will include the identification and assessment of climate risks and opportunities considered within the context of the various roles that the JSE occupies.

A global view
The World Federation of Exchanges is a global industry group for exchanges and CCPs. The group connects risk leadership and thinking at the world’s financial exchanges and clearing houses. The JSE is an active member and serves on various committees. This participation allows us to share experiences and perspectives in the interests of developing and enhancing risk management practices that are specific to market infrastructure operators.

Risk governance
Governance and oversight are enabled through an effective governance structure comprised of Board level committees – GRMC (page 124) and Group Audit Committee for assurance oversight (page 123) – and Executive level committees to promote active discussion and resolution of risk issues. Refer to the Group’s governance structures on page 105.

Exco is accountable to the Board for implementing the risk management principles and monitoring ongoing risk management. The executive head of each business unit is accountable for ensuring adherence to these principles and for integrating effective risk management practices into day-to-day operations.

As at 31 December 2022, the Board was satisfied that the Group’s risk and opportunity management processes were generally operating effectively.

JSE subsidiaries
The JSE risk policy and ERMF are applicable to subsidiaries and all entities and where applicable, and with appropriate approvals and oversight, adapted to ensure fit-for-purpose application. The Exco monitors the management of subsidiary risks with regular updates provided to the GRMC.
JSE Clear

JSE Clear’s governance structures are like those of the JSE: ultimate responsibility for the management of risk lies with the Board, and the Risk Committee assists the Board. The Board includes executive and independent expert representation. The JSE Clear Risk Committee is mandated to:

• Annually review and assess the quality, integrity and effectiveness of risk management plans and systems, and ensure that the risk policies and strategies are effectively managed and that risks taken are within the agreed tolerance and appetite levels.
• Define JSE Clear’s appetite or tolerance for risk, oversee the implementation of an effective ongoing process to identify and measure risks, and ensure that these risks are proactively managed.

A framework and process to anticipate risks are also maintained through JSE Clear’s risk management framework. Oversight of the degree to which this risk management framework is appropriately maintained and implemented is provided by the JSE Clear Audit Committee.

JSE Clear has reporting obligations to the JSE Board and the GRMC, allowing for appropriate Group oversight as well as its own, clearly defined JSE Clear risk appetite statement.

JPP and JIS

The JSE Group Board Committees serve JPP and JIS and they are not required to establish separate or additional Board Committees. Where any of the Group Board Committees address matters relating to the subsidiary, the relevant feedback will be provided to that subsidiary’s Board.

OUR TOP RISKS

Managing risk is fundamental to the successful execution of our strategy, including integrating new businesses, and the resilience of our operations.

Risk appetite

Our risk appetite is the measure and allocation of the amount of risk that the Group is willing to accept in pursuit of its strategy. The risk appetite statements are linked to the Group’s strategic priorities and associated key risks and support informed decision-making that is based on risk appetite and tolerance thresholds.

The JSE will only tolerate risks that permit it to:

• achieve its strategic business objectives;
• comply with all applicable laws and regulations;
• conduct its business in a safe and sound manner; and
• protect and/or enhance stakeholder value.

The risk appetite is a central pillar of the ERMF and is used as a benchmark for risk assessment and monitoring, with regular reporting of aggregated risks to Exco and GRMC. The Board, on an annual basis, articulates JSE’s risk appetite. This is cascaded through the Group with divisions and functions establishing more detailed risk appetite statements and monitoring their risk profile against the agreed appetite levels. Risks that are outside risk appetite are escalated to the Exco and Board through the GRMC.

We annually review risks which are categorised as either financial, reputational, regulatory or environmental risks. Climate change impacts are cross cutting and may be related to risks across one or all of these risk categories. Specific attention is given to ensure compliance with current and emerging regulations related to climate change and other pertinent sustainability issues.
### Overall risk appetite statements

<table>
<thead>
<tr>
<th>Category</th>
<th>The Group is committed to:</th>
<th>Strategic alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial</td>
<td>Maintain a healthy balance sheet, profitability and cash flow position to ensure sustainable commercial viability of the operations.</td>
<td></td>
</tr>
<tr>
<td>Capital requirements</td>
<td>Have sufficient eligible capital to cover regulatory capital requirements, including a buffer to accommodate stress events.</td>
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<tr>
<td>Liquidity resources</td>
<td>Maintain sufficient liquidity for regulatory capital requirements as per the FMA.</td>
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<tr>
<td>Operational resilience</td>
<td>Minimise the Group's operational losses within an expected target range.</td>
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<td></td>
<td>Provide reliable and accessible markets and services and aim to minimise material business disruption.</td>
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<tr>
<td>Cybersecurity</td>
<td>Manage and protect digital assets and detect and isolate significant breaches to minimise business impact.</td>
<td></td>
</tr>
<tr>
<td>Fraud and corruption</td>
<td>Minimise fraud and corruption and take timely action to prevent, detect, investigate and remediate incidents and recover losses arising from such activities.</td>
<td></td>
</tr>
<tr>
<td>Legal and compliance</td>
<td>Minimise non-compliance with regulatory requirements and enhance our control environment to mitigate against possible breaches.</td>
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<tr>
<td>Social</td>
<td>Contribute to the national agenda and maintain a BBBEE score of at least Level 3.</td>
<td></td>
</tr>
<tr>
<td>HR</td>
<td>Attract, develop and retain top talent that is proud to work for the JSE.</td>
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</tr>
<tr>
<td></td>
<td>Adopt a zero-tolerance stance on inequality, discrimination and unethical behaviour.</td>
<td></td>
</tr>
<tr>
<td>Reputation</td>
<td>Protect the JSE brand through service delivery, client satisfaction and effective stakeholder management. The Group has a low tolerance for any risk that could negatively impact its brand and reputation.</td>
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</tr>
</tbody>
</table>
Our top risks

*Our top risks reflect the challenges and opportunities posed by our operating context and those elements that could impact our long-term sustainability.*

The Group’s ERMF enables the proactive anticipation of risks and opportunities and ensures that appropriate responses are developed and implemented within risk appetite. The risks are identified through a top down, and bottom-up approach.

The risks are mapped against strategic priorities and for each risk, an executive lead is responsible for the mitigation strategies. The chief risk officer and risk function provide a second line of oversight.

We also identify and monitor emerging risks which are either new to the Group or are difficult to quantify due to their remote or evolving nature. In most cases, the mitigation for such emerging risks is to establish appropriate contingency plans and monitor the development of the risk until it can be quantified and removed, or included as a top risk.

Our risks and mitigation strategies are set out below for the six risks in which the residual risk rating reflects a high likelihood and potential impact. For the other four risks in our top 10 risks, we provide a reference to where more information is included.

**Residual risk ratings**

- **Impact**
  - Extreme
  - Major
  - Moderate
  - Low
  - Insignificant

- **Likelihood**
  - Rare: 5% – 10%
  - Unlikely: 10% – 25%
  - Possible: 25% – 50%
  - Likely: 50% – 90%
  - Probable: >90%

1. Business sustainability
2. Business agility
3. Technology
4. Cybersecurity
5. Talent
6. Operational vulnerability
7. Default/counterparty (refer to page 83)
8. Critical third-party failure
9. Information protection (refer to page 64)
10. Reputation and stakeholder (refer to pages 96 to 101)
Movements in our top risks compared to last year reflect changes in the JSE’s operational context, the evolving strategy and an increased focus on specific aspects of certain risks, which were separated to facilitate increased focus.

- Evolving business sustainability risk and business model risk were encapsulated under the **business sustainability risk**.
- **Business agility risk** was added as a new top 10 risk. In the context of a rapidly evolving business landscape, this risk relates to the JSE’s potential inability to respond rapidly and flexibly to market changes and/or client demands.

### 1. Business sustainability

**Inability to sustain business growth and meet financial targets.**

**Root cause:** The JSE has variable revenue, highly dependent on the equity market, which grows slower than its fixed cost base. A low global economic growth environment impacts this risk, in addition to competition and disruptive regulatory and market changes which could render the JSE business model obsolete.

**Impact:** Long-term viability of the JSE across several metrics.

**Mitigation:** Progress the inorganic growth strategy, grow JIS and JPP, and explore alternative products, solutions and pricing models.

**Risk movement:** Unchanged

**Risk appetite:** Operated within risk appetite limits

**Strategic priority impacted:** Sustainable, high-quality earnings

**Material matter:**
- Attractiveness of the JSE as a capital-raising and investment platform
- Level of trading activity
- Competition and disruptors

**More information:** Page 10

### 2. Business agility

**Inability to respond rapidly and flexibly to market changes and/or client demands resulting in missed opportunities and/or loss of competitive advantage.**

**Root cause:** Limited nimbleness driven largely by the legacy nature of our systems and manual processes, which limit flexibility and innovation, resulting in a slower-than-desired pace of strategic execution.

**Impact:** Inability to sustain business growth, meet financial targets and transform the JSE business model. This can potentially lead to the JSE becoming irrelevant due to its inability to compete on a global scale.

**Mitigation:** Ongoing rejuvenation of legacy systems and modification of risk appetite that is fit-for-purpose, ensuring it is aligned with the required pace of change to register impactful revenue as we venture into high risk and growth areas as part of the JSE’s strategy.

**Risk movement:** New Risk

**Risk appetite:** Operated within the risk appetite limits

**Strategic priority impacted:** Transform our business

**Material matter:**
- Attractiveness of the JSE as a capital-raising and investment platform
- Enabling technology to provide innovative solutions

**More information:** Page 52, 87, 88 and 64

### 3. Technology

**Inability to deliver reliable, performing and secure platforms with flexible architecture to ensure the cadence of business transformation is enabled with technology.**

**Root cause:** Increasing backlog of ageing applications and infrastructure coupled with diminishing capacity for change from an IT resources perspective.

**Impact:** As technology is the backbone of our strategy, this risk could limit business expansion, growth and/or diversification, rendering the JSE unable to compete effectively in the global market. In addition, it could lead to business interruptions, possibly with longer resolution times.

**Mitigation:** Refinement and implementation of our technology strategy that is aligned with the business strategy. Capital expenditure allocation to rejuvenation projects and internal capacity augmented with third-party suppliers/vendors.

**Risk movement:** Unchanged

**Risk appetite:** Operated within the risk appetite limits

**Strategic priority impacted:** Transform our business

**Material matter:** Enabling technology to provide innovative solutions

**More information:** Page 60
4. Cybersecurity

JSE digital assets compromised through breaches and/or unauthorised access.

**Root cause:** Increased vulnerability due to amplified opportunities and alertness of criminals, geographic dispersion of employees, clients and suppliers, as well as a lack of adequate specialised skills and resources.

**Impact:** Compromises and theft and/or loss of assets, operational disruption and reputational damage with potential regulatory sanctions and/or legal ramifications.

**Mitigation:** Continuously scanning the cyber risk landscape keeps the JSE informed of the evolving risk environment to prevent, detect and appropriately respond. This entails refining capabilities, leveraging existing security controls and integrating critical technologies.

**Risk movement:** Unchanged

**Risk appetite:** Operated within risk appetite limits

**Strategic priority impacted:** Protect and grow our core business

**Material matter:** Operational availability and stability

**More information:** Page 66

5. Talent

Inadequate capabilities and skills and/or loss of intellectual capital impacting strategy execution.

**Root cause:** Evolving skills and capabilities required for the Exchange of the future. Increasing attrition risk due to growing competition and the distributed workforce phenomenon, along with the overall mental wellbeing of employees and the lean nature of the JSE’s organisational structure.

**Impact:** Operational availability and reliability, strategy execution and ability to build the resource requirements for the Exchange of the future.

**Mitigation:** Robust employee value proposition, succession planning and employee wellness support and initiatives. Ongoing evaluation of employee satisfaction levels, training requirements and the required future skills.

**Risk movement:** Unchanged

**Risk appetite:** Operated within the risk appetite limits

**Strategic priority impacted:** Partner for a sustainable marketplace

**Material matter:** Attractiveness of the JSE as an employer

**More information:** Page 71

6. Operational vulnerability

Operational disruption and incidents resulting in system downtime, impacting service delivery.

**Root cause:** Legacy systems and technology, manual processes, human error, and low maturity level of controls.

**Impact:** Operational availability and reliability with reputational, financial, operational and regulatory implications.

**Mitigation:** Control management and operational resilience frameworks, supported by business continuity, crisis and incident management response plans. Regular disaster recovery and business continuity tests.

**Risk movement:** Unchanged

**Risk appetite:** There were three IT Priority 1 incidents (see page 64) and two data Priority 1 incidents in 2022.

**Strategic priority impacted:** Protect and grow our core business

**Material matter:** Operational availability and stability

**More information:** Page 62
Our success is dependent on our relationships with a range of stakeholders – clients, shareholders, regulators, communities, suppliers, and employees.

Central to our strategy is putting our stakeholders at the centre of what we do and aligning business initiatives with those that provide the most value in enhancing stakeholder experience. We grouped our stakeholders into 11 key categories and assessed their concerns, why they matter to us, and considered how they are affected by our strategic decisions. The manner, level, and extent of our engagements are driven by their influence, interests, expectations, and concerns.

These relationships are depicted in the graphic on the right.

**Enhanced stakeholder experience through collaborative value creation and quality of service delivery.**

- **Address concerns**
  - Communities
  - Non-governmental organisations

- **Keep informed**
  - Media
  - Suppliers

- **Involve extensively**
  - Clients
  - Employees
  - Shareholders
  - Regulators

- **Enlist**
  - Policy and rules makers
  - Market infrastructure associations
  - Industry bodies

**Impact**
(Extent to which the stakeholder group is impacted by the JSE)

**Influence**
(Extent to which the stakeholder group can influence the JSE’s success)
At the end of 2021, we commissioned an independent reputation survey to gauge the state of trust and stakeholder relationship strength between the JSE and selected key stakeholders, and to better understand important current issues for the 11 stakeholder groups. This forms the baseline from which we can assess and govern the effectiveness of our stakeholder relationships, design our reputation management framework and manage stakeholder risks. The study, in addition to asking open-ended questions on stakeholders’ engagements with JSE, measured four foundational elements for building strong and resilient stakeholder relationships, expressed numerically in indices:

1. **Value-creation** (what you stand for): the extent to which the JSE has a clear social purpose that is authentic and strategic.
2. **Stakeholder engagement** (what you do): how the JSE engages meaningfully and consistently with stakeholders.
3. **Thick trust** (where you are): The level of trust built through open and enduring relationships, unlocking information flows, dialogue and collaboration.
4. **Advocacy** (what you get): The extent to which stakeholders speak favourably about, recommend, frequent, do business with, invest in, or be open to dialogue and partnership with the JSE.

In summary, the study gleaned some insights, which have informed our stakeholder approach going forward.

- 83% of the respondents believe the JSE is doing well in meeting its mandate of building a trusted marketplace.
- Thick trust in the JSE is very high and culminates into good scores on the advocacy index*.
- The strongest driver of trust is our integrity and accessibility, coupled with our sound operations and leadership team.
- Stakeholders are inviting us to engage more in two-way dialogue on various matters such as sustainability, transformation, influencing public policy in areas such as SMEs, promoting gender equality, tax incentives for investment and co-creating to drive shared value for stakeholders.

* The extent to which stakeholders speak favourably about, recommend, frequent, do business with, invest in, or be open to dialogue and partnership with the JSE.
In response to the independent assessment, we embarked on a strategy where we have had focused engagements with our key stakeholders, some of which are outlined below. We will continue to focus on fostering trustworthy and mutually beneficial relationships with our stakeholders in 2023, so that we can achieve both our business and national agenda objectives.

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Audience</th>
<th>Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eskom engagement with CEOs</td>
<td>Listed company CEOs and top Eskom clients based in Johannesburg and Cape Town</td>
<td>Update key stakeholders on developments at Eskom and engage the private sector on how they can assist in resolving the challenges in electricity supply and demand.</td>
</tr>
<tr>
<td>Seminar on the prevention and elimination of harassment and gender-based violence</td>
<td>Human resources practitioners, civil society</td>
<td>To raise awareness on the broader definition of harassment, including gender-based violence, and the role of organisations in creating a safe workplace for their employees.</td>
</tr>
<tr>
<td>SA macro-economic seminar and SA Tomorrow Investor Conference</td>
<td>Institutional investors, investment managers, Pension funds, hedge funds, Private equity funds, fund managers and asset managers from US, UK, UAE, China, Singapore and Hong Kong</td>
<td>To promote South Africa as a leading emerging market destination in partnership with listed corporates, state-owned entities and senior public sector officials in the Office of the Presidency, National Treasury, and the SARB.</td>
</tr>
<tr>
<td>Financial markets training</td>
<td>Journalists and editors from various media publishing houses</td>
<td>Provide in-depth training on financial markets and financial instruments to enhance understanding of the JSE as a marketplace and regulatory authority.</td>
</tr>
<tr>
<td>Junior and emerging market engagement</td>
<td>Emerging mining companies, advisers, members of the South African Minerals Council and Junior Mining Association</td>
<td>To present the JSE’s proposition for emerging miners to drive growth and job creation. To better understand the JSE’s role in supporting the growth and sustainability of emerging miners.</td>
</tr>
<tr>
<td>JSE gender mainstreaming strategy</td>
<td>Broad internal and external stakeholder base</td>
<td>To promote gender equality in South Africa through focused interventions – such as people practices, procurement, CSI, regulation advocacy and partnerships with our stakeholders.</td>
</tr>
</tbody>
</table>
Engagements with material stakeholders

Our clients (refer to pages 50 to 59)

After two years of physical disruption caused by the COVID-19 pandemic, we had to adapt to the new(er) normal in a post-lockdown environment, with fewer restrictions on physical interactions. We recognised that the disruption could impact client service and rolled out a client experience methodology across the business and finalised service standards. These will be tracked in 2023.

The NPS survey sample size increased, especially for various client categories. The final score for 2022 showed improvement on the prior year. This suggests that clients are generally satisfied with their experience with the JSE. Clients within Post-trade services and Clearing, Market Regulation, and Issuer Regulation, have a higher-than-average level of satisfaction, while clients within the Information Services and Issuer Services have a slightly below-average level of satisfaction. The focus for 2023 will be to improve the value proposition and service to these two client segments.

Our employees (refer to pages 71 to 81)

The relationship between employer and employee has shifted fundamentally since the onset of the pandemic in 2020. Organisations, including our own, have had to reconsider their employee value propositions and wellness benefits to retain and attract top talent.

As we transitioned to a hybrid environment earlier this year, our people strategy has focused on enhancing the in-office experience, supporting the transition back to the physical workplace, and illustrating the benefits of in-person collaboration and team building.

In 2022, we conducted our employee engagement survey using a new tool to measure employee sentiment and have a measurable net promoter score.
Our shareholders (refer to pages 150 to 151)

During 2022, we accelerated in-person engagements with existing and prospective shareholders. We also conducted a JSE perception study (May to June 2022) to gain insights into our shareholders’ understanding of the JSE investment proposition and their expectations.

The findings of this study are based on 11 interviews (eight shareholders, two non-holders and one sell-side analyst). The shareholders interviewed held c. 35% of the JSE's free float. Six of the interviewees are based in South Africa, while the other five are based in the UK and US.

The views and expectations of clients included:

- **Mixed performance**: Despite a rally in 2021, participants noted a long-term trend of underperformance, partially attributed to external factors outside of management’s control but also to a high fixed cost base that exacerbates top line volatility.
- **Growing optimism**: Although JSE will be impacted by the high comparable base of 2021, South Africa is expected to benefit from current macro-economic trends and inflationary impact on commodity prices.
- **Growth opportunities**: Business diversification alongside optimising opportunities in core equity trading is understood to be key strategic objectives, with technology the key enabler.
- **Mergers and acquisitions**: Although the JSE appears as an ideal acquirer from a financial perspective, market opportunities and track record remain too limited for investors to see mergers and acquisitions as a material growth enabler.
- **Attractive dividend**: Generous dividend pay-out and high dividend yield appease the market, but a clearer future framework is sought in the near term.
- **Strong ESG credentials**: Gender diversity, robust governance structures and ESG advocacy responsibilities drive positive sentiment, while management’s proactive investor engagement approach is well received.
- **Communication**: The market seeks a more structured approach to guidance, particularly around controllable drivers of performance and capital allocation.
- **Stock undervalued**: Cash generation, balance sheet and dividends are cited as key tenants of the investment case, while country risk, market structure and margin evolution are considered as long-term overhangs on the stock.

Going forward, management will focus on providing a more structured approach to guidance, particularly around controllable drivers of performance and capital allocation. This is currently being actioned through shareholder presentations at year-end and interim results.
Our regulators (refer to pages 82 to 87)

We are fully committed to contributing to a robust regulatory environment, and we engage with regulators and policymakers in our role as both a regulated entity and a frontline regulator.

Our engagements for 2022 included:

- An FSCA on-site inspections of the Issuer and Market Regulation teams; and
- The PA conducted a total of 18 supervisory meetings; 8 for the JSE and 10 for JSE Clear.

These meetings included the respective CEOs, Risk, Compliance, IT, Finance, Internal and External Audit senior management, as well as the full Boards, and Board and Committee chairpersons. Topics discussed included strategic outlook; risk management; business model and operational strategy; and succession planning.
OUTLINING OUR COMMITMENT TO GOVERNANCE

Value is created by achieving the desired governance outcomes.

Value is created through good corporate governance by encouraging stakeholder trust and confidence which helps the Group achieve its vision to generate sustainable quality earnings.

The Board plays a pivotal role in protecting value by setting policy and overseeing the Group’s governance and compliance frameworks and control environment.

Sound corporate governance practices are implicit in our values, culture and processes; and our internal controls promote awareness of risk, compliance and good governance in all areas of the business.

The Board is guided by a range of local and international requirements, standards and guidance, including, but not limited to, the Companies Act, 71 of 2008 (as amended) (Companies Act); the Financial Markets Act; the Listings Requirements; and King IV. These requirements are incorporated into the Board’s policies, processes and operating procedures. Compliance with applicable statutes, regulatory notices and good governance practices is overseen by the Board, supported by the Group’s governance and assurance team.

The Board is satisfied that it has fulfilled its responsibilities in accordance with its mandate for the 2022 financial year and has provided relevant information to stakeholders to satisfy the King IV disclosure requirements.
Key focus areas for 2022
Including major decisions taken by the Board and its committees in 2022

• Approved a refreshed 2026 Group strategy that provides clear direction and momentum to the Group's strategic direction for the next five years.
• Provided guidance and support in implementing the acquisition strategy to ensure the effective execution of the JSE's growth strategy.
• Oversaw the JSE's Sustainability Strategy that saw us launch the JSE Sustainability Disclosure Guidance.

Refer to page 28 for more on strategy.

• Under the guidance of the Group Remuneration Committee:
  o Assessed opportunities to strengthen our employee value proposition.
  o Reviewed retention model to assess means to strengthen retention of employees who influence the direction and attainment of the business strategy.
  o Reviewed the remuneration of the Executive Committee.

Refer to page 71 for more on our human capital.

• Under the guidance of the Group Audit Committee and the Group Risk Management Committee:
  o Paid particular focus on operational resilience.
  o Closely monitored the cost of operations against the delivery of planned initiatives.
• Approved the appointment of the CFO, under the guidance of the Group Nomination and Governance Committee.

Future areas of focus
Growth strategy | Technology | Information Services | Financial performance

• Continue to focus on our growth strategy including exploring opportunities within the crypto and digital ecosystem.
• Drive the delivery of a clear future looking technology strategy that is fully integrated into the overall JSE strategy as well as the associated investment and return on investment.
• Continue to drive focus on advances in information services and market technological disruptions to maintain the JSE's competitive advantage.
• Focus on the financial aspect of the business, particularly revenue enhancement and diversification, and oversight on the cost-containment strategies.
• Focus on Board succession planning, with a particular focus on enriching technological and human resource skills within the Board.
Governance universe

Board

The Board is ultimately responsible for the JSE’s adherence to sound corporate governance practices and high ethical standards, and for ensuring the business operates fairly and transparently.

There is a clear delineation of roles and responsibilities between the Board and executive management. Our governance framework, anchored in the Companies Act, Financial Markets Act and the JSE’s memorandum of incorporation (MOI), allows for delegation and assignment of authority, while enabling the Board to maintain effective control of the Group. The Board confirms that it complied with all statutory requirements and the provisions of the MOI for the 2022 financial year.

The JSE aims to ensure that the roles, mandates and committee compositions allow for shared responsibilities, dispersed influence and balanced perspectives on the strategic matters facing the Board. Governance structures and processes are formally reviewed annually, and changes are adopted where appropriate to accommodate internal developments and market best practice. Each Board committee operates according to its written terms of reference and defined focus areas to deliver our governance outcomes.
Board committees

Finance and audit governance
- Group Audit Committee

Regulatory oversight
- Group SRO Oversight Committee

Remuneration governance
- Group Remuneration Committee

Risk, technology and information governance
- Group Risk Management Committee

Sustainability and ethics governance
- Group Sustainability Committee

Board renewal and governance
- Group Nominations and Governance Committee

Oversight of acquisitions and growth opportunities
- Group Investment Committee

Executive management
- Issuer Regulation
- Market Regulation
- Capital Markets
- Post-Trade Services
- Information Services

1 As of November 2022, this committee’s mandate was expanded to include oversight of Board governance. It was renamed the Group Nominations and Governance Committee.

Each Board committee confirmed that it has executed its responsibilities in accordance with its terms of reference.

Governance outcomes
- Ethical leadership
- Good performance
- Trust
- Legitimacy
- Effective control

Value creation is protected by achieving the governance outcomes as outlined in King IV. The Board has satisfied itself that the JSE has complied with the King IV principles in all material respects. A summary of how the King IV principles were applied starts on page 144.

The Board is satisfied that it has fulfilled its responsibilities as set out in the Board charter, and that the Board and Board committees have discharged their fiduciary duties, acted in good faith, with diligence and care, and in the best interests of the JSE and all its stakeholders.
INTRODUCING OUR LEADERSHIP TEAMS
Integrity, competence, responsibility, accountability, fairness and transparency are the key pillars of ethical and effective leadership.
Independent non-executive directors (INED)

**Independent non-executive chairman**

BSc; MBA  
**Key strengths**  
Finance  
Risk and Insurance  
Capital markets and Banking  
Securities trading  
Technology  
Human Resources  
Past or present CEO/COO  
Independent non-executive chairman of Tullow Oil plc (LSE)  
Independent non-executive IHS Holding Limited (NYSE)  
Non-executive director of:  
- Engen Holding Limited  
- Phembani Remgro Infrastructure Fund Managers  
- Chairman of Phembani Group (Pty) Limited  
- Chairman of Nelson Mandela Children’s Hospital  
Appointed to the Board in 2021 | Tenure as director: 1 year

**Lead independent non-executive director**  
CA(SA); CD(SA); MCom; PhD (Honorary)  
**Key strengths**  
Accounting and auditing  
Finance  
Risk and Insurance  
Regulatory Compliance  
Sustainability  
Past or present CEO/COO  
Chairman of Murray & Roberts Holdings Limited  
Lead independent non-executive director of Transaction Capital Limited  
Trustee and member of the executive committee IFRS Foundation  
Independent non-executive director of Anglo American Platinum Limited  
Appointed to the Board in 2015 | Tenure as director: 7 years

---

**Phuthuma Nhleko** (62)  
Nationality: RSA

**Suresh Kana** (67)  
Nationality: RSA
Independent non-executive director

**Zarina Bassa** (58)
Nationality: 🇿🇦

**Key strengths**
- Accounting and auditing
- Finance
- Risk and Insurance
- Regulatory Compliance
- Capital markets and Banking
- Past or present CEO/COO

Lead independent non-executive director of Investec Limited and Investec plc

Independent non-executive director of:
- Oceana Group Limited
- Mediclinic International plc

Appointed to the Board in 2018 | Tenure as director: 4 years

---

Independent non-executive director

**Siobhan Cleary** (49)
Nationality: 🇺🇸

**Key strengths**
- Strategy development and execution
- Corporate governance
- Sustainability
- Regulatory and compliance

Appointed to the Board in 2020 | Tenure as director: 3 years

---

**Independent non-executive director**

BAcc; DipAcc; CA(SA)

**Key strengths**
- Accounting and auditing
- Finance
- Risk and Insurance
- Regulatory Compliance
- Capital markets and Banking
- Past or present CEO/COO

Lead independent non-executive director of Investec Limited and Investec plc

Independent non-executive director of:
- Oceana Group Limited
- Mediclinic International plc

Appointed to the Board in 2018 | Tenure as director: 4 years

---

**Independent non-executive director**

MSc; BA LLB; MA; MBA; Fellowship: Yale World Programme

**Key strengths**
- Strategy development and execution
- Corporate governance
- Sustainability
- Regulatory and compliance

Appointed to the Board in 2020 | Tenure as director: 3 years
Nolitha Fakude (58)  
Nationality: 🇿🇦  
Independent non-executive director  
BA (Hons)  
Key strengths  
Human Resources  
Sustainability  
Past or present CEO/COO  
Non-executive director of:  
• Anglo American plc  
• Chairman – Anglo American Management Board: South Africa  
• Vice president – Minerals Council  
• International Woman’s Forum South Africa  
Appointed to the Board in 2017 |  
Tenure as director: 4 years

Faith Khanyile (55)  
Nationality: 🇿🇦  
Independent non-executive director  
BA (Hons), MBA, HDip Tax; PhD (Honorary)  
Key strengths  
Finance  
Risk and Insurance  
Capital markets and Banking  
Sustainability  
Past or present CEO/COO  
Non-executive director of:  
• Discovery Limited  
• Transcend Residential Property Fund Limited  
• Bidvest Group Limited  
Appointed to the Board in 2018 |  
Tenure as director: 4 years
Independent non-executive director
BCom (Hons); CA(SA); FCA (Ireland); HDip BDP

Key strengths
Accounting and auditing
Finance
Risk and Insurance
Capital markets and Banking
Securities trading
Technology
Human Resources
Past or present CEO/COO

Independent non-executive director of:
• Shriram General Insurance Company Limited
• Transaction Capital Limited
• Pepkor Holdings

Chairman of:
• SCOR UK Company Limited
• The Channel Managing Agency Limited

Appointed to the Board in 2020
Tenure as director: 2 years

---

Independent non-executive director
BCom (Hons); CA(SA)

Key strengths
Accounting and auditing
Finance
Risk and Insurance
Capital markets and Banking
Securities trading
Technology
Human Resources
Past or present CEO/COO

Lead independent non-executive director of Aspen Pharmacare Holdings Limited

Independent non-executive director of:
• Standard Bank Group Limited
• Standard Bank South Africa Limited

Appointed to the Board in 2018
Tenure as director: 4 years

---

Ian Kirk (64)  Nationality: 🇿🇦

Ben Kruger (63)  Nationality: 🇿🇦
Mantsika Matooane (47)
Nationality:

INTEGRATED ANNUAL REPORT 2022

Changes to the Board in 2022

Nonkululeko Nyembezi (62)
Independent non-executive chairman
Resigned effective May 2022

Aarti Takoordeen (42)
Executive Director: Chief Financial Officer
Resigned effective May 2022

Independent non-executive director

MBA, PhD

Key strengths

Risk and Insurance
Technology
Human Resources
Sustainability

Non-executive director of:
• Nedbank Group Limited
• Nedbank Limited

Appointed to the Board in 2012
Tenure as director: 10 years
Executive directors (ED)

Group Chief Executive Officer
BA (Hons); MCom; PhD
Key strengths
Finance
Risk and Insurance
Regulatory Compliance
Capital markets and Banking
Securities trading
Human Resources
Sustainability
Past or Present CEO/COO
Director of JSE-related companies
Non-executive director of:
• Strate (Pty) Limited
• Business Leadership South Africa
• World Federation of Exchanges Limited
• Co-Chair of Global Investors for Sustainable Development (GISD Alliance)
• African Securities Exchanges Association
• Youth Employment Service (RF) NPC
Appointed to the Board in 2019
and as CEO in 2019
Tenure as director: 3 years

Group Chief Financial Officer
BComm; BAcc; CA(SA)
Key strengths
Accounting and auditing
Finance
Risk and Insurance
Regulatory Compliance
Capital markets and Banking
Securities trading
Human Resources
Director of JSE-related companies
Appointed to the Board and as CFO in 2023 (effective 9 January 2023)
Tenure as director: 3 months

Leila Fourie (54)
Nationality:

Fawzia Suliman (51)
Nationality:
Group Executive Committee

Leila Fourie
Fawzia Suliman
Valdene Reddy
Alicia Greenwood
Mark Randall
Leila Fourie (54)
*Group Chief executive officer*
(Executive director)

Fawzia Suliman (51)
*Group Chief financial officer*
(Executive director)

Valdene Reddy (40)
*Director: Capital Markets*
BBusSc
Appointed to Exco in 2020 | Years in service: 9 years

Alicia Greenwood (51)
*Director: Post-Trade Services*
BSc (Hons); PhD
Appointed to Exco in 2016 | Years in service: 6 years

Mark Randall (42)
*Director: Information Services*
BCom
Fellow of the Actuarial Society of South Africa
Appointed to Exco in 2018 | Years in service: 10 years

Itumeleng Monale (45)
*Chief operating officer*
BSc; MBA
Appointed to Exco in 2021 | Years in service: 2 years
Changes to Exco

During the 2022 year, Carmini Kander was appointed as Acting CFO and Robin Tucker as Acting CIO. The Board extends its gratitude and appreciation for their effective leadership, commitment, support and service throughout the year.

Vuyo Lee (44)
Director: Marketing and Corporate Affairs
BCom (Hons); MBA
Appointed to Exco in 2021 | Years in service: 2 years

Qiniso Mthembu (41)
Chief risk officer
BCom
Appointed to Exco in 2022 | Years in service: 2 years

Palesa Ntoagae (41)
Director: Human Resources
BCom; PGDip
Appointed to Exco in 2022 | Years in service: 1 year

Tebalo Tsoaeli (42)
Chief information officer
BSc; MBA
Appointed to Exco in 2022 | 1 month in service

Biographical details are correct as at time of publication.

Executive gender diversity
80% (% female)

Executive race diversity
70% (% Black)

Average executive tenure
3.5 years (years)
**Effective leadership**

Independent Board oversight is an essential component of good performance and effective control. The role of the independent non-executive chairman is distinct and separate from that of the Group CEO. The separation of responsibilities is designed to ensure that no single person has unfettered decision-making powers and that the appropriate balance of power and authority exists on the Board. Two members of executive management (Group CEO and CFO) serve on the Board to ensure that non-executive directors have more than one point of direct interaction with management.

<table>
<thead>
<tr>
<th>Role</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chairman</strong></td>
<td>An independent non-executive director who is responsible for leading the Board and ensuring the integrity and effectiveness of the Board and its committees. Ensures high standards of corporate governance and ethical behaviour.</td>
</tr>
<tr>
<td><strong>Lead independent director</strong></td>
<td>An independent non-executive director who maintains the effectiveness of the Board by providing leadership and advice when the chairman has a conflict of interest, without detracting from or undermining his authority. Provides support to the chairman, is available as a trusted intermediary for the other directors, as necessary, and chairs a meeting of the non-executive directors at which the performance of the chairman is considered.</td>
</tr>
<tr>
<td><strong>Group CEO</strong></td>
<td>An executive director who is responsible for leading the Group, creating an organisational culture based on the Group’s values, and maintaining an ethical environment. She develops and recommends the JSE’s short-, medium- and long-term vision and strategy to the Board, and drives operating performance within the JSE’s approved risk appetite. The Group CEO appoints the executive management team and ensures proper executive succession planning.</td>
</tr>
<tr>
<td><strong>CFO</strong></td>
<td>An executive director responsible for the Group’s financial capital and leads the finance team. She creates and maintains a robust internal financial control environment, ensures appropriate treasury management, oversees the integrity of financial reporting and ensures compliance with all relevant financial and tax laws and regulations, including IFRS.</td>
</tr>
</tbody>
</table>
| **Group company secretary** | The Group company secretary serves as a conduit between the Board and the Group and has a direct reporting line to the chairman of the Board, the GAC and the GRMC. All directors have unfettered access to the advice and services of the Group company secretary. He plays a pivotal role in the effective functioning of the Board by guiding directors on their governance, compliance and fiduciary responsibilities. He ensures that Board and committee procedures, charters and relevant legislation and regulations are observed. The Board assessed the Group company secretary for 2022 and confirms that he continues to demonstrate the requisite level of knowledge, experience and competence to carry out his duties. The Group company secretary is not a director of the Company. The directors consider him suitably independent of the Board to be an effective steward of the Group’s corporate governance programme. In reaching their assessment, the Board has considered and concluded:  
  • Explicit independence: there is no direct or indirect relationship between the directors and the Group company secretary.  
  • Implicit independence: the company secretariat is properly resourced, and the Group company secretary has provided advice and guidance to the Board independently and objectively, and by following the principles of King IV, the JSE’s Board charter and code of ethics. The Board considers its arrangements for accessing professional corporate governance services as effective. |
MAINTAINING EFFECTIVE GOVERNANCE STRUCTURES

Board composition, diversity and tenure as at 31 December 2022

Unitary Board structure

Board composition
As at 31 December 2022, the JSE’s Board comprised:

9 Independent non-executive directors

1 Executive director\(^1\)

\(^1\) For 2022, there was an Acting CFO who was not appointed as an executive director. Subsequently, a new CFO was appointed effective January 2023 and will join the Board as an executive director.

Board diversity of gender and race

Female representation: Percentage of total Board (%)

Policy: Board must comprise a majority of independent non-executive directors with separate roles for chairman and Group CEO.

Policy: Maintain over time a minimum of 50% female Board members, and a minimum of 67% ACI Board members.

Average age of all directors 57.6 years
Average age of directors with 0–3 years tenure 57.3 years
Average age of directors with 4–6 years tenure 58.3 years
Average age of directors with 7–9 years tenure 67 years
Average age of directors with >9 years tenure 47 years
Oldest non-executive director 67 years
Youngest non-executive director 47 years
Number of directors by age group
Under 30 years: 0
Between 30–50 years: 2
Above 50 years: 9

\[ \begin{align*}
2018 & : 67 \quad 54 \\
2019 & : 67 \quad 59 \\
2020 & : 64 \quad 55 \\
2021 & : 67 \quad 50 \\
2022 & : 60 \quad 40
\end{align*} \]

White females
Black females
Black representation: Percentage of total Board
Board diversity of skill and expertise

In 2022, we undertook a skills audit of Board members and this highlighted that, from a Board composition perspective, there is a need to enrich the Board in the areas of technology, human resources and securities trading.

The Board’s areas of expertise are:

- Risk and insurance: 8
- Past or present CEO/COO: 8
- Finance: 7
- Capital markets and banking: 6
- Sustainability: 6
- Human resources: 5
- Accounting and auditing: 4
- Regulatory compliance: 4
- Securities trading: 4
- Technology: 4

The Board comprises an appropriate balance of knowledge, skills, experience, cultural diversity and independence to discharge its governance role and responsibilities objectively and effectively.

Independence

The Board considers the chairman to be independent and has appointed an independent non-executive director as a lead independent director.

The Board considers all its non-executive directors to be independent.

Refer to the directors’ report in the annual financial statements for non-executive directors’ interests in the JSE.

Board tenure

In 2022, the GNCG decided to enforce the strict nine-year tenure policy and only extend the term in exceptional circumstances to guard against making the extension of tenure a norm.

<table>
<thead>
<tr>
<th>Average non-executive director tenure</th>
<th>0 – 3 years</th>
<th>4 – 6 years</th>
<th>7 – 12 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent</td>
<td>P Nhleko</td>
<td>ZBM Bassa</td>
<td>SP Kana</td>
</tr>
<tr>
<td></td>
<td>MS Cleary</td>
<td>VN Fakude</td>
<td>MA Matooane</td>
</tr>
<tr>
<td></td>
<td>I Kirk</td>
<td>FN Khanyile</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>BJ Kruger</td>
<td></td>
</tr>
</tbody>
</table>

| Executive                             | L Fourie   |            |             |
|                                       | F Suliman  |            |             |

| Average tenure                        | 2 years    | 4 years    | 8.5 years   |

Policy: The Board should comprise directors with a wide range of knowledge, skills, experience and behavioural competencies across various industries and disciplines.

Policy: An independent director should be independent in character and judgement. There should be no relationships or circumstances which are likely to affect, or could appear to affect, this independence. In assessing independence, the Board considers all aspects of the relationship between the director and the JSE, not only the length of service.

Policy: At least one-third of all directors (including executive directors) are required to retire by rotation each year. All directors are subject to retirement by rotation and re-election at least once every three years. Retiring directors, if eligible, may be re-elected by shareholders. Non-executive directors may serve for a maximum of nine years on the Board.
Director rotation

Rotation of Board members is structured to retain valuable skills, ensure continuity of knowledge and experience and to introduce persons with new ideas and expertise.

Mantsika Matooane has served as an independent non-executive director for 10 years and is scheduled to retire from the Board at the AGM on 9 May 2023. This is in accordance with the Board’s tenure policy.

The following directors will be up for re-election (triennial rotation in terms of the MOI):

• L Fourie – standing for re-election for a second three-year term as executive director. Appointed as Group chief executive officer on 1 October 2019
• MS Cleary – standing for re-election for a second three-year term as independent non-executive director

F Suliman will stand for election for a first three-year term as executive director. Appointed as Group chief financial officer effective 9 January 2023.
### Board meeting attendance and director responsibilities in 2022

The Board is required to meet a minimum of four times per year and more frequently, should circumstances require. The Board and some of the Board committees engaged in several development sessions during the year (refer to page 136).

<table>
<thead>
<tr>
<th>Director</th>
<th>Role</th>
<th>Overall attendance</th>
<th>Board strategy session</th>
<th>GAC</th>
<th>GRMC</th>
<th>GSC</th>
<th>GRC</th>
<th>GSROOC</th>
<th>GIC</th>
<th>GNGC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1.00%</td>
<td>1.25%</td>
<td>1.00%</td>
<td>1.00%</td>
<td>1.00%</td>
<td>1.00%</td>
<td>1.00%</td>
<td>1.00%</td>
<td>1.00%</td>
</tr>
</tbody>
</table>
| **Number of meetings**
|          |      | 8.00%             | 1.00%                  | 4.00% | 3.00% | 3.00% | 2.00% | 4.00% | 3.00% | 4.00% |

**Non-executive directors**

<table>
<thead>
<tr>
<th>Director</th>
<th>Role</th>
<th>Overall attendance</th>
<th>Board strategy session</th>
<th>GAC</th>
<th>GRMC</th>
<th>GSC</th>
<th>GRC</th>
<th>GSROOC</th>
<th>GIC</th>
<th>GNGC</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Nyembezi*</td>
<td>Independent NED chairman (retired 3 May 2022)</td>
<td>100%</td>
<td>2.00%</td>
<td>1.00%</td>
<td>1.00%</td>
<td>1.00%</td>
<td>1.00%</td>
<td>1.00%</td>
<td>1.00%</td>
<td>1.00%</td>
</tr>
<tr>
<td>P Nhleko*</td>
<td>Independent NED chairman</td>
<td>91%</td>
<td>8.00%</td>
<td>1.00%</td>
<td>3.00%</td>
<td>3.00%</td>
<td>1.00%</td>
<td>3.00%</td>
<td>2.00%</td>
<td>4.00%</td>
</tr>
<tr>
<td>SP Kana</td>
<td>Lead independent director and chairs GAC and GSC</td>
<td>100%</td>
<td>8.00%</td>
<td>1.00%</td>
<td>4.00%</td>
<td>3.00%</td>
<td>3.00%</td>
<td>2.00%</td>
<td>4.00%</td>
<td></td>
</tr>
<tr>
<td>Z Bassa</td>
<td>Independent NED and chairs GSROOC</td>
<td>94%</td>
<td>8.00%</td>
<td>1.00%</td>
<td>4.00%</td>
<td>3.00%</td>
<td>2.00%</td>
<td>4.00%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S Cleary</td>
<td>Independent NED</td>
<td>100%</td>
<td>8.00%</td>
<td>1.00%</td>
<td>4.00%</td>
<td>3.00%</td>
<td>2.00%</td>
<td>4.00%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VN Fakude*</td>
<td>Independent NED and chairs GRC</td>
<td>85%</td>
<td>7.00%</td>
<td>1.00%</td>
<td>3.00%</td>
<td>2.00%</td>
<td>3.00%</td>
<td>3.00%</td>
<td>2.00%</td>
<td>4.00%</td>
</tr>
<tr>
<td>F Khanyile</td>
<td>Independent NED</td>
<td>100%</td>
<td>8.00%</td>
<td>1.00%</td>
<td>4.00%</td>
<td>3.00%</td>
<td>2.00%</td>
<td>4.00%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I Kirk*</td>
<td>Independent NED and chairs GRMC</td>
<td>100%</td>
<td>8.00%</td>
<td>1.00%</td>
<td>3.00%</td>
<td>2.00%</td>
<td>3.00%</td>
<td>4.00%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BJ Kruger</td>
<td>Independent NED and chairs GIC</td>
<td>100%</td>
<td>8.00%</td>
<td>1.00%</td>
<td>3.00%</td>
<td>2.00%</td>
<td>3.00%</td>
<td>4.00%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MA Matooane</td>
<td>Independent NED</td>
<td>100%</td>
<td>8.00%</td>
<td>1.00%</td>
<td>3.00%</td>
<td>2.00%</td>
<td>3.00%</td>
<td>4.00%</td>
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</tbody>
</table>

**Executive directors**

<table>
<thead>
<tr>
<th>Director</th>
<th>Role</th>
<th>Overall attendance</th>
<th>Board strategy session</th>
<th>GAC</th>
<th>GRMC</th>
<th>GSC</th>
<th>GRC</th>
<th>GSROOC</th>
<th>GIC</th>
<th>GNGC</th>
</tr>
</thead>
<tbody>
<tr>
<td>L Fourie</td>
<td>Group CEO</td>
<td>100%</td>
<td>8.00%</td>
<td>1.00%</td>
<td>3.00%</td>
<td>2.00%</td>
<td>4.00%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Takoordeen*</td>
<td>CFO</td>
<td>75%</td>
<td>1/2</td>
<td>1.00%</td>
<td>1.00%</td>
<td>1.00%</td>
<td>1.00%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Standing attendee**

<table>
<thead>
<tr>
<th>Director</th>
<th>Role</th>
<th>Overall attendance</th>
<th>Board strategy session</th>
<th>GAC</th>
<th>GRMC</th>
<th>GSC</th>
<th>GRC</th>
<th>GSROOC</th>
<th>GIC</th>
<th>GNGC</th>
</tr>
</thead>
<tbody>
<tr>
<td>GA Brookes</td>
<td>Group company secretary</td>
<td>100%</td>
<td>8.00%</td>
<td>1.00%</td>
<td>3.00%</td>
<td>2.00%</td>
<td>4.00%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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1. Includes director development sessions and bilateral meetings with the Prudential Authority.
2. GDC was renamed GIC to reflect increased role of oversight of all JSE investments.
3. GNC was renamed GNGC to reflect increased role of oversight of Board governance.
4. N Nyembezi resigned as chairman and independent non-executive director of the Board at the AGM held 3 May 2022.
5. P Nhleko’s appointment as chairman and independent non-executive director approved by shareholders at the AGM held on 3 May 2022.
6. VN Fakube stepped down as member of GSC.
7. I Kirk appointed as chairman of GRMC, effective July 2022.
8. A Takoordeen resigned from the Board effective 20 May 2022.

**GAC** – Group Audit Committee

**GRMC** – Group Risk Management Committee

**GRC** – Group Remuneration Committee

**GSC** – Group Sustainability Committee

**GSROOC** – Group SRO Oversight Committee

**GNGC** – Group Nominations and Governance Committee

**GIC** – Group Investment Committee

**NED** – Non-executive director
Board committees
The composition and key focus areas of the Board committees are described below. The responsibilities delegated to these committees are formally documented in each committee’s terms of reference, which are approved by the Board and reviewed annually. After each committee meeting, committee chairmen report back to the Board, which facilitates transparent communication between directors and ensures that all aspects of the Board’s mandate are addressed.

Group Audit Committee

Independence of committee: 100%

**Members:**
- SP Kana
- Z Bassa
- MS Cleary
- FN Khanyile
  
  **Chairman**
  - INED
  
  **Attendance:**
  - 4/4 4/4 1/1 4/4

  **Invitees:**
  - P Nhleko,
  - L Fourie,
  - External auditors,
  - FSCA representative,
  - Group internal auditors,
  - Group company secretary

**Objectives:**
Statutory committee constituted in terms of section 94(7) of the Companies Act. The committee’s main role is to oversee the integrity of the Group’s financial reporting and fulfils a vital role in the Group’s governance framework.

**Future focus areas:**
Mandate of the Committee remains unchanged, and the CFO will focus on the rollout of Sage software solution.

Continue to focus on improving the quality and accounting reporting controls.

Continue to drive oversee management’s progress in driving cost containment.

**Key topics considered by the committee during the year**

**Financial reporting**
- Reviewed the audited annual financial statements and integrated annual report.
  - Recommended for Board approval, advising that they were fair, balanced, and understandable and provide the necessary information for shareholders to assess the JSE’s financial position, performance, business model and strategy.
  - Considered the interim financial results and half-year statements with a trading statement issued in June 2022.
  - Ensured that the Group’s financial systems, processes and internal financial controls are operating effectively.
    - Initiated a project to improve internal controls with an enhanced focus on improving the quality and accounting reporting controls.

**External audit**
- Considered and endorsed the external auditors’ 2022 audit plan, confirming suitable reliance on Group internal audit and the appropriateness of key audit risks identified.
- Considered the scope and cost of the external audit for the year and approved the 2022 external audit fees.
- Monitored the effectiveness of the external auditors in terms of their audit quality, expertise and independence.
- Oversaw and managed audit partner transition for 2022/2023 (as per External Audit rotation policy).

**Group internal audit**
- Ensured that Group internal audit performs an independent assurance function.
- Monitored the effectiveness of the function in terms of its scope, execution of its plan, coverage, independence, skills, staffing, overall performance and position within the Group.

**Subsidiary oversight**
- Oversight over the financial and operational considerations relating to the transition of JSE Clear to an independent clearing house.
- Considered and endorsed proposal for additional capitalisation of JSEC required to ensure that it will continue to meet regulatory capital requirements once it operates as an ICH.
- Considered and endorsed additional capitalisation of JPP by way of additional share capital, to sufficiently provide for solvency requirements and the operational needs of the business.

**Governance**
- Approved changes from the more restrictive internal policy and align and adopt the JSE Ltd’s closed periods as stipulated in the Listing Requirements.
- Reviewed and approved external audit rotation policy.
- Reviewed and approved audit and non-audit services policies.

Further reading | Directors’ report and GAC report in the annual financial statements.
Group Risk Management Committee

Independence of committee: 83%

**Members:**
- I Kirk (Chairman)
- Z Bassa
- SP Kana
- BJ Kruger
- MA Matooane
- L Fourie (ED)

**Attendance:**

**Invitees:**
- P Nhleko, External auditors, CFO, CIO, COO, chief risk officer, External auditors, FSCA representative, Group internal audit, Director: Capital Markets, Director: Information Services, Director: Post-Trade Services, Group company secretary

**Objectives:**
The Committee has an independent role, providing oversight of all enterprise-wide risk management policies, procedures and activities of the Group, including all subsidiary companies and entities within the Group. Also provides oversight over the governance of technology and information, including oversight of all information security matters and cyber risks.

**Future focus areas:**
Refinement and implementation of a Group technology strategy that is aligned with the business strategy.

Continued focus on the rollout of the enterprise risk approach across subsidiaries and any new acquisitions.

**Key topics considered by the committee during the year**

**Enterprise risk management**
- Oversight over the JSE’s responses to risk events with potential to negatively affect markets, specifically the Russia-Ukraine and increased load shedding.
- Reviewed the reporting and prioritisation of top business risks and the process to self-assess the control activities in place to manage risks.
- Ensured that the Group’s financial systems, processes and internal financial controls are operating effectively.

**Technology**
- Oversaw cybersecurity, information management and data security interventions.

**Subsidiary oversight**
- Monitor the embedding of ERM in subsidiaries.

**Governance**
- With endorsement by GNGC, Dr M Matooane stepped down as chairman and was succeeded by Mr I Kirk.

Further reading | Page 88
## Group Investment Committee

**Independence of committee:** 80%

<table>
<thead>
<tr>
<th>Members</th>
<th>BJ Kruger</th>
<th>FN Khanyile</th>
<th>I Kirk</th>
<th>P Nhleko</th>
<th>L Fourie</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chairman</td>
<td>INED</td>
<td>INED</td>
<td>INED</td>
<td>ED</td>
<td></td>
</tr>
</tbody>
</table>

**Attendance:** 4/4 4/4 4/4 4/4 4/4

**Invitees:** S Kana, Director: Capital Markets, Director: Information Services, Group company secretary

**Objectives:**
To consider and evaluate potential opportunities for strategic partnerships, mergers, acquisitions and material transactions. Also exercises oversight and reviews performance of all investments.

**Future focus areas:**
Continue to drive growth strategy, particularly:

- JPP: focus will be on the building and scalability of the business in order to expand our footprint on digital platforms.
- Information Services: build an adjacent data business.
- Exploring the crypto currency ecosystem for acquisition opportunities and regulated exchange products.

### Key topics considered by the committee during the year

**Acquisition approach**

Oversight of all potential opportunities for strategic partnerships, mergers, acquisitions and related transactions.

In support of a wider Group strategy, crystalised focus on data and opportunities in Information Services.

Post-acquisition performance review:

- Private placement concept was successful with 19 deals on the platform and additional capital injection into JPP was approved to support operations.
- Approval for the JSE to enter into a SAFE note with Globacap, which is set to mature on 31 March 2023.

**Investment oversight**

Exercised oversight of all fund investment strategies:

- Approved investment of regulatory capital into government bonds¹.
- Approved the appointment of Aluwani Capital Partners as independent asset managers.
- Considered and approved JSE Ltd Own Funds Investment Mandate.

---

¹ JSE was authorised by the South African Reserve Bank (SARB) and the Prudential Authority (PA), to allocate capital and reserves towards investments in the South African government bond market.
Group Remuneration Committee

Independence of committee: 100%

Members:
- VN Fakude (Chairman)
- BJ Kruger
- I Kirk
- P Nhleko

Attendance:
- 3/3
- 3/3
- 3/3
- 3/3

Invites:
- L Fourie, Director: Human Resources, Group company secretary

Objectives:
Oversight for all remuneration matters and, in particular, the governance of remuneration for directors, executives and employees, and for ensuring accurate, complete and transparent disclosure of remuneration paid by the JSE.

Oversight over matters relating to succession planning, talent management and the JSE’s leadership pipeline.

Future focus areas:
- Continued oversight of the JSE’s implementation of pay parity in support of fair and responsible remuneration across the Group, particularly in our subsidiaries, JSE Clear and JIS
- Enhancing our strategic retention models and continuing to oversee the JSE’s talent management plans and pipeline, and employee value proposition, particularly in a post-COVID-19 world
- Monitoring the effectiveness, productivity and employee response to the JSE’s new hybrid way of work
- Reviewing the effectiveness of the new corporate scorecard model and the associated metrics and targets
- Considering whether to introduce an element of deferral for annual incentives
- Monitoring compliance with the revised MSR policy for all executives
- Reviewing the total reward framework and any additional enhancements that might be required post-AGM
- Maintaining the dialogue with our institutional shareholders on remuneration matters to promote alignment with stakeholder requirements

Key topics considered by the committee during the year

Remuneration
- Approved pay parity adjustments in line with our commitment of fair and responsible remuneration across the Group.
- Review of remuneration and benefit structures of JIS employees and approved salary adjustments to align their remuneration to that of their role.

Corporate performance
- Oversaw the implementation of a new detailed scorecard model and assessment process involving input on corporate performance from all Board Committees.
- Approved the corporate scorecard for 2022 and assessed corporate performance against this scorecard.
- Considered and endorsed the corporate scorecard for 2023.

Human capital
- Reviewed leadership succession and continuity and identified that succession in certain business areas needs to be strengthened.
- Approved a retention strategy in response to retention challenges at executive and senior leadership levels that were identified in 2021.
- Considered and endorsed approval of retention awards for the Group CEO and identified executives.
- Monitored employment equity progress and plans, and oversaw appointments to the executive committee.

Further reading | Page 77, and in the online remuneration report.
Group Sustainability Committee

Independence of committee: 100%

Members: SP Kana, MS Cleary, VN Fakude, F Khanyile, MA Matooane
Chairman: INED
INED
INED
INED
INED

Attendance: 3/3 3/3 0/1 3/3 3/3

Invitees: L Fourie, Director: Human Resources, Group company secretary

Objectives:
Oversight, monitoring and reporting on compliance by JSE Limited with legislated social and economic development requirements and other codes of good practice relating to corporate citizenship, the environment, health, public safety, and consumer protection.

Future focus areas:
Oversight over JSE’s journey towards TCFD-aligned climate disclosure.
Monitoring of corporate health profile will continue as a focus area.
Continued focus on promoting gender equality.

Key topics considered by the committee during the year

Sustainability
Oversight over the development and launch of the JSE’s Sustainability Disclosure and Climate Change Disclosure guidelines.
Oversight over the Group’s approach to sustainability reporting and commitment to TCFD-aligned climate disclosure for the 2022 reporting year.

Transformation
Oversight over the JSE’s approach to transformation and the implementation of enterprise and supplier development strategy.
• Approved the allocation of funding towards enterprise development and supplier development.

Human capital
Reviewed the JSE’s employee value proposition and oversaw initiatives in the following areas:
• Employment equity: Approved the implementations of a JSE Graduate Development Programme and Formal Mentorship Programme to actively develop ACI talent for key roles.
• Employee wellbeing: Close monitoring of JSE’s corporate health profile.
• Culture: Monitored progress on client and employee engagement surveys.
Reviewed the JSE’s approach to promoting gender equality both internally and in the broader community.

Further reading | Refer to the online sustainability report and pages 65 and 71 of this report

1 VN Fakude stepped down from the Group Sustainability Committee in July 2022.
**Group Nominations and Governance Committee**

**Independence of committee: 100%**

<table>
<thead>
<tr>
<th>Members:</th>
<th>P Nhleko</th>
<th>SP Kana</th>
<th>BJ Kruger</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chairman</td>
<td>INED</td>
<td>INED</td>
<td></td>
</tr>
</tbody>
</table>

**Attendance:** 3/3 3/3 3/3

**Invites:** L Fourie, Group company secretary

**Objectives:**
Oversees the composition and performance of the Board and its committees.

**Future focus areas:**
- Ensure the JSE strengthens the succession pool in identified business areas.
- Finalise the appointment of an additional member of GAC.
- Strengthen Board expertise in the areas of technology and human resources.

---

### Key topics considered by the committee during the year

**Board composition**
Reviewed the composition of the Board and governance committees, considering independence, skill, diversity and gender:
- Conducted a Board skills audit.
- Considered candidates for appointment to GAC, and the process will be finalised early-2023.
- Oversaw the CFO succession process and made recommendations to the Board for the new CFO.

**Subsidiary Boards**
Reviewed and endorsed appointments to Group entities.

**Board effectiveness**
Decided to enforce the strict nine-year tenure policy and only extend the term in exceptional circumstances.
Group SRO Oversight Committee

Independence of committee: 100%

Members:
- Z Bassa: Chairman
- MS Cleary
- F Khanyile
- SP Kana

Attendance:
- 1/2
- 2/2
- 2/2
- 2/2

Invitees:
P Nhleko, L Fourie, Director: Issuer Regulation, Director: Market Regulation, Group company secretary

Objectives:
The Committee has an independent role, providing oversight of regulatory matters, policies and related activities of the Group.

Future focus areas:
Continue to monitor regulatory developments, including those relevant to market conduct and reputational risk.
Continue to monitor conflicts of interest and compliance with the conflicts policy.

Key topics considered by the committee during the year
Examined the regulatory mandate of the committee, in a changing environment, to determine how the JSE's regulatory oversight function can best be exercised.
Ensured the fair treatment of clients by tracking market conduct compliance, breaches, complaints, and remediation.
Oversaw the activities of Issuer Regulation and Market Regulation divisions on regulatory activities undertaken in 2022.

Further reading | Refer to the online Group SRO Oversight Committee report and page 82 of this report.
ENSURING EFFECTIVE BOARD PERFORMANCE

Board appointment and induction

Board renewal was still a key focus area in 2022. Our approach to recruiting and inducting non-executive directors is designed to ensure that the search and appointment of directors is thorough and inclusive. The induction programme provides an effective introduction to the JSE and facilitates a comprehensive understanding of the business.

Recruitment and appointment

Guided by the Board appointment policy, the appointment process is a formal and transparent process that has a particular focus on gender and race diversity. The process is the responsibility of the GNGC. The GNGC, with the assistance of the Group company secretary, conducts the recruitment process and recommends the successful candidate for appointment by the Board.

Non-executive directors are required to sign a letter of appointment, setting out all salient engagement terms. Among others, it includes key responsibilities, time commitment, committee service, outside interests, director evaluation and emoluments.

Induction programme

A formal one-year process forms the mechanism to support new non-executive directors in meeting their statutory duties, embedding their understanding of our strategic priorities and bringing the director closer to the decision-makers and those tasked with running the day-to-day management of the business. The programme requires the new directors to attend GRMC meetings for the first year of appointment.

Board continuity

Focus on succession planning is important as it ensures the effective functioning of the Board over time and appropriate independence of all directors. Board succession planning, including Group CEO succession, is the responsibility of the GNGC, supported by the Group company secretary.

Mr P Nhleko assumed his role as the chairman of the Board in May 2022 after formal appointment at the AGM. The transition as chairman has been a smooth process.

The Board is well-balanced and diversified with the appropriate mix of experience and tenure. However, the changing business landscape demands continuous renewal of the Board, and this will remain a priority.

Changes in Board composition

The following Board changes were effective in 2022:

- Nonkululeko Nyembezi (independent non-executive director and chairman) retired from the Board at the May 2022 AGM, in terms of the Board’s tenure policy after serving the maximum 12 years.
- Phuthuma Nhleko, appointed as an independent non-executive director effective 1 July 2021, assumed his role as the new chairman of the Board at the same AGM.
- Aarti Takoordeen resigned as CFO and executive director in May 2022.
Board performance

The Board seeks to improve its performance and effectiveness over time through a continuous cycle of self-evaluation, reflection, goal setting and review.

1. Self-evaluation
The Board conducts a formal self-assessment every two years, guided by an independent service provider.
This takes the form of an in-depth review of how the Board impacts on critical issues facing the business as well as examining the drivers of Board effectiveness. An assessment of the Board committees and officers of the Company forms part of this review.
The format of these self-assessments includes an online questionnaire, one-on-one interviews with the service provider and follow-up discussions with the Board chairman. From time to time, the Board also includes a peer review element in the biennial self-assessment process.

2. Reflection
Report-backs from the self-evaluation process are reviewed by the Group Nominations & Governance Committee and by the full Board. These discussions are guided by the service provider and include time for reflection by the non-executive directors.

3. Goal setting
Areas of focus and improvement for the Board are distilled from the self-assessment and reflection phases. These goals usually have a multi-year focus and are aimed at addressing key governance and strategic matters, as well as enhancing Board dynamics and oversight.

4. Review
In the alternate years the Board undertakes checkpoints to assess progress against its development goals and to consider whether changes in strategic risks or business developments require new responses from the Board.

Key insights
2022 was a year of transition for the Board, with the passing of the baton to a new chairman and significant changes in the executive team. The Board relied on the detailed work undertaken by each of the Board committees, with clear and open communication between the Board and all the committees. The relationship between the Board and the Group CEO remains healthy, based on trust, openness and transparency.
## Board reflections and goals over time

<table>
<thead>
<tr>
<th>Level of concern</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>• Executive succession strategy (disruption, risk, agility, culture, alternate revenue streams)</td>
<td>• Strategy (purposeful to address agility, culture, ESG matters, alternative revenue streams)</td>
<td>• Technology (capability, legacy systems, cyber security)</td>
<td>• Strategy growth (inorganic and organic)</td>
<td>• Reshaping our corporate strategy for a sustainable future</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Strategy (more time devoted to deeper discussions)</td>
<td>• Technology alignment with strategy, legacy systems, cost and benefit</td>
<td>• Technology alignment with corporate strategy, (addressing legacy systems, and new digital technologies)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Executive succession (bench strength and talent management)</td>
<td>• Executive succession (bench strength, talent management and retention)</td>
</tr>
<tr>
<td>Medium</td>
<td>• Technology (capability, legacy systems and integrated trading and clearing)</td>
<td>• Board renewal (chairman succession)</td>
<td>• Board renewal (chairman succession)</td>
<td>• Board renewal – (chairman transition)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Board renewal (chairman succession)</td>
<td>• Culture, ethics and stakeholders</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Executive succession (bench strength and talent management)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>• ESG matters as part of strategy</td>
<td></td>
<td></td>
<td>• Board renewal – (composition)</td>
<td>• Sustainability</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Below we illustrate how we have addressed the matters that have been top of mind for the Board:

<table>
<thead>
<tr>
<th>Key concerns of the Board</th>
<th>How they have been addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reshaping our corporate strategy</td>
<td>During the 2021 formal self-assessment, the Board agreed on the vision and strategic direction for the JSE but noted that the JSE needs to be more deliberate in outlining how it will move from strategy execution to realising its ambitions. In 2022, following the change in chairman, the Board approved a reshaped strategy that provides clear direction and momentum for the Group’s strategic direction for the next five years. Strategic priorities are geared towards maximising short-term opportunities and future-proofing the business.</td>
</tr>
<tr>
<td>Alignment of Technology to our Strategy</td>
<td>The modernisation and continued development of IT systems remains a challenge and a key Board concern. During 2022, the JSE focused on operational and technology resilience, as well as commencing various cloud initiatives, and investigating new digital opportunities. The Group CEO managed the executive search process for a new Group chief information officer.</td>
</tr>
<tr>
<td>Executive Succession</td>
<td>The Group CEO, supported by the Group Nominations &amp; Governance Committee and the Group Remuneration Committee, has focused on strengthening the Group executive team. New appointments included the Director: HR, a Group chief risk officer, Group chief information officer and a Group chief financial officer (and executive director). These appointments have added fresh perspectives and skills to the Group Exco, and have enhanced the Group’s strategic management capabilities.</td>
</tr>
<tr>
<td>Board succession – chairman transition</td>
<td>The Board chairman transition was carefully managed with Mr Phuthuma Nhleko joining the Board as an independent non-executive director and chairman-elect in July 2021. The formal appointment as chairman followed the AGM in May 2022 with a seamless handover from Ms Nonkululeko Nyembezi.</td>
</tr>
</tbody>
</table>

Critical priorities for the Board in 2023

Future focus areas

- **Our 2026 Growth Strategy**
  - Execution and delivery of our strategy – capturing new revenue streams regular quarterly checkpoints to monitor progress in progressing the strategy.

- **Ensuring technology resilience**
  - Defining a fit-for-purpose, business-aligned technology strategy that will encompass core modernisation and simplification, data foundations, cloud, cyber resilience, and digital capabilities.

- **Board succession**
  - The changing business landscape demands continuous renewal of the Board, and ensuring that the Board has the appropriate mix of skills, experience and tenure will remain a priority.

- **Executive succession**
  - The future focus will be on the building of a strong bench below the Group Executive Committee, with internal candidates being developed for potential succession.
FOSTERING **GOOD GOVERNANCE**

*Leveraging good governance to ensure the long-term sustainability of our business.*

The results from the 2021 Board effectiveness annual assessment continued to shape the areas of focus for 2022.

The 2022 corporate scorecard includes initiatives that address all our material matters, however, the Board, supported by its committees, particularly focused on:

**Key Board activities during the year**

**Strategy and performance**

Refreshed the Group’s strategy and ensured that it addresses changes in the industry, such as driving the JSE to provide customisable market data services, scaling acquisitions embedded in our business while also monitoring performance to ensure that we continue to generate long-term value for stakeholders. Refer to page 28 for more insight.

**Succession planning**

Reviewed opportunities to strengthen our employee value proposition and means to strengthen retention of employees who influence the direction and attainment of the business strategy.

**Sustainability**

Oversaw the JSE’s sustainability strategy, including initiatives such as launching the JSE Sustainability Disclosure Guidance. Refer to page 31 for more insight.
The key actions taken by the Board in response to these focus areas are set out below.

**Board as a driver of value protection**

During 2022, mindful focus was given by the Board and its various committees to the following governance processes to ensure the Group achieves its strategic objectives and realises the desired governance outcomes.

### 1. Strategy and performance (GAC, GRMC, GIC)

#### Annual strategic review

The Board held its annual strategic review in June 2022 and in November 2022 approved a new refined long-term strategy that provides clear direction and momentum to the Group’s strategic direction for the next five years. External speakers and members of the Executive Committee joined the Board to stimulate discussion, resulting in a strategy that:

- supports growth in data and information services;
- considers the long-term vision for Capital Markets; and
- supports the Information Services strategy.

For more information see page 28.

#### Information services strategy

Driving JSE to capitalise the full potential of Information Services businesses. A core component of our 2026 strategy is to provide highly customisable market data services, using technology to serve clients the exact data mix they require. The Board monitored the implementation of this strategy and approved the allocation of capital expenditure to grow this area.

For more information, see page 56.

#### Growth strategy

Drive initiatives that will deliver new lines of business beyond equity trading:

- Approved capital injection into JPP to sufficiently provide for the operational needs of the business during its first year of operation.
- Oversaw the integration and full-year financial consolidation of JIS with particular focus on driving the business to retain its market base, along with attracting new clients to grow market share.
- Oversaw the implementation of Information Services strategy which aims to transform market data business.

#### Performance

Continued to drive for improvements in the key drivers of the Group’s financial performance.

- Oversaw the Group’s financial performance.
- Monitored and reviewed the performance of the acquisition strategy – reviewed the performance of newly acquired subsidiaries.
- Monitored operations with a key focus on operational resilience and the cost of operations.
## Sustainability (GSC)

### ESG matters
The Board, with the assistance of GSC, oversaw the implementation of the JSE's sustainability strategy which led to the successful launch of our Sustainability and Climate Disclosure Guidance papers in June 2022. Oversaw the JSE's progress on reporting against TCFD requirements.

## Succession planning (GSC, GNGC)

### Board succession
Under the guidance of GNGC, the Board ensured composition continues to support the delivery of strategy and creation of value through deliberate identification and addition of Board skills required to achieve this.

- Seamless transition of a new chairman onto the Board.
- Appointment of a new executive director.

### Appointment of new executive committee members
With the assistance of GNGC, the Board approved two new members of the Executive Committee, Fawzia Suliman as the new CFO and Tebalo Tsoaeli as new CIO.

### Talent management
With the guidance of GRC, the Board:

- Reviewed diversity of the Executive succession pool and identified that focus needs to be on accelerating the readiness of identified successors in value creation functions.
- Drove the delivery of a retention model that aims to have a preventative approach to retaining talent.
- Continued oversight of the JSE's implementation of pay parity in support of fair and responsible remuneration across the Group.

### Subject area | Objective and focus
--- | ---
**Strategy** | Examined the JSE's retail strategy to determine how to improve the JSE retail value proposition to encourage uptake on the eco-system to plug into the JSE's first true integrated individual investment/retail solution, OWNA.

**Post-Trade** | To determine how to leverage blockchain technology to improve market access and trade liquidity in South African capital markets. Reviewed the JSE's use case which aims to expand upon the research and innovation of the SARB-led Project Khokha 2, with the overall aim of improving financial market services in South Africa.

**Capital markets** | Considered the concept of developing a voluntary carbon market to serve and advance South Africa and the greater African continent in decarbonisation and towards net zero commitments.
**ENHANCING ACCOUNTABILITY AND CONTROL**

*The road to success is guarded by rails of assurance, enabling faster navigation and a greater probability of success.*

As the Group embarks on its vision of growing shared prosperity, reliable risk assurance mechanisms — that preserve and protect its future — are needed if the Group is to respond to this goal. Several assurance providers and reliable risk assurance mechanisms, that preserve and protect value creation, currently exist across the business.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong></td>
<td><strong>Internal Control Environment</strong> Processes to manage operational risks and performance. Processes to identify and remediate control breakdowns.</td>
</tr>
<tr>
<td><strong>2</strong></td>
<td><strong>Compliance and Risk</strong> Works closely with operational management to monitor processes and controls to mitigate identified risks. Provides oversight over management functions.</td>
</tr>
<tr>
<td><strong>3</strong></td>
<td><strong>Internal Audit</strong> Provides objective and independent assurance of the adequacy and effectiveness of internal controls, risk management and governance.</td>
</tr>
<tr>
<td><strong>4</strong></td>
<td><strong>External Audit</strong> Provides shareholders with independent assurance reporting information. Provides information on financial risk and reporting (to the Board and senior management).</td>
</tr>
</tbody>
</table>
Internal Financial Control

The JSE is still on its journey to driving improvements in the maturity of the control environment across the organisation, guided by the Control Management Framework (CMF) that was approved by GAC in 2020. The application of CMF goes beyond just the financial reporting control environment; it aims to achieve enhanced consistency and ultimately improve the robustness of the control environment.

Below is a graph depicting an overview of our control management arrangements.

Key focus areas in 2022

In 2022, there was continued focus on the following CMF elements:
- Equity Markets – end-to-end value stream;
- Rollout of CMF in JIS; and
- IFCFR review in support of the mandatory CEO and CFO attestation regarding the adequacy and effectiveness of the financial control environment.

The 2022 CMF reviews commenced during March 2022 and good progress has been made since, however, there has been a delay with the CMF rollout in the Bonds market, which has been deferred to 2024 due to capacity and budget constraints.
Compliance and Risk

Compliance

The JSE recognises the importance of compliance with applicable legislation and the standards set by its regulators. The Group’s compliance function is responsible for embedding a culture of compliance and providing the Board and senior management with the assurance of regulatory compliance.

Regulatory oversight

The FSRA established South Africa’s twin peaks regulatory regime.

The JSE is regulated as a licensed exchange and JSE Clear as a licensed clearing house by the FSCA and on a prudential basis in respect of these licensed functions, by the PA, a division of the SARB.

While ultimate accountability for regulatory compliance oversight lies with the Board, the implementation and execution of effective compliance management are delegated to the Group’s management, as the first line of defence.

As a second line of defence, the Group compliance function assists the Board and management in fulfilling their compliance obligations, by providing compliance risk management services. Regulatory alert systems and other professional and industry stakeholders assist the compliance function by constantly monitoring the frequently changing regulatory environment to ensure that key regulatory changes are identified and incorporated, as necessary.

The Group compliance function works closely with the Group ERM, Legal and internal audit functions, to ensure an aligned approach to monitoring and reporting.

There were no regulatory penalties, sanctions or fines for contraventions of, or non-compliance with statutory obligations. No fraud misdemeanours, bribery or corruptive practices were reported during the year.

Key focus areas in 2022

- Adherence of employees with JSE Compliance policies in respect of:
  - conduct and ethics
  - the safeguarding of personal and confidential information
  - the acceptable use of resources that house JSE information
  - cybersecurity remained a high priority, as employees transitioned to a hybrid way of working in 2022
- Oversight and support of the compliance team of JIS in respect of the performance of their regulated functions.
- Oversight of the compliance obligations of JPP in terms of its FAIS licence.
- Facilitated the recognition by the Ombud Council of the JSE Ombud Scheme, and adherence to the conditions of recognition.
- Completion and submission of all regulatory returns and reports.
- Ensured adequate insurance was in place for all JSE Group entities.

Future focus areas

- Maintenance of JSE regulatory relationships and the timely submission of all regulatory returns, reports, and information requests.
- Review and approval of the Compliance-related policies of the JSE Group, with an emphasis on those that relate to the conduct and ethics of employees, anti-bribery and corruption and the protection of personal and confidential information.
- The compliance initiatives of JPP, with a focus on the safeguarding of the interests of clients, including monitoring in respect of Anti-Money Laundering and Counter-Terrorism Financing, Conflicts of Interest and FAIS compliance.
- The renewal of the insurance policies of JSE Group entities.
Conflicts of interest

FMI
As an FMI, the JSE is required to implement appropriate arrangements to avoid, eliminate, disclose and otherwise manage possible conflicts of interest that may arise between its functions as the regulator of its issuers and markets, and its commercial services. This includes the identification of possible situations in which a conflict of interest may arise, and the documented steps necessary for its avoidance, elimination or management and disclosure in accordance with Board Notice 1 of 2015, issued by the FSCA. The conflicts of interest policies for the Issuer and Market Regulation divisions, as prescribed by the Board Notice (which sets out these requirements), were in effect during the year and are published on the JSE website.

Directors and employees
Directors are required, at all Board and committee meetings, to table their directorships, if updates are required, and to declare any conflicts of interest that they have encountered or foresee for noting in the corporate register.

Insider trading
The JSE dealing policy prohibits directors and employees from trading in JSE shares during periods when they could be privy to price-sensitive information. Trading in JSE shares is permitted during two limited open periods, these being immediately following the release of the annual financial statements and again after the interim financial statements are released. A director may not trade in JSE shares without obtaining the prior written approval of the Board chairman. In the event that the Board chairman wishes to trade, they must obtain the approval of the lead independent director.

The dealing policy also governs the trading by directors and employees in JSE-listed securities, other than those of the JSE, and it is mandatory that the prior approval of the relevant executive head and the director: market regulation is obtained for these transactions. Employees in specific divisions, such as Market Regulation and Issuer Regulation, are prohibited from trading in any JSE-listed securities, as a result of their ongoing exposure to non-public Company information.

Refer to the directors’ report in the annual financial statements for dealings by directors and prescribed officers.

Anti-bribery and corruption
The JSE has a strict zero-tolerance approach to unethical conduct, and we do not engage in, accept or condone any illegal acts. This includes, among others, any form of bribery, facilitation payments, political donations or any corrupt practices in the conduct of our business. The Board’s policy is to actively pursue and encourage the prosecution of the perpetrators of fraudulent and other illegal activities, should it become aware of such acts. No fraud, bribery or corrupt practices were reported during the period under review.

Tax compliance
Where complex tax treatment is required as a result of tax law amendments, tax opinions are sought from external experts to ensure correct treatment and compliance.

Ombudsman for JSE complaints and disputes
The JSE Ombud Scheme is recognised in terms of section 194 of the FSRA as an industry ombud scheme. The rules of the JSE Ombud Scheme, as set out in the rules of the JSE, regulate the resolution of complaints and disputes between authorised users, and between authorised users and their clients. The governing body of the scheme is the JSE Exco.

The scheme allows the JSE to facilitate the resolution of complaints that are made by or against clients and authorised users in a timely and cost-effective way and reduces the need for either party to resort to formal legal proceedings.
Risk
For more details on the arrangements we have in place for risk governance and management, see page 88.

Group internal audit
Approach
The Group has an independent in-house Group internal audit (GIA) function which operates in terms of an approved charter. GIA is responsible for the delivery of internal audit services to the JSE Group (including all subsidiaries and Group entities) as set out in the internal audit charter. GIA’s purpose is to be a proactive business partner, providing integrated, risk-based and objective assurance, insight and related advisory services.

PricewaterhouseCoopers (PwC) is contracted to assist the internal audit function and provides additional specialised resources and expertise to support Group internal audit in carrying out its duties and to ensure the required degree of independence.

GIA is headed by the chief audit executive who reports functionally to the GAC chairman and administratively to the Group CEO and has the mandate to communicate directly and freely on relevant matters. GIA has adopted the in-house platform which maintains a database of audit findings and facilitates tracking and monitoring of remediation efforts.

During the year, the GAC received regular reports from GIA on any weaknesses in controls that were identified, including financial controls, and considered corrective actions to be implemented by management. The GAC is satisfied with the expertise, effectiveness and adequacy of arrangements in place for combined assurance.

GIA follows a three-year risk-based internal audit plan that is anchored in management’s enterprise risk assessments and focuses explicitly on the extreme and high inherent risks within the JSE’s operating environment. The plan also provides adequate internal audit coverage over JSE Limited and its subsidiaries. The 2022 annual internal audit plan priority areas were influenced by the following factors:

• Extreme and high-risk areas as identified by Business and assessed by ERM for completeness and accuracy.
• Control design and operating effectiveness assessed by management as either effective or partially effective, which reflected the control environment as ready for IA review.
• Alignment with the CMF implementation plan for the Equities and Bonds Market end-to-end value streams.
• Financial risk-related internal audit reviews to drive combined assurance where potential reliance can placed on these respective control environments by the External Auditors.
• Mandatory compliance reviews conducted in accordance with regulatory, contractual or policy requirements.
The 2022 annual internal audit plan therefore included the following significant areas of focus:

<table>
<thead>
<tr>
<th>Focus Area</th>
<th>IA Review Name</th>
<th>JSE Top 10 Strategy Risk mapping</th>
<th>JSE Limited</th>
<th>JSEC</th>
<th>JIS</th>
<th>JPP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Information Technology</strong></td>
<td>Cyber Security – Assessed Security Operations Centre oversight.</td>
<td>4</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Issuer Regulation – Access control to Webstir</td>
<td>2</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Disaster Recovery (DR) Review</td>
<td>5</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Operational</strong></td>
<td>Business Continuity Management – organisational resilience and scenario planning</td>
<td>5</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Payroll Continuous Auditing</td>
<td>8</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Treasury Continuous Auditing</td>
<td>8</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td><strong>CMF</strong></td>
<td>Equities market end to end, including billing process</td>
<td>5</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>JIS CMF implementation, including revenue (billing &amp; expenses)</td>
<td>5</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Internal Financial Controls for Financial Reporting</td>
<td>8</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>JIS</strong></td>
<td>Procurement Review</td>
<td>7</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Third party Outsourcing review (IT component)</td>
<td>7</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>
**Whistleblowing**

GIA is responsible for overseeing the JSE’s confidential/anonymous whistleblowing hotline. No calls were logged/reported with the whistleblowing service for the year. No incidents of fraud were noted during the period.

**Interaction with External Audit**

GIA meets with the external auditors on a regular basis to ensure that they are aligned from a combined assurance perspective to facilitate reliance where practical and appropriate. GIA has continuous engagements with the external auditors and matters for discussion included, amongst others:

- progress against Annual Internal Audit Plan for 2022;
- potential use of the work of IA for 2022;
- status on the CMF implementation and the implications on the JSE;
- status and conclusions reached regarding the IFCFR testing performed by IA;
- any material matters reported to management; and
- general themes emanating from both internal and external reviews.

**External Audit**

Ernst & Young is the Group’s appointed external auditor and GAC is satisfied that they are independent of the Group. In reaching this conclusion, the committee considered:

- the Group has a clearly defined audit and non-audit services policy which is strictly followed; and
- the extent of non-audit services is minimal and is continuously monitored, with no excessive, unusual or unnecessary engagements noted.

The committee is of the view that the Group received a high-quality external audit considering the standard of audit planning and scope of activities performed.

Below are the areas of significant audit that the external auditor focused on in 2022:

- Revenue recognition – consistent with prior years, this remains a key area of audit focus given the various IT applications supporting the revenue process.
- Goodwill impairment testing – continues to be a significant risk area, considering that the recoverability of the goodwill is linked to management assumptions relating to future periods which is highly judgemental and subject to high degree of estimation.
- Fair value and accounting of investment in Globacap.
King IV principles

We are a listed company, listed on our own exchange, and paragraph 3.84 of the Listings Requirements stipulates that issuers must comply with specific requirements concerning corporate governance. The JSE certifies that it complies with all the requirements detailed in paragraph 3.84.

We believe that our governance processes should aim to achieve an ethical culture, good performance, effective control and legitimacy. We have applied all the principles outlined in King IV adequately during 2022. The table sets out a brief description of the principles and their application within the JSE environment. More information can be found in the IAR where relevant information is indicated through a King IV icon. Principle 17 relates to institutional investors and has no bearing on the JSE.
<table>
<thead>
<tr>
<th>Desired outcomes</th>
<th>Activities in the year</th>
<th>Key governance policies and procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Principle 1</strong> Lead ethically and effectively</td>
<td>• Satisfactory attendance by directors at Board meetings.</td>
<td>• Board charter and terms of reference</td>
</tr>
<tr>
<td></td>
<td>• Declaration of interest at each Board and Board committee meeting.</td>
<td>• Declarations of interest</td>
</tr>
<tr>
<td></td>
<td>• Oversaw and monitored implementation and execution of policies by management.</td>
<td>• Board assessments</td>
</tr>
<tr>
<td><strong>Principle 2</strong> Govern the ethics of the organisation to support an ethical culture</td>
<td>• Continued to embed a culture of putting people first and taking care of employees by focusing on employee safety and wellness programmes.</td>
<td>• Whistle-blowing hotline</td>
</tr>
<tr>
<td></td>
<td>• Employees trained on their obligations in respect of the JSE Group code of conduct and ethics policy.</td>
<td>• Group Dealing in Shares policy</td>
</tr>
<tr>
<td></td>
<td>• Oversight over culture initiative that was aimed to identify and rank organisational cultural elements that enable or disable the JSE from achieving success.</td>
<td>• Code of conduct and ethics policy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Protected disclosure/whistle-blowing procedures</td>
</tr>
<tr>
<td><strong>Principle 3</strong> Ensure that the organisation is seen to be a responsible corporate citizen</td>
<td>Oversaw and monitored the Group’s following activities:</td>
<td>• Sustainability strategy</td>
</tr>
<tr>
<td></td>
<td>• Transformation efforts – achievement of Level 2 on BBBEE scorecard.</td>
<td>• Employment equity plan</td>
</tr>
<tr>
<td></td>
<td>• Launch of sustainability and climate change disclosure guidance.</td>
<td>• BBBEE scorecard</td>
</tr>
<tr>
<td></td>
<td>• Commitment to TCFD-aligned set of climate disclosures for the 2022 reporting year.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Revision of the carbon footprint.</td>
<td></td>
</tr>
<tr>
<td><strong>Principle 4</strong> The organisation’s core purpose, its risks and opportunities, strategy, business model, performance and sustainable development are inseparable elements of the value creation process</td>
<td>• Approved a new refined long-term strategy that provides clear direction and momentum to the Group’s strategic direction for the next five years.</td>
<td>• 2022 Group strategy</td>
</tr>
<tr>
<td></td>
<td>• Oversaw the integration and full-year financial consolidation of JIS.</td>
<td>• 2022 CEO and corporate scorecard</td>
</tr>
<tr>
<td></td>
<td>• Oversaw the implementation of Information Services strategy which aims to transform market data business.</td>
<td>• 2022 annual budget</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Information Services strategy</td>
</tr>
<tr>
<td><strong>Principle 5</strong> Ensure that reports issued by the organisation enable stakeholders to make informed assessments of the organisation’s performance and its short-, medium- and long-term prospects</td>
<td>• Timely submissions to the Board and Board committees to better monitor strategic objectives.</td>
<td>• Shareholder/investor roadshows</td>
</tr>
<tr>
<td></td>
<td>• Reviewed and approved the 2022 IAR, Group consolidated annual financial statements, financial results and results announcements.</td>
<td>• IAR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Trading statements</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Remuneration report</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Sustainability report</td>
</tr>
<tr>
<td>Desired outcomes</td>
<td>Activities in the year</td>
<td>Key governance policies and procedures</td>
</tr>
<tr>
<td>------------------</td>
<td>------------------------</td>
<td>---------------------------------------</td>
</tr>
<tr>
<td>Principle 6</td>
<td>The Board is the focal point and custodian of corporate governance in the organisation</td>
<td>• Change in chairman of the Group Risk Management Committee. • Reviewed Board work plan and Board committees’ terms of reference. • Group Nominations Committee’s mandate expanded to include governance oversight and renamed Group Nominations and Governance Committee. • Group Investment Committee mandate has expanded to include oversight over all investments.</td>
</tr>
<tr>
<td>Principle 7</td>
<td>Appropriate balance of knowledge, skills, experience, diversity and independence to discharge governance role and responsibilities objectively and effectively</td>
<td>• Achieved voluntary diversity targets at Board level. • Reviewed Board succession plan. • Fully integrated the newly appointed Board chairman. • Under the guidance of GNGC, undertook a skill audit of the Board.</td>
</tr>
<tr>
<td>Principle 8</td>
<td>Ensure that arrangements for delegation within Board structures promote independent judgement, and assist with the balance of power and the effective discharge of its duties</td>
<td>• Reviewed and updated the committee terms of reference to ensure alignment between the committees. • Meetings without management.</td>
</tr>
<tr>
<td>Principle 9</td>
<td>Ensure that the evaluation of the Board and its committees supports continued improvement</td>
<td>• Implemented action plans from the 2021 independent Board evaluation. • Performed 2022 internal evaluation of directors, chairs and committees.</td>
</tr>
<tr>
<td>Principle 10</td>
<td>Ensure that the appointment of, and delegation to, management contribute to role clarity and the effective exercise of authority and responsibilities</td>
<td>• Implement the Board delegation of authority as a base for the divisional delegations of authority.</td>
</tr>
<tr>
<td>Desired outcomes</td>
<td>Activities in the year</td>
<td>Key governance policies and procedures</td>
</tr>
<tr>
<td>------------------</td>
<td>------------------------</td>
<td>----------------------------------------</td>
</tr>
</tbody>
</table>
| **Principle 11** | - Continued to embed a risk-aware culture by integrating risk and resilience activities into business processes and decision-making. | - ERM policy  
- Risk and resilience roadmap  
- Control management framework  
- Business continuity management policy  
- Business continuity management plan |
| Govern risk in a way that supports the organisation in setting and achieving its strategic objectives |  |  |
| **Principle 12** | - Invested in our operational capabilities, technology upgrade, information security, cybersecurity, technical skills and backup systems to ensure the operational stability of our markets and reduce operational disruption. | - IT and associated security policies  
- Information Services policy  
- Operational resilience framework  
- Control management framework |
| Govern technology and information in a way that supports the organisation setting and achieving its strategic objectives |  |  |
| **Principle 13** | - Entrenched legal compliance processes to mitigate the risk of non-compliance.  
- Monitored regulatory compliance to ensure the fulfilment of licence operating conditions. | - Group compliance charter  
- Group compliance framework |
| Govern compliance with applicable laws and adopted, non-binding rules, codes and standards in a way that supports the organisation being ethical and a good corporate citizen |  |  |
| **Principle 14** | - Reviewed and updated remuneration policy to ensure that it is aligned with current remuneration designs.  
- Conducted pay parity alignment. | - Remuneration policy |
| Ensure that the organisation remunerates fairly, responsibly and transparently to promote the achievement of strategic and positive outcomes in the short, medium and long term |  |  |
| **Principle 15** | - Applied three levels of combined assurance model that is aligned with King IV and designed to effectively address significant risks and material matters.  
- The Group Audit Committee received regular reports from GIA on any identified weaknesses in controls. | - Non-audit services policy  
- GIA charter  
- Annual internal audit plan  
- Control management framework |
| Ensure that assurance services and functions enable an effective control environment that supports the integrity of information for internal decision-making and for external reports |  |  |
| **Principle 16** | - Focused on enhancing customer experience and improving the quality of our engagements.  
- Continued to embark on initiatives to improve the JSE’s employee value proportion with the aim of improving employee wellbeing. | - Stakeholder engagement framework  
- Crisis communication standard  
- Employee engagement initiatives |
| Adopt a stakeholder-inclusive approach that balances the needs, interests and expectations of material stakeholders in the best interests of the organisation |  |  |
JSE GROUP STRUCTURE 2022

JSE Limited

- Controlled and consolidated subsidiaries
  - 100%
  - JSE Clear Proprietary Limited
  - JSE Clear Derivatives Default Fund Proprietary Limited
  - JSE Trustees Proprietary Limited
  - JSE Private Placements Proprietary Limited
  - JSE Investor Services Proprietary Limited

- Controlled and consolidated trusts
  - 100%
  - 100% JSE Investor Services CSDP Proprietary Limited
  - 100% Pacific Custodians Nominees Proprietary Limited
  - JSE Long-term Incentive Scheme 2010 Trust
  - JSE Long-term Incentive Scheme 2018 Trust
  - JSE Empowerment Fund Trust

- Controlled and consolidated structured entities (JSE investor protection funds)
  - 100%
  - JSE Guarantee Fund Trust for the Equity Market
  - JSE Derivatives Fidelity Fund Trust for the Derivatives Market
  - JSE Debt Guarantee Fund Trust for the Interest rate Market

- Equity-accounted investee
  - 44.55%
  - Strate Proprietary Limited
  - Nautilus MAP Holdings Proprietary Limited

- Discontinued operations controlled and consolidated subsidiaries
  - 100%
  - JSE Benevolent Fund
    (JSE provides certain administration services)

Structured entities not controlled by the Group
**SHARE INFORMATION**

The JSE has a primary listing on the Johannesburg Stock Exchange. There are no secondary listings.

**Share code:** JSE  
**ISIN:** ZAE000079711  
**LEI:** 231800MZ1VUQEBWRF039  
**Sector:** Financial Services  
**Sub-sector:** Investment Services

<table>
<thead>
<tr>
<th>Date</th>
<th>Authorised share capital (Shares)</th>
<th>Nominal value (Rand)</th>
<th>Number of shares in issue (Shares)</th>
<th>Nominal value (Rand)</th>
<th>Closing price (Rand per share)</th>
<th>Market capitalisation (Rand billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>31 December 2021</td>
<td>400 000 000</td>
<td>40 000</td>
<td>86 877 600</td>
<td>8 620</td>
<td>112.50</td>
<td>9.8</td>
</tr>
<tr>
<td>30 June 2022</td>
<td>400 000 000</td>
<td>40 000</td>
<td>86 877 600</td>
<td>8 620</td>
<td>99.54</td>
<td>8.6</td>
</tr>
<tr>
<td>31 December 20221</td>
<td>400 000 000</td>
<td>40 000</td>
<td>86 877 600</td>
<td>8 620</td>
<td>108.47</td>
<td>9.4</td>
</tr>
</tbody>
</table>

1 The JSE has one class of shares: ordinary shares with a par value of 10 cents per share. The total number of treasury shares held by the Group at as 31 December 2022 was 4 823 009 shares (2021: 3 662 367 shares). Further details of the stated capital for the period under review are disclosed in note 19 of the Company's audited consolidated annual financial statements, available at [https://group.jse.co.za/investor-relations/reporting-suite](https://group.jse.co.za/investor-relations/reporting-suite).
Shareholder spread as at 31 December 2022

<table>
<thead>
<tr>
<th>Public</th>
<th>Number of shareholders</th>
<th>Shares held</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional shareholders</td>
<td>1 214</td>
<td>77 595 187</td>
<td>89.32%</td>
</tr>
<tr>
<td>Non-institutional shareholders</td>
<td>5 960</td>
<td>4 564 584</td>
<td>5.25%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>7 174</td>
<td><strong>82 159 771</strong></td>
<td><strong>94.57%</strong></td>
</tr>
<tr>
<td>Non-public</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JEF Trust</td>
<td>1</td>
<td>2 129 639</td>
<td>2.45%</td>
</tr>
<tr>
<td>JSE LTIS Trust</td>
<td>61</td>
<td>2 511 191</td>
<td>2.89%</td>
</tr>
<tr>
<td>Directors and company secretary</td>
<td>6</td>
<td>76 999</td>
<td>0.09%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>4 717 829</strong></td>
<td><strong>5.43%</strong></td>
</tr>
<tr>
<td>Total share capital</td>
<td></td>
<td><strong>86 877 600</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

**Geographic ownership**

<table>
<thead>
<tr>
<th>Country</th>
<th>Shares held</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>53 878 808</td>
<td>62.02%</td>
</tr>
<tr>
<td>United States</td>
<td>9 384 999</td>
<td>10.80%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>12 927 368</td>
<td>14.88%</td>
</tr>
<tr>
<td>Rest of world</td>
<td>10 686 425</td>
<td>12.30%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>86 877 600</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

1 Historically, we have reported on the number of beneficiaries of the JEF Trust, however, for FY2022 we are reporting the Trust as the shareholder.
Major shareholders

Pursuant to the Companies Act, the following beneficial shareholdings equal to or exceeding 4% as at 31 December 2022 were disclosed or established from enquiries:

<table>
<thead>
<tr>
<th>Names</th>
<th>% of total issued ordinary shares</th>
<th>Number of ordinary shares held</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ninety One SA Pty Limited</td>
<td>13.72</td>
<td>11 919 348</td>
</tr>
<tr>
<td>Public Investment Corporation (SOC) Limited</td>
<td>13.30</td>
<td>11 550 345</td>
</tr>
<tr>
<td>PSG Asset Management (Pty) Limited</td>
<td>9.24</td>
<td>8 026 708</td>
</tr>
<tr>
<td>Allan Gray Proprietary Limited</td>
<td>8.01</td>
<td>6 960 878</td>
</tr>
<tr>
<td>Goldman Sachs Asset Management, L.P.</td>
<td>5.84</td>
<td>5 071 821</td>
</tr>
</tbody>
</table>

No individual shareholder’s beneficial shareholding in any of the JSE employee incentive scheme is equal to or exceeds 5%.

Fund managers

The directors have ascertained that some of the shares registered in the names of nominee holders are managed by various fund managers. As at 31 December 2022, the following fund managers were responsible for managing investments of 2.5% or more of the share capital of the JSE:

<table>
<thead>
<tr>
<th>Names</th>
<th>% of total issued ordinary shares</th>
<th>Number of ordinary shares held</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ninety One SA Pty Limited</td>
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</tr>
<tr>
<td>Allan Gray Proprietary Limited</td>
<td>8.01</td>
<td>6 960 878</td>
</tr>
<tr>
<td>Goldman Sachs Asset Management International</td>
<td>5.84</td>
<td>5 071 821</td>
</tr>
<tr>
<td>The Vanguard Group, Inc.</td>
<td>3.62</td>
<td>3 144 356</td>
</tr>
<tr>
<td>JPMorgan Chase &amp; Co</td>
<td>2.77</td>
<td>2 405 302</td>
</tr>
<tr>
<td>Sasol</td>
<td>2.54</td>
<td>2 210 907</td>
</tr>
</tbody>
</table>
## Shareholder diary

### Events or reports in relation to the 2022/2023 financial years

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Release of summarised annual financial statements with the declaration of a dividend</td>
<td>Wednesday, 8 March 2023</td>
</tr>
<tr>
<td>Annual results presentation</td>
<td>Thursday, 9 March 2023</td>
</tr>
<tr>
<td>Record date to determine which shareholders are entitled to receive the AGM notice</td>
<td>Friday, 17 March 2023</td>
</tr>
<tr>
<td>Publication of 2022 integrated annual report and posting of AGM notice</td>
<td>Thursday, 30 March 2023</td>
</tr>
<tr>
<td>Last day to trade in order to be eligible to attend and vote at the AGM</td>
<td>Monday, 24 April 2023</td>
</tr>
<tr>
<td>Record date to determine the registered holders of JSE shares to participate in the AGM</td>
<td>Friday, 28 April 2023</td>
</tr>
<tr>
<td>Forms of proxy for the AGM to be lodged for administrative purposes by 16:00</td>
<td>Friday, 5 May 2023</td>
</tr>
<tr>
<td>AGM at 16:00 on</td>
<td>Tuesday, 9 May 2023</td>
</tr>
<tr>
<td>Release of results of AGM</td>
<td>Wednesday, 10 May 2023</td>
</tr>
<tr>
<td>Release of summarised interim report for the six months ended 30 June 2023</td>
<td>Wednesday, 2 August 2023</td>
</tr>
</tbody>
</table>
Declaration of ordinary cash dividend

The Board has declared an ordinary cash dividend for the year ended 31 December 2022, as follows:

<table>
<thead>
<tr>
<th>Dividend</th>
<th>Annual gross amount per share</th>
<th>Withholding tax %</th>
<th>Net amount per share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ordinary</td>
<td>769 cents</td>
<td>20%</td>
<td>615.20000 cents</td>
</tr>
</tbody>
</table>

The JSE’s practice has been to return distributable cash to shareholders after ring-fencing cash for regulatory capital requirements and investments (both capital expenditure and inorganic opportunities) as well as working capital.

The ordinary dividend of 769 cents per share represents a 2% increase on the 754 cents per share paid in 2021. The ordinary cash dividend has been declared from retained earnings. A dividend withholding tax of 20% will be applicable to all shareholders who are not exempt.

The dividends are payable to shareholders recorded in the register of members of the JSE at close of business on Friday, 31 March 2023. In compliance with the Companies Act, 71 of 2008 (as amended) (the Companies Act), the directors confirm that the JSE will satisfy the solvency and liquidity test immediately after completion of the dividend distribution. In compliance with the requirements of Strate, the following salient dates for the payment of the ordinary cash dividends are applicable:

<table>
<thead>
<tr>
<th>Dividend paid in year in respect of financial year ended</th>
<th>31 December 2022</th>
<th>31 December 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ordinary dividend per share</td>
<td>769 cents</td>
<td>754 cents</td>
</tr>
<tr>
<td>Total rand value</td>
<td>R668 million</td>
<td>R741 million</td>
</tr>
<tr>
<td>Declaration date</td>
<td>Wednesday, 8 March 2023</td>
<td>Monday, 28 February 2022</td>
</tr>
<tr>
<td>Last date to trade JSE shares cum dividend</td>
<td>Tuesday, 28 March 2023</td>
<td>Tuesday, 22 March 2022</td>
</tr>
<tr>
<td>JSE shares commence trading ex-dividend</td>
<td>Wednesday, 29 March 2023</td>
<td>Wednesday, 23 March 2022</td>
</tr>
<tr>
<td>Record date for purposes of determining the registered holders of JSE shares to participate in the dividend at close of business on Dividend payment date</td>
<td>Friday, 31 March 2023</td>
<td>Friday, 25 March 2022</td>
</tr>
<tr>
<td></td>
<td>Monday, 3 April 2023</td>
<td>Monday, 28 March 2022</td>
</tr>
</tbody>
</table>

Share certificates may not be dematerialised or rematerialised from Wednesday, 29 March 2023 to Friday, 31 March 2023, both days inclusive. On Monday, 3 April 2023, the dividend will be electronically transferred to the bank accounts of certificated shareholders. The accounts of those shareholders who have dematerialised their shares (which are held at their central securities depository participant or broker) will be credited on Monday, 3 April 2023.

The issued share capital of the JSE as at the declaration date was 86 877 600 ordinary shares.

The tax number of the JSE is 9313008840.
GLOSSARY

Financial measures
- CAGR: compound annual growth rate
- CAPEX: capital expenditure
- EBIT: earnings before interest and tax
- EBITDA: earnings before interest, tax, depreciation and amortisation
- EPS: earnings per share
- HEPS: headline earnings per share
- NPAT: net profit after tax
- OPEX: operating expenditure
- ROE: return on equity

Job titles and committees
- CEO: Chief executive officer
- CFO: Chief financial officer
- CIO: Chief information officer
- EXCO: Executive Committee
- GAC: Group Audit Committee
- GNC: Group Nominations Committee
- GRC: Group Remuneration Committee
- GRMC: Group Risk Management Committee
- GSC: Group Sustainability Committee
- GSROOC: Group SRO Oversight Committee

Group entities
- JEF: JSE Empowerment Fund
- JIS: JSE Investor Service
- JPP: JSE Private Placement
- JSE Clear: JSE Clear Proprietary Limited
- JSE/the Group: JSE Limited

Other
- ACI: annual general meeting
- AGM: African, Coloured, Indian
- BBBEE: Broad-based Black Economic Empowerment
- BCM: business continuity management
- BDA: broker dealer accounting back-office services
- CCP: central counterparty
- CSI: corporate social investment
- ERM: enterprise risk management
- ESG: environmental, social and governance
- ETFs: exchange-traded funds
- ETNs: exchange-traded notes
- FASSET: Finance and Accounting Services Sector Education and Training Authority
- FCA: Financial Conduct Authority
- FMA: Financial Markets Act
- FMI: financial market infrastructure
- FSCA: Financial Sector Conduct Authority
- FTSE: Global provider of benchmarks, analytics, and data solutions with multi-asset capabilities. FTSE Russell provides a comprehensive range of indexes

HR: human resources
IFRS: International Financial Reporting Standards
IOSCO: International Organization of Securities Commissions
IPO: initial public offering
IT: information technology
Jibar: Johannesburg Interbank Average Rate
KING IV: King Report on Corporate Governance™ for South Africa, 2016 (copyright and trademarks are owned by the Institute of Directors in South Africa NPC and all of its rights are reserved)
LTIS: long-term incentive scheme
MOI: memorandum of incorporation
NPS: net promoter score
PoPIA: Protection of Personal Information Act
RFSC: Revised Financial Sector Charter
RTC: real time clearing
SANAS: South African National Accreditation System
SARB: South African Reserve Bank
SLA: service level agreement
SME: small and medium enterprise
SRO: self-regulatory organisation
STT: securities trading and technologies
TCFD: Task Force on Climate-related Disclosures
TMPS: total measured procurement spend
UN: United Nations
UNGC: UN Global Compact
WFE: World Federation of Exchanges
YoY: year-on-year
CORPORATE INFORMATION AND DIRECTORATE

JSE Limited
(Incorporated in the Republic of South Africa)
Registration number: 2005/022939/06
Share code: JSE
ISIN: ZAE000079711
LEI: 213800MZ1VUQEBWRF039

Registered office
One Exchange Square
2 Gwen Lane
Sandown, 2196

Postal address
Private Bag X991174
Sandton, 2146

Contacts
Telephone: +27 (0) 11 520 7000
Web: www.jse.co.za
Investor relations: ir@jse.co.za
Group company secretary: GroupCompanySecretary@jse.co.za

Directors as at 31 December 2022
P Nhleko (Chairman)
Z Bassa
MS Cleary
VN Fakude
SP Kana (Lead Independent Director)
FN Khanyile
IM Kirk
BJ Kruger
MA Matooane
L Fourie (Group CEO)¹

¹ Executive director.

Changes to the Board in 2022
N Nyembezi (independent non-executive directors) resigned from the Board, effective 3 May 2022.
A Takoordeen (executive director) resigned from the Board, effective 20 May 2022.

Changes to the Board in 2023
F Suliman was appointed as Group chief financial officer and executive director effective 9 January 2023, and will stand for election to the Board by shareholders at the AGM to be held on Tuesday, 9 May 2023, as required by the MOI.
MA Matooane will retire as an independent non-executive director at the AGM to be held on Tuesday, 9 May 2023, having served for a consecutive term of ten years on the Board.

Group company secretary
GA Brookes

Transfer secretary
JSE Investor Services Proprietary Limited
One Exchange Square
2 Gwen Lane
Sandown, 2196

Sponsor
Rand Merchant Bank (a division of FirstRand Bank Limited)
1 Merchant Place
Corner Fredman and Rivonia Road
Sandton, 2196

AGM scrutineers
The Meeting Specialist Proprietary Limited
One Exchange Square
2 Gwen Lane
Sandown, 2196

Auditors
Ernst & Young Inc.
102 Rivonia Road
Sandton, 2196

Bankers
First National Bank of SA Limited
Corporate Account Services
4 First Place
Bank City
Simmonds Street
Johannesburg, 2001

Investor queries should be directed to ir@jse.co.za and will be redirected, where necessary, to the appropriate Board member or executive for a response.
Governance and secretarial queries should be directed to GroupCompanySecretary@jse.co.za
NOTES