NZX

2022 Annual Report

Positioning for the **future**

About this report

Welcome to the NZX 2022 Annual Report – Positioning for the Future.

The report outlines the work the NZX Group has done this year to deliver sustainable wealth, value and opportunities for all.

The report's theme demonstrates NZX's deep commitment to supporting growth in New Zealand's capital markets benefiting the wellbeing of all New Zealanders. We have put in place a strong foundation for growth and are excited and motivated by the opportunities that exist for NZX as an exchange and listed company.

The report includes our full Financial Statements (and Notes to the Financial Statements) for the year ended 31 December 2022, along with commentary on the company's financial results and operational performance.

The Business Year (How We Performed and Who We Are) and the NZX Group Overview (How We Deliver Value) provide information on our key performance and organisational metrics as well as our Purpose, Vision and Strategy.

Stakeholders, customers and investors can also read our performance in Operating Responsibly that covers environmental, social and governance (ESG) matters. Broken down into three sections (Our People, Our Environment and Our Markets and Economic Performance) it also includes for the first time, key ESG metrics on a page, making it easier for the reader to see the NZX Group's progress.

The report has been prepared in accordance with the Global Reporting Initiative (GRI) Context Index and with the New Zealand Climate Risk Disclosures (aligned with the Task Force on Climate Change-related Financial Disclosures, TCFD recommendations). Both are located in the Appendices.

The Governance section of the report describes how we set the objectives and direction for the business, and the framework for identifying and managing risks is outlined in the Risk Report.

Our corporate governance policies are available online at https://www.nzx.com/about-nzx/investor-centre/governance/policies.

NZX Limited is registered with the New Zealand Companies Office and our New Zealand Business Number (NZBN) is 9429036186358.

This report is dated 22 February 2023 and is signed on behalf of the Board of NZX Limited by James Miller (Chair), and Lindsay Wright (Chair of the Audit and Risk Committee).

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1. Business Year

2. NZX Group Overview

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How we **performed**

Total Capital listed and raised

$20.9b

5.7% and 20.8% 5 year av.

Total Value Traded

$37.4b

28.6% and 14.8% 5 year av.

Funds Under Management*

$8.26b

26.4%

Funds Under Administration

$9.96b

9.7%

Information Services Revenue

$19.4m

10.9%

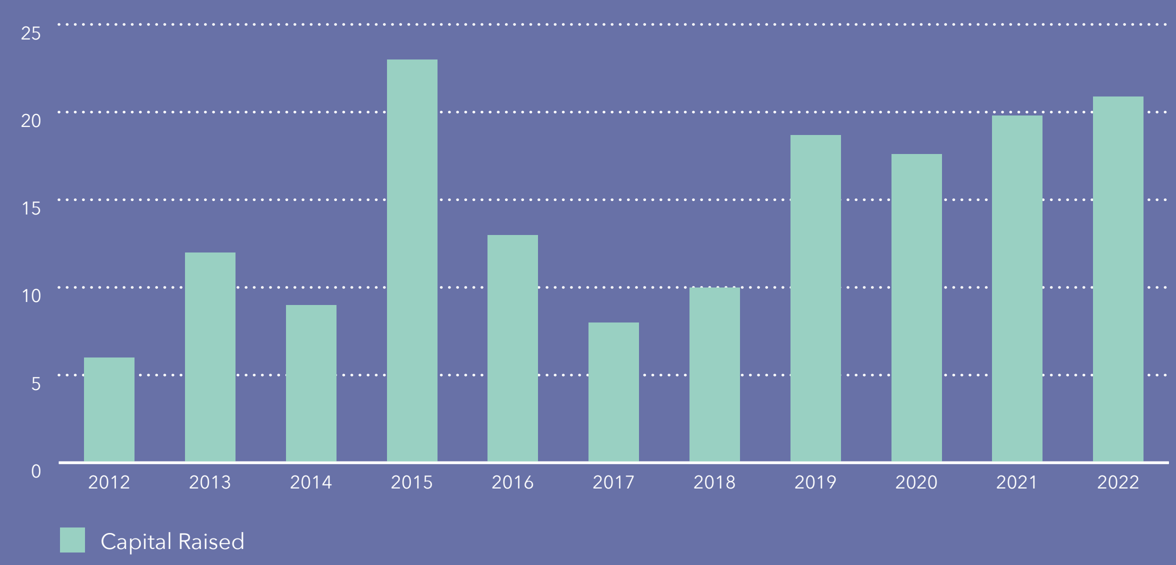
Dairy Derivatives Lots traded

428,173

40.0%

* Includes ASB Superannuation Master Trust acquired FUM.

Capital Listed & Raised (billions)



Operating Earnings *

$35.1m

1.9%

Net Profit After Tax

$14.2m

5.7%

Dividend (Fully imputed)

6.1 cents per share

Data highlighted on pages 4 and 5 is "for the financial year ended 31 December 2022" or "as at 31 December 2022" (as applicable). Percentage changes represent the movement from 2021 to 2022, except Funds Under Management and Funds Under Administration which are the movement in balances at 31 December 2021 to 31 December 2022.

5 year average percentage changes represent the movement against the rolling average for the preceding 5 years

* Operating earnings are before net finance expense, income tax, depreciation, amortisation, gain or loss on disposal of assets, and share of profit of associate. Operating earnings is not a defined performance measure in NZ IFRS. The Group's definition of operating earnings may not be comparable with similarly titled performance measures and disclosures by other entities. Refer to financial statements note 2 for a reconciliation of EBITDA to NZ IFRS profit for the year.

Includes one-off acquisition and integration costs of $1.54 million in 2022 (2021: $1.35 million). Operating earnings excluding one-off acquisition and integration costs increased 2.3% to $36.6m.

The 2022 targets are detailed in Management Commentary section on page 61 of this report.

Who **we** are

NZX operates New Zealand's equity, debt, funds, derivatives and energy markets. To support the growth of our markets, we provide trading, clearing, settlement, depository, and information services for our customers.

NZX also owns Smartshares, a New Zealand issuer of listed Exchange Traded Funds (ETFs) and KiwiSaver provider SuperLife. NZX Wealth Technologies is a 100%-owned subsidiary delivering comprehensive online platform functionality to enable New Zealand investment advisers and providers to efficiently manage, trade and administer their client's assets.

NZX is responsible for monitoring and enforcing the rules under which NZX's markets operate. This applies directly to issuers, market participants and indirectly (through market participants) to investors. This function is undertaken by NZ RegCo, an independently governed entity.

Learn more about us at: **www.nzx.com**

Total Market Capitalisation

$216b

Listed equity, debt and funds

Issuer relationships

338

Total listed equity, debt, funds and other securities

Secondary Markets

11.7m

Trades in 2022, with a total value of $37.4b

Information Services

6,691

Professional data terminals

Smartshares

125,005

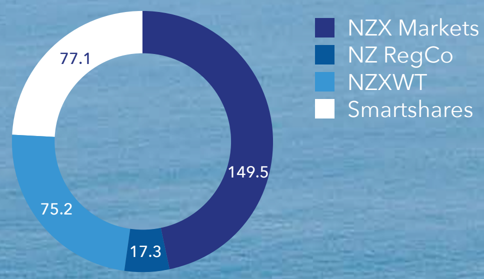
Members across KiwiSaver, investment, superannuation, and insurance solutions

NZX Wealth Technologies

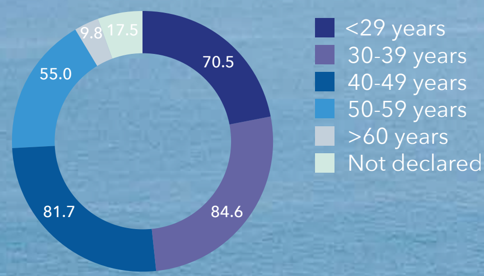
33,210

Investor portfolios, with total Funds Under Administration of $9.96b

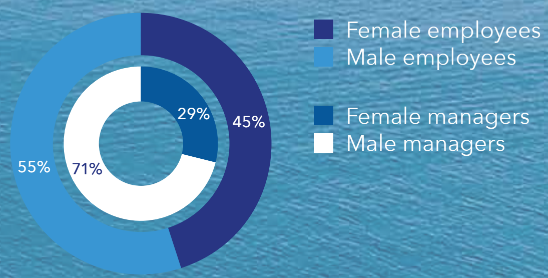
Employees (FTE) by Business Unit



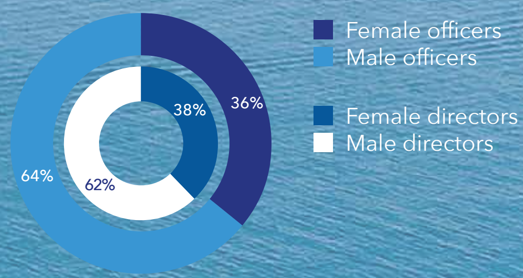
Employee (FTE) by Age



Gender Diversity All Employees



Gender Diversity of Officers & Board

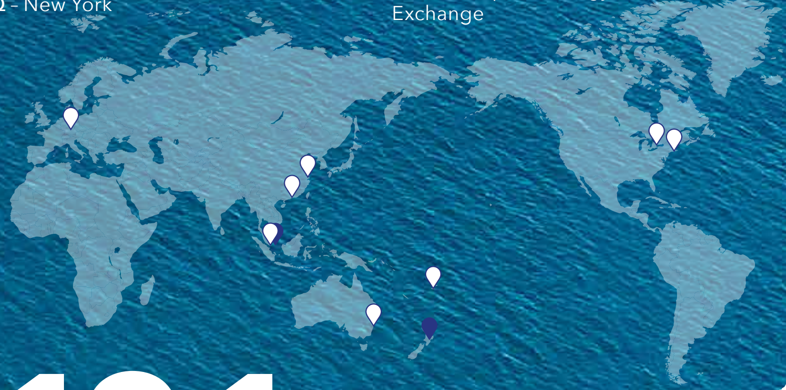


New Zealand presence connecting a world of investments to NZ businesses

Global affiliations
ASX - Sydney
HKEX - Hong Kong
LSE - London
NASDAQ - New York

SGX - Singapore
TMX - Toronto
SPSE - Suva
SSE - Shanghai

WFE - World Federation of Exchanges
SSE - Sustainable Stock Exchanges Initiative
EEX - European Energy Exchange



319.1

Full-time equivalent employees
(excluding contractors & consultants)

Letter from the Chair

NZ's capital markets **opportunity**

In a rapidly changing economic environment, the NZX Group demonstrated notable resilience in 2022.

While equity markets were soft affecting value traded, the diverse mix of the NZX Group business and the breadth of market offerings available to access capital, highlighted the strength and success of the organisational strategy we have implemented over the previous four years. This enabled us to maintain earnings through the cyclical movement of markets and tightening of financial conditions and is reflected in our results.

NZX is reporting 2022 operating earnings of $35.1 million. Excluding one-off acquisition and integration costs, Group operating earnings were up 2.3% to $36.6 million.

Net profit after tax for the year (NPAT) was $14.2 million, compared with $15.0 million the previous year. This includes increased amortisation costs from the continued investment into our Wealth Technologies platform and the acquired ASB Superannuation Master Trust.

Dividend

Your Board has declared a final dividend of 3.1 cents per share to be paid on 16 March 2023 contributing to a FY2022 dividend of 6.1 cents per share fully imputed.

I am proud of what NZX has achieved to grow the business and implement a strategic plan that is bearing fruit in terms of our global ambitions and value for shareholders.

Strategic progress

I am pleased to outline the continuing progress NZX is making in delivering to its strategy.

I am proud of what NZX has achieved to grow the business and implement a strategic plan that is bearing fruit in terms of our global ambitions and value for shareholders. Through our 2.0 Strategy: Growing, Connecting, Adding Value, we are positioning NZX for the future.

In 2022, right across the NZX Group, we showed our Purpose by being committed to connecting people, businesses and capital every day.

Smartshares, Wealth Technologies, the international partnerships with Fonterra and European Energy Exchange (EEX) in GlobalDairyTrade, the SGX Group in dairy derivatives, alongside our growing information services business, the Emissions Trading Scheme and carbon auction, are all adding value or considerable bench strength to our core markets business.

I take personal pride in the international partnerships and warm friendships which ensure that NZX is well connected to the world and the exciting opportunities that exist.

Likewise, I'm proud of our achievements in growing the Smartshares business with a diversified client base, smart acquisitions and achieving default status as a KiwiSaver provider. Funds Under Management that was circa $1.7 billion when I became Chair is now just under $8.59 billion.

In my view, Smartshares will lead the passive market in New Zealand in the years to come. Given the KiwiSaver market is around $96 billion, and most global markets have approximately 20% allocated to passive, the business has a clear path to grow to $20 billion without factoring in industry growth factors. This is exciting for NZX and New Zealand's capital markets and gives us greater control of our destiny.

This year the Board reaffirmed the next stage of the strategy, including encouraging stronger global connections and opportunities, and bringing more size, scale and efficiencies to our capital market operations, our funds management (Smartshares) and funds under administration (Wealth Technologies) businesses.

I want to thank my fellow directors and NZX Chief Executive Mark Peterson and his dedicated team for all their hard work and perseverance this year.

There is of course much more to be done to deliver to our growth aspirations. NZX's Vision is to be a trusted New Zealand business delivering sustainable wealth, value and opportunities for all.

New home for NZ's markets

2022 heralded a fresh start for New Zealand's capital markets with the opening in November of the New Zealand Capital Markets Centre in central Auckland.

NZX's genesis began in Dunedin on 30 June 1866, when the first exchange in New Zealand opened. Regional exchanges then popped up and later combined.

However, unlike exchanges in London, New York or Sydney, we have never had a real home in our biggest city. Over the years, there have been multiple attempts to get a NZX capital markets centre up and running in Auckland.

When the New Zealand Stock Exchange moved from its undersized premises into its grand new premises in 1986, it was envisaged by the Auckland Chair Michael Benjamin and the likes of Warren Paine, Neil Craig, Hamish Taylor, Malcolm Brown, Jon Cimino and Rick Flower that it would serve as the country's capital market centre.

It is my understanding when Jarden legend David Wale and Sir Eion Edgar were brought on to recalibrate the exchange in early 1989, there was talk then about developing a financial centre as part of their vision to rebuild public confidence in the capital markets.

Visiting the Nasdaq IPO room in 2018, NZX could see how to design a physical presence for modern capital markets that would bring together the community to celebrate success in an environment where stocks are now traded electronically and not by open outcry. We were delighted to have our friends from Nasdaq attend the Auckland office opening.

Unlike many other global stock exchanges, we had the opportunity to create a modern centre unencumbered by the legacy of the past. The need for NZX to open its offices for this purpose has been clear to many in the community over many decades.

The new centre celebrates New Zealand's capital markets past, present and future. We want it to be a place where corporate events are celebrated such as IPOs, direct listings, debt issues, company anniversaries and new product lines. We hope it will provide a focus point for school and university students and those interested in stock exchanges to visit and understand the proud history of New Zealand's public markets.

It was an honour to have Adena Friedman, the President and Chief Executive of Nasdaq, speak at the office opening and for NZX's inaugural Chair Simon Allen to mark the occasion by ringing the bell.

NZX has provided the location – it is now up to everyone involved in the New Zealand capital markets community to ensure it becomes a home for the New Zealand market.

But a home is only as good as the purpose for which it was created. As I leave NZX, I pose the question: is New Zealand ready to accept the challenge to grow our capital markets and play its part in creating more and better paying jobs and a higher standard of living for New Zealanders?

A growth blueprint exists

Three years ago, Growing New Zealand's Capital Markets 2029 was publicly released. Sponsored by NZX and the Financial Markets Authority, it represented the output of a broad cross section of New Zealand's capital markets participants enthusiastic about the opportunity to lift our nation's productivity.

It has a 10-year vision that would create more opportunities for Kiwis to grow personal wealth, help New Zealand businesses to prosper, and help future proof the country's economy.

The review has 42 recommendations covering KiwiSaver, regulation, public sector assets and infrastructure, promotion of public markets, tax, new products, and technology. To be effective, the response needs to be a close partnership between the public and private sectors.

NZX has delivered the initiatives earmarked for our action. We encourage the government and its agencies to prioritise those that require their input. NZX has never been better positioned than it is now to support the government in ensuring New Zealand's capital markets become internationally competitive.

> NZX has provided the location – it is now up to everyone involved in the New Zealand capital markets community to ensure it becomes a home for the New Zealand market.

As a country, we need to move from inaction to innovation, from imposing compliance costs that deter new market entrants to providing incentives that encourage the formulation of capital. We need to take a lead from other countries that have taken a holistic approach where markets and government are in step with one another. It is time for New Zealand to take action now on a “NZ Inc approach” to our economic wellbeing.

To successfully grow the New Zealand economy, we have to be able to generate considerable equity capital for entrepreneurs to create companies with the scope and scale to genuinely compete in international markets. Companies that try to do this on a shoestring budget are a recipe for burnout and failure. Each new company established creates a head office in a New Zealand city, thereby creating vibrancy and quality jobs.

Economies are successful when a government and stock exchange work well together. This includes market design, effective regulation and investor education. If the NZ capital market is to be successful, our capital market regulatory settings need to evolve with the best of best of our competitors globally.

To be successful in capital formation, New Zealand needs to focus on the following areas: first, creation of savings; secondly, effective mobilisation of those savings into the productive sector; and thirdly, investment of those savings. With KiwiSaver, point one has been largely achieved, but more needs to be done on points two and three. That is what Capital Markets 2029 is trying to facilitate. NZX and our markets are key methods in achieving these outcomes.

NZX would welcome the opportunity to work with the New Zealand Government on rolling out the highest priority, highest impact initiatives that will benefit New Zealanders well into the future. It’s about ensuring we reach a level of balance between efficient capital formation to grow the economy and investor protection.

Governance & regulation

In August we announced that NZX would establish a new institute, the Corporate Governance Institute (CGI), as a centre for thought leadership around corporate governance in New Zealand’s listed companies (see case study and members on page 42). The development of the CGI follows public consultation last year on the NZX Corporate Governance Code.

The aim of the CGI is to ensure the NZX Main Board has settings in place that will improve performance and increase shareholder value in a sustainable manner, while lowering issuers’ cost of capital.

The CGI will shift away from developing assertion-based policy and move to delivering outcomes supported by evidence and academic research. It aims to be a market leader for corporate governance settings that are appropriate for a leading, innovative, regional stock exchange.

We hope the CGI will follow in the successful footsteps of NZ RegCo, the independently governed entity, responsible for performing NZX’s frontline regulatory functions. NZ RegCo continues to grow from strength to strength and I want to acknowledge the diligent work of Chair Trevor Janes, the NZ RegCo Board and Chief Executive Joost van Amelsfort and his team.

As previously announced in February 2022, I am stepping down as Chair of NZX in April 2023 after the annual shareholder meeting (ASM). It has been an absolute privilege to hold this role and serve on the Board.

NZX Board Changes

As previously announced in February 2022, I am stepping down as Chair of NZX in April 2023 after the annual shareholder meeting (ASM). It has been an absolute privilege to hold this role and serve on the Board.

In October 2022, the NZX Board announced to the market that experienced markets practitioner Rob Hamilton had been appointed to the Board and would be Chair Elect, following confirmation at the ASM in April 2023.

I am delighted Rob is prepared to step up and give back to the capital markets as his leadership skills, intellect and more than 30 years' experience in the financial sector will place him well to oversee the myriad of matters that NZX manages as a market operator and business.

Rachel Walsh also joined the Board in October. Rachel is the Chief Financial Officer of Datacom Group and, having worked at Rank Group Limited and the US markets, she also brings a private equity lens to the board table. She will bring capacity and depth to the Audit and Risk and Clearing committees.

Rob and Rachel are proven performers whose strong understanding of markets, listed company requirements, financial services and increasing business performance will be of great value to NZX. So too will Dame Paula Rebstock, whose appointment to the NZX Board was announced on 1 February 2023. Dame Paula will bolster our board with her broad governance skills and experience, passion for listed markets, proven funds management expertise, and deep understanding of government and regulation.

As part of the succession process, directors Nigel Babbage and Richard Bodman decided to take the opportunity to retire from the Board at the end of the year after both having served more than five years.

Richard has been an excellent director, bringing first-class technical skills alongside promoting high-quality ethical standards and behaviour. He helped drive the establishment and expansion of our Wealth Technologies business alongside improvements in our technology and clearing operations.

It was with great shock and sadness that Nigel passed away suddenly in November (see tribute on page 21). Nigel was a great champion of New Zealand's capital markets and had many friends at NZX.

Finally, acknowledgement needs to be made to Victoria Newman, NZX's 2022 Future Director. Victoria's considerable strategic consulting and project management experience, coupled with her incisive analysis of issues and clear communication style, have been very much valued by the Board. The Board welcomes our sixth Future Director, Sarah Miller (no relation) from 1 January 2023. These changes mean in 2023, the NZX Board will, for the first time, have a majority of directors who are women.

Acknowledgements & future direction

When Mark Peterson and I commissioned the 150-year history of NZX and hosted celebrations throughout the country, many commentators were of the view we wouldn't make it to 200 years as a standalone entity. While I haven't delivered on the total shareholder returns I would have liked, broker sum of the parts valuations clearly indicate considerable latent value has been created by a very talented and hard working team. I have every confidence future boards will extract this value and the capital markets community can confidently look forward to NZX celebrating its 200th birthday in 43 years.

Creating NZ RegCo, the CGI, the Capital Markets Centre, opening the company's eyes to the potential of NZX with our board visit to New York in 2018, uniting the markets behind our 150th celebrations, and the Capital Markets 2029 vision, are all personal highlights for me. I am also proud of the strength of the positive working relationship I have developed with Mark and the successes we have achieved. Special thanks must go out to Mark and Chief Financial & Corporate Officer Graham Law in particular for their strong and considered leadership, advice and ability to deliver to the organisational strategy.

Finally, a sincere and very humble thank you to all the shareholders of NZX, along with the capital markets community, Ministers, the FMA, NZX directors (past and present) and our NZX staff, for having confidence in me and for having my back in my time as Chair.

The next stage in the growth journey for NZX has started and, as I pass the baton to Rob, I have every confidence in his ability to move the New Zealand capital markets to a place where entrepreneurs and savers work together to create a more prosperous future for our country.

James Miller
NZX Chair

Chief Executive's update

Driving **growth** and leverage

Maintaining earnings through market cycles

With the tightening of monetary policy, rising inflation and interest rates, the war in Ukraine, and the lingering financial effects from a pandemic, it was unsurprising the global economy in 2022 prioritised economic certainty. This materially changed market conditions worldwide.

At the same time, the increasing cost of capital and a tight labour market, impacted the operating environment.

Despite these challenges, the NZX Group delivered a pleasing result due to the diversity of our product offering and the robust building blocks for growth we have been putting in place since 2017.

Our results and achievements for the year ended 31 December 2022 demonstrate steady progress in delivering our growth strategy and balancing costs with opportunity. We have made significant progress in strengthening the business and our

Our ambitions to round out our capital markets product offering in areas such as equity derivatives and carbon markets will broaden our earnings base, add scale to our settlement and clearing activities and mature our market.

market and operations infrastructure in the last five years.

Market cycles are inevitable. What NZX was focused on in 2022 was continuing to grow our revenue, maintain our earnings, drive efficiencies and maximise the leverage off the acquisitions and investments we have made in recent years under our strategy. We continue to develop our business to capture opportunities that will have an upside when markets recover.

We are making good progress towards growing a more integrated financial markets infrastructure and services business. Our ambitions to round out our capital markets product offering in areas such as equity derivatives and carbon markets will broaden our earnings base, add scale to our settlement and clearing activities and mature our market.

We are globalising our footprint across all businesses – as evidenced by the partnerships between NZX, Singapore Exchange (SGX Group), European Energy Exchange (EEX) and Fonterra in GlobalDairyTrade and SGX-NZX Global Dairy Derivatives. We see significant opportunities in a 'star alliance-type' strategy. Global partnerships will help us achieve scale.

In addition, most exchanges have a level of diversification, and in our case, for the Smartshares and Wealth Technologies businesses , there are long-term structural market tailwinds that support strong growth in both.

Performance and results

Group result

Despite the step back in market activity in 2022, our overall revenue growth reflected the strength of our strategy and earnings base. Smartshares and Wealth Technologies continue to provide a platform for future growth.

While total value traded on NZX secondary markets was down 28.6% to $37.4 billion, Group operating earnings (EBITDA) held up well at $36.6 million and including acquisition and integration costs were $35.1 million – up 1.9% on 2021. Group revenues were up 8.8% to $95.7 million for the full year.

Operating expenses, excluding acquisition and integration costs, increased 13.3% to $59.1 million largely due to headcount and wage inflation caused by a highly competitive and tight labour market.

Depreciation was higher due to the fit out of the new Capital Markets Centre in Auckland and full year impact of IT infrastructure improvements completed through 2021.

We have detailed our financial results in the Management Commentary on page 60.

Capital markets – progress in challenging times

Despite complex market conditions impacting total value traded, in 2022 we had a strong year in capital listing and raising activity showing the strength of public markets through cycles.

We are developing a vibrant capital listing and raising business across equity, funds and debt, driving scale across all areas of issuance. Interest in listing and raising remains strong. However, a number of companies deferred to 2023 as a result of adverse market conditions.

In 2022, $20.9 billion of capital was listed and raised on market. This this was one of the strongest years of capital listed and raised since the Mixed Ownership Model programme and continues the positive run of the last 10 years.

Pathways to listing worked well with seven new issuers joining NZX. Promoting these pathways was a key recommendation in Growing New Zealand's Capital Markets 2029. In 2022 there was a shift from equity to debt, reflecting global market conditions.

This year we had a direct listing (Black Pearl Group), a foreign exempt listing (Ampol), a fund listing (Booster), three new debt issuers (Southland Building Society, Westpac, and Napier Port) and a reverse listing (WasteCo).

We are driving this growth through an embedded origination model actively connecting parties in the capital markets ecosystem. We have had 28 new listings since January 2020 in equity, debt and funds.

A key feature of 2022 was the strength of the listed debt market. During the height of the COVID-19 outbreak we saw a pivot away from bonds as investors climbed up the risk curve to achieve returns. In 2022 bonds were back with 26 bond deals

on market, and more than $11.3 billion listed and raised.

ESG bonds remain strong with 41 bonds listed on the NZDX in the ESG category, representing 26% of listed bonds on issue. We expect to see green bonds continue to grow as more companies look to raise funds for projects to deliver environmental benefits.

In December Zespri announced its intention to list on the NZX in 2023. NZX is looking forward to working constructively with Zespri on the listing process in the year ahead.

In line with the recommendations in Growing New Zealand's Capital Markets 2029, we continue to support our issuers through high-quality communication and engagement offerings. This includes utilising our new media room in our Capital Markets Centre in Auckland.

In 2022 we provided podcasts, spotlight videos, virtual investor events, education workshops, and media and social media support. It's great to be engaging with issuers in this way and to see the new office being used as it was intended to be – as a central hub for New Zealand's capital markets.

While total value traded was lower in 2022 due to ongoing market uncertainty, NZX maintained our on-market liquidity levels of 64%. The expectation remains that we reach 80% in the next five years. Increased on-market trading is key to driving new participation, particularly globally, and increasing overall transparency and liquidity in our market.

We continued to evolve our connectivity and enlarging our global footprint by making connecting to NZX markets easier and more resilient for market participants.

Despite softer market conditions, Information Services revenues continue to grow (up 10.9% or $19.4 million including connectivity revenue) and will be a source of recurring revenue growth into the future as we develop new product and delivery mechanisms. Professional terminal numbers remain steady, with an uplift in revenue demonstrating strong interest in our markets from local and global investors.

Another area of exciting growth, due to the strength of our global connections, is Dairy. Across the global dairy value chain, NZX is now well positioned across all of the key pillars – physical, financial, and data.

GlobalDairyTrade (GDT), in which NZX has a one-third shareholding alongside Fonterra and EEX, is making steady progress on its three-year strategy. In August we saw the delivery of more frequent price discovery to the physical market through the weekly auction known as GDT Pulse.

The dairy derivatives partnership between NZX and SGX Group has led to a significant increase in growth with the annual volume trading record broken on 20 October 2022. By the end of 2022, our full year results were 40% up on the year before.

The partnership has seen NZX's dairy derivatives listed on SGX's derivatives platform, and combines NZX's core dairy expertise in industry engagement, market insight, research capability, and product development with SGX's leading Asian presence and global distribution capability.

Since 2021 NZX, in partnership with the EEX, has been managing the New Zealand Emissions Trading Scheme Auctions for New Zealand Units (NZUs). The auction now has 102 fully registered participants, ranging across multiple sectors within New Zealand and abroad. The partnership with EEX is consistent with NZX's strategy of building global connections with partners that have proven expertise.

The relationship with participants, the Ministry for the Environment (MfE) as the operator and EEX, remains strong and collaborative. This has enabled NZX to not only deliver continued successful auctions but to provide system and process efficiencies to benefit the market and operator.

The secondary carbon market also provides opportunities to deepen carbon trading in New Zealand. In November, the New Zealand Government announced a Request for Information for a centralised, regulated exchange operator for the trading of spot carbon. NZX is supportive of the potential market benefits of this opportunity.

Smartshares

Smartshares is New Zealand's leading passive and systematic investment manager and provider of Exchange Traded Funds (ETFs) and is well positioned for further growth.

In November, Smartshares' strong performance in 2022 saw it win Research IP Fund Manager of the Year. It also won three other awards: the Longevity Award (SMS US 500), Global Equities Fund of the Year (SMS US 500), and the Australian Equities Fund of the Year (SMS AU Top 20).

Smartshares continues to be on a strong growth path. In recent years we have been steadily building capability with our people and technology to match our growth ambitions.

While the changes in market conditions this year impacted top line Funds Under Management levels, this was largely offset by strong net cash inflows of $800 million and the acquisition of the ASB Superannuation Master Trust. This lifted overall FUM to $8.26 billion.

Operating earnings including acquisition and integration costs lifted 42.8% to $11.2 million.

We have said we would look for the right mergers and acquisitions opportunities that fit our strategy. This has included the ASB Superannuation Master Trust announcement in 2021 and, this year in November, the announcement of the purchase of boutique fund manager, QuayStreet Asset Management, and its $1.6 billion in FUM from Craigs Investment Partners.

The $25 million acquisition of the ASB Superannuation Master Trust was completed in February. Some services continue to be provided by ASB and we expect the transition of investment administration, investment management and registry services to be completed in the second half of 2023.

QuayStreet provides another opportunity towards achieving scale and operating leverage in Smartshares. Scale and operating leverage are important elements for a funds management business. Our market analysis indicates $15-$20 billion of FUM is the point when cost bases are at their most efficient for New Zealand fund managers.

The QuayStreet funds will be offered as an additional product set to the Smartshares offering. In time, Smartshares, with input from Craigs and clients, will work to align and refine the products to ensure the funds continue to meet customer needs and represent good value for money.

Smartshares is on a strong pathway to $20 billion of FUM and remains focused on offering funds to investors that track the performance of an index or use a systematic approach to investing with an ESG tilt.

NZX Wealth Technologies

The NZX Wealth Technologies platform provides core market infrastructure to New Zealand's financial advice community, aligning to NZX's purpose of connecting people, business and capital every day.

It offers an open, modern and efficient fully cloud-based platform for advisers and financial services providers to manage, trade, administer and report performance of their clients' investments.

In 2022 the team transitioned more clients on to the platform, secured new prospects and extended functionality to existing partners. This includes implementing Calastone using application programming interfaces which automate and streamline fund manager transactions. The NZX Wealth Technologies platform is the first in New Zealand to do this.

Impacted by market conditions, Funds Under Administration (FUA) ended the year with $10 billion. Revenue reached $6 million – an increase of 36.3% from 2021.

NZX Wealth Technologies' pipeline prospects remain strong. Further FUA growth is underpinned by a large, contracted client that is being onboarded in 2023/24. We are working with a good number of prospects of medium to high conviction that will add scale and recurring revenue to our business, achieving our original objectives and targets for the business.

NZX Wealth Technologies is well regarded and respected in the New Zealand market. We believe in the business. That's why in November we announced we were considering whether there was a strategic partner for NZX Wealth Technologies that could enhance and accelerate the opportunities it has ahead of it.

Refreshed Purpose and Vision

Our goal as an exchange is to provide businesses with access to capital to fuel their growth and to contribute to the New Zealand economy. Likewise, as a business we want to deliver sustainable wealth and value to our shareholders and New Zealand.

This year we set about refreshing our organisational Purpose (why we exist) and Vision (what we want to achieve) to better demonstrate the value and impact of NZX to our customers, shareholders and New Zealand.

This is illustrated in the diagram on page 23 that pulls together in one place our new Purpose and Vision, alongside our Values and Strategy. It demonstrates that our customers are at the heart of what we do.

It also provides a clear customer focus for our people, no matter if they work in market facing roles, operations, Smartshares, Wealth Technologies, NZ RegCo, or corporate and support functions.

Governance remains our strength while our focus in the year ahead will be on improving our transparency and communication on the environmental and social aspects of ESG.

Committed to transparency and progress on ESG

ESG remains a priority area for NZX and we have further opportunities within our business alongside providing capability and leadership for the wider market to leverage. We continued to make steady progress in 2022 across the business and NZX achieved net carbon zero certification for the 2021 and 2022 years from Toitū Envirocare.

Governance remains our strength while our focus in the year ahead will be on improving our transparency and communication on the environmental and social aspects of ESG.

During the period NZX completed our review of the NZX Corporate Governance Code (CGC) after comprehensive engagement with industry. We were delighted with the interest and thoughtful feedback we received. The updated Code will promote good governance in business practices, including greater environmental, social and governance disclosure among listed companies.

As the operator of New Zealand's stock exchange and markets, as a financial services and technology business, and as a regulator (NZ RegCo), our focus is to create value while delivering a positive impact on society and the environment.

Demonstrating our commitment as a business and market operator, in 2022 NZX has published for the first time our Climate Statement and partnered with BusinessDesk in sponsoring its new Sustainable Finance section. Public markets will continue to play an important role in facilitating the flow of capital towards decarbonising the New Zealand economy.

NZ RegCo – upholding market integrity

Special acknowledgement needs to be made for NZ RegCo, the independently governed entity, responsible for monitoring and enforcing compliance by listed issuers and accredited market participants with NZX's market rules.

Under the leadership of Chief Executive Joost van Amelsfort, NZ RegCo continues to go from strength to strength. It was pleasing to see in the Financial Market Authority's annual NZX market operator obligations review in June recognition of how effectively NZ RegCo was operating as a standalone frontline regulator and demonstrating an appropriate level of independence from NZX.

NZX was also pleased with the findings of that review which noted the significant improvement in NZX's technology and systems capabilities, personnel and risk management practices.

Exciting opportunities ahead

Our group strategy to 2027 is clear: round out our product offering in capital markets in line with other exchanges internationally and drive scale and operating leverage across the broader business to increase our revenue base.

We know our product offering could be expanded (equity derivatives, carbon markets) which is key to driving further growth in capital markets activity and greater global connections. Carbon and energy markets are strategically beneficial to New Zealand. As a trusted and established exchange operator in these sectors, NZX can add significant value helping New Zealand businesses achieve their climate change goals.

In mature markets, derivatives are core to revenue generation. Unsurprisingly the resulting revenues sit in the trading and post trading functions.

Derivatives, in particular equity derivatives, are core to revenue stability. Derivatives also drive growth across multiple layers of the capital markets including cash market trading, participation and data revenues.

We will continue to push hard to deliver the S&P/NZX 20 Index Futures in 2023. We have a cornerstone group signed on with 12 local and global fund managers supporting it. Work is well underway on risk recovery tools and clearing house settings to prepare the platform for global participants.

In NZX post trade there is headroom for scale, supporting new product developments essential to market growth such as derivatives, additional services and efficiencies essential to market participants.

We will continue to explore providing more traded products and increase scale in clearing and settlement. Increasing the first helps deliver the second.

Our biggest strength is our people

In 2022 geopolitical and macroeconomic events were added

to the growing list of significant challenges the world economy and businesses are facing.

Through all of this I am extremely proud of the fortitude and resilience NZX staff continue to demonstrate.

'Committed' and 'customer focused' are words that best sum up the collective attitude this year. They are a testament to the calibre of our people – and their ability to cope with constant change – alongside strong management by our senior leaders.

With our strategic direction clear, I am excited by the opportunities before us to leverage off and best utilise the investments we have made, bringing significant benefits to our shareholders, customers and country.

Mark Peterson
Chief Executive Officer

Operating earnings (EBITDA) are before net finance expense, income tax, depreciation, amortisation, gain or loss on disposal of assets, and share of profit of associate. Operating earnings is not a defined performance measure in NZ IFRS. The Group's definition of operating earnings may not be comparable with similarly titled performance measures and disclosures by other entities. Refer to financial statements note 2 for a reconciliation of EBITDA to NZ IFRS profit for the year.

A Tribute to **James Miller**

James Miller joined the Board of NZX in August 2010 and he took over from Andrew Harmos as Chair of NZX in May 2015.

From everything that James says and does, it is clear he sees New Zealand's capital markets as a critical element in assisting the growth of New Zealand's productivity and economy alongside building its relevance on the global stage.

James has demonstrated huge passion for driving NZX's growth towards becoming a globally connected capital market and a more diversified and resilient financial services company.

He has always been a forward thinker. He sees the bigger picture clearly and is driven to always be better. James has brought all his capital markets experience and industry network to bear and has dedicated an enormous amount of time, energy and enthusiasm to NZX over the years. He also understands the importance of the organisation's people and culture to the delivery of its objectives.

I have been privileged to work closely with James since becoming NZX Chief Executive in 2017. He has always offered his wisdom, guidance and support to me over his tenure, for which I am sincerely grateful.

The role of NZX Chair is considerable, and it is only right to also recognise the support that James has received from Gillys and his family over the years.

On behalf of the wider NZX community, I would like to thank James for his enormous contribution to the business and New Zealand's capital markets and we wish him every success for the future.

Mark Peterson
Chief Executive Officer

Otago University BNZ Bloomberg Markets Lab Opening.
Photographer: Dave Bull.

Champion of New Zealand's Capital Markets

It was with great shock and sadness we heard that NZX Director Nigel Babbage had passed away suddenly in Christchurch on 20 November 2022.

Nigel, a NZX Board member since 2017 and a friend to many at NZX, had been a long-term advocate of NZX and stock markets. He had proven international experience and had served on the Foreign Exchange Committee of the Federal Reserve Bank of New York.

Nigel was a proud champion of NZX as a board member and significant shareholder. He was a man of immense passion and integrity, something he demonstrated throughout his sterling 35-year career as a currency trader, businessman, conservationist and director. In his own words he was a "market junkie".

Never was there a greater supporter of NZX as a market operator and as a business than Nigel. He bought shares in NZX when it listed in June 2003 and vowed he would never sell them. He loved speaking to staff, finding out what was happening on the shop floor.

Nigel's deep financial and capital markets experience, and insights had been of great benefit to NZX in delivering to its growth strategy, particularly around derivatives.

Nigel always backed NZX in looking for opportunities to grow New Zealand's capital markets and I know Mark Peterson and the NZX team really appreciated that. He was passionate about NZX succeeding.

We will miss him greatly – especially his self-deprecating sense of humour and ebullient personality. At every meeting, at any in person discussion or phone call, his focus

Otago University BNZ Bloomberg Markets Lab Opening. Photographer: Dave Bull.

was all about the business, and the wider capital markets, growing and succeeding.

In October, Nigel announced he was retiring from the NZX Board. The 22 November NZX Board meeting was to be his last.

Our thoughts go out to Nigel's family, including sons, Charles and Edward, and siblings Nicki, Kate and Andrew.

James Miller
NZX Chair

How we **deliver value**

For 156 years we have been creating and delivering opportunities for Kiwis to grow their personal wealth and helping businesses prosper. As New Zealand's Exchange, we are proud of our record in supporting and fueling the growth and global ambitions of local companies.

NZX is an integral part of the New Zealand economy. By operating efficient, effective, transparent and resilient public markets, we help provide the capital for business to grow, innovate, invest in much-needed infrastructure, and create more and better paying jobs for New Zealanders.

Our Purpose or mission, lies at the heart of why we exist. We are New Zealand's Exchange, an integrated financial services business, and a frontline market regulator.

We utilise our expertise and connections here and overseas to bring together all the ingredients required for economic prosperity. We are people helping people. Customer service is in NZX's DNA and in the people we employ. We want to make a positive impact on people's lives.

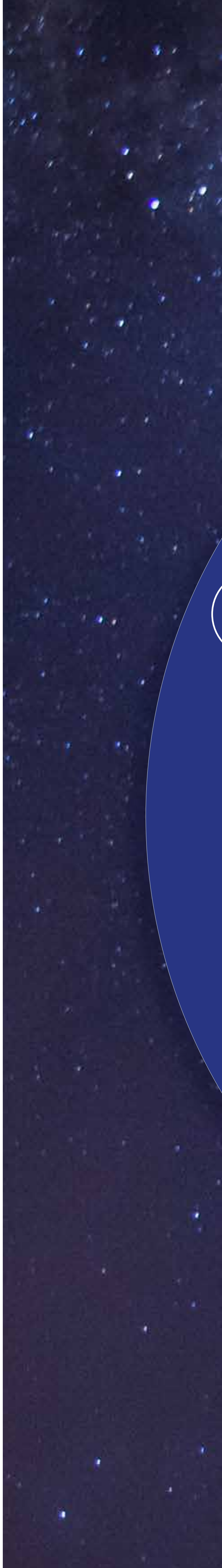
Our Vision is our goal or aspiration of what we want NZX to achieve. We want to ensure we grow our business – and the businesses and individuals we serve – in a way that is sustainable and profitable; helping our country, and the citizens who live in it, succeed.

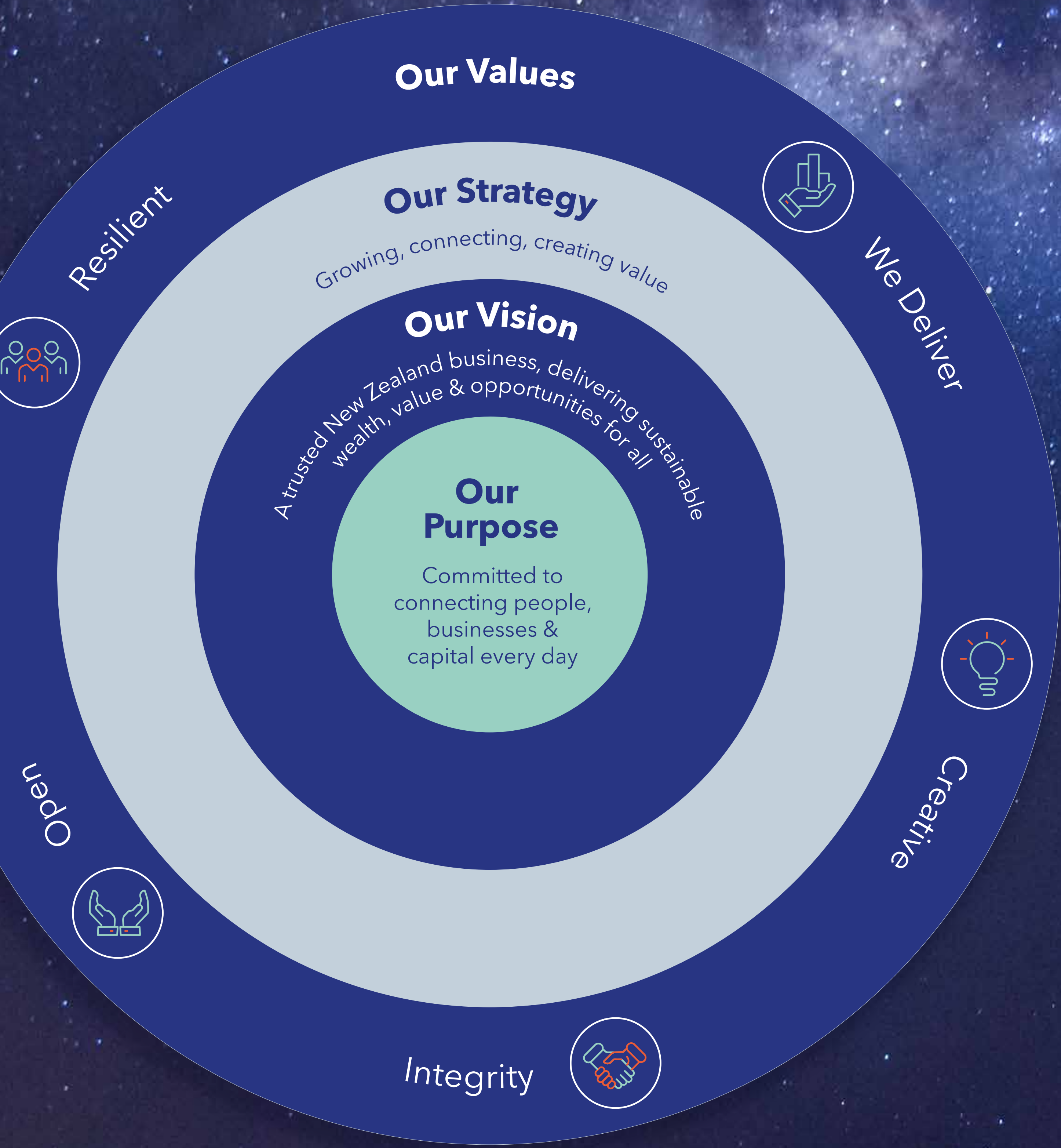
Our Values are the behaviours our people demonstrate that underpin our Purpose and achieve our Vision.

Our Strategy is the guide rail for our decision making. We are growing a more integrated financial markets infrastructure and services business, building on NZX's core strengths and continuing to explore growth opportunities across our businesses to create further value to our shareholders over time. Successful execution will benefit consumers of capital, investors, our shareholders – and ultimately our economy and the standard of living of all New Zealanders.

The Operating Responsibly section in this report outlines how and where NZX delivers value.

NZX has a dual role: strengthening New Zealand's exchange with resilient, vibrant markets; and growing a more integrated financial markets infrastructure and services business.





Our Values
Resilient
We Deliver
Creative
Integrity
Open
Our Strategy
Growing, connecting, creating value
Our Vision
A trusted New Zealand business, delivering sustainable wealth, value & opportunities for all
Our Purpose
Committed to connecting people, businesses & capital every day

Our **Board**

James Miller – Chair
James was appointed as a director in August 2010, and has been NZX Chair since May 2015. He has deep experience in the sharebroking industry, with more than 14 years across Craigs Investment Partners, ABN AMRO, Barclays de Zoete Wedd and ANZ Securities. He is a qualified chartered accountant, a Certified Securities Analyst Professional, and is a Fellow of both the Institute of Chartered Accountants and the Institute of Directors in New Zealand. James is a director of Mercury NZ, New Zealand Refining Company and Vista Group. He is a former deputy chair of ACC and former director of Auckland International Airport and Vector. He was an inaugural director of the Financial Markets Authority, and previously a member of the ABN AMRO Securities, INFINZ and Financial Reporting Standards Boards.

Frank Aldridge – Director
Frank was appointed as a director in May 2017. Frank has an extensive understanding of New Zealand's capital markets having spent more than two decades working for Craigs Investments Partners where he led the business for 16 years as Managing Director through a period of significant growth and expansion between 2005 to March 2021. In addition during this period, he was also Chair of Australian-based Wilsons Advisory and Stockbroking, former member and Chair of New Zealand Securities Association, and sat on several of Craigs Investment Partners' subsidiary Boards. Frank is an accredited NZX Adviser, Financial Adviser (FA), and a Chartered Member of the Institute of Directors. Frank currently is a Director of Avion Private advising corporates, trusts and individuals.

Nigel Babbage* – Director
Nigel was appointed as a director in December 2017. Nigel spent more than 35 years working in financial and capital markets locally and globally, and brought to NZX extensive clearing and derivatives experience. Nigel previously held executive roles with British Petroleum (now BP) and Citibank, managing the New York currency derivatives desk, and worked for BNP Paribas, where he took on the joint role of Global Head of Currency Derivatives Trading and Head of North American Foreign Exchange. He served on the Foreign Exchange Committee of the Federal Reserve Bank of New York for three years. Nigel was CEO of Christchurch-based investment company Mohua Investments Limited.
See tribute to Nigel on page 21.

Richard Bodman* – Director
Richard was appointed as a director in April 2017. Richard has spent more than 25 years working in the financial services sector, including 17 years at Jarden (previously First NZ Capital) where he held several executive roles, including Managing Director and Head of Compliance. Prior to this, Richard spent seven years as an inspector for the Securities & Futures Authority in London. Richard is an independent director of Forsyth Barr Custodians Limited, Forsyth Barr Cash Management Nominees Limited, Octagon Asset Management Limited and Te Ahumairangi Investment Management Limited, and a member of the Institute of Directors. Richard has been a director of First NZ Capital and a NZX registered Compliance Manager.

Elaine Campbell – Director
Elaine was appointed as a director in February 2019. She has more than 20 years' legal experience, primarily focusing on financial and capital markets, IT and telecommunications law. Elaine is currently Chief Corporate Officer & General Counsel of NZX-listed Chorus. During her time on the executive team at NZX from 2002 to 2008, Elaine led the legal workstream for the demutualisation and listing of NZX and was responsible for the insourcing of regulatory functions, along with chairing Smartshares. Elaine spent five years at the Financial

* Nigel Babbage and Richard Bodman resigned from NZX Board effective 22 November 2022 and 31 December 2022 respectively.

** Rob Hamilton and Rachel Walsh were appointed to the board effective 12 October 2022.

*** Dame Paula Rebstock was appointed to the Board effective from 1 February 2023.

Markets Authority as Director of Compliance before joining AMP as an executive director and General Counsel. She has previously worked in the UK and USA for multinational Sun Microsystems.

Rob Hamilton** - Director

Rob was appointed as a director in October 2022. He will take over the Board Chair role from James Miller in April 2023 subject to confirmation at the annual shareholder meeting.

Rob is a respected member of the capital markets and finance community in New Zealand, with more than 30 years' experience in senior executive and governance roles. Rob is currently an independent director of Westpac New Zealand Limited, Tourism Holdings Limited and Oceania Healthcare Limited. He was previously Chief Financial Officer of SkyCity Entertainment Group Limited and a Managing Director and Head of Investment Banking at Jarden (formerly First NZ Capital).

Rob is also a trustee of the Auckland Grammar School Foundation Trust and has previously been a Board member of Auckland Grammar School and the New Zealand Olympic Committee.

Peter Jessup – Director

Peter joined the NZX Board in January 2022, following his appointment to the Technology Sub-committee in April 2021. He brings more than 35 years' financial markets IT experience – including trading, surveillance, clearing, depository and settlement systems. Prior to establishing an independent consultancy in 2018, Peter was Senior Vice President at Nasdaq's Global Technology Services group, leading an international team of software product engineers and support personnel of over 250 across four geographical locations. Peter previously worked for NZSE (New Zealand Stock Exchange), where he played a key role in automation of the exchange, including the implementation of electronic settlement and automated trading technology.

Dame Paula Rebstock*** – Director

Dame Paula joined the NZX Board in February 2023. She is a leading Auckland-based economist and company director, who was made a Dame Companion of the New Zealand Order of Merit in 2015 for services to the State. Dame Paula has extensive professional experience in corporate and public services governance. She is Deputy Chair of NZX-listed Vector, and also serves on unlisted entities including AIA Sovereign Insurance New Zealand, Auckland One Rail, Chair of Asia Pacific Healthcare Group, and Sealink New Zealand among others. Dame Paula is a former Chair of the New Zealand Commerce Commission, and the Accident Compensation Corporation (ACC); was a Deputy Chair of KiwiRail, and a Director of Auckland Transport. She is a member of the Clearing, Nominations and Human Resources and Remuneration committees.

Rachel Walsh** – Director

Rachel was appointed as a director in October 2022. She is a senior financial executive and a Fellow of CAANZ. She is the Chief Financial Officer of Datacom Group and a member of the External Reporting Advisory Panel (XRAP). Rachel was previously CFO at listed healthcare company Abano Healthcare Group. She has worked at Rank Group Limited where she was involved in private equity acquisitions and divestments, debt raising in the US markets and financial reporting in the US market and under International Financial Reporting Standards.

Ms Walsh has also worked at PricewaterhouseCoopers as a Director in Audit. She is a member of the NZX Audit and Risk, Clearing and Technology committees.

Lindsay Wright – Director

Lindsay was appointed as a director in February 2018. She has more than 30 years' financial services and funds management experience locally and globally. Lindsay is CEO of Funds Management at Sun Hung Kai & Co. She has held a range of senior roles in the funds management sector both globally and regionally (APAC) for Matthews Asia, BNY Mellon Investment Management, Invesco Hong Kong, Harvest Funds and Deutsche Asset Management. Lindsay started her career with Bankers Trust, becoming CFO/COO before moving to Deutsche Asset Management. From a governance perspective she has served as Deputy Chair of the Board and Chair of the Audit and Risk Committee of the Guardians of the NZ Super Fund, and as a director of Kiwibank. Lindsay has a Bachelor of Commerce from the University of Auckland and is a Fellow of the Hong Kong Institute of Directors.

Our **Leadership Team**

Mark Peterson – Chief Executive
Mark joined NZX in May 2015 and became Chief Executive in April 2017. He has 30 years' experience in financial services covering the capital markets, private wealth, institutional and retail banking, and insurance. Mark previously worked as the Managing Principal of ANZ Securities, and before that held senior management roles with First NZ Capital, ANZ and The National Bank of NZ.

Graham Law – Chief Financial & Corporate Officer
Graham joined NZX in November 2017. He has considerable experience working across the financial and professional service sectors in New Zealand and the United Kingdom. Graham previously worked as Head of Finance at ACC, and prior to this was Managing Director and Chief Financial Officer at AMP Capital Limited. Graham brings expertise in strategic leadership, corporate governance, and risk and financial management.

Jeremy Anderson – General Manager, Capital Markets Development
Jeremy joined NZX in March 2017. He has significant experience working in the agribusiness, technology and financial service sectors across Australia and New Zealand. Prior to joining NZX, Jeremy led and executed Vodafone New Zealand's agribusiness strategy. Since working for NZX he has led the NZX Agri business, established and led the Information Services business and now leads the Capital Markets Development business. His areas of expertise include; leadership, strategy development, sales management and innovation.

Kristin Brandon – Head of Policy & Regulatory Affairs
Kristin joined NZX in 2007 and is responsible for leading the development of NZX's market rules, and managing NZX's regulatory relationships. Kristin has extensive experience in financial services law, having previously worked in legal roles in corporate and commercial, and financial services teams at DLA Piper and Chapman Tripp in New Zealand, and Dechert LLP in London. Kristin holds an LLB(Hons) and BCA (accounting major) from Victoria University in Wellington.

Robert Douglas – Chief Information Officer
Robert joined NZX as the Chief Information Officer in February 2021. He has over 27 years' experience in financial services, including leading large teams in real-time technology environments. Prior to joining NZX, Robert was the Chief Operating Officer at Verifone NZ and has held previous roles as Head of ANZ Bank Institutional, Corporate and Commercial Operations, the Head of Technology at First NZ Capital and the Chief Information Officer of Markets Business Technology for ANZ Bank based in Australia.

Felicity Gibson – General Manager, Market Operations
Felicity joined NZX in March 2014 and leads the Market Operations team, covering the capital and energy markets' clearing businesses. Before joining NZX, Felicity held capital markets legal and regulatory roles in New Zealand and the United Kingdom, including with the FMA in New Zealand and FCA in the United Kingdom. Felicity holds an LLB and BA (Geography major) from the University of Otago.

Lisa Turnbull – CEO, Wealth Technologies
Lisa joined NZX in November 2016 and has led the growth of the Wealth Technologies platform business from

its start-up phase. She is a Chartered Accountant with more than 30 years' experience in financial services with a career spanning disciplines across software as a service, custody, fund administration, investments, risk & compliance, insurance and banking. Lisa previously worked for the ASB Bank and Sovereign Insurance holding leadership roles across finance, investments, distribution and operations.

Sarah Minhinnick – General Manager, Capital Markets Origination
Sarah joined NZX in February 2020. She has deep experience in capital markets – including as a Director of Capital Markets at Bank of New Zealand, and began her career as a lawyer with Freshfields Bruckhaus Deringer LLP New York and Russell McVeagh. She has a Bachelor of Commerce (majoring in Economics), and a Bachelor of Laws with Honours, both from the University of Auckland. Sarah also holds a Master of Laws (in Corporate Law and Finance) from New York University.

Hugh Stevens – CEO, Smartshares
Hugh joined NZX in February 2018 with extensive fund management industry experience gained in New Zealand and abroad. Hugh is the former Head of Private Equity and Real Estate Fund Services for BNP Paribas based in Paris, France, and prior to that was Head of BNP Paribas Securities Services New Zealand. Before BNP Paribas, Hugh worked for JP Morgan in London where he held several executive roles. Hugh holds an MBA from London Business School, a Bachelor of Engineering (Hons) from the University of Canterbury, and a Bachelor of Science from Victoria University of Wellington. Hugh announced his resignation from Smartshares in January 2023.

Nick Morris – General Manager, Strategic Delivery
Nick joined NZX in February 2016 and leads the strategic delivery function, including derivatives, energy and environmental markets. Nick has extensive financial markets experience both in exchange traded and over the counter products. Before joining NZX, Nick held markets-based roles at Bank of New Zealand, and at Medley Global Advisers in central bank policy research. Nick holds a BCom (accounting and tax major) from the University of Canterbury.

Joost van Amelsfort – CEO, NZ RegCo
With the establishment and structural separation of NZX's new regulatory agency NZ RegCo on 10 December 2020, Joost, formerly Head of Market Supervision became Chief Executive of NZ RegCo. Joost has more than 20 years' legal experience advising capital markets Participants, including roles with Simpson Grierson and Linklaters LLP, London and Dubai. Joost's particular areas of expertise include corporate governance, equity and debt capital markets, and mergers and acquisitions.

NZ RegCo
NZ'S LISTED
MARKET REGULATOR

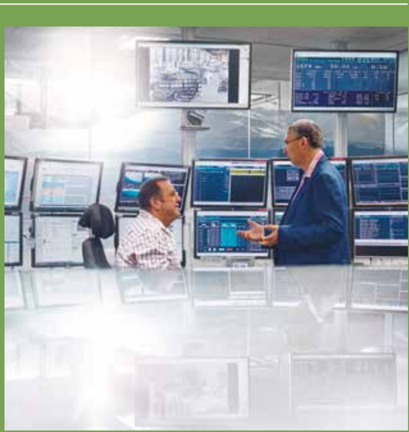
ESG at a glance

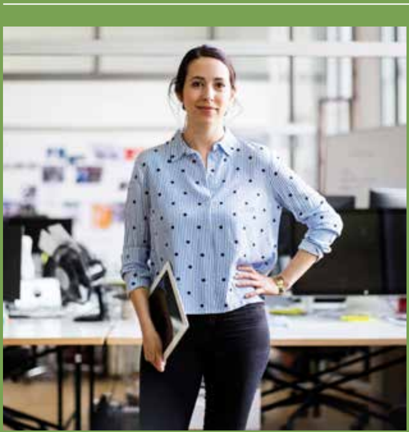
Net carbonzero certified

by Toitū Envirocare (for 2021 and 2022)

371.3 tonnes CO_2e

26.0% reduction on 2019 baseline





29%

women in management and senior leadership roles

89.6%

of our electricity came from renewable sources (September 2022 – New Zealand Energy Quarterly)

79%

increase in Green, Social and Sustainability (GSS) bonds

14.7%*

gender pay gap (compared with 25.0% gender pay gap for NZ financial services and insurance industry)

* Internally calculated, unaudited

Operating Responsibly

NZX's focus is to create value while delivering a positive impact on society and the environment.

NZX operates New Zealand's equity, debt, funds, derivatives and energy markets. We are also a financial services provider, and a market regulator. As New Zealand's public market operator we have a key role in connecting buyers and sellers in a transparent and efficient way, ensuring financial stability and sustainable growth in New Zealand's capital markets.

Public markets will continue to play an important role in facilitating the flow of capital towards decarbonising the New Zealand economy and empowering sustainable finance.

It is important stakeholders consider both the financial and non-financial measures of our performance in how we deliver sustainable long-term value. The four "Ps" – Planet, People, Prosperity and Principles of governance – are the core pillars of NZX's environmental, social and governance (ESG) approach.

The NZX Board approved an ESG strategy in November 2022 that lays out our ambitions. Targets and implementation plans will be advanced in 2023. This aligns with our organisational purpose, vision and strategy, and with New Zealand's long-term sustainability goals and international commitments.

Our ESG performance reporting for 2022 has been prepared in accordance with the Global Reporting Initiative (GRI) Standards. It provides comprehensive disclosure of our performance against key ESG metrics we track. The GRI Content Index can be found on page 126 of this report.

As a business, NZX is committed to taking credible action on climate

change and being transparent about our action and impact. This report provides enhanced climate reporting in accordance with Aotearoa New Zealand Climate Standards (ANZCS) on a voluntary basis, ahead of this reporting becoming mandatory next year.

In 2022 NZX achieved net carbon zero certification from Toitū Envirocare for the 2021 year and again received certification for the 2022 year in early 2023. We are one of the first stock exchanges in the world to reach net zero.

NZX is a signatory of the United Nations Sustainable Stock Exchanges (SSE Initiative). We want to align with international best practice for stock exchanges.

Robust governance, including through promoting updates to the Code and ESG Guidance Note, is paramount to the role that NZX plays in overseeing the integrity of New Zealand's public markets.

Continuing to have a strong focus on advancing diversity and inclusion in the NZX Group workforce remains essential to our business success and to better reflect the customers, businesses and country we serve.

NZX is focused on attracting more female managers, executives and governors and providing them with leadership development. Encouraging more young graduates to work at NZX – alongside senior staff who will mentor them – is a priority, especially in a time of global skill shortages.

NZX provides our employees a paid day's leave each year to volunteer in our communities and we are supportive of events that provide support to those in need. In 2022 examples included collecting for the Cancer Society on Daffodil Day, working at Chained Dog Rehabilitation & Rehoming NZ, and participating in the New Zealand Financial Markets Golf Classic that supports charities each year (see case study on page 35.

Our **people**

At NZX we are passionate about working with our customers and stakeholders to generate wealth integral to New Zealanders' prosperity. This allows New Zealand companies, investors and savers to get ahead.

Our people are our greatest asset and critical to the success of NZX achieving our strategic goals and a high level of customer service. We strive to create a culture that nurtures talent, embraces diversity and rewards outstanding performance.

We are committed to equal opportunity in the workplace, the Living Wage, and we embrace the insights and values from all employees to ensure we make improvements to their lives – and that of our customers – every day. Our organisation is aware it is action, not just words that count.

To support business growth across the group and market stability, our workforce grew by 26.4 full time equivalents in 2022.

Challenging labour market

The tight labour market in 2022 continued to be challenging, which resulted in high vacancy levels and significant wage pressure. To address the impact of the talent shortage and to remain competitive, we reviewed our NZX Graduate programme to make NZX more attractive to prospective employees. As a result, we welcomed an intake of seven university graduates in February 2023. These graduates will be supported with on-the-job training and a mentor.

Skills for the Future (training & development)*

$1,319 per FTE

2021: $981

Diversity and inclusion

Our aim is to have at least 40% women and 40% men in each workforce group. Our commitment to gender pay equity and a fair working environment continues. We continue to meet this goal at the workforce level and increasing the number of women in senior roles remains a priority. Our senior leadership team is made up of 36% female executives and we actively participate in industry groups, such as Champions for Change and Global Women.

* Internally calculated, unaudited

Gender and Age Diversity of governance bodies (Headcount)

Percentage of individuals within the organization's governance bodies in each of the following diversity	No of Males	No of Males (%)	No of Females	No of females (%)	Total
Under 30 years old					
30 – 50 years old	1	50%	1	50%	2
Over 50 years old	11	73%	4	27%	15
Total	**12**		**5**		**17**

Gender and Age Diversity of Workforce (Headcount)

Percentage of employees per employee category in each of the following diversity categories:	No of Males	No of Males (%)	No of Females	No of females (%)	Gender not declared	Total
Under 30 years old	48	68%	23	32%		71
30 – 50 years old	91	54%	78	46%		169
Over 50 years old	40	60%	27	40%		67
Not declared	8	62%	5	38%		13
Total	**187**	**58%**	**133**	**40%**	**5**	**325**

Percentage of employees per employee category in each of the following diversity categories:	No of Males	No of Males (%)	No of Females	No of females (%)	Gender not declared	Total
CEO + EXEC	7	64%	4	36%		11
Management	44	72%	17	28%		61
Workforce	136	55%	112	45%		248
Employees Overall	**187**	**58%**	**133**	**40%**	**5**	**325**

** Disclosed genders as at 31 December 2022

Employee Engagement (Gallup Score)

4.25

2021: 4.09

Health & Safety (TRIR)

1.16

2021: 0.40

We continue to reduce our mean gender pay gap (now at 14.74% – well below the financial and insurance industry average).

Through our graduate programme and IT summer internships, we are increasing our workforce diversity. We value the input and skills people from a broad range of backgrounds and ethnicities provide to our business. As an example, in the last year Smartshares employed new staff from India, Brazil, Sri Lanka, Australia, China, Vietnam, Russia, Singapore, the Cook Islands, Philippines, Samoa, Scotland, Chile, Zimbabwe, Norway and Nepal.

Engagement

The NZX engagement survey is the tool used to measure engagement, motivation and commitment of staff to NZX. It provides insights into employee views – what is working and where improvements can be made. Pleasingly, the two surveys conducted in 2022 showed a consistent lift in overall engagement. The engagement score at the end of 2022 was 4.25 out of 5.0 – up from 4.09 in 2021 – with a participation rate of 94%.

As a result of staff feedback in the May 2022 survey, it was agreed a refresh of our Purpose and Vision would be beneficial. This resulted in staff representatives from across our business having direct input into our future focus by creating and designing our new Purpose and Vision. It can be found on page 22 of this report.

Health and Wellbeing

Active management of COVID-19 risks continued to support a healthy workforce through the third year of the pandemic. Our people continued to show resilience and agility in adapting to ensure continuity of market operations and other essential customer-facing services.

Our health and safety record at NZX remained strong with a Total Recordable Injury Rate (TRIR) of 1.16 incidents per 200,000 hours worked.

Our absentee rate for the year was 2.2 days per employee – up from 1.38 in 2021– reflecting appropriate use of sick leave provisions during the year.

CASE STUDY

Relying on help, kindness and support from others is essential. That is why the generous work The Little Miracles Trust does is inspiring, greatly needed and deeply appreciated by thousands of Kiwi families every year.

Supporting our community

Alongside our people, supporting the success of our community and country is a key focus for NZX. In 2022 we were proud to help raise funding for The Little Miracles Trust as co-hosts of the NZ Financial Markets (NZFM) Charity Golf Classic.

The Little Miracles Trust is an incredible not-for-profit charity set up to provide support and resources to parents and whānau going through the stress and anxiety of premature and sick babies that require neonatal care.

Relying on help, kindness and support from others is essential. That is why the generous work The Little Miracles Trust does is inspiring, greatly needed and deeply appreciated by thousands of Kiwi families every year.

To facilitate this fundraising, NZX was proud to co-host the NZ Financial Markets (NZFM) Charity Golf Classic for the fifth consecutive year alongside the New Zealand Financial Markets Association (NZFMA).

The NZFM Charity Golf Classic is New Zealand's largest charity golf tournament. It has raised more than $1 million for New Zealand children's charities over the past 32 years.

What makes it truly special – and a highly regarded event in the capital markets calendar year – is that it is one of the only events in New Zealand where a number of market participants come together in support of charity.

Over the course of the weekend, through the golf tournament, gala dinner, silent and live auctions, the NZFM Charity Golf Classic collectively donated $42,000 to The Little Miracles Trust.

Recognising the success and significance of the NZFM Golf Classic, NZX is committed to sponsoring the event for the long-term and, in 2023, NZX will take over as the primary sponsor from the NZFMA.

Already, planning is well underway for another fantastic charity weekend, and we are pleased to support The Little Miracles Trust as our chosen charity for another year.

Through the NZFM Charity Golf Classic and a range of other initiatives – including the opportunity for charitable organisations to open trading and have messages displayed on our tickers across Wellington and Auckland – we look forward to supporting more worthy causes across New Zealand.

Our
Environment

Increasing transparency
Putting credible information in the hands of investors to enable informed decision-making is a key driver for NZX's push to be more transparent about our environmental performance. We are committed to telling our story.

A significant step this year is NZX's first ever assessment of our environmental disclosures under CDP. CDP is an independent body that provides comprehensive assessments of companies' and cities' environmental disclosures around the world. Their assessments are consistent with TCFD and are used by a wide range of decision makers in the financial markets.

CDP's ratings are retrospective and ratings released in December 2022 reflect NZX's 2021 financial year. Our C rating indicates an "awareness" level of maturity towards environmental stewardship in 2021 and is in line with the global average and industry average. It is also consistent with other broader ESG ratings we have received, such as Forsyth Barr (C+).

Understanding how we impact the climate
Using robust tools to measure and independently verify the sources of our greenhouse gas (GHG) emissions across 2019, 2020 and 2021, we have developed a good understanding of the main ways our business operations impact the climate. To date we have measured, and independently verified, all Scope 1 and 2 emissions as well as some Scope 3 emissions such as business travel, electricity transmission losses, and employees working from home. Air travel is consistently our single highest source of GHG emissions, with electricity being the second highest.

The range of Scope 3 emissions measured were selected on the basis of a screening of our full value chain for an estimated level of climate impact. In 2023 we will broaden the boundary of Scope 3 emissions that we measure, for a more complete picture of our climate impact.

Reducing our emissions from travel and electricity
Air travel emissions in 2022 reduced 44.2% compared to air travel emissions in the 2019 baseline year. Taking advantage of new ways of working during the pandemic has resulted in greater uptake of online meeting technology among NZX and our customer base, resulting in less air travel being required.

NZX implemented two emissions reduction initiatives in 2022, focused on each of our two major sources of GHG emissions, namely air travel and electricity. One such initiative was the launch of an internal Emissions-Efficient Guide To Air Travel. This guide provides business travellers with information on ways to reduce emissions when travelling. NZX is focused on striking a balance between flying to engage with customers (and doing so in the most effective and efficient way) with the impact on the environment.

In 2022 we also identified and committed to emissions reduction initiatives that reduce electricity usage through active management of the state of the art technology in our new Auckland office. Emissions and cost benefits will flow through in 2023.

Setting targets

NZX is committed to supporting New Zealand's efforts under the Paris Agreement to limit average temperature rise to below 1.5˚. In 2022, NZX achieved a gross reduction of -26% compared to our 2019 39 baseline year.

In 2023, NZX intends to develop and set interim and long-term, science-based emissions reduction targets in line with keeping global warming to below 1.5˚.

-26%

reduction in gross emissions compared to 2019 baseline

NZX Greenhouse Gas (GHG) Emissions

Scope	Emissions sources CO_2-e	2019 Tonnes	2020 Tonnes	2021 Tonnes	2022 Tonnes
Scope 1	Direct Emissions (diesel)	1.9	5.6	4.2	8.8
Scope 2	Electricity purchased	48.1	41.1	39.8	51.5
Scope 3	Air Travel - Domestic - Short haul international - Long haul international	212.1 33.6 174.9	95.9 8.2 43.7	84.5 1.3 –	155.1 22.2 65.2
	Accommodation	8.0	4.0	3.2	9.2
	T&D losses for purchased electricity	4.3	3.7	3.2	4.7
	Fuel Emissions (rental and other cars)	10.6	4.8	5.3	5.7
	Working From Home	–	9.3	26.5	15.0
	Freight	4.2	0.5	–	26.6
	Office Waste	2.3	3.6	1.8	7.2
	Recycling	1.8	0.1	0.1	0.1
Total		**501.9**	**220.5**	**169.9**	**371.3**

* 2022 and prior year figures audited by Toitū Envirocare during the current period; where prior year data has been adjusted during the audit process, restatement of audited data is provided here.

Strengthening climate disclosures

The introduction of mandatory climate-related financial disclosures in New Zealand heralds a new era for many listed issuers, investment scheme managers and others. NZX welcomed the publication of the first Aotearoa New Zealand Climate Standards (ANZCS) by the External Reporting Board in December 2022. They are consistent with the Taskforce for Climate-related Financial Disclosures (TCFD) and other international frameworks for climate disclosures.

NZX is a climate reporting entity as defined by the standards. This means NZX is subject to mandatory reporting beginning with the 2023 financial year and will deliver its first climate statement in 2024. Separately, Smartshares is a climate reporting entity under the standards as manager of an investment scheme. Smartshares is subject to mandatory reporting starting with the 2023/24 reporting year and will deliver its first climate statement mid-2024.

Ahead of this NZX made significant progress in 2022 toward meeting the incoming standards and is voluntarily reporting our progress in this report. A summary is provided on page 126.

Oversight of climate risk

Governance oversight of climate risks and opportunities is essential for any company. NZX's Board of Directors is the governance body responsible for oversight of our climate-related risks and opportunities, and are supported by the Audit and Risk Committee for monitoring climate-related risks.

Respective management committees are delegated the responsibility of monitoring and managing climate-related opportunities and risks, both current and emerging.

A significant review of both physical and transition climate-related risks was undertaken by NZX management during 2022. New risks identified have been integrated into our Risk Management Framework and cascaded to business owners for further assessment and management. We expect to mature our climate risk management further in 2023 including the addition of scenario analysis.

In addition, Smartshares contributed to a financial industry initiative coordinated by the Financial Services Council to develop a common set of scenarios for investment emission scenario analysis. This work will assist fund managers such as Smartshares to advance their readiness for ANZCS disclosures and through this provide information for customers on how their funds may be impacted under various climate change scenarios.

CASE STUDY

"Our carbon footprint may be small, but we're taking action now to contribute our fair share to global climate action efforts."

Achieving net carbonzero in 2022

This year NZX proudly achieved Toitū net carbonzero certification in line with ISO 14064-1(2018) for both 2021 and 2022. The independent verification of our emissions, compensating for unavoided emissions, and certification as net carbonzero by Toitū Envirocare meets international standards and aligns with the practice for science-based, transparent climate performance claims. This programme also aligns to ISO14064:1 and the Greenhouse Gas Protocol corporate standard.

Committing to the Toitū net carbonzero programme in 2021 has enabled NZX access to rigorous tools to understand, and independently verify, our GHG emissions profile and to confidently plan for the future. Verification of our 2019, 2020 and 2021 GHG emissions will help establish a robust evidence base from which to set targets against a 2019 baseline year.

The table on page 37 shows that emissions in 2022 were 26.0% less than emissions in 2019, our baseline year, which keeps us on track to meet the 2025 gross emissions reduction target. Emissions were 118% more than 2021 due to the extreme travel restrictions of the pandemic preventing normal business travel activity in 2021.

While we take action to reduce emissions, we also proactively offset our impacts through the purchase of high-quality carbon credits from New Zealand-based sources. Carbon credits purchased in 2022 address United Nations Sustainable Development Goals #13 (climate change) and #15 (life on land). The projects will deliver biodiversity, conservation, watershed protection, and erosion control benefits.

NZX's Chief Executive Mark Peterson explains: "Our role as market operator drives much of the influence we have on climate action in New Zealand. Our credibility in that leadership role is underpinned by the direct action we're taking to deliver strong environmental, social and governance performance in our own business.

"Our carbon footprint may be small, but we're taking action now to contribute our fair share to global climate action efforts."

Our Markets & Economic **Performance**

As New Zealand's Exchange we are passionate about working with our customers and stakeholders to grow the markets NZX operates, which generate wealth integral to Kiwis' standard of living, and New Zealand companies getting ahead.

To support the growth and development of our core markets business, and to ensure we are well connected to New Zealand investors, NZX owns Smartshares, a New Zealand issuer of listed Exchange Traded Funds, and KiwiSaver provider SuperLife.

NZX provides wealth management services for New Zealand advisers via our Wealth Technologies business.

NZX is also responsible for developing, consulting on, and enhancing the market rules, practices and policies under which NZX's markets operate (see www.nzx.com and case study on NZX Corporate Governance Institute on page 42)

NZX makes a significant contribution to New Zealand's economy, both directly and indirectly via companies that are listed on the

GDP contribution of S&P/NZX 50 companies was

$59.4b

in 2022

public markets. Around two million New Zealanders are investors through their KiwiSaver accounts and many more though online platforms such as Sharesies.

The value that NZX has added to the NZ economy since 2016 has been substantial when compared to our gross revenue. Similarly, constituents of the S&P/NZX50 index contribute significant value to the New Zealand economy.

The NZX Main Board covers 181 listed issuers with a market capitalisation of $163.48 billion.

The NZX Debt Market supports 52 listed issuers with $52.89 billion outstanding on the market. There are 154 financial instruments listed on the NZX Debt Market.

S&P/NZX50

The GDP contribution of S&P/NZX 50 companies was approximately $59.4 billion in 2022, compared to $72.4 billion in 2021. Combined gross revenue approximated $110 billion. On average, share of value added to gross revenue was 54%, down from 65% in 2021. This means that, in 2022, for every dollar of revenue generated, companies in the NZX 50 contributed 54% directly to the New Zealand economy.

The lower result for 2022 is reflective of both changes in market conditions and higher costs most businesses would have experienced. While gross revenue was higher as compared to 2021, so were costs, resulting in higher operating expenses and lower operating profit.

NZX's economic contribution

In 2022, NZX directly contributed $194 million to the New Zealand economy, up 9% from $178 million in 2021.

Despite challenging market conditions, NZX's share of value added to gross revenue has held steady at 69% (70% in 2021). This means that for every dollar of revenue generated, in 2022 NZX contributed 69% directly to the New Zealand economy in the form of labour (wages or salaries), return on capital or taxes.

Internally we have a workforce of 319.1 full time equivalents (FTEs) – adding 26.4 FTEs in 2022 to support business growth and paid a total of $41 million in salaries.

* Data is sourced from financial statements and calculated internally

Growing interest in GSS bonds

Along with providing investors with ready access to world-leading companies, the markets operated by NZX enable New Zealand companies and other organisations to raise capital that directly leads to value creation for businesses, society and our environment.

As well as capital raising to strengthen balance sheets, funds are raised via NZX-operated markets to provide for a range of wellbeing initiatives such as social housing, and environmental and climate change focused projects.

Green, Social and Sustainability (GSS) bonds issued or raised in 2022 increased 79% to $2.7 billion - up from $1.5 billion in 2021. GSS bond issuances include those from Genesis Energy, GMT Bond Issuer, Precinct Properties, Transpower, Contact Energy, and Kāinga Ora.

We are proud to help issuers achieve their ESG goals, meet investor demand, and contribute towards the decarbonisation of New Zealand.

In 2022, NZX directly contributed*

$194m

to the New Zealand economy

9%

up from $178 million in 2021*

*Internally calculated, unaudited

CASE STUDY

NZX Corporate Governance Institute

In August 2022 NZX announced the establishment of a new institute as a centre of excellence for corporate governance in New Zealand's listed companies.

It aligns with NZX's approach of making continuous improvements to our own governance settings to ensure they are fit for purpose. This includes the creation of NZ RegCo in 2020 as a standalone entity for frontline market regulation.

NZX Chair James Miller says the purpose of the new body – the NZX Corporate Governance Institute, or CGI – will be to assist NZX by delivering recommendations in relation to the development of the NZX Corporate Governance Code and rule settings that apply to the corporate governance practices of issuers on the NZX Main Board.

"The Institute will shift away from developing assertion-based policy and move to delivering outcomes supported by evidence and academic research. The Institute will aim to be a market leader for corporate governance settings that are appropriate for a leading, innovative, regional stock exchange," Mr Miller says.

NZX's corporate governance policy settings provide key investor protections which help to promote and facilitate the fair, orderly, and transparent operation of NZX's markets to support NZX in complying with its market operator license obligations.

The aim of the CGI will be to ensure the NZX Main Board has settings in place that will improve performance and increase shareholder value in a sustainable manner, while lowering issuers' cost of capital. It will also assist NZX in delivering corporate governance policies that provide investor protections which are proportionate to the size of the NZX Main Board and the compliance requirements on issuers. NZX's settings need to reflect that issuers on the NZX Main Board compete for capital in the context of the Australasian capital markets.

The Institute, which first met in November, will enhance the success of New Zealand's capital markets by ensuring key stakeholders have a more active role in the creation of the corporate governance standards applying to the listed market. It will also provide investors and other stakeholders access to appropriate information about issuers' corporate governance practices to enable informed voting and investment decisions.

The NZX Board appoints the members of the Institute and any associate members. It is being chaired by Hamish Macdonald, NZX's former General Counsel, Company Secretary and Head of Policy.

The CGI contains a high calibre and broad cross section of members representing institutional investors, corporates, experienced board directors, shareholders and academics. To ensure alignment with Australia, NZX appointed Ian Matheson, the Chief Executive of Australasian Investor Relations Association, and a director of the ASX Corporate Governance Council.

The development of the CGI follows public consultation in 2021 on the NZX Corporate Governance Code. It will initially be convened for an establishment phase of one year, after which NZX will assess its effectiveness and determine whether to continue the CGI on a permanent basis.

The CGI establishment members are:

- Hamish Macdonald (Chair)
- Rachel Dunne – leading Partner specialising in equity capital markets, governance and M&A at Chapman Tripp and member of the Capital Markets 2029 Steering Committee
- Sandra McCullagh – Australian-based professional director and a former leading sell-side analyst for Credit Suisse Australia
- Stuart McLauchlan – is Chair of Scott Technology and a director of EBOS Group and Argosy Property
- Oliver Mander – Chief Executive, New Zealand Shareholders' Association
- Ian Matheson – Chief Executive, Australasian Investor Relations Association and a cross over member from the ASX Corporate Governance Council
- Sarah Miller – Member of Listed Companies Association (former Chair), Serko Executive
- Sam Porath – Chair, New Zealand Corporate Governance Forum and ACC portfolio manager
- Helen Roberts – a leading finance professor from Otago University focusing on corporate governance
- Anne Urlwin – a leading professional director (Precinct Properties, Summerset Group, Vector Ltd and Ventia) and a member of the Council of the Institute of Directors

Corporate **Governance**

NZX's shares are quoted on the NZX Main Board. NZX also has a subordinated note quoted on the NZX Debt Market.

In this part of the annual report, we disclose the extent to which we have followed the recommendations set out in the NZX Corporate Governance Code 2022 (NZX Code). The information in this section is current as at 31 December 2022 and has been approved by the board of directors of NZX.

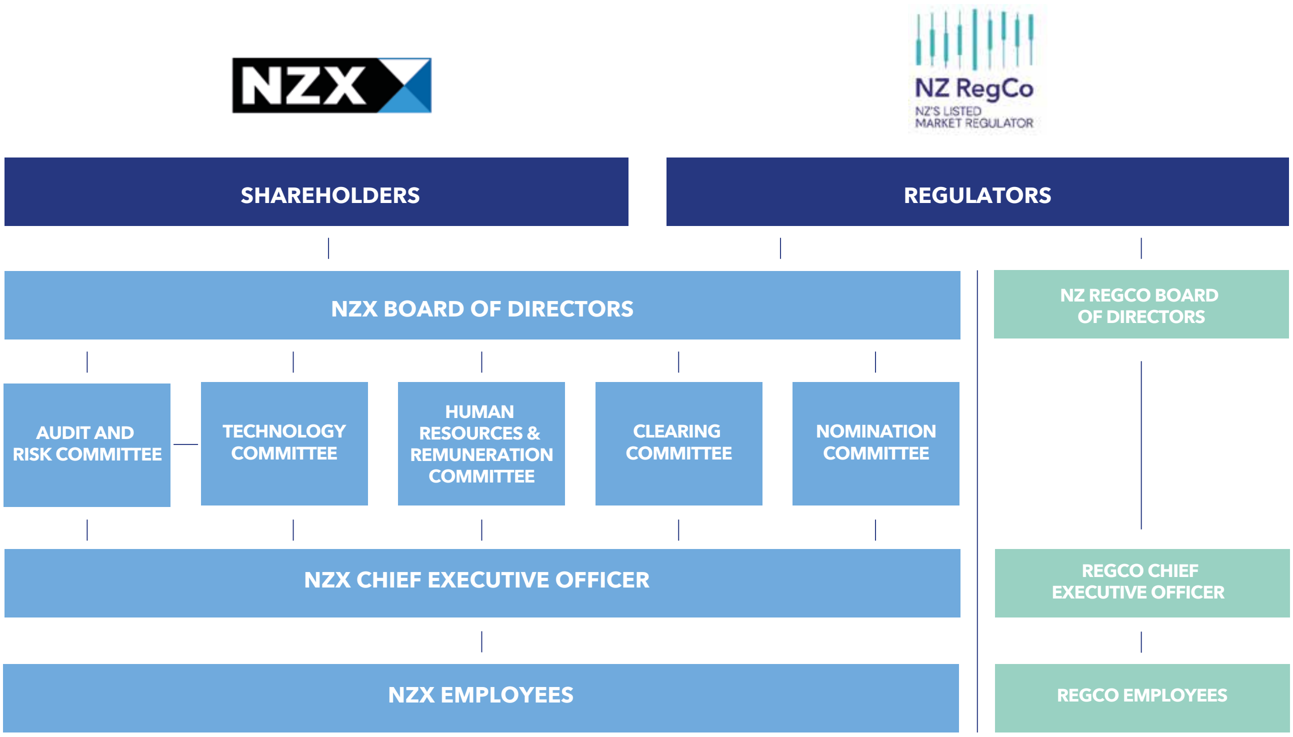
NZX's board is committed to maintaining the highest standards of governance by implementing a framework of structures, practices and processes that it considers reflect best practice. NZX's corporate governance policies and procedures, and its board and committee charters, document the framework and have been approved by the board.

The framework has been guided by the recommendations set out in the NZX Code and the requirements set out in the listing rules. The board's view is that NZX's corporate governance framework has followed these recommendations and requirements in the year to 31 December 2022 (reporting period), except for recommendation 8.5 of the NZX Code as explained below.

The corporate governance framework is regularly reviewed by the board against the corporate governance standards set by NZX, any regulatory changes, and developments in corporate governance practices.

The key corporate governance documents referred to in this section are available from NZX's investor centre.

The following diagram summarises the NZX corporate governance framework.



NZX Regulation Limited

The exchange's regulatory functions are performed by NZX Regulation Limited (**NZ RegCo**), a separate, independently governed entity. All regulatory decision-making has been delegated to the NZ RegCo Board and NZ RegCo management.

NZ RegCo does not regulate NZX as a listed issuer, or any related entities of NZX that are subject to the exchange's market rules. This means NZ RegCo also does not regulate Smartshares (as the listed issuer of the Smartshares ETFs) or NZX Wealth Technologies Limited (as an accredited NZX Participant). NZX and its related entities are regulated by the Special Division of the NZ Markets Disciplinary Tribunal.

NZ RegCo's functions in relation to regulation of operations on NZX's markets include:

- monitoring and enforcing compliance with NZX's market rules by issuers listed on NZX's markets;
- monitoring and enforcing compliance with the NZX Participant Rules and the NZX Derivatives Market Rules by participants operating on NZX's markets, such as NZX Firms, NZX Advisors and Trading Participants; and
- working with the FMA as a co-regulator under the FMCA in relation to continuous disclosure, market manipulation and insider trading.

NZ RegCo is subject to a charter, which sets out the objectives, responsibilities and framework for the operation of NZ RegCo management and the NZ RegCo Board.

NZX CODE

Principle 1 – code of ethical behaviour

Directors should set high standards of ethical behaviour, model this behaviour and hold management accountable for these standards being followed throughout the organisation.

Code of Conduct

NZX's Code of Conduct sets out the standards of conduct expected of directors (including members of committees) and employees (including secondees, contractors and consultants). The purpose of the code is to underpin and support the values that govern our individual and collective behaviour.

Training on the code is included as part of the induction process for new directors and employees.

The code requires directors and employees to promptly report material breaches of the code and sets out the procedure for doing so.

The code is reviewed at least every two years and was last reviewed in April 2022.

Financial Products Trading Policy

NZX's Financial Products Trading Policy sets out NZX's restrictions on its directors and employees buying or selling financial products. In particular:

- directors and employees may not buy or sell NZX's shares in the "blackout" periods set out in the policy (these periods occur prior to the release of NZX's financial results to the market); and
- outside of a blackout period, directors and employees must obtain consent to buy or sell NZX's shares.

Because NZX is a licensed market operator, NZX's senior managers and employees with access to market sensitive information must obtain consent to buy or sell financial products quoted on a market operated by NZX.

Training on the policy is included as part of the induction process for new directors and employees, with annual refresher training to all employees.

The policy is reviewed at least annually and was last reviewed in November 2022.

Principle 2 – board composition and performance

To ensure an effective board, there should be a balance of independence, skills, knowledge, experience and perspectives.

Board Composition as at 31 December 2022

Board Structure	Number of Directors	Gender Diversity	Average Director Tenure	Average Director Age	Diversity Characteristics
Single tier	8	5 men, 3 women	4 years, 2 months	55 years, 8 months	Education qualifications, professional experience, personal achievements, geography, gender, age

With the retirement of Richard Bodman as at 31 December 2022 and the appointment of Dame Paula Rebstock as a director of NZX as at 1 February 2023, the gender diversity of the NZX board is now 4 men and 4 women i.e. 50/50. With the retirement of James Miller at the 2023 annual general meeting, the gender diversity of the NZX board will move to 3 men and 4 women.

Board charter

NZX's board operates under a written charter, which sets out the responsibilities and framework for the operation of the board.

The charter is reviewed at least every two years and was last reviewed in November 2022.

Management of NZX on a day-to-day basis is undertaken by the Chief Executive Officer and senior managers through a set of delegated authorities that clearly define the Chief Executive Officer's and senior managers' responsibilities and those retained by the board. The delegated authorities are set out in NZX's Delegated Authority Policy. The policy is reviewed at least annually and was last reviewed in November 2022.

The board meets its responsibilities by receiving reports and plans from management and through its annual work programme. The board uses committees to address issues that require detailed consideration. Committee-work is undertaken by directors. However, the board retains ultimate responsibility for the functions of its committees and determines their responsibilities.

Nomination and appointment of directors

NZX has a Nomination Committee, which is responsible for reviewing candidates for appointment and re-election to the board and committees, and making recommendations to the board. An independent recruitment consultant may provide assistance in preparing a list of candidates for the committee's consideration. The committee meets with preferred candidates before making a recommendation to the board. Checks are done on candidates in accordance with NZX's Fit and Proper Policy. Key information about candidates is provided to shareholders in the notice of annual meeting.

At each annual meeting, current directors retire by rotation at least every three years as required by the NZX Listing Rules and are eligible for re-election. Any directors appointed since the previous annual meeting must also retire and are eligible for re-election.

NZX uses a skills matrix when selecting candidates for appointment and re-election to the board. The skills matrix outlines the ideal mix of skills, experience and diversity needed to ensure the board is equipped to provide the high standard of corporate governance required to lead NZX. If the board determines that new or additional skills are required, training is completed or a formal recruitment process is undertaken.

The matrix assesses directors against the following criteria:

- strategy and performance – expertise in respect of stock exchanges, data information, media, technology and business operations;
- quality committee leadership – skills to serve on NZX's committees; and
- connectivity to stakeholder groups such as regulators or government, the Electricity Authority, listed issuers, brokers or institutional and retail investors.

Based on these criteria, the board considers that its members currently have the balance of independence, skills, knowledge, experience and perspectives necessary to lead NZX.

Written agreement

NZX provides a letter of appointment to each newly appointed director setting out the terms of their appointment. The letter includes information regarding expected time commitments, the board's responsibilities, remuneration, independence requirements, disclosure requirements, confidentiality obligations, indemnity and insurance provisions, intellectual property rights and cessation of appointment.

Director information

The board currently comprises eight directors with diverse backgrounds, skills, knowledge, experience and perspectives. All directors are non-executive and independent.

Information in respect of directors' ownership interests is available on page 122. NZX's directors are not formally required to own NZX shares, but are encouraged to do so. In addition, there is a Share Purchase Plan for directors, the details of which are set out on page 51.

Diversity

NZX's Diversity and Inclusion Policy sets out how NZX will set measurable objectives for achieving diversity and inclusion, and how it will assess its progress towards achieving these objectives.

The policy is reviewed at least annually and was last reviewed in April 2022. Further details on NZX's diversity and inclusion are outlined on pages 33 and 34.

DIRECTOR TRAINING

Directors are expected to understand NZX's operations and undertake training and education to enable them to effectively perform their duties. This can include:

- attending management presentations in respect of NZX's operations;
- attending presentations on changes in governance, legal and regulatory frameworks;
- attending technical and professional development courses;
- attending presentations from industry experts and key advisers;
- attending the World Federation of Exchanges (WFE) conferences of which NZX is a member; and
- receiving regular educational materials.

NZX continues to support the Institute of Directors' Future Director Programme, with Victoria Newman's term as NZX's Future Director ending 31 December 2022 and Sarah Miller being appointed as NZX's next Future Director effective 1 January 2023.

ASSESSMENT OF BOARD PERFORMANCE

A detailed board evaluation was conducted in 2020 to review the performance of the board and committees across key areas, including strategy, risk management, board processes and monitoring organisational performance. This process was run by external and independent governance experts. The key findings of the process, including questionnaire responses, were reviewed by the board.

The review found that NZX's board and management are aligned strategically, including with respect to growth businesses. The review also found that progress had been made since the 2018 review in a number of governance areas including board committees, stakeholder engagement and risk management. In addition, a number of opportunities were also identified for the board to continue to develop and enhance performance.

SEPARATION OF THE CHAIRPERSON AND CHIEF EXECUTIVE OFFICER

NZX's board chair is a different person to NZX's Chief Executive Officer.

Principle 3 – committees

The board should use committees where this will enhance its effectiveness in key areas, while still retaining board responsibility.

COMMITTEES AND MEMBERS

The board uses committees where specialist skills and experience are required. As at 31 December 2022, five standing committees have been established to assist the board on matters falling within their areas of responsibility. Each committee has authority to undertake any activity set out in its charter or as authorised by a separate resolution of the board.

The board and five committees and the members of each as at 31 December 2022 are set below.

Board and committees (as at 31 December 2022)

Board of Directors

- James Miller (Chair)
- Frank Aldridge
- Rob Hamilton
- Rachel Walsh
- Richard Bodman[1]
- Elaine Campbell
- Peter Jessup
- Lindsay Wright

1. Richard Bodman resigned as a director of NZX Limited, effective 31 December 2022.

Committees

Core Committees				
Audit and Risk Committee	Human Resources and Remuneration Committee	Nomination Committee	Clearing Committee	Technology Committee
Lindsay Wright (Chair) Rob Hamilton Rachel Walsh	Frank Aldridge (Chair) Lindsay Wright James Miller Elaine Campbell Rob Hamilton	James Miller (Chair) Frank Aldridge Rob Hamilton	Frank Aldridge (Chair) Richard Bodman Elaine Campbell Rob Hamilton Rachel Walsh (Chair Elect) Peter Jessup	Peter Jessup (Chair) Anna Scott Rachel Walsh

Director meeting attendance

		Core Committees				
Director	Board	Audit and Risk Committee	Human Resources and Remuneration Committee	Nomination Committee	Technology Committee	Clearing Committee
Frank Aldridge	8/8	–	4/4	8/8	–	4/4
Nigel Babbage[1]	7/7	–	–	5/6	–	3/3
Richard Bodman[2]	8/8	5/5	–	–	3/3	4/4
Elaine Campbell	8/8	–	4/4	–	–	4/4
Peter Jessup[3]	8/8	5/6	–	–	4/4	–
James Miller	8/8	6/6	3/4	8/8	–	–
Lindsay Wright	8/8	6/6	3/4	–	–	–
Rob Hamilton[4]	1/1	1/1	1/1	2/2	–	1/1
Rachel Walsh[4]	1/1	1/1	–	–	1/1	1/1

1. Following his passing, Nigel Babbage vacated his position as director of NZX Limited effective 20 November 2022 (along with his positions on the Clearing Committee and Nomination Committee).
2. Effective 12 October 2022, Richard Bodman vacated his position on all committees, other than the Clearing Committee, which he remained a member of until his retirement on 31 December 2022.
3. Peter Jessup was appointed as a director of NZX Limited effective 1 January 2022. Following his appointment, Peter Jessup was appointed to the Technology Committee as well as the Audit and Risk Committee. On 31 December 2022, Peter Jessup vacated his position on the Audit and Risk Committee (remaining a member of the Technology Committee) and was appointed to the Clearing Committee on the same date.
4. Rob Hamilton and Rachel Walsh were appointed as directors of NZX Limited effective 12 October 2022. Following her appointment, Rachel Walsh was appointed to the Technology Committee, Clearing Committee and Audit and Risk Committee. Following his appointment, Rob Hamilton was appointed to the Audit and Risk Committee, Clearing Committee, Human Resources and Remuneration Committee and Nomination Committee.
5. In addition to the scheduled full day board meetings, the board held three additional meetings via VC during the year in relation to potential acquisition opportunities and the entitlement offer.
6. In addition to the scheduled meetings, the Audit and Risk Committee held an additional meeting via VC during the year to review internal policies.
7. In addition to committee attendance, NZX directors may also sit on subsidiary boards. Elaine Campbell is a director of NZX Regulation Limited and attended 7/7 scheduled board meetings, as well as an additional meeting held during the year.

External committee member meeting attendance

Committee member	Board	Audit and Risk Committee	Human Resources and Remuneration Committee	Nomination Committee	Technology Committee	Clearing Committee
Anna Scott[1]	–	–	–	–	3/4	–

1. Anna Scott was appointed to the Technology Committee effective 1 January 2022.

Audit and Risk Committee
NZX's Audit and Risk Committee assists the board to fulfil its responsibilities in relation to the NZX Group's financial practices and reporting, internal control environment, internal audit, external audit and risk management. The committee operates under a written charter, which sets out the responsibilities and framework for the operation of the committee. The charter is reviewed at least every two years and was last reviewed in November 2022.

The committee must be comprised solely of NZX directors, have a minimum of three members, have a majority of members that are independent directors and have at least one director with an accounting or financial background. The current composition of this committee complies with these requirements.

The committee's chair, Lindsay Wright, holds a bachelor of commerce degree from the University of Auckland majoring in finance and accounting, and has previously held the role of CFO of Deutsche New Zealand (previously Bankers Trust) and was also formerly Chair of the Audit Committee for the New Zealand Superannuation Fund. Lindsay's full biography is on page 25.

The committee chair and the board chair are different people.

Management may only attend meetings at the invitation of the committee and the committee routinely has committee-only time and time with the external and internal auditors without management present.

Human Resources and Remuneration Committee
NZX's Human Resources and Remuneration Committee assists the board in overseeing the management of the human resources activities of NZX, including the remuneration of employees. The committee operates under a written charter, which sets out the responsibilities and framework for the operation of the committee. The charter is reviewed at least every two years and was last reviewed in November 2022.

The committee must have a majority of members that are independent directors. The current composition of this committee complies with this requirement.

Management may only attend meetings at the invitation of the committee.

Nomination Committee
NZX's Nomination Committee assists the board in identifying and recommending to the board individuals for nomination as directors and members of committees. The committee operates under a written charter, which sets out the responsibilities and framework for the operation of the committee. The charter is reviewed at least every two years and was last reviewed in November 2022.

The committee must have a majority of members that are independent directors. The current composition of this committee complies with this requirement.

Management may only attend meetings at the invitation of the committee.

Technology Committee
NZX's Technology Committee was formed in 2020 and assists the board in oversight of the role and use of technology in executing NZX's strategy (including ICT recommendations from Capital Markets 2029), meeting regulatory requirements and standards and in supporting the function of the markets operated and cleared by NZX Clearing. The Technology Committee oversees NZX technology risk and supports the Audit and Risk committee in its overall group risk management obligations. The committee operates under a written charter, which sets out the responsibilities and framework for the operation of the committee.
The charter was last reviewed in April 2021.

The committee must have three members. The committee may have a non-director as a member (who must have skills and experience relevant to the operation of the Committee). The current composition of this committee complies with these requirements.

Clearing Committee
The Clearing Committee assists the board in ensuring that New Zealand Clearing Limited has adequate risk capital to meet its obligations as the central counterparty clearing house for NZX Clearing. The committee operates under a written charter, which sets out the responsibilities and framework for the operation of the committee. The charter is reviewed at least every two years and was last reviewed in June 2021.

The committee must have a minimum of three members. The committee may have a non-director as a member (who must have skills and experience relevant to the operation of the committee). The current composition of this committee complies with these requirements.

TAKEOVER PROTOCOL
NZX's Takeover Protocol sets out the procedure to be followed if there is a takeover offer for NZX.

The protocol is reviewed at least every two years and was last reviewed in early 2023.

Principle 4 – reporting and disclosure

The board should demand integrity in financial and non-financial reporting, and in the timeliness and balance of corporate disclosures.

CONTINUOUS DISCLOSURE

NZX's Continuous Disclosure Policy sets out NZX's arrangements to ensure material information is identified, reported, assessed and, where required, disclosed to the market in a timely manner.

NZX is committed to ensuring the timely disclosure of material information about the NZX Group and to ensuring that NZX complies with the NZX Listing Rules.

It is the responsibility of the board to monitor compliance with the Continuous Disclosure Policy. The board considers at each board meeting whether any information discussed at the meeting requires disclosure.

The policy is reviewed at least annually and was last reviewed and updated in November 2022.

CHARTERS AND POLICIES

The key corporate governance documents referred to in this section, including policies and charters, are available from NZX's investor centre.

FINANCIAL REPORTING

NZX is committed to ensuring integrity and timeliness in its financial reporting and in providing information to the market and shareholders which reflects a considered view on its present and future prospects.

The Audit and Risk Committee oversees the quality and integrity of external financial reporting, including the accuracy, completeness, balance and timeliness of financial statements. It reviews NZX's full and half-year financial statements and makes recommendations to the board concerning accounting policies, areas of judgement, compliance with accounting standards, stock exchange and legal requirements, and the results of the external audit. All matters required to be addressed and for which the committee has responsibility were addressed during the reporting period.

NZX has published its full and half-year financial statements that were prepared in accordance with relevant financial standards. The full year financial statements are set out on pages 70 – 111.

The Chief Executive Officer and Chief Financial and Corporate Officer have confirmed in writing to the board that NZX's external financial reports present a true and fair view in all material aspects.

NON-FINANCIAL REPORTING

NZX releases data on its non-financial performance metrics each month through its monthly shareholder metrics publications. It also releases quarterly revenue and shareholder metrics, and regulation metrics representing the key features of NZX's activities in regulating its markets.

This year NZX has continued to integrate its non-financial reporting and disclosures to align with its financial performance and strategy.

To support this, and provide increased clarity for shareholders and the market on our financial performance and execution of strategy, a series of five year financial and non- financial targets are now being reported.

Further information is available from the NZX investor centre.

Principle 5 – remuneration

The remuneration of directors and executives should be transparent, fair and reasonable.

DIRECTORS' REMUNERATION

Shareholders fix the total remuneration available for NZX directors. The annual fee pool limit is $522,000 and was approved by shareholders at the annual meeting in April 2022.

Before this increase, the annual fee pool for directors was last independently benchmarked in 2002, prior to listing and approved by shareholders in 2012. With the exception of accommodating appointment of additional directors, individual director fees have remained static since 2003. As a result of increasing complexities in NZX's business including increased technology requirements and regularity obligations, the board sought proposals from leading independent remuneration advisers and engaged PWC to carry out independent benchmarking for non-executive director (NED) fees at NZX Limited based on a group of 20 peers. It is essential that NZX pays market rates for fees and accordingly, the board submitted, and shareholders approved, an increase to the current director fee pool to $522,000 (which represented a comparative ratio of 72% of the market median). As there is still some way to go for the fee pool to reach the market median, NZX Limited has signalled to shareholders its intention to request further pool increases in 2023 and 2024 to seek further adjustments. In addition, a Share Purchase Plan for directors was established in 2022 (further details are set out on the following page).

The current fees paid to NZX's directors are $60,000 per annum for directors and $120,000 for the chair. Directors are not paid additional fees for being members of committees or directors of subsidiaries, with the exception of NZ RegCo, where the NZX cross-over director is paid $15,000 from 1 April 2022.

Total remuneration received by each director in 2022 is set out in Note 5 of the Statutory Information section on page 119.

External committee member remuneration is set out below.

External committee member remuneration

Committee member	Committee member fees
Anna Scott (Technology Committee)	$40,000
Hamish MacDonald (Chair of Corporate Governance Institute)	$6,250

Directors do not receive any performance, or superannuation or retirement benefits. This reflects the difference in the role of the directors, which is to provide oversight and guide strategy, and the role of management which is to operate the business and execute NZX's strategy. A Share Purchase Plan for directors was established in 2022 to align directors' incentives with shareholders, which provides that a portion of the directors' base fees will be used to acquire NZX Limited shares (except where it is not permitted for compliance purposes, or when certain thresholds are met).

REMUNERATION POLICY

NZX's Remuneration Policy sets out the principles which apply to the remuneration of NZX's directors and employees. The policy is reviewed at least annually and was last reviewed in April 2022.

As set out above, Director remuneration is paid in the form of director fees and during the past year, NZX has established a Fixed Share Purchase Plan for directors of NZX. Employee remuneration will include a mix of the following components:

- fixed remuneration (which includes base salary and KiwiSaver employer contributions);
- short-term incentive plan (which is available to senior employees);
- long-term incentive plan (which is available to members of NZX's executive team and senior management); and
- a one-off grant of $1,000 of NZX shares when an employee starts at NZX to ensure that all employees are shareholders.

NZX's short-term incentive plan is performance based, with any short-term incentive plan payment being conditional on (1) NZX's financial performance; (2) the business unit's financial and operational performance; and (3) the employee's individual performance. Potential short-term incentive plan payments are generally between 15% and 25% of base salary, depending upon the employee's seniority and role.

Under NZX's long-term incentive plan, executive team members and senior managers may be awarded NZX share rights which may convert to shares based on NZX's long-term (generally three year) performance. The plan is designed to:

- align managers' rewards with improvement in shareholder value;
- achieve business plans and corporate strategies;
- reward performance improvement; and
- retain key skills and competencies.

Chief Executive Officer remuneration

Mark Peterson commenced his role as NZX's Chief Executive Officer on 10 April 2017 and his employment term is to April 2024.

Mark Peterson's remuneration is a mix of base salary and short term and long-term incentive plan components.

Mark Peterson's base salary for 2022 was $600,000 and potential short-term incentive plan payment for 2022 was $600,000 ($300,000 for on-target performance). Mark Peterson's actual short-term incentive plan payment for 2022 was $600,000, this will be paid in February 2023. Mark Peterson's 2022 STI was based on NZX's financial performance against target and delivery against the key performance indicators set, and assessed, by the NZX Board.

Mark Peterson is currently allocated share rights under NZX's long-term incentive plan in respect of the extension of his employment term in September 2021 (with a vesting date in April 2024), with a value equivalent to $389,000 per annum. Vesting is dependent on NZX meeting performance hurdles in respect of NZX's total return to shareholders for the prior two year seven months period, and on Mark Peterson remaining an employee for the duration of the vesting period.

In 2018, 1,177,894 performance rights were issued to Mark Peterson with a five year vesting period pursuant to NZX's long-term incentive plan. On 23 June 2022, 588,947 performance rights that were issued to Mark Peterson in 2018 vested and as a result, Mark Peterson was issued 599,524 NZX Ordinary Shares. On the same date, a further 588,947 performance rights issued to Mark Peterson in 2018 lapsed.

Principle 6 – risk management

Directors should have a sound understanding of the material risks faced by the issuer and how to manage them. The board should regularly verify that the issuer has appropriate processes that identify and manage potential and material risks.

RISK MANAGEMENT FRAMEWORK

The board is responsible for the establishment and oversight of NZX's risk management framework, together with setting NZX's overall risk appetite and tolerance.

Significant risks are discussed at each board meeting, or as required.

The board has established an Audit and Risk Committee with responsibility to:

- review and provide feedback in respect of the principal risks set out in NZX's risk register;
- ensure that management has established a risk management framework which includes policies and procedures to effectively identify, manage and monitor NZX's principal risks; and
- monitor compliance with, and assess the effectiveness of, the risk management framework.

The committee reviews the risk register every quarter. The committee also reviews the risk management framework annually. The committee receives reports on the operation of risk management policies and procedures.

The executive team and senior management are required to regularly identify the major risks affecting the business, record them in the risk register and develop structures, practices and processes to manage and monitor these risks.

NZX maintains insurance policies that it considers adequate to meet its insurable risks.

The board is satisfied that NZX has in place a risk management framework to effectively identify, manage and monitor NZX's principal risks, including a Risk Appetite Statement, Conflict Management Policy, Continuous Disclosure Policy, Delegated Authority Policy, Financial Products Trading Policy, Fit and Proper Policy, IT Acceptable Use Policy (now entitled Acceptable Use of Technology Policy) and Protected Disclosures Policy.

NZX engages EY to carry out internal audit functions on various parts of its operations, including assessing the effectiveness of NZX's risk management policies and procedures. Additionally, independent assurance is provided and reviews are undertaken on matters such as risk capital, operational controls, IT/software security and anti-money laundering procedures.

KEY RISKS

NZX's material risks for 2022 and how these are being managed are outlined and discussed at pages 54 to 57.

CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL AND CORPORATE OFFICER ASSURANCE

The Chief Executive Officer and Chief Financial and Corporate Officer have provided the board with written confirmation that NZX's 2022 financial statements are founded on a sound system of risk management and internal compliance and control; and that all such systems are operating efficiently and effectively in all material respects.

Principle 7 – auditors

The board should ensure the quality and independence of the external audit process.

NZX's Audit and Risk Committee makes recommendations to the board on the appointment and removal of the external auditor. The committee also monitors the independence and effectiveness of the external auditor, and reviews and approves any non-audit services performed by the external auditor. An External Auditor Independence Policy sets out the services that may or may not be performed by the external auditor. This policy was last reviewed in May 2022.

The committee regularly meets with the external auditor to approve their terms of engagement, audit partner rotation (at least every five years) and audit fee, and to review and provide feedback in respect of the annual audit plan.
A comprehensive review and formal assessment of the independence and effectiveness of the external auditor is undertaken periodically. The committee routinely has time with NZX's external auditor, KPMG, without management present.

KPMG attends the annual meeting, and the lead audit partner is available to answer questions from shareholders at that meeting. KPMG attended the 2022 annual meeting.

KPMG has provided the Audit and Risk Committee with written confirmation that, in their view, they were able to operate independently during the year.

NZX has appointed EY to perform a number of internal audit functions. The Audit and Risk Committee is responsible for overseeing the independence and objectivity of the internal audit function and for reviewing and monitoring the internal audit work plan, reports from internal audit and management responses. The committee routinely has time with EY without management present.

Principle 8 – shareholder rights and relations

The board should respect the rights of shareholders and foster constructive relationships with shareholders that encourage them to engage with the issuer.

INFORMATION FOR SHAREHOLDERS

NZX seeks to ensure that investors understand its activities by communicating effectively with them and giving them access to clear and balanced information.

The key information channels are NZX's website, announcements and media releases, social media channels, the annual and interim report, investor days and the annual meeting.

NZX's investor centre contains annual and interim reports, investor presentations, dividend information and other information relating to NZX (including key corporate governance documents).

COMMUNICATING WITH SHAREHOLDERS

NZX's investor centre sets out NZX's Chief Financial and Corporate Officer's and NZX's Head of Investor Relations and Communication's contact details for communications from shareholders. NZX responds to all shareholder communications within a reasonable timeframe.

NZX provides options for shareholders to receive and send communications electronically, to and from both NZX and its share registrar.

SHAREHOLDER VOTING RIGHTS

In accordance with the Companies Act 1993, NZX's Constitution and the NZX Listing Rules, NZX refers major decisions which may change the nature of NZX to shareholders for approval.

NZX conducts voting at its shareholder meetings by way of a poll and on the basis of one share, one vote. Further information on shareholder voting rights is set out in NZX's Constitution.

NOTICE OF ANNUAL MEETING

NZX's annual meeting was held on 6 April 2022. The notice of the meeting was released to the market on 15 March 2022 and announced on NZX i.e. 15 working days. The notice of meeting was also posted on the NZX's website, in its Investor Centre. Whilst this met NZX's legal requirement as to providing notice, this timing did not meet recommendation 8.5 of the NZX Code to provide at least 20 working days' notice of annual meetings. The timing of the release of the 2022 notice of meeting was affected by the timetable for NZX's 2022 capital raise (which was occurring at the same time). NZX expects to provide at least 20 working days' notice for its 2023 annual meeting. The 2023 meeting will be held on 19 April 2023 in Auckland. A webcast of the meeting will be made available to shareholders.

Risk Management

Effective risk management is integral to NZX's strategic objectives. NZX Limited has established a Risk Management Framework (RMF) to ensure it has a comprehensive framework to assist with identifying, assessing, and managing its risk in a pro-active and effective manner. The RMF adopted by NZX is linked to its business strategy through consideration of risk appetite and the significant types of risks to which NZX is currently exposed as well as any emerging risks which may impact the business in the future.

Avoid the risk	Mitigate the risk	Transfer the risk	Accept the risk
NZX may choose to avoid a risk by not proceeding with an activity likely to generate the risk.	NZX may seek to mitigate a risk through Implementing or enhancing controls to reduce or remove the likelihood/ and or consequence of the risk materialising.	NZX may choose to transfer all or part of a risk to a third party e.g., outsourcing. Transferring the risk does not remove it and oversight/ monitoring the risk remain a focus	NZX may choose to accept a risk where it is either immaterial or cannot be mitigated within appetite. A formal risk acceptance process is embedded within the RMF

Risk	The risk and its impact	How we are responding
Strategic	Strategic risks that NZX faces include the composition of our business and the strategic direction we choose to take, changes in financial markets and the business environment to adapt our strategy and, where appropriate, react Underlying risks include: – Strategic Direction, Design and Innovation risk – Strategic Implementation risk – Macro Economic Environment risk – Market Competition risk	– We set a five-year strategy in 2017 which established our strategic direction through 2023. We regularly revisit this strategy (including formulating our strategy for the next five-years) and we report progress annually through our Investor Presentations – Our strategy includes diversifying operating earnings and building resilience into our business model – We refreshed our core purpose, vision and values in support of the NZX strategy in 2022 – We engage with a broad range of stakeholders and monitor changes in the business environment to adapt our strategy and react as a 'fast follower' as needed – We monitor business unit performance to identify opportunities and issues early and address any people and resourcing risks – We monitor, and report to the Board, our progress integrating recent acquisitions – We publish monthly operating metrics and quarterly revenues to enhance the monitoring of performance
Financial	Financial risks arise through various sources including: – adverse strategic decisions (including inappropriate resource allocation); – general market risk – including lower numbers of listed issuers, less listing and capital raisings, lower levels of trading activity, declines in market capitalisation and funds under management / administration (FUM / FUA); – counterparty credit risk in operating the clearing house; and – operational errors, undetected fraud or poor execution of projects that are designed to deliver the strategy Underlying risks include: – Financial Performance/ Return risk – Credit risk – General Market risk – Liquidity risk	– We assess our financial risks from both a strategic and operational perspective – We manage balance sheet and counterparty risks to an acceptable level through a framework of policies and financial controls – Our capital management takes into account both current and anticipated future market activity levels, as well as the impact of strategic decisions / investments – We regularly monitor an extensive range of financial metrics and indicators of risks across all our business units; including the progress integrating recent acquisitions – The counterparty credit risk associated with NZX's clearing function is managed by the clearing house's risk management framework, which is aligned to international practice. This model ensures that the clearing house holds sufficient prefunded capital to manage the default of the largest participant in extreme but plausible conditions. – We have a governance framework including a delegated authority policy which sets limits and outlines authority for committing NZX to expenditure – We have people, policies, processes, systems and controls in place designed to meet our operational expectations and benchmarks, and ensure project delivery effectiveness

Risk	The risk and its impact	How we are responding
Information Technology / Cybersecurity Risk	Information technology plays a critical role for our business. We recognise we are an important component to the New Zealand Capital Markets IT risk arises when the technology is not reliable or available and/or does not operate accurately. The technology environment must also be secure and resilient to external cyber threats which are evolving at an ever-increasing pace. The technology environment is also dependent on other participants in the Capital Markets ecosystem Underlying risks include: – Information Technology risk – Information Security risk (including Cyber) – 3rd Party (Outsourcing) risk – Disaster Recovery risk	– We seek to have appropriate processes, procedures, applications and resources in place to manage IT / Cybersecurity risks. We acknowledge the impact of technology related issues remains an area of critical focus and ongoing investment. – We will continue to manage against cyber risks; acknowledging that cybersecurity activities and mitigation activities need to continually evolve in a constantly changing environment. We provide staff with cybersecurity training at regular intervals throughout the year. – Within the context of a need for continuous improvement, we now actively monitor our key systems with regular reviews of availability against service levels (where applicable) and targets. Regular testing is performed on key systems / services to determine throughput and capacity and we aim to enhance our systems in a timely manner. – Observability, tools and processes are critical to ensuring our ongoing performance and monitoring of critical applications. This was a priority in 2022 and will continue to be a key focus in 2023 and beyond. – We seek to have contingency plans in place for disruptions or a loss of service to Tier 1 technology systems. As part of our enhancement plans, we intend to hold crisis planning across the capital markets ecosystem and improve our crisis incident management and communications with the market and other stakeholders – We replace ageing technology as part of lifecycle management; this is undertaken in a planned / phased approach to system architecture with security, future capacity, growth and supportability driving key design decisions – We manage changes to critical infrastructure, operating systems and applications through formal change management processes including agreed governance and quality gates – We seek to maintain active engagement with our vendor partners who provide critical systems and applications, with a key focus on ensuring partners and suppliers understand our business, objectives and criticality of all market operations. We proactively work with other strategic vendors to ensure that they have agreed roadmaps. – We have a disaster recovery testing program in place, including at least annually for financial markets systems / operations – We have a Technology Committee (a sub committee of the NZX Board). There is monthly Technology Governance Reporting in place and a standing agenda on Technology KPIs and Cyber Security at the NZX Audit & Risk Committee (ARC). – We have a Cybersecurity Strategy and Incident Response Plan. We have measures in place to identify and protect against data security threats and an integrated SOC (Security Operations Centre) with a strategic partner. – We are progressing engagement with the capital markets ecosystem through the introduction of the Technology Working Group to develop an IT roadmap for the future and to improve our engagement with the market on technology issues – We develop and train our staff and seek to have suitably qualified and experienced information technology staff – We ensure our stakeholders and regulator is informed and kept up to date on our strategy and roadmap
Compliance, Legal & Regulatory	Risk that NZX breaches its compliance, legal and regulatory conduct obligations (including for example NZX's licensed market operator license, clearing house designation order, MIS license, supervisor, regulatory and customer commitments) leading to reputational damage, adverse regulatory outcomes, fines or breach of contract Underlying risks include: – Legal risk – Regulatory risk	– We seek to mitigate compliance, legal and regulatory risks through practicing good corporate governance and adherence to internal policies and procedures – We train and educate our operational staff so they understand the obligations applicable to their role, and the related requirements, policies and procedures – We have regular independent audits and periodic reviews of our adherence to compliance, legal, regulatory and contractual obligations – We aim to engage with government, regulators and industry participants, at management, CEO and Board level, on market structure issues to promote the best and most efficient industry-wide outcomes – Where appropriate, we address regulatory concerns by developing and implementing action plans with the regulators – We include structural separation of NZX's commercial and regulatory roles as part of our regulatory model. The regulation function is carried out by an independently-governed agency and ensures enhanced conflicts management arrangements between NZX's commercial and regulatory roles.

Risk	The risk and its impact	How we are responding
Customer & Stakeholder	Risk that NZX does not focus on customers to ensure appropriate customer outcomes Underlying risks include: – Client risk – Partner/Stakeholder risk – Product risk	– We acknowledge the importance of customers within our strategy. The Group is structured around diverse customer segments in a complex ecosystem, of which NZX is a critical component. – We aim to consider the impact of NZX-driven changes on our customers, partners and stakeholders and we provide sound basis for the change alongside appropriate levels of communication – We aim to have regular and open engagement with customers, partners and stakeholders to seek feedback on our performance. – We track all our communications with our customers to ensure that there is a record of what is discussed and what follow up is required
Operational / Business Continuity	The risk of unexpected failure in the day-to-day operations caused by technical failure or people or processes Underlying risks include: – Operational Process risk – Operational People risk – Operational System risk – Business Continuity risk	– We routinely review and refine our operational procedures and controls – We routinely assess how we can make improvements to the resilience and reliability of our operations, with an ongoing focus on automation – We have regular training and suitably qualified and experienced operational staff – We cross train both within and across operational teams to ensure maximum coverage for issues related to people availability in specific locations – We have regular independent audits and periodic reviews of our operational processes and activities – We have business continuity plans that are tested at regular intervals and have in place remote working procedures – We have an incident management framework requiring that timely attention be paid to rectifying incidents as they occur. Post incident review ensures learnings from incidents are implemented
Reputational	Confidence in the market is critical, hence the risk arising from negative perception on the part of both existing and prospective customers, employees, counterparties, regulators or other stakeholders can adversely affect NZX's ability to maintain existing, or establish new customer relationships Underlying risks include: – Reputational risk	– We recognise NZX has a leadership role to perform across the capital markets ecosystem – Understanding the importance of our reputation and protecting it is a core component of our decision making and actions – We aim to have regular and open engagement with wider stakeholders to seek feedback on our performance – Where appropriate, we interact with our regulators and government at management, CEO and Board level to facilitate thorough coverage of issues
Human Resources (including Culture, Conduct and Health & Safety)	NZX employees play a critical role in the business. Culture influences how management and staff behave on a daily basis and enables NZX to deliver on strategy. An effective culture within NZX includes consistently putting customers at the centre of decision-making, product design, sales and advice processes, and all day-to-day activities Underlying risks include: – Culture and Conduct risk – Health and Safety risk – People Management and Resourcing risk	– We seek to operate a healthy, open, respectful culture where teamwork, diverse thought, challenge and clarity of decisions are all embraced – Our company values are based on Integrity, Resilience, Openness, Creativity and Delivery – We seek to operate to best practice People and Health & Safety standards – We are committed to continually evolving and promoting an effective risk management culture that creates an environment of risk awareness and responsiveness – Our people are expected to uphold a high standard of professionalism and integrity. Employees must adhere to our Code of Conduct that sets out standards of conduct and includes our company values, legal obligations and policies. – We regularly measure and monitor employee engagement via employee engagement surveys and set action plans for continuous improvement
Emerging Risks	NZX uses a horizon scanning approach to proactively identify and monitor new and emerging risks which may impact our business in the future i.e. new Climate-related risks: both physical (acute and chronic) and transition were identified through climate related risk reviews. Comprehensive assessment and monitoring of these risks are undertaken, and these are integrated as part of the RMF through the risk hierarchy	

Management Commentary

Management Commentary

Overview

A breakdown of NZX's financial results by business unit is summarised in the following table:

	Operating Revenue			Operating Expenses			Operating Earnings (EBITDA)[1]			Operating Margin		FTEs	
	2022	**2021**	**Change**	**2022**	**2021**	**Change**	**2022**	**2021**	**Change**	**2022**	**2021**	**2022**	**2021**
	$000	$000	%	$000	$000	%	$000	$000	%				
Capital Markets Origination	16,965	15,815	7.3%										
Secondary Markets	25,346	27,747	(8.7%)										
Data & Insights	19,354	17,453	10.9%										
Markets Sub-total	**61,665**	**61,015**	**1.1%**	**19,078**	**18,648**	**(2.3%)**	**42,587**	**42,367**	**0.5%**	**69.1%**	**69.4%**	**82.4**	**81.9**
Funds Management	24,486	18,838	30.0%	11,757	9,648	(21.9%)	12,729	9,190	38.5%	52.0%	48.8%	77.1	68.4
Wealth Technologies	5,991	4,397	36.3%	4,662	4,013	(16.2%)	1,329	384	246.1%	22.2%	8.7%	75.2	65.8
Corporate Services[2]	56	85	n/a	19,698	16,454	(19.7%)	(19,642)	(16,369)	(20.0%)	n/a	n/a	67.1	59.3
NZX Commercial Operations Sub-total	**92,198**	**84,335**	**9.3%**	**55,195**	**48,763**	**(13.2%)**	**37,003**	**35,572**	**4.0%**	**40.1%**	**42.2%**	**301.8**	**275.4**
Regulation	3,528	3,620	(2.6%)	3,926	3,413	(15.0%)	(398)	207	(292.5%)	n/a	n/a	17.3	17.3
NZX Group Total Excl. Acq/ Integration Costs	**95,726**	**87,955**	**8.8%**	**59,121**	**52,176**	**(13.3%)**	**36,605**	**35,779**	**2.3%**	**38.2%**	**40.7%**	**319.1**	**292.7**
Acq/Integration Costs	-	-	n/a	1,540	1,352	(13.9%)	(1,540)	(1,352)	(13.9%)	n/a	n/a	-	-
NZX Group Total	**95,726**	**87,955**	**8.8%**	**60,661**	**53,528**	**(13.3%)**	**35,065**	**34,427**	**1.9%**	**36.6%**	**39.1%**	**319.1**	**292.7**

1 Operating earnings (EBITDA) are before net finance expense, income tax, depreciation, amortisation, gain or loss on disposal of assets, and share of profit of associate. Operating earnings is not a defined performance measure in NZ IFRS. The Group's definition of operating earnings may not be comparable with similarly titled performance measures and disclosures by other entities. Refer to financial statements note 2 for a reconciliation of EBITDA to NZ IFRS profit for the year.

2 Corporate Services provides accommodation, legal, accounting, IT, HR, communications and project management support to the other business units. Related costs are currently not recharged to these commercial business units and subsidiaries (other than NZ RegCo).

Operating earnings (EBITDA) increased 1.9% to $35.065 million. On a like for like basis operating earnings (EBITDA) excluding one-off acquisition and integration costs (2022: $1.540 million, 2021: $1.352 million) increased 2.3% to $36.605 million, with:

- operating revenue increasing 8.8% to $95.726 million; and
- operating expenses, excluding acquisition and integration costs, increasing 13.3% to $59.121 million.

The operating revenue and operating expenses are discussed in the following pages.

The Investor Presentation (refer https://www.nzx.com/about-nzx/investor-centre/reports-and-disclosure) provides a detailed summary of the financial results by business unit.

Key Metrics

The key metrics for 2022 as outlined in the Investor Presentation in February 2022 are summarised in the table below:

		External dependencies	2022 Targets	2022 Actual[1]
NZX Group	Operating earnings excluding acquisition and integration costs (EBITDA)[2]		$33.5 - $38.0 million	$36.6 million (up 2.3%)
Core Markets				
Capital Markets Origination	Capital listed and raised (total primary and secondary capital issued or raised for Equity, Funds and Debt)	• Listing ecosystem is dependent on other market participants • No major market correction	$14.8 billion	$20.9 billion (up 5.7%)
Secondary Markets	Total value traded	• Participant activity levels drive value traded • No major market correction	$52.5 billion	$37.4 billion (down 28.6%)
	Dairy Derivatives lots traded	• Participant activity levels and dairy market price volatility drive lots traded	0.45 - 0.55 million lots	428,173 lots (up 40.0%)
Data & Insights	Revenue growth (in subscriptions, licenses and dairy subscriptions)	• Dependent on market's growth	Average revenue growth: 6.5%	$19.4 million (up 10.9%)
Funds Management	Total Funds Under Management (FUM)	• Investment market returns • No major market correction	Continue 3-year rolling average growth: 14% (excluding acquired FUM)	$6.63 billion excluding acquired FUM (up 1.5%. Average FUM for period up 10.6%)
Wealth Technologies	Total Funds Under Administration	• Investment market returns • No major market correction	Migrate new clients and OE clients onto the platform	$9.96 billion (down 9.7%)

1 Percentage changes represent the movement for the year 2021 to 2022, except Funds Under Management and Funds Under Administration which are the movements in balances as at 31 December 2021 to 31 December 2022.
2 Operating earnings (EBITDA) are before net finance expense, income tax, depreciation, amortisation, gain or loss on disposal of assets, and share of profit of associate. Operating earnings is not a defined performance measure in NZ IFRS. The Group's definition of operating earnings may not be comparable with similarly titled performance measures and disclosures by other entities. Refer to financial statements note 2 for a reconciliation of EBITDA to NZ IFRS profit for the year.

Operating Revenue

Operating revenue increased to $95.7million (+8.8% on 2021), reflecting NZX's diverse revenue sources and despite the adverse impact of the reduced level of 2022 market activity.

Specifically, market activity levels had an adverse impact on revenues in the following areas:

- Reduced value traded / cleared had a $2.6-3.0m impact based on current pricing;
- Adverse market returns which impacted:
  - Smartshares' funds under management (FUM) which had an estimated $2.3-2.6m impact at average bps; and
  - Wealth Technologies' funds under administration (FUA) which had an estimated $0.20-$0.25m impact at average bps

The adverse impact of market activity levels was more than offset by increased revenues from sources not exposed to market capitalisation, such as secondary listing fees, dairy derivatives and data & insights revenues. Additionally, FUM / FUA based revenues increased, despite the market activity impact, impacted by strong positive cash flows and the ASB Superannuation Master Trust acquisition.

Capital Markets Origination

Annual listing fees paid by NZX's equity, debt and fund issuers are driven by the number of listed issuers and equity, debt and fund market capitalisations. Annual listing fees have been positively impacted by both price increases (effective from October 2021) and the growth in market value of debt instruments, and have been partially offset by the contraction in equity market capitalisation.

Primary listing fees are paid by all issuers at the time of listing. The primary drivers of this revenue are the number of new listings and the value of capital listed. Primary listing fees in the year have been driven by the level of retail debt listings. Total new capital listed of $7.73 billion was down 28.1% on last year.

Secondary issuance fees are paid by existing issuers when they raise additional capital through placements, rights issues, the exercise of options, dividend reinvestment plans, or further debt issues. The primary drivers for this revenue are the number of secondary issuances and the value of secondary capital raised. Secondary issuance fees in the year reflect a higher level of equity recapitalisations and retail debt issuances; with total additional capital raised of $13.16 billion up 45.9% on last year.

Secondary Markets

Participant services revenue is charged to Market Participants (broking, clearing and advisory firms) that are accredited for NZX's equity, debt and derivatives markets. The total number of Market Participants decreased to 29 (2021: 32), with the resignation of Derivatives Trading and Clearing Participants (StoneX Financial Inc and ADM Investor Services Inc) following the commencement of the dairy derivatives strategic partnership with SGX, and the resignation of Snowball Effect Limited as an NZX Sponsor.

Securities trading revenue comes from the execution of trades on NZX's equity and debt markets. Securities clearing revenue relates to clearing and settlement activities, and related services such as OTC settlement and registry messaging services provided to Market Participants. The largest component is clearing fees which are based on the value of settled transactions.

Securities trading and clearing revenue decreased reflecting:

- lower market activity levels - the total value traded and cleared ($37.4 billion) was 28.6% lower than last year;
- uncharged value traded impacting securities trading revenue (mainly caused by large index rebalance trading days where fees on value traded exceeds the fee cap), which decreased to 6.5% (2021: 10.1%); and
- higher levels of clearing margin, partially offset by lower levels of depository registry transfer fees and clearing penalties.

Dairy derivatives revenue relates to trading, clearing and settlement fees for trading NZX dairy futures and options. The fees are largely charged in USD (reflecting the global nature of the market) per lot traded and are shared under the SGX-NZX dairy derivatives strategic partnership. Dairy derivatives revenue increased in line with the 40.0% increase in lots traded, being favourable impacted by the SGX-NZX dairy derivatives strategic partnership (commenced late November 2021) and the movements in USD exchange rate.

Contractual and consulting and development revenue arises from the operation of New Zealand's electricity market (under a long term contract with the Electricity Authority), the Fonterra Shareholders' Market (under a contract with Fonterra) and the carbon managed auction service (under a contract with the Ministry for the Environment). Consulting and development revenue includes:

- Electricity market - enhancements to the electricity market systems, including the market real time pricing project, which is due for completion in 2023; and

- Carbon market - development of the carbon managed auction service, which was completed in early 2021 (non-recurring revenue $0.9m).

Data & Insights

Royalties from terminals revenue relates to the provision of markets data to data resellers who distribute data to their customers. The royalties from terminals increased by 11.9% driven by the average number of professional terminals being 2.0% higher and price increases.

Subscriptions and licences revenues relate to the provision of markets data to other participants in the capital markets (e.g. non-display applications). The subscriptions and licences revenue increase of 10.3% reflects the continued growth in data usage and the ability to capture licence revenue streams post audit, resulting in increased license numbers (6.6%), partially offset by reduced subscriptions (0.3%). There has also been a positive impact from price increases (effective from August 2021).

Audit and back dated licensing revenue is at record levels (2022: $1.47 million, 2021: $1.24 million) due to continued high levels of audit activity.

Dairy data subscriptions relate to the sale of dairy data and insight products. The dairy data subscription revenue reduction reflects reduced product subscriptions.

Indices revenue relates to the revenue generated on index licensing in partnership with S&P. The indices business has grown over the last few years, driven through an increase in funds using the indices as benchmarks across the funds management market and additional index data clients.

Connectivity revenue relates to the provision of connectivity and access to NZX systems for participants and data vendors. Connectivity revenue has increased in line with increased connectivity requirements (i.e. standards of performance and resilience) from both participants and data vendors.

Funds Management

Funds management revenue is generated from:

- Funds under management based revenue which relates to variable funds under management (FUM) fees net of fund expenses. Fund expenses include a combination of fixed costs (principally outsourced fund accounting and administration costs, registry fees and audit fees), and variable costs proportionate to FUM (principally custodian fees, trustee fees, index fees, settlement costs and third party manager fees);

- Member based revenue which includes fixed membership administration fees and other member services; and

- Other revenue, for example interest income, insurance service fees and stock lending and borrowing service fees.

FUM based revenue (net of fund expenses) has increased 32.6%, which is a combination of the ASB Superannuation Master Trust acquired FUM ($1.815 billion), negative market returns ($886 million) and positive net cash flows ($800 million). FUM at 31 December 2022 has grown to $8.26 billion up 26.4% on last year.

Member based revenue has increased, reflecting a mix of increased investor numbers (from the ASB Superannuation Master Trust acquisition) and a reduction in some annual administration fees charged to members effective from 1 April 2021.

Other revenue has increased due to higher levels of stock lending and interest income.

Wealth Technologies

Wealth Technologies' revenue is generated from administration services provided on both the original (OE) and the new wealth management platforms, and development fees received for customisation of the wealth management platform or data migration effort specific to client requirements.

Administration service fees are based on funds under administration (FUA) and have been driven by a combination of a full year impact from the new clients FUA migrated during 2021 onto the platform, negative market returns and positive net cash flows. FUA at 31 December 2022 was $9.96 billion, down 9.7% on last year.

Development fees / deferred income release revenue relates to customisation of the wealth management platform or data migration effort specific to client requirements.

Corporate

Other corporate revenue relates to commission fees on Kaplan NZX related courses and sub lease income.

Regulation (NZ RegCo)

Regulatory fees relate to issuer regulation, participant compliance, market conduct, and market surveillance activities. Issuer regulation services comprise time spent by NZ RegCo reviewing listing and secondary capital raising documents and requests for listing rule waivers. Participant compliance services comprise time spent by NZ RegCo reviewing participant applications. Market conduct services comprise time spent by NZ RegCo reviewing market conduct matters and issuer disclosure. Market surveillance activities are recoverable from market participants. In 2022 NZ RegCo undertook a lower level of recoverable fee based work than in the previous year.

Additionally NZ RegCo receives an internal allocation of annual listing fees and annual participants fees, which is set in advance based on the services expected to be provided by NZ RegCo.

Operating Expenses

Operating Expenses, excluding acquisition and integration costs, increased to $59.1 million (+13.3% on 2021), reflecting inflationary pressure and the full year impact of our prior year investments for growth and to improve IT resilience.

Our 2022 investments for growth have been the acquisitions of i) the ASB Superannuation Master Trust management rights, ii) the 33.33% interest in GlobalDairyTrade Holdings Limited, and iii) QuayStreet Asset Management (due to complete in February 2023), as well as progressing on the relaunch of S&P/NZX20 Index Futures. The Markets businesses completed our IT capacity and resilience improvement programme, as well as strengthening cyber security. We continue to invest for customer growth in the Funds Management and Wealth Technologies businesses.

Personnel costs

Personnel costs are made up of:

- Salary costs (including bonuses, ACC levies and KiwiSaver contributions); plus
- Contractor and other personnel costs (including training, recruitment and staff benefits); less
- Capitalised labour (where employees or contractors are engaged on capital projects).

Personnel costs have increased due to a combination of an increase in average FTEs, wage inflation (driven by a highly competitive and tight labour market), and high levels of recruitment costs (driven by higher than normal vacancy rates as a result of the tight labour market).

FTEs at December 2022 of 319.1 were 9.0% higher (December 2021: 292.7), with a high level of vacancies across both years. The majority of the increase relates to our growth businesses and includes:

- Smartshares has increased 8.7 FTEs to resource the initial operations and integration project for the ASB Superannuation Master Trust transition;
- Wealth Technologies has increased 9.4 FTEs to migrate new clients / FUA to the platform;
- Derivatives has increased by 1.0 FTE – to support the SGX partnership and the implementation of NZX20 equity derivatives;
- A Sustainability team has been formed (2.0 FTEs) to enhance NZX's ESG reporting; and
- There are also additional Corporate roles to support the growth across the business and current levels of project activity e.g. HR resources (to address the high vacancy levels), Risk Analyst (to enhance the Risk function and second line of defence), Legal roles (to support Smartshares), and Project Management Resources (to support Smartshares integrations).

Capitalisation of internal development resources (2022: $6.74 million; 2021: $6.62 million) primarily related to Wealth Technologies' core platform, as well as Smartshares' system enhancements required for the integration of the ASB Superannuation Master Trust.

Information Technology

Information technology costs were made up of software licence fees, hardware support and maintenance fees, telecommunications and data network costs, and IT services provided by third parties.

Over the previous two years our focus had been on increasing trading and clearing system capacity, improving security and resilience, and maintaining market stability. In the current year we have completed the network transformation, and further enhanced our Security Operation Centre (SOC) capability, to strengthen NZX's cyber security.

Information technology costs have increased due to:

- Trading and clearing systems licensing and hardware / software maintenance costs, which are impacted by the USD exchange rate and contractual inflation rates;
- Data & Insights, Energy Electricity Market and Wealth Technologies businesses have had increasing data feeds, data hosting and software licence costs relating to new clients;
- Dairy derivatives – NZX's share of IT costs under the SGX dairy derivatives strategic partnership;
- Smartshares' business has incurred new licence costs for the KiwiSaver Default Scheme digital tools; and
- Corporate business has incurred new maintenance costs for the ticker and communication screens in the Auckland Capital Markets Centre.

Professional Fees

Professional fees, including legal expenses, corporate memberships, assurance costs and advisory / consultancy fees, include those relating to:

- EEX royalty fees relating to the operation of the carbon managed auction service;
- NZX's share of ongoing costs relating to the SGX dairy derivatives strategic partnership;
- Terminal royalty audit fees which vary in proportion to royalty audit revenues, with costs and revenues recognised on a gross basis;
- The assurance programme – internal audits, internal control reports, energy audits and consulting obligations under the Electricity Authority contracts, annual conflicts review, and corporate governance review;

- One off costs associated with investigating acquisition opportunities; and
- The prior year included set up costs i) for the development of the new carbon managed auction service for the Ministry for the Environment, ii) for the set up of the SGX-NZX dairy derivatives strategic partnership, and iii) for set up of the KiwiSaver Default Scheme.

Marketing

Marketing costs relate primarily to Smartshares (i.e. advertising, printing and distribution costs), marketing the Markets businesses (including the Capital Markets Origination team being sponsors of groups in order to identify listing opportunities) and the investor relations programme.

The slight increase in marketing spend reflects:

- The Smartshares business increasing printing and electronic communications (e.g. text messaging) costs to comply with KiwiSaver Default obligations; offset by
- The Capital Markets Origination team undertaking a lower level of direct marketing campaigns.

Other Expenses

Other expenses relate to premises related costs, insurance, directors' fees, travel, external audit costs, outsourced payroll system, carbon credits, statutory/compliance costs and non recoverable GST (on the Clearing House, Funds Management and Wealth Technologies businesses).

Other expenses were higher due to increases in insurance premiums, directors' fees (increased from July 2022), travel (which has increased post COVID), statutory/compliance costs (relating to increased FMA levies), and non-recoverable GST (relating to growth in the Funds Management and Wealth Technologies businesses).

Capitalised overheads

The portion of all expense categories which relates to capital activities (primarily Wealth Technologies' core platform) has increased.

Acquisition and integration costs

Acquisition and integration costs relate to Smartshares' acquisition of the management rights of the ASB Superannuation Master Trust and QuayStreet Asset Management.

Non-operating Income and Expenses

Net finance expense comprises interest income (on operational cash balances, Clearing House risk capital and regulatory working capital), interest expenses (on the subordinated note, loans, overdrafts facility and lease liabilities), and foreign exchange losses. Decreased net finance costs result from increased interest income due to the higher OCR interest rate.

Depreciation and amortisation expenses have increased due to:

- Smartshares' digital tools (and supporting infrastructure) for the KiwiSaver Default Scheme which commenced amortisation in early 2022;
- Smartshares' amortisation of the acquired ASB Superannuation Master Trust management rights commenced from February 2022 (increased amortisation is approx. $0.92m);
- Wealth Technologies' core platform amortisation of the migration costs for new clients from late 2021;
- Amortisation of IT improvements completed throughout 2021 to improve IT resilience (including the new trading system and the network transformation); and
- Depreciation of the Auckland office fit out, which was completed in mid 2021.

The effective tax rate is lower than the statutory rate of 28% due to a combination of non-deductible items (e.g. acquisition costs and amortisation on the ASB

Superannuation Master Trust management rights) offset by valuation (accounting v taxation) differences (e.g. on the vesting of long term incentive schemes).

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Directors' Responsibility Statement

The directors are responsible for the preparation, in accordance with New Zealand law and generally accepted accounting practice, of financial statements which give a true and fair view of the financial position of NZX Limited and its subsidiaries (the NZX Group) as at 31 December 2022 and the results of their operations and cash flows for the year ended 31 December 2022.

The directors consider that the financial statements of the NZX Group have been prepared using accounting policies appropriate to the NZX Group's circumstances, consistently applied and supported by reasonable and prudent judgments and estimates, and that all applicable New Zealand Equivalents to International Financial Reporting Standards have been followed.

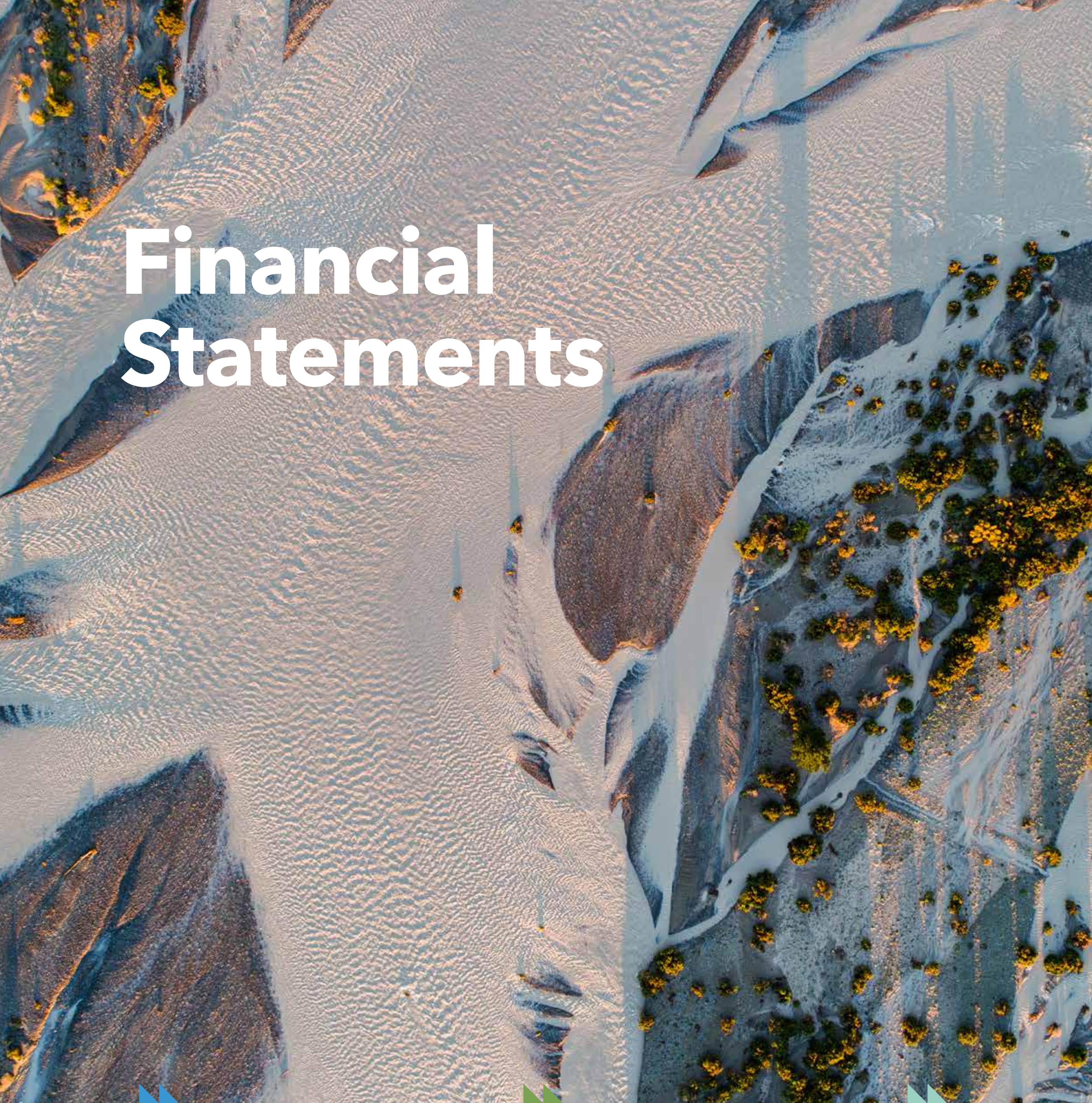
The directors are pleased to present the financial statements of the NZX Group for the year ended 31 December 2022.

The financial statements were authorised for issue for and on behalf of the directors on 22 February 2023.

James Miller
Chair of the Board

Lindsay Wright
Chair of the Audit and Risk Committee

Financial Statements



Group Income Statement

For the year ended 31 December 2022

	Note	2022 $000	2021 $000
Operating revenue	10	95,726	87,955
Operating expenses	11	(60,661)	(53,528)
Earnings before net finance expense, income tax, depreciation, amortisation, gain or loss on disposal of assets, and share of profit of associate (EBITDA)[1]	2	**35,065**	**34,427**
Net finance expense	12	(1,838)	(2,507)
Gain/(loss) on disposal of assets		3	(145)
Depreciation and amortisation expense		(13,860)	(10,404)
Share of profit of associate	7	146	-
Profit before income tax		**19,516**	**21,371**
Income tax expense	14	(5,357)	(6,356)
Profit for the year		**14,159**	**15,015**
Earnings per share			
Basic (cents per share)	15	4.6	5.4
Diluted (cents per share)	15	4.5	5.3

1 EBITDA is not a defined performance measure in NZ IFRS. Please refer to Note 2 for more information.

Group Statement of Comprehensive Income

For the year ended 31 December 2022

	2022 $000	2021 $000
Profit for the year	14,159	15,015
Total other comprehensive income	-	-
Total comprehensive income for the year	**14,159**	**15,015**

Group Statement of Changes in Equity

For the year ended 31 December 2022

	Note	Share Capital $000	Retained Earnings $000	Translation Reserve $000	Total Equity $000
Balance at 1 January 2021		**58,517**	**9,160**	**(46)**	**67,631**
Profit for the year		-	15,015	-	15,015
Total comprehensive income for the year		**-**	**15,015**	**-**	**15,015**
Transactions with owners recorded directly in equity:					
Dividends paid	23	-	(17,006)	-	(17,006)
Issue of shares	22	3,953	-	-	3,953
Share based payments	22	1,013	-	-	1,013
Cancellation of non-vesting rights	22	(11)	11	-	-
Total transactions with owners recorded directly in equity		**4,955**	**(16,995)**	**-**	**(12,040)**
Balance at 31 December 2021		**63,472**	**7,180**	**(46)**	**70,606**
Profit for the year		-	14,159	-	14,159
Total comprehensive income for the year		**-**	**14,159**	**-**	**14,159**
Transactions with owners recorded directly in equity:					
Dividends paid	23	-	(18,095)	-	(18,095)
Issue of shares	22	44,626	-	-	44,626
Share based payments	22	412	-	-	412
Cancellation of non-vesting rights	22	(40)	40	-	-
Total transactions with owners recorded directly in equity		**44,998**	**(18,055)**	**-**	**26,943**
Balance at 31 December 2022		**108,470**	**3,284**	**(46)**	**111,708**

Group Statement of Financial Position

As at 31 December 2022

	Note	31 December 2022 $000	31 December 2021 $000
Current assets			
Cash and cash equivalents	16	20,611	29,062
Cash and cash equivalents - restricted	16	20,000	20,000
Funds held on behalf of third parties	13	30,282	28,025
Receivables and prepayments	17	17,132	11,270
Total current assets		**88,025**	**88,357**
Non-current assets			
Property, plant & equipment	18	10,372	6,473
Right-of-use lease assets	8	19,204	11,299
Goodwill	4	30,222	30,222
Other intangible assets	3	68,593	44,279
Investment in associate	7	16,783	-
Total non-current assets		**145,174**	**92,273**
Total assets		**233,199**	**180,630**
Current liabilities			
Funds held on behalf of third parties	13	30,282	28,025
Trade payables	19	7,434	6,814
Other liabilities - current	20	19,413	17,035
Lease liabilities	8	997	1,175
Current tax liability	14	665	1,872
Interest bearing liabilities - current	21	39,037	-
Total current liabilities		**97,828**	**54,921**
Non-current liabilities			
Non-current other liabilities	20	-	645
Lease liabilities	8	20,679	12,378
Interest bearing liabilities	21	-	38,971
Deferred tax liability	14	2,984	3,109
Total non-current liabilities		**23,663**	**55,103**
Total liabilities		**121,491**	**110,024**
Net assets		**111,708**	**70,606**
Equity			
Share capital	22	108,470	63,472
Retained earnings		3,284	7,180
Translation reserve		(46)	(46)
Total equity attributable to shareholders		**111,708**	**70,606**

The accompanying notes form an integral part of these financial statements

Group Statement of Cash Flows

For the year ended 31 December 2022

	Note	2022 $000	2021 $000
Cash flows from operating activities			
Receipts from customers		92,068	88,136
Net interest paid		(1,967)	(2,279)
Payments to suppliers and employees		(59,976)	(51,110)
Income tax paid	14	(6,689)	(7,355)
Net cash provided by operating activities	16	**23,436**	**27,392**
Cash flows from investing activities			
Payments for property, plant and equipment		(5,096)	(5,473)
Payments for intangible assets		(35,400)	(11,447)
Payments for investment in associate		(16,637)	-
Net cash used in investing activities		**(57,133)**	**(16,920)**
Cash flows from financing activities			
Net receipts from equity raising	22	42,669	-
Payments of lease liabilities		(1,236)	(1,099)
Dividends paid		(16,187)	(13,086)
Net cash from/(used in) financing activities		**25,246**	**(14,185)**
Net decrease in cash and cash equivalents		(8,451)	(3,713)
Cash and cash equivalents at the beginning of the year		49,062	52,775
Cash and cash equivalents at the end of the year	16	**40,611**	**49,062**

Notes to the Group Financial Statements

For the year ended 31 December 2022

1. Reporting entity and statutory base

Reporting entity

These consolidated financial statements are for NZX Limited (the Company) and its subsidiaries (together referred to as the Group) as at and for the year ended 31 December 2022.

The Group operates New Zealand securities, derivatives and energy markets, including maintaining the infrastructure on which they operate. It provides funds management services including superannuation and Exchange Traded Funds (ETFs), as well as developing and operating wealth management platforms for other providers. It also provides a range of information and data to support market growth and development in the securities and dairy sectors.

The Company is incorporated and domiciled in New Zealand, registered under the Companies Act 1993 and is an FMC reporting entity under the Financial Markets Conduct Act 2013 (FMCA). These financial statements have been prepared in accordance with the Companies Act 1993 and the Financial Reporting Act 2013. The Company is listed and its ordinary shares are quoted on the NZX Main Board. The company also has listed debt which is quoted on the NZX debt market.

Basis of preparation

The Group financial statements have been prepared in accordance with New Zealand Generally Accepted Accounting Practice (NZ GAAP). They comply with New Zealand equivalents to International Financial Reporting Standards (NZ IFRS) and other applicable Financial Reporting Standards, as appropriate for profit oriented entities. The financial statements also comply with International Financial Reporting Standards (IFRS).

The measurement basis adopted in the preparation of these financial statements is historical cost, modified by the revaluation of certain financial instruments as identified in the accompanying notes. These financial statements are presented in New Zealand Dollars ($), which is the Group's functional currency. All financial information presented in New Zealand dollars has been rounded to the nearest thousand, except when otherwise indicated.

Basis of consolidation

The Group financial statements are prepared by consolidating the financial statements of all the entities that comprise the Group, being the Company and its subsidiaries. Consistent accounting policies across the parent and all subsidiaries are employed in the preparation and presentation of the Group financial statements.

i. Business combinations

Business combinations are accounted for using the acquisition method as at the acquisition date, which is the date on which control is transferred to the Group. On acquisition, the assets, liabilities and contingent liabilities of a subsidiary are measured at their fair values at the date of acquisition. In determining the fair value of assets acquired, the Group assesses identifiable intangible assets including brands, intellectual property, software, management rights and any other identifiable intangible assets using recognised valuation methodologies and with reference to suitably qualified experts. Any excess of the cost of acquisition over the fair values of the identifiable net assets acquired is recognised as goodwill.

ii. Investments in subsidiaries

Subsidiaries are entities controlled by the Group. The financial statements of subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases.

In preparing the Group financial statements all intercompany balances and transactions, and unrealised profits arising within the Group are eliminated in full.

iii. Investment in associate

Associates are those entities in which the Group has significant influence, but not control or joint control, over the financial and operating policies. Investments in associates are accounted for using the equity method. They are initially recognised at cost, including transaction costs. Subsequent to initial recognition, the consolidated financial statements include the Group's share of the profit or loss and other comprehensive income of the associate, until the date on which significant influence ceases.

Accounting policies

Accounting policies that summarise the measurement basis used and are relevant to the understanding of the financial statements are provided throughout the accompanying notes.

The accounting policies adopted have been applied consistently throughout the periods presented in these financial statements.

A number of new standards, amendments to standards and interpretations are effective for annual periods beginning on or after 1 January 2023, and have not been applied in preparing these financial statements. The Group does not plan to adopt these standards early. None of these standards are expected to have a significant effect on the financial statements of the Group.

Presentational changes

Certain amounts in the comparative information have been reclassified to ensure consistency with the current year's presentation.

Accounting estimates and judgements

The preparation of the financial statements in conformity with NZ IFRS requires management to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates. Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimates are revised and in any future periods affected.

The principal areas of judgement for the Group, in preparing these financial statements, including information about assumptions and estimation uncertainties that have a significant risk of resulting in a material adjustment within the next financial year, are set out in:

- note 3 - intangible assets
- note 4 - goodwill
- note 8 - leases
- note 24 - share based payments

2. Non-GAAP measures

EBITDA is a non-GAAP performance measure and differs from the NZ IFRS profit for the year. The Group's definition of EBITDA may not be comparable with similarly titled performance measures and disclosures by other entities.

Reconciliation of EBITDA to NZ IFRS profit for the year:

	2022 $000	2021 $000
Profit for the year	**14,159**	**15,015**
Income tax expense	5,357	6,356
Profit before income tax	**19,516**	**21,371**
Adjustments for:		
- Net finance expense	1,838	2,507
- Gain or loss on disposal of assets	(3)	145
- Depreciation and amortisation expense	13,860	10,404
- Share of profit of associate	(146)	-
EBITDA	**35,065**	**34,427**

The Group has presented the EBITDA performance measure in addition to NZ IFRS profit for the year, as this performance measure is used internally in conjunction with other measures to monitor performance and make investment decisions. EBITDA is calculated by adjusting profit from operations to exclude the impact of taxation, net finance expense, depreciation, amortisation, gain or loss on disposal of assets, and share of profit of associate.

3. Intangible assets

Intangible assets are initially measured at cost. The direct costs associated with the development of software and website assets are capitalised only if the expenditure can be measured reliably, the development of intangible asset is technically and commercially feasible, future economic benefits are probable and the Group intends to and has sufficient resources to complete the development of the asset. Otherwise, it is recognised in profit or loss as incurred. The cost of intangible assets acquired in a business combination is their fair value at the date of the acquisition. Intangible assets with a finite life are amortised from the date the asset is ready for use on a straight-line basis over its estimated life which is as follows:

- Software and websites: 3 - 9 years
- Brands, trademarks, and rights to use brands: 10 years
- Data archives, customer lists, databases, and other IP: 10 years
- Management rights: 20 - 25 years

At each reporting date, the Group reviews the carrying amounts of its intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. This is outlined in note 5.

Where estimated useful lives or recoverable values have diminished due to technological change or market conditions, amortisation is accelerated.

	Software and websites $000	Brands, Trademarks and rights to use Brands $000	Data archives, customer lists, databases, and other IP $000	Management rights $000	Intangible work in progress $000	Total $000
Gross carrying amount						
Balance at 1 January 2021	**64,441**	**182**	**1,458**	**18,116**	**4,071**	**88,268**
Additions	-	-	-	-	11,447	11,447
Disposals	(6,102)	-	-	-	-	(6,102)
Transfer from WIP	12,759	-	-	-	(12,759)	-
Balance at 31 December 2021	**71,098**	**182**	**1,458**	**18,116**	**2,759**	**93,613**
Additions	-	-	-	25,000	10,330	35,330
Transfer from WIP	5,803	-	-	-	(5,803)	-
Balance at 31 December 2022	**76,901**	**182**	**1,458**	**43,116**	**7,286**	**128,943**
Accumulated amortisation & impairment						
Balance at 1 January 2021	**42,565**	**91**	**-**	**4,733**	**-**	**47,389**
Amortisation expense	7,127	18	-	789	-	7,934
Disposals	(5,989)	-	-	-	-	(5,989)
Balance at 31 December 2021	**43,703**	**109**	**-**	**5,522**	**-**	**49,334**
Amortisation expense	9,293	18	-	1,705	-	11,016
Balance at 31 December 2022	**52,996**	**127**	**-**	**7,227**	**-**	**60,350**
Net Book Value						
As at 1 January 2021	**21,876**	**91**	**1,458**	**13,383**	**4,071**	**40,879**
As at 31 December 2021	**27,395**	**73**	**1,458**	**12,594**	**2,759**	**44,279**
As at 31 December 2022	**23,905**	**55**	**1,458**	**35,889**	**7,286**	**68,593**

4. Goodwill

A cash generating unit (CGU) to which goodwill has been allocated is tested for impairment annually, and whenever there is an indicator of impairment based on the performance of the CGU relative to expected future performance and other relevant factors.

The directors have carried out impairment testing with the key assumptions set out in Note 5. No impairment was required in 2022 (2021: none).

5. Impairment tests

Indefinite life intangible assets are reviewed for impairment annually. They are also reviewed for impairment whenever there are indicators of impairment, as are finite life intangible assets.

A summary of the CGUs to which intangible assets have been allocated as at 31 December 2022 is outlined below:

	Software & websites $000	Other finite life intangible $000	Indefinite life intangible $000	Work in progress $000	Total other intangible $000	Goodwill $000	Total $000
Cash generating unit							
Clearing House	500	-	-	-	**500**	-	**500**
Funds management	2,280	33,545	2,344	499	**38,668**	20,730	**59,398**
Wealth Technologies	15,041	-	-	5,875	**20,916**	1,494	**22,410**
Energy	1,171	-	-	323	**1,494**	7,720	**9,214**
Direct data	-	55	1,458	-	**1,513**	278	**1,791**
Other							
Other intangible assets	286	-	-	452	**738**	-	**738**
Other computer software	4,627	-	-	137	**4,764**	-	**4,764**
	23,905	**33,600**	**3,802**	**7,286**	**68,593**	**30,222**	**98,815**

Impairment test

For the year ended 31 December 2022, the directors have reviewed all intangible assets for impairment using discounted cash flow analysis, comparable EBITDA multiple analysis and/or other factors as appropriate to the asset being tested. All impairment tests have been undertaken on a value in use basis.

Key assumptions used in the calculation of recoverable amounts in discounted cash flow analysis are consistent with those used and disclosed in the financial statements for the year ended 31 December 2021 unless indicated otherwise. Discounted cash flow analysis using a forecast period of five years was used for all CGUs, other than Energy where the forecast period matches the remaining contractual period plus an expected renewal period of eight years. The analysis also uses a WACC rate of 10.7% (2021: 9.6%) and was stress tested at higher rates. The terminal growth rate used to extrapolate cash flow projections beyond five years was 1.75% (2021: 1.75%). Management has assessed the long term economic outlook data available, and assessed that the use of this terminal growth rate was appropriate, consistent with the prior year. Where relevant, EBITDA multiples were used to cross-check the discounted cash flow analysis for established businesses.

The review of the carrying values of goodwill and intangible assets has determined that all the CGUs have recoverable amounts exceeding their carrying values and no impairment is required for the year ended 31 December 2022 (2021: Nil).

Further information on specific assumptions (other than the general assumptions outlined above) underlying the CGU discounted cash flow analysis is set out below.

a. Clearing House

The Clearing House intangible assets relate to the clearing and depository systems software.

The principal assumption on which the discounted cash flows for this CGU are dependent is the future revenue growth rate. Future revenue growth is dependent on growth in equity clearing values and central securities depository services. Growth in equity clearing values and central securities depository services has been forecast based on historical growth rates in line with NZX's five year strategic plan.

b. Funds Management

The Group holds the following intangible assets used by its funds management business Smartshares Limited:

- Smartshares exchange traded funds management rights acquired between 2004 - 2006 for a total value of $2.344 million. The management rights are held in the Group accounts with an indefinite life, as there is no expiry date for these rights and they are expected to apply indefinitely;

- SuperLife management rights which were acquired on 1 January 2015 for $15.772 million and goodwill of $20.730 million. The management rights are held in the Group accounts as a finite life intangible asset and amortised on a straight line basis over 20 years; and

- ASB Superannuation Master Trust management rights which were acquired on 11 February 2022 for $25.000 million. The management rights are held in the Group accounts as a finite life intangible asset and amortised on a straight line basis over 25 years (refer note 6).

As the ASB Superannuation Master Trust management rights are a finite life intangible assets full impairment testing is only required where there is an indicator of impairment. No indicators of impairment have been identified for 2022.

For the remaining management rights (including finite life management rights where acquired with goodwill) and goodwill, the principal assumption on which the discounted cash flows are dependent is the future level of funds under management (FUM), which is assumed to grow through both net cash flows and market growth, driving FUM based revenue. FUM based revenue would have to reduce by 40% (2021: 48%) in the forecast period, where FUM is expected to increase 88% (2021: 85%), to indicate an impairment in the intangibles carrying value. The company considers the FUM growth assumption reasonable based on historic experience and NZX's five year strategic plan.

c. Wealth Technologies

The carrying value of the Wealth Technologies CGU includes platform development and client migration assets with a net book value of $20.916 million, and related goodwill of $1.494 million.

The principal assumptions on which the discounted cash flows for the Wealth Technologies CGU are dependent is the future level of funds under administration (FUA) which is assumed to grow through both bringing new clients on to the platforms and current client growth, driving FUA based revenue. FUA based revenue would have to reduce by 23% (2021: 13%) in the forecast period, where FUA is expect to increase 590% (2021: 697%), to indicate an impairment in the intangibles carrying value. The Company considers the FUA growth assumptions reasonable given the start-up nature of Wealth Technologies and based on the continued interest from current, future and potential customers.

d. Energy

The carrying value of the Energy CGU includes software net book value of $1.494 million relating to the trading, pricing, clearing and reconciliation of spot market electricity, and goodwill of $7.720 million.

This business has a significant reliance on service provider contracts it has in place with the Electricity Authority (EA). The contracts mature mid 2024, with the EA having an option to extend for a further 3 years. As a result of these service provider contracts, NZX has certainty of minimum cash flows to be received over the contract period, along with additional contracted consulting revenue, and a reasonable expectation of contract renewal based on previous contract renewals, which supports the current carrying value of the Energy CGU. The non-renewal of contracts, post the 3 year extension period, could result in impairment of the carrying value of the Energy CGU.

e. Direct data

The carrying value of the Direct Data CGU includes Company Research management rights of $1.458 million, which are held in the Group accounts as indefinite life, as there is no expiry date for these rights and they are expected to apply indefinitely, and goodwill of $0.278 million.

The principal assumptions on which the discounted cash flows for the Direct Data CGU are dependent is the future revenue growth rate (driven by increased volumes and price increases). Direct Data revenue would have to reduce by 51% (2021: 56%) in the forecast period, where Direct Data revenue is expect to increase 2% p.a.to 10% p.a. (2021: 1.0% p.a. to 12.0% p.a.), to indicate an impairment in the intangibles carrying value. The Company considers the revenue growth assumption reasonable based on historical experience and NZX's five year strategic plan.

f. Investment in associate

NZX acquired a 33.33% shareholding in GlobalDairyTrade Holdings Limited (GDT) effective 30 June 2022 which has been recognised as an investment in an associate.

Accounting standards require full impairment testing to be undertaken on an investment in an associate only where there is objective evidence of a potential impairment event that has a negative impact on future cash flows.

The Group has reviewed for indicators of impairment and no impairment was required in 2022.

6. Acquisition of management rights

On 11 February 2022 Smartshares Limited acquired the management rights of the ASB Superannuation Master Trust for cash consideration of $25 million. This acquisition drives scale in Smartshares with funds under management (FUM) increasing approximately $1.8 billion at acquisition and is aligned with the NZX Group strategy to capture complementary opportunities that the greater scale in the Smartshares business provides to both NZ Capital Markets and NZX's Markets business.

The management rights are accounted for as a definite life intangible asset and amortised on a straight line basis over 25 years. Amortisation of $0.92 million has been recognised during the year.

7. Investment in associate

On 30 June 2022 NZX acquired a 33.33% interest (ownership and voting) in GlobalDairyTrade Holding Limited (GDT) .

GDT is the leading global physical trading platform for dairy and provides a sustainable foundation for NZX's dairy derivatives business. GDT's place of incorporation and principal place of business is New Zealand.

The initial purchase price paid on 30 June 2022 was $15.7 million, which includes NZX's contribution to strategic cash of $3.2 million. The sale and purchase agreement included a purchase price adjustment (i.e. working capital wash up) based on completion accounts which resulted in an additional $0.37 million being paid on 13 September 2022. Costs directly attributable to the acquisition have been capitalised.

To allow GDT to retain its earnings for reinvestment into the growth and expansion of the business there is a contractual restriction on the payment of dividends from GDT to shareholders until 31 July 2025.

The Group's interest in GDT has been accounted for as an investment in an associate and has been measured by applying the equity method.

The following tables summarise the financial information of GDT as included in its own financial statements and reconciles the summarised financial information to the carrying amount of the Group's interest in GDT. The information for 2022 presented in the tables includes the results of GDT for the period from 1 July to 31 December 2022, being the period the Group held an interest in GDT.

i) *Summarised financial position of associate not adjusted for the percentage ownership held by the Group:*

	31 December 2022 $000	**31 December 2021 $000**
Current assets	14,810	-
Non-current assets	3,041	-
Total assets	**17,851**	-
Current liabilities	4,757	-
Non-current liabilities	352	-
Total liabilities	**5,109**	-
Net assets	**12,742**	-

ii) Reconciliation to carrying amount:

	2022 $000	2021 $000
Net assets at acquisition 30 June 2022	12,304	-
Profit for the year	438	-
Other comprehensive income	-	-
Dividends paid	-	-
Net assets at end of the year	**12,742**	-
Group's share in %	33.33%	-
Group's share of net assets	4,247	-
Goodwill and intangibles	12,536	-
Carrying amount at end of the year	**16,783**	-

iii) *Summarised statement of comprehensive income*:

	2022 $000	2021 $000
Revenue	8,739	-
Profit from continuing operations	438	-
Profit for the period	438	-
Other comprehensive income	-	-
Total comprehensive income	**438**	-
Group's share of total comprehensive income	146	-
Dividends received from associate	-	-

8. Leases

On entering into a contract, the Group determines whether the contract contains a lease that conveys the right to control the use of an identified asset for a period of time in exchange for consideration. Determining whether there is a right of control involves the assessment of whether the contract involves the use of an identified asset, whether the Group has the right to obtain substantially all of the economic benefits from use of that asset through the period of use, and whether the Group has the right to direct the use of the asset.

As a lessee

The Group recognises a right-of-use asset and a lease liability at the lease commencement date.

The right-of-use asset is initially measured at cost net of any lease incentives received and is subsequently depreciated using the straight-line method from the commencement date to the end of the lease term.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted at the Group's incremental borrowing rate or the interest rate implicit in the lease, if this can be determined. The lease liability is measured at amortised cost using the effective interest method. It is remeasured when there is a change in future lease payments arising from a change in an index or rate or if the Group changes its assessment of whether it will exercise a purchase, extension or termination option, with a corresponding adjustment made to the carrying value of the right-of-use asset.

The Group has elected not to recognise right-of-use assets and lease liabilities for short term leases (lease term less than 12 months) or leases of low-value assets.

Detail of leases for which the Group is a lessee are presented below:

Right-of-use assets

	Property leases $000	Other leases $000	Total $000
Balance at 1 January 2021	4,805	303	5,108
Additions during the year	7,549	-	7,549
Depreciation expense for the year	(1,130)	(228)	(1,358)
Balance at 31 December 2021	**11,224**	**75**	**11,299**
Additions during the year	8,648	712	9,360
Depreciation expense for the year	(1,220)	(235)	(1,455)
Balance at 31 December 2022	**18,652**	**552**	**19,204**

Other leases includes leases of IT and office equipment.

During the year, the Group entered into a new Auckland office lease agreement commencing 1 September 2022, along with a modification of the current Auckland office leases, which resulted in an addition to the right-of-use assets and lease liabilities.

Lease liabilities

	31 December 2022 $000	31 December 2021 $000
Maturity analysis - contractual undiscounted cash flows		
Up to one year	2,113	1,594
One to two years	1,650	1,532
Two to five years	6,196	4,219
More than five years	20,644	9,428
Total undiscounted lease liabilities	**30,603**	**16,773**
Lease liabilities included in the statement of financial position	**21,676**	**13,553**
Current	997	1,175
Non-current	20,679	12,378

Property leases for the Group's Wellington and Auckland offices give the Group the right to renew the lease at the end of the current contracted period for a further 6 year term.

As a lessor

On entering into a lease as a lessor, the Group assesses whether the lease transfers to the lessee substantially all of the risk and rewards of ownership of the underlying asset. Where such a transfer is assessed to occur, the lease is recognised as a finance lease; otherwise it is recognised as an operating lease.

Where the Group is an intermediate lessor, its interest in the head lease and the sub-lease are accounted for separately, with the sub-lease classification assessed with reference to the right-to-use asset arising from the head lease.

The Group recognises lease payments received under operating leases as income on a straight-line basis over the lease term as part of other corporate revenue.

The Group has sub-leased part of one of its property leases since September 2022. The sub-lease is for a short term period, has not transferred substantially all of the risks and rewards of the underlying asset, and is classified as an operating lease accordingly. Income related to this short term sub-lease for the current year was $21,000 (2021: $nil). A maturity analysis of operating lease payments, showing the undiscounted lease payments to be received after the reporting date is set out below:

	31 December 2022 $000	31 December 2021 $000
Maturity analysis - contractual undiscounted cash flows		
Up to one year	75	-
One to two years	139	-
Two to five years	95	-
Total undiscounted lease liabilities at period end	**309**	**-**

9. Segment reporting

The Group has five revenue generating commercial operations segments, as described below, which are the Group's strategic business areas, and a corporate segment which has limited revenue but includes all costs that are shared across the organisation.

Operating segments are reported in a manner consistent with the internal reporting provided to the Chief Operating Decision Maker (CODM). The CODM, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as the Group CEO. The CODM assesses performance of the combined Markets businesses (i.e. the Capital Markets Origination, Secondary Markets and Data & Insights revenue generating segments) as a single segment, being an integrated business that supports the growth of New Zealand capital markets. The performance of Funds Management, Wealth Technologies and Corporate businesses are assessed separately.

In 2020 the Group introduced a new regulatory model and incorporated NZX Regulation Limited (NZ RegCo), as a stand-alone, independently-governed agency which performs all of NZX's front line regulatory functions, resulting in the structural separation of the Group's commercial and regulatory roles. Consequently the CODM for the Regulation business is the NZ RegCo CEO.

The reportable commercial operations segments are:

- Markets:
    - Capital Markets Origination - provider of issuer services for current and prospective customers;
    - Secondary Markets - provider of trading and post-trade services for securities and derivatives markets operated by NZX, provider of a central securities depository and market operator for Fonterra Co-Operative Group, the Electricity Authority and the Ministry for the Environment;
    - Data & Insights - provider of information services for the securities and derivatives markets, and analytics for the dairy sector;
- Funds Management - manager of superannuation funds, KiwiSaver funds and exchange traded funds; and
- Wealth Technologies - funds administration provider and custodian.

The Group’s revenue is allocated into each of the reportable segments (including an internal allocation of annual listing fees and annual participants fees to NZ RegCo). Expenses incurred are allocated to the segments only if they are direct and specific expenses to one of the segments. The remaining expenses that relate to activities shared across the group are reported in the Corporate segment.

The Group's assets and liabilities are allocated into each of the revenue generating segments, apart from those assets and liabilities that are utilised on a shared basis, which are allocated to the corporate segment.

Segmental information for the year ended 31 December 2022

	Capital Markets Origination $000	Secondary Markets $000	Data & Insights $000	Markets sub-total $000	Funds $000	Wealth Tech. $000	Corporate $000	NZX Commercial Operations sub-total $000	Regulation $000	NZX Group Total $000
Operating revenue	16,965	25,346	19,354	61,665	24,486	5,991	56	**92,198**	3,528	**95,726**
Operating expenses				(19,078)	(13,297)	(4,662)	(19,698)	**(56,735)**	(3,926)	**(60,661)**
Operating earnings (EBITDA)[1]				**42,587**	**11,189**	**1,329**	**(19,642)**	**35,463**	**(398)**	**35,065**
Segment assets				94,304	72,433	24,301	42,039	**233,077**	122	**233,199**
Segment liabilities				(43,279)	(10,552)	(2,024)	(65,830)	**(121,685)**	194	**(121,491)**
Net assets				**51,025**	**61,881**	**22,277**	**(23,791)**	**111,392**	**316**	**111,708**

1 EBITDA is not a defined performance measure in NZ IFRS. Please refer to Note 2 for more information.

Segmental information for the year ended 31 December 2021

	Capital Markets Origination $000	Secondary Markets $000	Data & Insights $000	Markets sub-total $000	Funds $000	Wealth Tech. $000	Corporate $000	NZX Commercial Operations sub-total $000	Regulation $000	NZX Group Total $000
Operating revenue	15,815	27,747	17,453	61,015	18,838	4,397	85	**84,335**	3,620	**87,955**
Operating expenses				(18,648)	(11,000)	(4,013)	(16,454)	**(50,115)**	(3,413)	**(53,528)**
Operating earnings (EBITDA)[1]				**42,367**	**7,838**	**384**	**(16,369)**	**34,220**	**207**	**34,427**
Segment assets				74,804	45,106	21,720	38,899	**180,529**	101	**180,630**
Segment liabilities				(41,150)	(8,547)	351	(60,569)	**(109,915)**	(109)	**(110,024)**
Net assets				**33,654**	**36,559**	**22,071**	**(21,670)**	**70,614**	**(8)**	**70,606**

1 EBITDA is not a defined performance measure in NZ IFRS. Please refer to Note 2 for more information.

Geographical information

In presenting information on the basis of geographical segments, segment revenue is based on the geographical location of customers. Segment non-current assets are based on the geographical location of the assets.

Revenue	**2022 $000**	**2021 $000**
New Zealand	77,499	73,131
Australia	5,449	3,471
Other	12,778	11,353
Total revenue	**95,726**	**87,955**

Non-current assets	**31 December 2022 $000**	**31 December 2021 $000**
New Zealand	145,174	92,273
Total non-current assets	**145,174**	**92,273**

10. Operating revenue

Revenue is recognised when an entity satisfies the performance obligation and transfers control of goods or services to a customer. Revenue is recognised at the transaction price amount allocated to the performance obligation. The specific revenue recognition criteria for the classes of revenue are as follows:

i. *Capital Markets Origination*

- Listing and issuance fees consist of revenue from annual listing fees (net of an allocation to NZ RegCo), initial listing fees and subsequent capital raising fees. Initial and subsequent listing fees are recognised when the listing or subsequent capital raising event has taken place. Annual listing fees are billed on 30 June for the following 12 month period and are recognised on a straight line basis over this 12 month period.

ii. *Secondary Markets*

- Participant services revenue consist of annual participant fees (net of an allocation to NZ RegCo) and initial participant fees. Initial participant fees are recognised when the participant's application has been approved. Annual participant fees are billed on 30 June for the following 12 month period and are recognised on a straight line basis over this 12 month period.

- Securities trading fees arise from the trading of debt and equity securities, which are recognised at trade date.

- Securities clearing fees relate to debt and equity clearing and settlement, which are recognised at settlement date (which is two days after initial trade date).

- Dairy derivatives fees relate to the trading, clearing and settlement of derivatives by SGX, net of fees retained by SGX. Trading and clearing fees are recognised at trade date. Settlement fees are recognised at settlement date.

- Market operations revenue arises from the provision of post-trade systems and technology services for both the energy and the Fonterra Shareholders markets, and from the provision of advisory and development services for both the energy market and New Zealand's Emissions Trading Scheme managed auction services. Revenues are recognised over the period the service is provided.

iii. *Data & Insight*

- Securities information revenue relates to the provision of securities and derivatives market data, which is recognised over the period the service is provided.

- Dairy data subscription revenue relates to the provision of data and analysis for the dairy sector, which is recognised over the period the service is provided.

- Connectivity revenue relates to the provision of connectivity and access to NZX operated markets for market participants and data vendors, which is recognised over the period the service is provided.

iv. *Funds Management*

- Funds management revenue relates to funds under management based fees and administration fees, which are recognised over the period the service is provided.

v. *Wealth Technologies*

- Wealth Technologies revenue relates to platform administration fees and development fees, which are recognised over the period the service is provided.

vi. *Regulation*

- Regulatory services fees (including Issuer Regulation, Market Conduct, Participant Compliance and Surveillance services) are recognised over the period the service is provided. Additionally, there is an allocation of annual listing fees and annual participant fees and an internal allocation to reflect regulatory support services provided to NZX Limited.

vii. Corporate

- Other Corporate revenue relates to miscellaneous services provided by the Group (including sublease of excess office space and commission fees on Kaplan NZX related courses), which is recognised over the period the service is provided.

	2022 $000	2021 $000
Listing and issuance fees	16,965	15,815
Total Capital Markets Origination revenue	**16,965**	**15,815**
Participant services	448	600
Securities trading	4,171	5,208
Securities clearing	7,580	8,148
Dairy derivatives	1,887	1,241
Market operations	11,260	12,550
Total Secondary Markets revenue	**25,346**	**27,747**
Securities information	16,001	14,274
Dairy data subscriptions	610	616
Connectivity revenue	2,743	2,563
Total Data & Insights revenue	**19,354**	**17,453**
Funds Management revenue	**24,486**	**18,838**
Wealth Technologies revenue	**5,991**	**4,397**
Regulation revenue	**3,528**	**3,620**
Other Corporate revenue	**56**	**85**
Total operating revenue	**95,726**	**87,955**

11. Operating expenses

	Note	2022 $000	2021 $000
Gross personnel costs		(44,060)	(39,785)
Less capitalised labour		6,742	6,624
Personnel costs		(37,318)	(33,161)
Information technology		(13,071)	(11,753)
Professional fees		(3,517)	(3,259)
Marketing		(1,419)	(1,389)
Directors' fees	26	(460)	(413)
Remuneration paid to Group auditors		(257)	(225)
Other operating expenses		(4,675)	(3,531)
Capitalised overheads		1,596	1,555
Acquisition/integration costs		(1,540)	(1,352)
Total operating expenses		**(60,661)**	**(53,528)**

Remuneration paid to Group auditors

	2022 $000	2021 $000
Audit and review of NZX Group and subsidiary statutory financial statements	(203)	(181)
Total audit fees	**(203)**	**(181)**
Annual operational audit of the Clearing House	(45)	(36)
Annual depository assurance engagement of New Zealand Depository Limited	(6)	(5)
Net Tangible Assets procedures engagement of Smartshares Limited	(3)	(3)
Total other audit related services	**(54)**	**(44)**
Total remuneration paid to Group auditors	**(257)**	**(225)**

12. Net finance expense

	2022 $000	2021 $000
Interest income	1,204	395
Interest on lease liabilities	(641)	(374)
Other interest expense	(2,466)	(2,394)
Amortised borrowing costs	(87)	(81)
Net gain/(loss) on foreign exchange	152	(53)
Net finance expense	**(1,838)**	**(2,507)**

13. Funds held on behalf of third parties

	31 December 2022 $000	31 December 2021 $000
Bond deposits	2,105	2,180
Collateral deposits	28,177	25,845
	30,282	**28,025**

The bond deposits represent balances deposited by issuers, required as a condition of listing on NZX's markets. Funds lodged as bond deposits are interest bearing and are recognised at the amounts deposited which represent fair value. There is an equal and opposite amount disclosed under current liabilities for the total amount repayable to issuers.

The collateral deposits represent balances deposited by participants to cover margins on outstanding settlement obligations for cash market and derivative contracts, as well as mutualised default fund contributions. Funds lodged as margin collateral and mutualised default fund contributions are interest bearing and are recognised at the amounts deposited which represent fair value. There is an equal and opposite amount disclosed under current liabilities for the total amount repayable to participants.

14. Taxation

Tax expense comprises current and deferred tax. Current and deferred tax is recognised as an expense or income in the Income Statement, as there is no current or deferred tax related to items credited or debited directly to equity or other comprehensive income.

Current tax is calculated by reference to the amount of income taxes payable or recoverable in respect of the taxable profit or loss for the year, using tax rates enacted or substantively enacted by the reporting date, and any adjustment to tax payable in respect of previous years. Current tax for current and prior periods is recognised as a liability (or asset) to the extent that it is unpaid (or refundable).

Deferred tax is recognised in respect of temporary differences arising from differences between the carrying amount of assets and liabilities in the financial statements and the corresponding tax base of those items.

In principle, deferred tax liabilities are recognised for all taxable temporary differences. Deferred tax assets are recognised to the extent that it is probable that sufficient taxable income will be available against which deductible temporary differences or unused tax losses and tax offsets can be utilised. However, deferred tax assets and liabilities are not recognised if the temporary differences giving rise to them arise from the initial recognition of assets and liabilities (other than as a result of a business combination) which affects neither taxable income nor accounting profit. Furthermore, a deferred tax liability is not recognised in relation to taxable temporary differences arising from the initial recognition of goodwill.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period(s) when the asset and liability giving rise to them are realised or settled, based on tax rates (and tax laws) that have been enacted or substantively enacted by the reporting date. The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Group expects, at the reporting date, to recover or settle the carrying amount of its assets and liabilities.

Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset when they relate to income taxes levied by the same taxation authority and the Group intends to settle its current tax assets and liabilities on a net basis.

a. Income tax expense recognised in profit or loss

	2022 $000	2021 $000
Tax expense comprises:		
Current tax expense	5,663	6,991
Prior period adjustment	(317)	(136)
Deferred tax relating to the origination and reversal of temporary differences	11	(499)
Total tax expense	**5,357**	**6,356**

The prima facie income tax expense on pre-tax accounting profit from continuing operations reconciles to the income tax expense in the financial statements as follows:

	2022 $000	2021 $000
Profit before income tax expense	19,516	21,371
Income tax calculated at 28%	**(5,464)**	**(5,984)**
Tax adjustments	(231)	(508)
	(5,695)	**(6,492)**
Prior period adjustment	317	136
Tax credits	21	-
	(5,357)	**(6,356)**

b. Current tax liabilities

	2022 $000	2021 $000
Balance at beginning of the year	(1,872)	(2,274)
Current year charge	(5,663)	(6,991)
Prior period adjustment	181	38
Tax paid	6,689	7,355
Balance at end of year	**(665)**	**(1,872)**

c. Deferred tax liability

	2022 $000	2021 $000
Balance at beginning of the year	(3,109)	(3,706)
Current year movement	(11)	499
Prior period adjustments	136	98
Balance at end of the year	**(2,984)**	**(3,109)**
Deferred tax balance comprises:		
Employee entitlements	1,621	1,567
Doubtful debts	52	67
Property, plant and equipment, and software	(5,684)	(5,800)
Leases	427	525
Other	600	532
	(2,984)	**(3,109)**

d. Imputation credit account

	2022 $000	2021 $000
Imputation credits available for use in subsequent reporting periods	**7,720**	**9,648**

15. Earnings per share and net tangible assets per share

i. Earnings per share

Basic earnings per share is calculated by dividing the profit for the year by the weighted average number of ordinary shares outstanding during the period. An adjustment to take into account the shares and rights issued under the various employee share plans (refer to Notes 22 and 24) is made to the weighted average number of shares used in the calculation of the diluted earnings per share.

a. Basic earnings per share

	2022	2021
Profit for the year ($000)	14,159	15,015
Weighted average number of ordinary shares for the purpose of earnings per share (in thousands)	307,176	279,530
Basic earnings per share (cents per share)	**4.6**	**5.4**

b. Diluted earnings per share

	2022	2021
Profit for the year ($000)	14,159	15,015
Weighted average number of total shares and rights for the purpose of earnings per share (in thousands)	312,161	284,639
Fully diluted earnings per share (cents per share)	**4.5**	**5.3**

ii. Net tangible assets per share

Basic net tangible assets per share is calculated by dividing the net tangible assets at year end by the weighted average number of ordinary shares outstanding during the period. An adjustment to take into account the shares and rights issued under the various employee share plans (refer to Notes 22 and 24) is made to the weighted average number of shares used in the calculation of the diluted net tangible assets per share.

a. Basic net tangible assets per share

	31 December 2022 $000	31 December 2021 $000
Net assets	111,708	70,606
Less:		
Goodwill	(30,222)	(30,222)
Intangible assets	(68,593)	(44,279)
Investment in associate	(16,783)	-
Net tangible assets	**(3,890)**	**(3,895)**
Weighted average number of ordinary shares for the purpose of net tangible assets per share (in thousands)	307,176	279,530
Basic net tangible assets per share (cents per share)	(1.27)	(1.39)

b. Diluted net tangible assets per share

	31 December 2022 $000	31 December 2021 $000
Net assets	111,708	70,606
Less:		
Goodwill	(30,222)	(30,222)
Other intangible assets	(68,593)	(44,279)
Investment in associate	(16,783)	-
Net tangible assets	**(3,890)**	**(3,895)**
Weighted average number of total shares and rights for the purpose of net tangible assets per share (in thousands)	312,161	284,639
Fully diluted net tangible assets per share (cents per share)	(1.25)	(1.37)

16. Cash and cash equivalents and cash flow reconciliation

a. Cash and cash equivalents

Cash comprises:	31 December 2022 $000	31 December 2021 $000
Cash at bank	19,411	27,262
Bank deposits	1,200	1,800
Cash and cash equivalents	**20,611**	**29,062**
Cash at bank - restricted	14,000	12,000
Bank deposits - restricted	6,000	8,000
Cash and cash equivalents - restricted	**20,000**	**20,000**
Cash and cash equivalents - total	**40,611**	**49,062**

Restricted cash and cash equivalents relates to balances held for risk capital requirements by the Clearing House and is not available for general cash management use by the Group. In addition, cash and cash equivalents includes amounts of up to $9.3million (as at 31 December 2022; 31 December 2021: up to $7.3million) that are held by subsidaries to comply with regulatory requirements and are not available for general use by other entities within the Group.

b. Reconciliation of profit for the year to net cash provided by operating activities

	2022 $000	2021 $000
Profit for the year	**14,159**	**15,015**
Adjustments for:		
Share based payment arrangements	460	1,047
Depreciation and amortisation expense	13,860	10,404
Amortisation of borrowing costs	66	60
Disposal of assets	5	145
Share of profit of associate	(146)	-
Increase in receivables and prepayments	(5,862)	(430)
Increase in trade payables and other liabilities	2,226	2,150
Decrease in current tax liability	(1,207)	(402)
Decrease in deferred tax liability	(125)	(597)
Net cash provided by operating activities	**23,436**	**27,392**

17. Receivables and prepayments

Receivables and prepayments are initially recognised at the fair value of the amounts to be received. They are subsequently measured at amortised cost (using the effective interest method) less impairment losses, if any.

	31 December 2022 $000	31 December 2021 $000
Trade receivables	6,258	4,755
Provision for doubtful debts	(186)	(239)
Net trade receivables	**6,072**	**4,516**
Prepayments	4,324	3,230
Accrued interest	96	44
Accrued income	6,640	3,480
Total current receivables and prepayments	**17,132**	**11,270**

Movement in provision for doubtful debts

The Group applies the simplified approach in providing for expected credit losses prescribed by NZ IFRS 9, which permits the use of the lifetime expected credit loss provision for all trade receivables. The provision for impairment losses are either individually or collective assessed based on number of days overdue. The Group takes into account the historic loss experience and incorporates forward looking information and relevant macroeconomic factors.

The Group maintains a provision for impairment losses when there is objective evidence of its customers being unable to make required payments and also makes a provision for doubtful debts on all balances greater than 60 days overdue.

	2022 $000	2021 $020
Balance at beginning of the year	(239)	(233)
Amounts written off during the year	44	104
Decrease/(increase) in provision recognised in profit or loss	9	(110)
Balance at end of the year	**(186)**	**(239)**

18. Property, plant and equipment

Property, plant and equipment is carried at cost less accumulated depreciation and impairment. The cost of the assets is the value of the consideration given to acquire the assets and the value of other directly attributable costs incurred in bringing the assets to the location and condition necessary for their intended use.

Depreciation is recognised in the Income Statement and is calculated on a straight line basis so as to write off the net cost of each asset over its expected useful life to its estimated residual value. Leasehold improvements are depreciated over the period of the lease or estimated useful life, whichever is the shorter, using the straight line method. The estimated useful lives, residual values and depreciation method are reviewed at the end of each annual reporting period.

The following estimated useful lives are used in the calculation of depreciation:

- Computer equipment: 3 - 7 years
- Furniture and equipment: 2 - 10 years
- Leasehold improvements: 5 - 15 years
- Motor vehicles: 3 years

	Computer equipment $000	Furniture and equipment $000	Leasehold improvements $000	Motor Vehicles $000	Capital work in progress $000	Total $000
Gross carrying amount						
Balance at 1 January 2021	**5,995**	**1,675**	**2,733**	**45**	**137**	**10,585**
Additions	986	58	-	-	4,429	5,473
Disposals	(2,975)	(375)	(351)	-	-	(3,701)
Transfers from WIP	16	1,225	3,262	-	(4,503)	-
Balance at 31 December 2021	**4,022**	**2,583**	**5,644**	**45**	**63**	**12,357**
Additions	178	237	5	-	4,873	5,293
Disposals	(91)	(6)	-	-	-	(97)
Transfer from WIP	381	-	2,626	-	(3,007)	-
Balance at 31 December 2022	**4,490**	**2,814**	**8,275**	**45**	**1,929**	**17,553**
Accumulated depreciation						
Balance at 1 January 2021	**5,210**	**1,585**	**1,611**	**33**	-	**8,439**
Depreciation expense	604	161	335	12	-	1,112
Disposals	(2,974)	(375)	(318)	-	-	(3,667)
Balance at 31 December 2021	**2,840**	**1,371**	**1,628**	**45**	-	**5,884**
Depreciation expense	621	305	463	-	-	1,389
Disposals	(86)	(6)	-	-	-	(92)
Balance at 31 December 2022	**3,375**	**1,670**	**2,091**	**45**	-	**7,181**
Net Book Value						
As at 1 January 2021	**785**	**90**	**1,122**	**12**	**137**	**2,146**
As at 31 December 2021	**1,182**	**1,212**	**4,016**	-	**63**	**6,473**
As at 31 December 2022	**1,115**	**1,144**	**6,184**	-	**1,929**	**10,372**

19. Trade payables

Trade payables and accruals are initially recognised at fair value less transaction costs (if any). They are subsequently measured at amortised cost using the effective interest method.

	31 December 2022 $000	31 December 2021 $000
Trade payables	1,979	1,722
Goods and services tax payable	285	652
Accrued expenses	5,093	4,351
Accrued interest	77	89
	7,434	**6,814**

20. Other liabilities

	31 December 2022 $000	31 December 2021 $000
Employee benefits	8,793	7,140
Unearned income	9,024	8,406
Other provisions	550	550
Other current liabilities	1,046	939
Total current other liabilities	**19,413**	**17,035**
Non-current employee benefits	-	645
Total non-current other liabilities	-	**645**
Total other liabilities	**19,413**	**17,680**

21. Interest bearing liabilities

	31 December 2022 $000	31 December 2021 $000
Subordinated notes	40,000	40,000
Total drawn debt	**40,000**	**40,000**
Capitalised borrowing costs (net of amortisation)	(963)	(1,029)
Net interest bearing liabilities	**39,037**	**38,971**

a. Subordinated notes

The subordinated notes have a 15 year term, maturing 20 June 2033, with election dates at 5 yearly intervals from the issue date until maturity. The current interest rate (5.40%) is fixed until the first election date (20 June 2023), at which point NZX may reset the interest rate. On the election date investors may either retain their subordinated notes (at the reset interest rate) or elect to redeem their subordinated notes.

NZX may defer the payment of interest at any time at its discretion, but will be subject to penalty interest of an additional 4.0% per annum until the next interest payment date at which unpaid and deferred interest is paid.

The terms of the subordinated notes offer include a financial covenant requiring that debt that ranks in priority to the subordinated notes, less unrestricted cash, may not exceed 1.5 times operating earnings (being EBITDA and non-cash items, and capital gains/losses). A breach of the financial covenant is not an event of default, but may prevent NZX paying dividends to shareholders, if it has failed on two consecutive test dates. The subordinated notes financial covenant has been met throughout the year.

The subordinated notes have been recognised initially at fair value less directly attributable transaction costs, and are subsequently measured at amortised cost using the effective interest method, as required by NZ IFRS 9.

At 31 December 2022 NZX's subordinated notes ($40 million) were classified within current liabilities (2021: nil). Due to this classification, the Group's current liabilities exceed the Group's current assets. The Group does not have liquidity or working capital concerns as the intention is to refinance the subordinated notes through either a roll-over of the existing notes (including an interest rate reset and with any redemption requests to be purchased using NZX's surplus cash balances and existing, unused bank facilities, and subsequently reissued in accordance with the terms of the subordinated notes) or the issue of new subordinated notes (the proceeds of which would be used to repay the existing notes).

b. Bank overdraft, revolving credit and term loan facilities

The Group has access to bank overdraft and revolving credit facilities, which have an expiry date of 22 December 2024 (extendable by mutual agreement), as well as a term loan facility (subject to certain conditions precedent).

The overdraft facility provides the Group with flexibility in its working capital management. The facility limit is $3.0 million (2021: $3.0 million). The bank may require repayment by making a written demand. The effective interest rate of the facility at 31 December 2022 was 4.80% (2021: 3.07%). The overdraft facility was undrawn at 31 December 2022 and 2021.

The revolving credit facility provides the Group with additional flexibility in its working capital management. The facility limit is $7.0 million (2021: $7.0 million). The revolving credit facility was undrawn at 31 December 2022 and 2021.

The term loan facility provides the Group with acquisition funding. The facility limit is $27.5 million (2021: $25.0 million). During the year a term loan facility was utilised to fund the acquisition of the management rights of the ASB Superannuation Master Trust (note 6), the term loan facility was then repaid from the proceeds of NZX's equity raising (note 22) and the facility closed. The Group has entered into a new term loan facility agreement, which was subject to certain conditions precedent and was undrawn at 31 December 2022. Subsequent to the balance date the conditions precedent have been fulfilled and the term loan facility will be utilised to complete the acquisition of QuayStreet Asset Management (note 30).

The bank facilities are unsecured and contain two financial covenants which have been met throughout the year:

- The ratio of interest bearing debt to EBITDA shall not exceed 3.5 times; and
- The ratio of EBITDA to interest shall exceed 4.0 times.

22. Shares on issue

The Company had 314,709,360 fully paid ordinary shares as at 31 December 2022 (31 December 2021: 280,690,043 fully paid ordinary shares). The holders of ordinary shares are entitled to receive dividends as declared and are entitled to one vote per share at meetings.

On 18 March 2022 the Group completed an equity raising which resulted in the issue of 31,185,792 new shares. The proceeds of the equity raising were used to fund the investment into GlobalDairyTrade Holding Limited (GDT), to replenish the balance sheet following the settlement of the acquisition of the management rights to the ASB Superannuation Master Trust on 11 February 2022, and also to provide capacity to support investment across the Company's market platform as it continues to scale its growth businesses.

The Dividend Reinvestment Plan was suspended for the dividends paid in March 2022 and applied to dividends paid in September 2022 (2021: applied to all dividends), resulting in the issue of 1,572,500 ordinary shares (2021: 2,150,910). Additionally 1,261,025 shares (2021: 538,002) were issued as share based payments - refer to Note 24.

As at 31 December 2022, the Company has 4,461,935 performance rights on issue under the Long Term Incentive Plan (2021: 5,484,403) to the members of its executive and management teams and to its CEO pursuant to its Long Term Incentive Plan. The performance rights give the holder options to acquire ordinary shares in the Company, which may be exercised if certain performance hurdles are met and the performance rights vest. Until the performance rights vest, none are quoted on the NZX Main Board. Refer to Note 24.

Movement in share capital:

	Number	$000
Balance at 1 January 2021	**278,001,131**	**58,517**
Issue of ordinary shares	2,688,912	3,953
Share based payments accrual	-	1,013
Cancellation of non-vesting rights	-	(11)
Balance at 31 December 2021	**280,690,043**	**63,472**
Issue of ordinary shares	34,019,317	44,626
Share based payments accrual	-	412
Cancellation of non-vesting rights	-	(40)
Balance at 31 December 2022	**314,709,360**	**108,470**

23. Dividends

		2022		2021	
	For year ended	Cents per share	Total $000	Cents per share	Total $000
Dividends paid					
March 2021 - Final	31 Dec 20			3.1	8,618
September 2021 - Interim	31 Dec 21			3.0	8,388
March 2022 - Final	31 Dec 21	3.1	8,701		
September 2022 - Interim	31 Dec 22	3.0	9,394		
Total dividends paid for the year		**6.1**	**18,095**	**6.1**	**17,006**

The Dividend Reinvestment Plan was suspended for the dividends paid in March 2022 and applied to dividends paid in September 2022 (2021: applied to all dividends).

Refer to Note 30 for details of the final 2022 dividend.

24. Share based payments

a. CEO Long Term Incentive Plan

During the year there were no changes in the terms of the CEO Long Term Incentive Plan.

i) CEO Long Term Incentive Plan - 2018

In 2018, the CEO was issued 1,177,894 performance rights under a long term incentive plan (CEO Long Term Incentive Plan - 2018). Each of these performance rights gave the CEO an option to acquire one ordinary share in NZX. Vesting of the performance rights was dependent on NZX meeting performance hurdles in respect of total shareholder return (TSR) growth and earnings per share (EPS) growth, and on the CEO remaining an employee of the NZX Group for the duration of the five year vesting period from 6 April 2017 to 6 April 2022. The cost of the performance rights was measured based on the fair value at the date granted using an appropriate pricing model and recognised in personnel costs over the term, with a corresponding increase in equity.

In May 2022, the Group assessed the CEO share scheme on vesting:

- Total shareholder return (TSR) component - the TSR over the scheme period exceeded the maximum hurdle (11.29%), resulting in 588,947 TSR performance rights vesting. The performance rights, when adjusted for the dilutive impact of NZX's equity raising (note 22), resulted in the issue of 599,524 shares in June 2022; and

- Earnings per share (EPS) component - the EPS minimum hurdle (8%) was not met and no EPS performance rights vested. The Group reversed the $287,000 fair value of the 588,947 EPS performance rights through profit and loss in the current year.

ii) CEO Long Term Incentive Plan - 2021

In 2021, the CEO was issued 550,449 performance rights under a long term incentive plan (CEO Long Term Incentive Plan - 2021). Each of these performance rights will give the CEO an option to acquire one ordinary share in NZX. The CEO may exercise the options if the performance rights vest. Vesting of the performance rights is dependent on NZX meeting performance hurdles in respect of total shareholder return (TSR) growth and on the CEO remaining an employee of the NZX Group for the duration of the vesting period.

Vesting of the performance rights is dependent on TSR growth over the vesting period. TSR growth of 7.40% per annum would result in 50% of the TSR growth related performance rights being vested; TSR growth of 9.40% would result in 100% being vested; and TSR growth between 7.40% and 9.40% results in between 50.1% to 99.9% being vested on a linear, pro-rata basis.

The vesting period is from 10 September 2021 to 6 April 2024.

There is a cap on the maximum value of performance rights that can vest. The maximum value is $5,000,000 million less the value of the Performance Rights that vest under the CEO Long Term Incentive Plan - 2018.

The cost of the performance rights is measured based on the fair value at the date granted using an appropriate pricing model. The cost is recognised over the term, with a corresponding increase in equity. The cumulative expense at each reporting date reflects the extent to which the vesting period has expired and is the best estimate of the number of performance rights that will vest. The expense or credit in the reporting period of $149k (2021: $50k) is the movement in cumulative expense and is recognised in personnel costs.

b. NZX Employee Long Term Incentive Plan

The NZX Employee Long Term Incentive Plan was implemented in 2018. Under the terms of the NZX Employee Long Term Incentive Plan, NZX offers selected employees performance rights, which are subject to certain entitlement criteria before performance rights may vest and the holder can acquire shares in NZX at nil cost. Once vested and exercised the performance rights entitle the holder to receive one share for each performance right at nil cost to employees. If the vesting conditions are not met or waived, the performance rights will lapse.

The NZX Employee Long Term Incentive Plan is offered on a three to six year term, with 1,183,353 performance rights issued to participants during 2022 (2021: 1,296,621).

The cost of the performance rights is measured based on the fair value at the date granted using an appropriate pricing model. The cost is recognised over the term of the scheme, with a corresponding increase in equity. The cumulative expense at each reporting date reflects the extent to which the vesting period has expired and is the best estimate of the number of performance rights that will vest. The expense or credit in the reporting period of $545k (2021: $874k) is the movement in cumulative expense and is recognised in personnel costs.

c. NZX Employee Shares

During the year $1,000 (gross) worth of NZX ordinary shares were issued to each new employee at nil cost to employees to encourage staff engagement and shareholder alignment.

25. Financial instruments

The Group's activities expose it to a variety of financial risks including credit risk, liquidity risk and market risk (including foreign currency risk and interest rate risk).

The board of directors has overall responsibility for the establishment and oversight of the Group's risk management framework, including the management of financial risk. The board has established an Audit and Risk Committee (Committee), which is responsible for developing and monitoring the Group's financial risk management policies (except for those relating to clearing and settlement activities discussed below). The Committee reports regularly to the board of directors on its activities.

The Group undertakes securities clearing and settlement activities for the listed equities, debt and derivatives markets through its clearing house New Zealand Clearing and Depository Corporation Limited (NZCDC or the Clearing House). These activities expose NZCDC and the Group to several significant financial risks. Management of these risks is the responsibility of the Clearing Committee of the NZX Board as well as the board of directors of NZCDC. Regular reporting is provided to the NZX Board on the risk management activities.

The specific financial risks faced by the Group, the way in which they are managed and their impact on the financial statements are discussed below.

a. Credit risk

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations. Credit risk arises from three principal sources:

- Receivables from customers arising in the normal course of business;
- Investment of surplus cash with financial institutions;
- The activities of the Clearing House, which is discussed separately in section (g).

Excluding Clearing House activities, NZX has no significant concentrations of credit risk from general customers, with receivable balances spread across a broad portfolio of customers. NZX does not require collateral to be provided against receivables incurred in the ordinary course of business, although listed issuers and participants in NZX's equity and debt markets are required to provide a bond that may be called upon in the event of default on financial obligations.

The status of trade receivables at the reporting date was as follows:

	31 December 2022 $000	31 December 2021 $000
Not past due	4,125	3,994
Past due 0 - 30 days	1,663	392
Past due > 30 days	470	369
Gross trade receivables	**6,258**	**4,755**

In summary, trade receivables are determined to be impaired as follows:

	31 December 2022 $000	31 December 2021 $000
Gross trade receivables	6,258	4,755
Individual impairment	(108)	(227)
Collective impairment	(78)	(12)
Net trade receivables	**6,072**	**4,516**

The movement in the provision for doubtful debts in respect of trade and other receivables during the year is set out in note 17.

For investment of surplus cash balances, the Group follows treasury policies that require investments to be held only with high credit quality counterparties and sets limits on the Group's exposure to individual counterparties. The individual counterparty limits are set as follows:

- The greater of $35 million or 60% of cash and cash equivalents for registered banks that operate in New Zealand with a minimum credit rating of AA-; and
- The greater of $17.5 million or 30% of total cash and cash equivalents for other institutions with a minimum credit rating of A-.

b. Foreign exchange risk

NZX primarily derives revenues and incurs expenses in NZD. In a minority of cases, however, receipts and payments are in foreign currencies (principally USD and AUD). NZX utilises foreign currency receipts to offset purchases denominated in foreign currencies. The Group determines forward exposures, and considers these in line with internal policies and procedures. It may enter into forward exchange agreements to keep any exposure to an acceptable level, though no such contracts were considered necessary in the current or prior financial year. Monetary assets and liabilities are kept to an acceptable level by buying or selling foreign currencies at the spot rate.

c. Interest rate risk

NZX is exposed to interest rate risk in that future interest rate movements will affect the interest that it pays on interest bearing liabilities. NZX does not currently use any derivative products to manage interest rate risk.

The interest period for the Subordinated Note ($40m) is fixed until the first election date (20 June 2023) at which point the interest rate may be reset (refer to note 21).

The Group's investment assets, particularly those designated as risk capital, are generally required to be readily convertible into cash. These are therefore held as bank deposits at floating rates of interest or invested in short term interest bearing assets for up to 12 months. This reduces the risk of movements in the market value of financial investments, but increases the Group's exposure to changes in cash flows as a result of short term movements in interest rates.

As at balance date, none of the Group's investments were subject to interest periods of greater than 12 months.

An analysis of the sensitivity of the Group's earnings to movements in interest rates is shown below. As at both 31 December 2022 and 2021 the Group's interest bearing assets exceeded its interest bearing liabilities, hence an increase in interest rates would have had a positive impact on earnings.

	2022 $000	2021 $000
Effect on net profit before income tax:		
1% increase in interest rate	78	190
1% decrease in interest rate	(78)	(190)

This above information is calculated using:

- the Group's cash balances;
- the Group's interest bearing liabilities; and
- the balances of application and redemption trust accounts of $5.2 million (2021: $7.7 million), where Smartshares Limited collects fees based on interest earned (in respect of balances held in those accounts between the cash receipt date and the date they are used to complete applications into and distributions from the Funds managed by Smartshares Limited).

d. Liquidity risk management

Liquidity risk is the risk that the Group will be unable to realise its assets on a sufficiently timely basis to meet its financial liabilities as they fall due. Liquidity risk arises from the general activities of the Group as well as in specific situations in the operation of the Clearing House. Clearing House liquidity risk is discussed in section (g).

The Group manages its general liquidity risk by maintaining adequate cash reserves, maintaining a sufficient term to maturity for its interest bearing liabilities and maintaining adequate overdraft and working capital facilities to provide it the flexibility to absorb predicted variability in cash flows. It continuously monitors forecast and actual cash flows to assist with determining the appropriate levels of cash reserves and borrowing capacity.

The table below summarises the Group's exposure to liquidity risk based on the undiscounted contractual cash flows and maturities of term debt. The amounts presented reflect the Group's contractual obligation to redeem NZX subordinated notes if elected by investors at the 20 June 2023 election date. The Group's intention is that the notes will be refinanced (refer note 21).

Interest bearing liabilities	Total contractual cash flows $000	Less than 1 year $000	1-2 years $000	2-5 years $000	More than 5 years $000
31 December 2022	(41,012)	(41,012)	-	-	-
31 December 2021	(43,172)	(2,160)	(41,012)	-	-

e. Accounting classification and fair values

The fair value of the financial instruments, which comprise cash and cash equivalents, funds held on behalf of third parties, receivables, trade payables, other liabilities and interest bearing liabilities, approximates their carrying amounts in these accounts. The subordinated notes have a fair value of $39.84 million (2021: $41.00 million).

f. Energy Clearing House

NZX, through its subsidiary Energy Clearing House Limited (ECH), is the electricity market operation service provider responsible for ensuring that market participants pay or are paid the correct amount for the electricity they generated or consumed. ECH also manages the prudential security requirements of participants, intended to ensure payers can meet their obligations in the market.

At 31 December 2022, ECH has outstanding payables and receivables for the purchase and sale of electricity. These items are not recorded in the Group's statement of financial position, because the energy market participants have accepted the risks associated with electricity settlement.

In discharging its obligations under the Electricity Industry Participation Code, ECH is required to ensure that purchasers maintain adequate levels of prudential security which is calculated daily. Participants can comply with this obligation in a number of ways, including third party guarantees, letters of credit, deposits of cash with the ECH or hedging mitigations.

ECH holds cash deposit security on trust, and does not recognise the security provided in its statement of financial position. There was $11,104,166 cash held from such deposits at 31 December 2022 (2021: $13,132,238).

g. Clearing House counterparty risk

The Clearing House acts as a central counterparty to trades undertaken on NZX's financial products markets. Trades that enter the Clearing House are immediately novated with the clearing participants such that the Clearing House becomes the buyer to every sell trade and the seller to every buy trade. As the buy and sell settlements resulting from all transactions that are novated to the Clearing House offset each other, the Group is not directly exposed to price movements in the underlying equities or derivatives, unless a clearing participant defaults.

On the equity market, for the period between trade date and settlement date, the Clearing House is exposed to credit risk as a clearing participant may become unable to meet its obligations to the Clearing House, for example if it became insolvent. Should a buying participant fail to pay cash, the Clearing House must still meet its obligations to buy the financial products from the selling participant. In these circumstances, the Clearing House is subject to market price risk on the financial products acquired as if the price of the financial products falls, the Clearing House may incur a loss on the disposal of those financial products. In addition, the Clearing House also faces liquidity risk, as it may be unable to realise sufficient cash on the scheduled settlement date to pay for the financial products it is acquiring.

Where the defaulting participant has outstanding sell trades to settle, the Clearing House may purchase those financial products in order to deliver them to the buying participant. In so doing, the Clearing House is again exposed to market and liquidity risk.

Credit risk

Counterparty credit risk is primarily managed in two ways. Firstly, through imposing requirements on participants, including minimum capital adequacy requirements, that aim to ensure that participants maintain sufficient capital and liquidity to meet their obligations to the Clearing House on an ongoing basis. Secondly, through calculating margin requirements on participants' open positions and requiring participants to post this margin as collateral as security for the trades. Margin requirements are calculated for each participant based on that participant's unsettled transactions in each financial product. Margin rates for each financial product are based on the underlying characteristics of the financial product and its price volatility. Margin requirements are calculated daily using current market prices. Each day, margin requirements are compared to collateral held and a margin call made where necessary. Participants are then required to post additional eligible collateral. Eligible collateral includes cash and financial products (including S&P/NZX 50 listed securities). Financial products provided as collateral are subject to a prudential value discount, commonly referred to as a "haircut".

In addition, counterparty credit risk for the derivatives market is also managed through the mutualised default fund. Derivatives Clearing Participants are required to make contributions to the mutualised default fund based on the level of their uncovered stress losses. Contributions are recalculated on a quarterly basis, or as required. Contributions must be provided in NZD or USD. The mutualised default fund can be applied to meeting settlement obligations of a defaulting participant on the derivatives market. In April 2021 NZX and the Singapore Exchange (SGX) entered into a strategic partnership agreement, followed by the migration of dairy derivatives contracts from NZX to SGX in November 2021. With suspension of dairy derivatives trading on NZX and no current trading in equity derivatives, contributions to the mutualised default fund are $nil.

The Group may also be exposed to counterparty credit risk through New Zealand Clearing Limited (NZCL) by acting as central counterparty for securities lending transactions. Where the securities lending facility is utilised, NZCL is exposed to the full principal value of each loan and NZCL requires collateral to be posted equal to 105% of the loan. All loans are revalued on a daily basis and additional collateral required where appropriate. In 2022 and 2021, the securities lending facility was not utilised by any Clearing Participants.

The Clearing House is also subject to counterparty credit risk relating to the investment of cash with financial institutions, including the Clearing House's own surplus cash and risk capital as well as the collateral and mutualised default fund contributions. The Clearing House has its own treasury policy and investment policy to manage the credit risk, including limits on the Clearing Houses' exposure to individual counterparts as follows:

- Unlimited for amounts held within New Zealand Depository Limited (NZDL) Exchange Settlement Accounts (ESAS) at the Reserve Bank of New Zealand
- Up to $300 million and 50% of total exposure with registered banks with a minimum credit rating of AA
- Up to $200 million and 40% of total exposure with registered banks with a minimum credit rating of AA-
- Up to $75 million and 20% of total exposure with registered banks with a minimum credit rating of A+
- Up to $50 million and 20% of total exposure with registered banks with a minimum credit rating of A

The Clearing House must only invest in Reserve Bank of New Zealand or New Zealand registered banks, except that foreign currency can be invested in foreign bank branches that are appointed as a settlement bank.

Liquidity risk
Liquidity risk is managed through a combination of the collateral held from participants, the Clearing House's own cash reserves, a mutualised default fund applicable to the derivatives market and a specific liquidity facility which provides short term liquidity in the event of a participant default.

Collateral from the defaulting participant would be applied towards meeting the settlement obligations on the other side of the trade. The Clearing House also holds risk capital in cash and highly liquid investments, which is available to meet the obligations of defaulted transactions. Additionally, derivatives Clearing Participants provide contributions to a mutualised default fund which can be applied to meeting settlement obligations of a defaulting participant on the derivatives market. With suspension of dairy derivatives trading on NZX from November 2021 current contributions to the mutualised default fund are $nil. As at 31 December 2022 the Clearing House held risk capital of $20 million (31 December 2021: $20 million).

In addition, the Clearing House has an agreement with a major New Zealand fund manager to provide liquidity support in the form of $50 million of securities or cash. Use of this facility is limited to situations where a participant default has occurred. The Clearing House may access the facility to obtain liquidity in the form of securities or cash, collateralised against cash or eligible securities provided by the Clearing House to the Fund Manager. The facility term is until 31 December 2023 after which the facility shall continue unless either party provides six month notice to terminate the facility.

Market risk
The risk that the Clearing House will realise a loss from liquidating securities that it becomes the owner of as a result of a participant default is managed by maintaining sufficient participant collateral and default capital (i.e. risk capital and mutualised default fund capital) to absorb projected losses. Any losses incurred are initially funded from the defaulting participant's margin collateral. Should this be insufficient to cover the losses, then these must be met from the Clearing House's own risk capital. For the derivatives market, the mutualised default fund will also be applied, with the defaulting participants contributions used first, followed by $10m of the Clearing House's risk capital, then non-defaulting participants contributions, before the final amount of the Clearing House's risk capital will be applied. With delisting of dairy derivatives trading on NZX from November 2021 current contributions to the mutualised default fund are $nil. The Clearing House regularly stress tests clearing participant exposures against the total amount of margin collateral and default capital resources.

Clearing balances outstanding

	31 Dec 2022 $000	31 Dec 2021 $000
Cash market transactions[1]		
NZCL to receive from Clearing Participants - in NZD	14,093	13,310
NZCL to pay to Clearing Participants - in NZD	14,093	13,310
Aggregate absolute value of all net outstanding cash market settlement transactions - in NZD	63,610	76,019
Collateral held to cover outstanding settlement positions		
Cash - in NZD	28,177	25,844

1 All of these outstanding transactions were settled subsequent to 31 December 2022.

26. Related party transactions

a. Transactions with key management personnel

Key management personnel comprises the Group's senior management team. Key management personnel compensation comprised the following:

	2022 $000	2021 $000
Short-term employee benefits	5,625	5,081
Long-term employee benefits	(626)	161
Share-based payments	316	545
Resignation benefits	414	90
	5,729	**5,877**

b. Transactions with directors and other entities NZX directors are associated with

The Company regularly enters into transactions under normal commercial terms and conditions with other entities that some of the directors may sit on the board of or are employed by.

NZX directors fees for the year were $460,000 (2021: $413,000) (refer to Note 11).

c. Transactions with managed funds

Management and other fees are received from the funds managed by wholly owned subsidiary Smartshares Limited and are shown in the Income Statement as funds management revenue (refer to Note 10).

d. Transactions with associate

On 30 June 2022 the Group acquired a 33.33% stake in GlobalDairyTrade Holding Limited (GDT) (note 7).

	Transaction values for the year ended 31 December		Balance outstanding as at 31 December	
	2022 $000	2021 $000	2022 $000	2021 $000
Services to associate	6	-	-	-
Services from associate	(27)	-	(22)	-

All outstanding balances with the related party are priced on an arm's length basis and are to be settled in cash subsequent to the reporting date. None of the balance is secured. No expense has been recognised in the current year or prior year for bad or doubtful debts in respect of amounts owed by related party.

Two directors on the GDT board are employees of NZX Limited and no directors' fees are paid by GDT to those directors.

27. Contingent assets

The Group has identified management fees relating to prior Fund financial years that are yet to be recognised by its Funds Management business. No revenue has been recognised in the financial year (current estimate is up to $1.1 million) as it is not virtually certain as to the recoverability of the additional management fees.

28. Contingent liabilities

In New Zealand there has been increased regulatory focus on market participant compliance for entities such as the Group. Accordingly, there has been an increase in the number of matters on which the Group engages with its regulators including matters such as financial market conduct, reporting and disclosure obligations, tax treatments, and product disclosure documentation. In the normal course of business the Group may be subject to actual or possible claims and court proceedings. Where relevant, expert legal advice is obtained and, in light of such advice, provisions and/or disclosures as deemed appropriate are made.

There were no contingent liabilities as at 31 December 2022 and 31 December 2021.

29. Capital commitments

	31 December 2022 $000	31 December 2021 $000
Capital expenditure commitments:		
Software development	36	20
Hardware development	283	-
	319	20

30. Subsequent events

Dividend
Subsequent to balance date the board declared a final 2022 dividend (fully imputed) of 3.1 cents per share, to be paid on 16 March 2023 (with a record date of 2 March 2023).

Acquisition of QuayStreet Asset Management

On 23 February 2023 Smartshares Limited will complete the acquisition of the management rights and associated assets of QuayStreet Asset Management. This acquisition:

- will drive further scale in Smartshares, with funds under management expected to increase by approximately $1.6 billion at acquisition;
- will provide Smartshares, in time, with an enhanced passive product offering; and
- is aligned with the NZX Group strategy to capture complementary opportunities that the greater scale in the Smartshares business provides to both the NZ Capital Markets and NZX's market business.

The total transaction consideration comprises a $22.5 million upfront cash payment, the issuance of $8.75 million in NZX shares (at $1.3320) and potential earn-out consideration of up to $18.75 million, based on net FUM inflows from the Craigs Investment Partners network over a three-year period.

The Group's term loan facility (on completion of the conditions precedent) will be utilised to fund the acquisition (note 21) on 23 February 2023. The remaining initial purchase price will be satisfied by the issue of NZX shares on 3 March 2023.

The business combination accounting will recognise the fair value of identifiable assets and liabilities at the date of completion, with any excess of the cost of acquisition (including the fair value of the contingent consideration) over the fair values of the identifiable net assets recognised as goodwill. The acquisition costs incurred to date (including costs contingent on the completion of the acquisition) have been expensed.

Independent Auditor's Report

To the shareholders of NZX Limited

Report on the audit of the consolidated financial statements

Opinion

In our opinion, the consolidated financial statements of NZX Limited (the 'company') and its subsidiaries (the 'group') on pages 70 to 111 present fairly, in all material respects:

i. the group's financial position as at 31 December 2022 and its financial performance and cash flows for the year ended on that date;

ii. in accordance with New Zealand Equivalents to International Financial Reporting Standards and International Financial Reporting Standards issued by the New Zealand Accounting Standards Board.

We have audited the accompanying consolidated financial statements which comprise:

— the consolidated statement of financial position as at 31 December 2022;

— the consolidated income statement, statements of comprehensive income, changes in equity and cash flows for the year then ended; and

— notes, including a summary of significant accounting policies and other explanatory information.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (New Zealand) ('ISAs (NZ)'). We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

We are independent of the group in accordance with Professional and Ethical Standard 1 *International Code of Ethics for Assurance Practitioners (Including International Independence Standards) (New Zealand)* issued by the New Zealand Auditing and Assurance Standards Board and the International Ethics Standards Board for Accountants' *International Code of Ethics for Professional Accountants (including International Independence Standards)* ('IESBA Code'), and we have fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA Code.

Our responsibilities under ISAs (NZ) are further described in the *Auditor's responsibilities for the audit of the consolidated financial statements* section of our report.

Our firm has also provided other services to the group in relation to regulatory assurance. Subject to certain restrictions, partners and employees of our firm may also deal with the group on normal terms within the ordinary course of trading activities of the business of the group. These matters have not impaired our independence as auditor of the group. The firm has no other relationship with, or interest in, the group.

Materiality

The scope of our audit was influenced by our application of materiality. Materiality helped us to determine the nature, timing and extent of our audit procedures and to evaluate the effect of misstatements, both individually and on the consolidated financial statements as a whole. The materiality for the consolidated financial statements as a whole was set at $1 million determined with reference to a benchmark of group profit before tax. We chose the benchmark because, in our view, this is a key measure of the group's performance.

Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the consolidated financial statements in the current period. We summarise below those matters and our key audit procedures to address those matters in order that the shareholders as a body may better understand the process by which we arrived at our audit opinion. Our procedures were undertaken in the context of and solely for the purpose of our statutory audit opinion on the consolidated financial statements as a whole and we do not express discrete opinions on separate elements of the consolidated financial statements.

The key audit matter

Goodwill & other intangible assets impairment assessment

Refer to Note 5 to the financial statements.

The group's goodwill and other intangible assets arise from acquisitions and subsequent capitalised costs that relate to a number of different cash generating units (CGUs) as described in Note 5 of the financial statements.

The goodwill and other intangible assets are significant and the valuation models used in the impairment tests include a range of subjective assumptions about the future performance of the cash generating units.

We focus on the impairment tests for the CGUs that we consider having a higher risk of impairment. This assessment is primarily based on the level of judgement involved in the underlying valuation model and market conditions for the relevant CGU. The CGUs we consider to be higher risk are Energy and Wealth Technologies.

How the matter was addressed in our audit

For the CGUs we determined to have a higher risk of impairment, our audit procedures included:

- Comparing the cash flow forecasts to budgets and assessing forecasting accuracy by comparing current year actual performance to prior year budgets.
- Assessing the significant assumptions applied to the revenue forecasts by comparing to contracts, forecast inflation rates, and forecast market share analysis. In addition, we performed stress-testing over the forecasts and considered the pipeline of future customers for Wealth Technologies.
- Assessing the cost forecasts against management's business plans, actual expenditure incurred and forecast inflation rates.
- Comparing the discount rate used to our own independently determined rate and evaluating terminal growth rates against long-term inflation forecasts.

Based on our analysis, the assumptions and judgements used by the Directors in the group's impairment assessments were within acceptable ranges and we did not identify any material issues with the carrying value of goodwill or intangible assets.

Other information

The Directors, on behalf of the group, are responsible for the other information included in the entity's Annual Report. Other information includes the reports within the Business Year update including the Chair's letter and CEO, reports within the NZX Group Overview, Operating Responsibly, Governance and Management Commentary sections of the annual report and disclosures relating to statutory information. Our opinion on the consolidated financial statements does not cover any other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Use of this independent auditor's report

This independent auditor's report is made solely to the shareholders as a body. Our audit work has been undertaken so that we might state to the shareholders those matters we are required to state to them in the independent auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the shareholders as a body for our audit work, this independent auditor's report, or any of the opinions we have formed.

Responsibilities of the Directors for the consolidated financial statements

The Directors, on behalf of the company, are responsible for:

- the preparation and fair presentation of the consolidated financial statements in accordance with generally accepted accounting practice in New Zealand (being New Zealand Equivalents to International Financial Reporting Standards) and International Financial Reporting Standards issued by the New Zealand Accounting Standards Board;
- implementing necessary internal control to enable the preparation of a consolidated set of financial statements that is free from material misstatement, whether due to fraud or error; and
- assessing the ability to continue as a going concern. This includes disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless they either intend to liquidate or to cease operations or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the consolidated financial statements

Our objective is:

- to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error; and

— to issue an independent auditor’s report that includes our opinion.

Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with ISAs NZ will always detect a material misstatement when it exists.

Misstatements can arise from fraud or error. They are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

A further description of our responsibilities for the audit of these consolidated financial statements is located at the External Reporting Board (XRB) website at:

http://www.xrb.govt.nz/standards-for-assurance-practitioners/auditors-responsibilities/audit-report-1/

This description forms part of our independent auditor’s report.

The engagement partner on the audit resulting in this independent auditor's report is Brent Manning.

For and on behalf of

KPMG

KPMG
Wellington

22 February 2023

Statutory Information

1. Business operations

During the year, the company acquired (through its subsidiary Smartshares Limited) the management rights of the ASB Superannuation Master Trust as well as entered into an agreement to acquire the management rights and related assets of QuayStreet Asset Management.

NZX also finalised its strategic partnership with Fonterra Cooperative Group Limited (Fonterra) and the European Energy Exchange (EEX) during the year, with NZX and EEX taking ownership stakes in GlobalDairyTrade Holdings Limited (GDT) alongside Fonterra.

NZX established the Corporate Governance Institute during the year with the purpose of this new body to assist NZX by delivering recommendations to the development of the NZX Corporate Governance Code and rule settings that apply to the corporate governance practices of issuers on the NZX Main Board.

There have been no other changes in core business undertakings of the Company or its subsidiaries during the year.

2. Interests register

NZX is required to maintain an interests register in which particulars of certain transactions and matters involving the directors must be recorded.

3. Directors' interests

The following are particulars of the disclosures of interest by directors holding office during the accounting period.

Director	Interest	Entity
Frank Aldridge	Director	Claybrook Holdings
	Director	Avion Private Limited
	Shareholder (indirect)	Craigs Investment Partners Limited (CIP)
Nigel Babbage[1]	Director	Orbell Vineyards Limited
	Chair and CEO	Mohua Investments Limited
	Director	Mohua Limited
Richard Bodman[2]	Director and shareholder	Te Ahumairangi Investment Management Limited
	Director	Forsyth Barr Cash Management Nominees Limited
	Director	Forsyth Barr Custodians Limited
	Director	Octagon Asset Management Limited
	Consultant	Accident Compensation Corporation (retired from during year)
Elaine Campbell	Chief Corporate Officer and General Counsel	Chorus Limited
James Miller	Director	Mercury NZ Limited
	Director and Chair	Channel Infrastructure NZ Limited (formerly The New Zealand Refining Company Limited)
	Director	Vista Group International Limited
Lindsay Wright[3]	CEO Funds Management	Sun Hung Kai & Co
Peter Jessup[4]	Consultant	LSEG Technology (superseded by below)
	Head of Market Infrastructure Business Development, D&A Product - Trading & Banking Solutions	LSEG Technology
	Owner/ Director	Katipo Consulting Pty Limited
Robert Hamilton[5]	Director	Westpac New Zealand Ltd
	Director	Oceania Healthcare Ltd
	Director	Tourism Holdings Ltd

Director	Interest	Entity
	Director and Shareholder	Stelvio Consulting Ltd
	Director and Shareholder	Kamari Consulting Ltd
Rachel Walsh[6]	Chief Financial Officer	Datacom Group

1 Following his passing, Nigel Babbage vacated his office as director of NZX Limited, effective 20 November 2022.
2 Richard Bodman resigned as a director of NZX Limited, effective 31 December 2022.
3 Lindsay Wright also acts as a director on a number of fund entities managed by her employer.
4 Peter Jessup was appointed as a director of NZX Limited, effective1 January 2022.
5 Robert Hamilton was appointed as a director of NZX Limited, effective 12 October 2022.
6 Rachel Walsh was appointed as a director of NZX Limited, effective 12 October 2022.

4. Information used by directors

There were no notices from directors of the Company requesting to disclose or use Company Information received in their capacity as directors that would not otherwise have been available to them.

5. Directors' remuneration

The total remuneration available for directors is fixed by shareholders. The annual fee pool limit was increased by shareholders at the annual meeting in April 2022 by $87,000 from $435,000 to $522,000 with effect from 1 July 2022. The number of NZX directors increased from seven at the beginning of the year to eight at the end of the year following John McMahon's resignation effective 31 December 2021, Peter Jessup's appointment effective 1 January 2022, Robert Hamilton's appointment effective 12 October 2022, Rachel Walsh's appointment effective 12 October 2022 and Nigel Babbage's vacation effective 20 November 2022.

Director	Role	Board Fees	RegCo Fees	Total
Frank Aldridge	Director	$55,000	-	$55,000
Nigel Babbage[1]	Director	$48,641	-	$48,641
Richard Bodman	Director	$55,000	-	$55,000
Elaine Campbell	Director	$55,000	$15,000	$70,000
Peter Jessup	Director	$55,000	-	$55,000
James Miller	Chair	$110,000	-	$110,000
Lindsay Wright	Director	$55,000	-	$55,000
Robert Hamilton	Director	$13,207	-	$13,207
Rachel Walsh	Director	$13,207	-	$13,207
Total		**$460,055**	**$15,000**	**$475,055**

1 Following his passing, Nigel Babbage vacated his office of director of NZX effective 20 November 2022.

6. Indemnification and insurance of directors and officers

NZX pays premiums in respect of directors' liability insurance. The policies do not specify a premium for individuals.

The insurance provides cover against costs and expenses involved in defending legal actions and any damages or judgements awarded or entered against the individual, settlements negotiated and any legal costs or expenses awarded against the individual arising from a liability to persons (other than the company or a related body corporate) incurred in their position as a director unless the conduct involves a wilful breach of duty, improper use of inside information or position to gain any profit or advantage or any criminal, dishonest, fraudulent or malicious acts or omissions or any knowing or wilful violation of any statute or regulation.

NZX has granted indemnities to NZX directors and NZX-appointed directors of operating subsidiaries in relation to potential liabilities and costs they may incur for acts or omissions in their role as a director of NZX or an NZX subsidiary. Similar exclusions to those described in the previous paragraph on insurance apply.

7. Subsidiary company directors

The directors of all NZX subsidiaries during the year are as follows:

Clearing House entities

New Zealand Clearing and Depository Corporation Limited

- Mark Peterson
- Roger Bayly
- Graham Law
- Felicity Gibson (appointed 1 September 2022)

New Zealand Clearing Limited

- Mark Peterson
- Graham Law

New Zealand Depository Limited

- Mark Peterson
- Graham Law

New Zealand Depository Nominee Limited

- Graham Law
- Mark Peterson

Other NZX subsidiaries

Energy Clearing House Limited

- Graham Law
- Mark Peterson

Smartshares Limited

- John Williams (independent director)
- Guy Elliffe (independent director)
- Mark Peterson
- Graham Law

NZX Wealth Technologies Limited

- Mark Peterson
- Graham Law
- Kathryn Jaggard

NZX Regulation Limited

- Trevor Janes
- Michael Heron KC
- Elaine Campbell
- Annabel Cotton[1]
- John Hawkins

New Zealand Exchange Limited

- Graham Law
- Mark Peterson

NZX Holding No. 4 Limited

- Graham Law
- Mark Peterson

The directors of NZX's subsidiary companies who are not NZX employees or directors of NZX Limited, have declared interests in the following entities:

1 Annabel Cotton retired as a director of NZX Regulation Limited, effective 31 December 2022.

Subsidiary directors (Non-NZX directors)	Interest	Entity
Annabel Cotton	Director and Shareholder	Merlin Group Limited
	Director and Shareholder	Merlin Consulting Limited
	Director and Shareholder	Access IR Group Limited
	Director	New Zealand Growth Capital Partners Limited
	Director	Aspire NZ Seed Fund Limited
	Director	Elevate NZ Venture Fund GP Limited
	Trustee	Global Women
Guy Elliffe	Corporate Governance Manager	Accident Compensation Corporation
	Member of Investment Committee	Todd Foundation (retired from)
John Hawkins	Director	Pines Apartments Limited
Michael Heron KC	Barrister	Mike Heron KC
Kathryn Jaggard	Consultant	NZX Limited

NZX employees and directors do not receive additional remuneration for acting as directors of subsidiary companies.

The total amount of remuneration and other benefits to which independent directors of an NZX subsidiary was entitled during 2022 is as follows:

Subsidiary directors (Non-NZX directors)	Remuneration
Kathryn Jaggard	$20,000
John Williams	$50,000
Guy Elliffe	$50,000
Annabel Cotton	$46,000
John Hawkins	$42,250
Michael Heron	$42,250
Trevor Janes	$68,750
Total	**$319,250**

8. Donations

During the year NZX made donations to charitable organisations of $250. NZX does not make political donations.

9. Employee remuneration

The table below sets out the number of NZX Group employees and former employees who received remuneration and other benefits, including non-cash benefits and share-based remuneration in excess of $100,000 per annum. This information is based on all amounts received by the employees during the calendar year and therefore includes short term and long term incentive payments that relate to 2021 and prior years (where applicable). Directors are not included in the table below. Their remuneration is set out separately in section 5.

Remuneration range	Employees
100,000 -110,000	19
110,000 - 120,000	14
120,000 - 130,000	22
130,000 - 140,000	9
140,000 - 150,000	11
150,000 - 160,000	6
160,000 - 170,000	8
170,000 - 180,000	7
180,000 -190,000	13
190,000 - 200,000	9
200,000 - 210,000	4
210,000 - 220,000	4
220,000 - 230,000	4
230,000 - 240,000	3
250,000 - 260,000	1
260,000 - 270,000	4
270,000 - 280,000	1
280,000 - 290,000	4
290,000 - 300,000	2
300,000 - 310,000	1
310,000 - 320,000	1
340,000 - 350,000	1
350,000 - 360,000	1

370,000 - 380,000	1
380,000 - 390,000	1
390,000 - 400,000	1
420,000 - 430,000	1
520,000 - 530,000	1
530,000 - 540,000	1
2,290,000 - 2,300,000[1]	1

1 This employee's remuneration includes the value of shares vested under a 2018 long-term incentive plan. During the calendar year, 588,947 performance rights that were issued to this employee in 2018 vested and as a result, he/she was issued 599,524 NZX Ordinary Shares. In addition, a further 588,947 performance rights issued to this employee in 2018 lapsed. The cost of the performance rights has been recognised at their fair value over the 5 year plan term. Refer to note 24(a) of the Financial Statements for more details.

10. Director transactions in securities of the parent company

Director	Securities held (legally and beneficially) at 31 December 2022 (Subordinated Notes)	Securities held (legally and beneficially) at 31 December 2022 (Ordinary Shares)
Frank Aldridge	Nil	55,555
Richard Bodman	15,000	11,441
Elaine Campbell	Nil	10,977
James Miller	8,000	174,144
Lindsay Wright[1]	Nil	Nil
Robert Hamilton	Nil	Nil
Rachel Walsh	Nil	Nil

1 As part of the conflict management arrangements in place for her role with Sun Hung Kai & Co, Lindsay Wright does not hold securities in NZX.

11. Auditors

The external auditor of the parent company and the Group is KPMG. They provide audit and other services, for which their remuneration in 2022 was as follows:

	Group $000
Audit of the financial statements	203
Other audit related fees	54
Total	257

Other audit-related fees relate to operational audit of New Zealand Clearing and Depository Corporation Limited, the annual depository assurance engagement of New Zealand Depository Limited and the Net Tangible Assets procedures engagement of Smartshares Limited.

12. Top 20 security holders

The following table shows the names and holdings of the 20 largest holders of NZX ordinary shares as at 31 December 2022:

Investor name	Shares held	% of issued shares
Accident Compensation Corporation	23,261,886	7.39
Bnp Paribas Nominees NZ Limited Bpss40	17,586,278	5.59
Citibank Nominees (Nz) Ltd	17,033,097	5.41
Bnp Paribas Nominees NZ Limited	14,644,707	4.65
FNZ Custodians Limited	13,321,620	4.23
Forsyth Barr Custodians Limited	12,132,888	3.86
HSBC Nominees (New Zealand) Limited	12,009,457	3.82
Nigel Charles Babbage	11,700,000	3.72
JPMORGAN Chase Bank	10,817,187	3.44
Custodial Services Limited	10,640,712	3.38
New Zealand Depository Nominee	9,360,616	2.97
David Mitchell Odlin	6,986,275	2.22
Mirrabooka Investments Limited	4,722,222	1.50
Premier Nominees Limited	3,920,855	1.25
Elizabeth Beatty Benjamin & Michael Murray Benjamin	3,314,000	1.05
Cogent Nominees (Nz) Limited	3,000,090	0.95
Wairahi Investments Limited	2,750,000	0.87
New Zealand Permanent Trustees Limited	2,550,000	0.81
Tea Custodians Limited	2,416,405	0.77
New Zealand Superannuation Fund Nominees Limited	2,145,346	0.68

The following table shows the names and holdings of the 20 largest holders of NZX Subordinated Notes as at 31 December 2022:

Investor Name	Notes held	% of issued notes
Forsyth Barr Custodians Limited	8,960,000	22.40

Investor Name	Notes held	% of issued notes
FNZ Custodians Limited	6,557,000	16.39
Custodial Services Limited	3,256,000	8.14
New Zealand Permanent Trustees Limited	2,680,000	6.70
Hobson Wealth Custodian Limited	2,496,000	6.24
JBWERE (Nz) Nominees Limited	1,738,000	4.35
Graeme Laurence Beckett & Janine Dale Beckett	1,017,000	2.54
New Zealand Permanent Trustees Limited	725,000	1.81
Forsyth Barr Custodians Limited	430,000	1.08
Investment Custodial Services Limited	343,000	0.86
Public Trust Rif Nominees Limited	280,000	0.70
Richard Barton Adams & Allison Ruth Adams	250,000	0.63
Rodney Gavin Shayle Callender	200,000	0.50
Enft Limited	150,000	0.38
Amanda Jane Nicholas	149,000	0.37
Forsyth Barr Custodians Limited	127,000	0.32
Graham Nicholas Law	113,000	0.28
Forsyth Barr Custodians Limited	108,000	0.27
Hobson Wealth Custodian Limited	103,000	0.26
Craig John Thompson	100,000	0.25
Erudite Holdings Limited	100,000	0.25
Somsmith Nominees Limited	100,000	0.25
William Robert Mortlock & Joanne Elizabeth Mortlock	100,000	0.25

13. Spread of ordinary shareholders as at 31 December 2022

The following table shows the spread of NZX Ordinary Shares as at 31 December 2022:

	SHAREHOLDERS		SHARES	
Size of holding	Number	%	Number	%
1 - 1,000	716	14.95	373,691	0.12
1,001 - 5,000	896	18.71	2,724,099	0.87
5,001 - 10,000	1,019	21.27	7,922,454	2.52
10,001 - 50,000	1,715	35.80	38,239,189	12.15
50,001 - 100,000	261	5.45	18,518,467	5.88
Greater than 100,000	183	3.82	246,931,460	78.46
Total	**4,790**	**100**	**314,709,360**	**100**

The following table shows the spread of NZX Subordinated Notes as at 31 December 2022:

	NOTEHOLDERS		NOTES	
Size of holding	Number	%	Number	%
1 - 1,000	-	-	-	-
1,001 - 5,000	61	11.34	305,000	0.76
5,001 - 10,000	147	27.32	1,345,000	3.36
10,001 - 50,000	297	55.21	7,305,000	18.26
50,001 - 100,000	16	2.97	1,222,000	3.06
Greater than 100,000	17	3.16	29,823,000	74.56
Total	**538**	**100**	**40,000,000**	**100**

14. Substantial product holders

The following information is given pursuant to section 293 of the Financial Markets Conduct Act 2013 (FMCA). According to NZX's records and disclosures made pursuant to section 280 (1)(b) of the FMCA, the following were substantial product holders in NZX as at 31 December 2022. The total number of voting securities on issue as at 31 December 2022 was 314,709,360.

	Class	Relevant Interest	% of Issued shares
abrdn Asia Limited (formerly known as Aberdeen Standard Investments (Asia) Limited)	Ordinary shares	22,357,256	7.1040
Aggregate of abrdn plc (formerly known as Standard Life Aberdeen plc)	Ordinary shares	22,357,256	7.1040
Accident Compensation Corporation (ACC)	Ordinary shares	23,261,886	7.392

15. Waivers from listing rules and independent director certificates

During the year, NZX requested a waiver from the Special Division of the NZ Markets Disciplinary Tribunal in respect of Listing Rule 4.19.1 regarding its capital raising in the form of an accelerated renounceable entitlement offer. The rationale for this waiver was that the acceleration of the institutional entitlement offer may cause NZX's largest shareholder, Aberdeen Standard Investments (Asia) Limited and Aberdeen Asset Management Limited (which acts as an investment manager for various clients and entities), to exceed the control limits permitted by the Financial Markets Conduct Act 2013 and the associated regulations as well as in NZX's Constitution.

On 16 February 2022, NZX received confirmation from the Special Division of the NZ Markets Disciplinary Tribunal that its waiver application had been approved, subject to certain conditions. A copy of this decision was released to the market on 17 February 2022.

16. Securities issued by NZX

NZX's ordinary shares are quoted on the NZX Main Board. In 2018 NZX introduced an employee share scheme and CEO share scheme based on the issue of performance rights, which are subject to certain entitlement criteria before performance rights may vest and the holder can acquire shares in NZX. For as long as performance rights issued under these schemes are subject to these restrictions they, and any shares which may be issued following the exercise of performance rights, are not quoted on any market and will not be quoted on any market until such time as they vest in the relevant participants. In 2022, NZX introduced a Share Purchase Plan for directors to align directors' incentives with shareholders, which provides that a portion of the directors' base fees will be used to acquire NZX Limited shares (except where it is not permitted for compliance purposes, or when certain thresholds are met).

In 2018 NZX issued $40 million of unsecured, subordinated notes with a coupon rate of 5.4%. These notes are quoted and traded on the NZX Debt Market as NZX010.

This report is signed by and on behalf of the board of NZX Limited by:

James Miller
Chair of the Board

Lindsay Wright
Chair of the Audit and Risk Committee

Appendices

Appendix 1

OUR ESG IMPACT - GRI CONTENT INDEX

NZX is committed to comprehensive ESG and sustainability reporting. This report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards, and with reference to the recommendations of the World Economic Forum's Measuring Stakeholder Capitalism Towards Common Metrics and Consistent Reporting of Sustainable Value Creation (2020) and the Taskforce for Climate-related Financial Disclosures (TCFD).

Where applicable, disclosures are also consistent with the Aotearoa New Zealand Climate Standards (ANZCS).

General disclosures		
102-1	Name of organisation	NZX Limited
102-2	Activities, brands, products, and services	Who we are. See pages 6/7
102-3	Location of headquarters	NZX Limited, Level 1 / NZX Centre, 11 Cable Street, Wellington. See page 6/7
102-4	Location of operations	New Zealand
102-5	Nature of ownership and legal form	Notes to the Group Financial Statements. See page 74
102-6	Markets served	The NZX Group operates the NZX Main Board, NZX Debt Market, NZX Derivatives Market and Fonterra Shareholders' Market, along with the New Zealand's Wholesale Energy Market and the New Zealand Emissions Trading Scheme (ETS) Auction Market.
102-7	Scale of organisation	Who we are. See pages 6/7
102-8	Information on employees and other workers	Who we are. See page 6/7
102-9	Supply chain	Our vendors include contractors for office space, utilities, telecommunications, cybersecurity and data centre facilities providers in New Zealand and other countries to deliver a range of exchange-related services.
102-10	Significant changes to organisation and its supply chain	During 2022, the management rights of the ASB Superannuation Master Trust were acquired as well as the management rights of QuayStreet (and related assets of QuayStreet) from Craigs Investments Partners. In addition, NZX established the Corporate Governance Institute during the year and finalised its strategic partnership with Fonterra and EEX in relation to GDT. See page 118
102-11	Precautionary Principle or approach	Not material to NZX Group. See Risk section, page 54, for our approach to risk management.
102-12	External initiatives	Sustainable Stock Exchanges Initiative (SSE), World Federation of Exchanges (WFE), Global Women, Champions for Change.
102-13	Membership of associations	Diversity Works NZ, Business NZ, Business NZ Energy Council, Australasian Investor Relations Association, Futures Industry Association, Institute of IT Professionals, NZ Institute of Economic Research Inc, FinTech NZ, The Hugo Group Inc, The New Zealand Initiative, Financial Services Council. Global affiliations include: ASX – Sydney, HKEX – Hong Kong, LSE – London, NASDAQ – New York, SGX – Singapore, TMX – Toronto, SPSE – Suva, SSE – Shanghai
102-14	Statement from senior decision-maker	How we create value. See page 22 and Operating Responsibly, page 30

General disclosures		
102-16	Values, principles, standards, and norms of behaviour	How we deliver value. See page 22
102-18	Governance structure	Corporate Governance. A full list of Board Committees and membership is published on page 48
102-20	Executive-level responsibility for ESG topics	Head of Sustainability reporting to the Chief Financial & Corporate Officer
102-40	List of stakeholder groups	How we create value. See page 22. NZX engages with various stakeholder groups in the capital markets eco-system, including those entities regulated by NZ RegCo. During 2022 NZX further embedded industry engagement practices, including through the Technology Working Group and the Securities Industry Association which represents NZX Participants. See page 42 for establishment of the NZX Corporate Governance Institute. NZX also works closely with other regulatory and government agencies that set policy that affects NZX's markets, including FMA, MBIE and XRB and engages with market peers through WFE and the SSE Initiative.
102-42	Identifying and selecting stakeholders	
102-43	Approach to stakeholder engagement	
102-41	Collective bargaining agreements	None of NZX's employees are covered by a collective bargaining agreement.
102-45	Entities included in the consolidated financial statements	Notes to the Group Financial Statements. See page 74
102-46	Defining report content and topic boundaries	About this report. See page 1
102-47	List of material topics	NZX plans to undertake an ESG materiality assessment in 2023, which would include the identification of key stakeholders and engagement with them to determine how they are affected by the company's decisions and actions – supporting reporting on the key topics and concerns raised, and how NZX has prioritised and responded to those matters.
102-48	Restatement of information	There has been no restatement of prior year financial data. External audit of prior year GHG emissions resulted in some adjustments; prior year GHG emissions in this report are up to date. See page 37
102-49	Changes in reporting	No significant changes other than improved data coverage and quality
102-50	Reporting period	1 January 2022 – 31 December 2022
102-51	Date of most recent report	16 February 2022
102-52	Reporting cycle	Annual
102-53	Contact point for questions regarding the report	info@nzx.com
102-54	Claims of reporting in accordance with GRI Standards	This report has been prepared in accordance with the GRI Standards: Core option.
102-55	GRI Content Index	GRI Index. See page 126
102-56	External assurance	Independent Auditor's Report for external assurance of financial statement. See page 112
205-1	Operations assessed for risks related to corruption	During the period Anti-Money Laundering (AML) reviews were undertaken in NZX Wealth Technologies and Energy operations. No significant risks were raised through the risk assessments. Risk reporting. See page 54

General disclosures		
205-2	Communication and training about anti-corruption policies and procedures	NZX has a Conflict Management Policy that applies to all employees and directors. Any person subject to the policy is required to complete annual training to a satisfactory standard. 98% had completed training at the reporting date. NZ RegCo employees and directors must complete separate training relevant to their conflicts management obligations. 100% had completed training at publication date.
205-3	Confirmed incidents of corruption and actions taken	In the 12 Month period to 31 December 2022, there were no confirmed incidents of corruption, including cases where employees are dismissed, business contracts violated or terminated, or public legal cases in relation to Anti Money Laundering.
	Protected ethics advice and reporting mechanisms	NZX's Code of Conduct was last updated in April 2022, and the Protected Disclosure Policy last updated in November 2022 (which includes a third party reporting mechanism)
Risk and opportunity oversight	Integrating risk and opportunity into business process	Risk reporting. See page 54
207-1	Approach to tax	Note to the Group Financial Statements. See page 91
207-2	Tax governance control and risk management	
207-3	Stakeholder engagement and management of concerns related to tax	NZX's planned materiality assessment, and related stakeholder engagement will include assessing potential concerns related to tax, including approach to engagement with authorities, approach to public policy advocacy.
207-4	Country-by country reporting	The NZX Group is resident for tax purposes in New Zealand only.
419-1	Non-compliance with laws and regulations in the social and economic area	Nil
102-15	Business continuity – key impacts, risks and opportunities	Risk reporting. See page 54
Governing purpose	Setting purpose	How we create value. See page 22
Quality of governing body	Governance body composition	Corporate governance. See page 44. The composition of the NZX Board is disclosed, including average tenure and diversity characteristics, and this reporting will be reviewed in the 2022 financial year with a view to including competencies relating to economic, environmental and social topics.
Stakeholder engagement	Material issues impacting stakeholders	NZX plans to undertake an ESG materiality assessment in 2022, which would include engagement with key stakeholders to determine how they are affected by the company's decisions and actions. This will include a list of the ESG topics that are material to key stakeholders and the company, how the topics were identified and how the stakeholders were engaged.
Ethical behaviour	Anti-corruption	At publication date 100% of governance body members and 98% of NZX employees have received training on the organisation's anti-corruption policies and procedures. Annual refresher training is required.
	Protected ethics advice and reporting mechanisms	NZX's Code of Conduct and Protected Disclosure Policy include an external reporting mechanism

PEOPLE – social disclosures		
405-1	Diversity and inclusion	Who we are. See page 6&7 for diversity by FTE. Operating responsibly – Our People for diversity by headcount. See page 33
405-2	Pay equality	The NZX Group reporting relates to gender equality and does not currently address minor to major ethnic groups, and other relevant equality areas. Operating Responsibly: Our People. See page 32 Ratio of average basic salary of women to men: The average basic salary of women is 85.26% of the average basic salary of men. Another way to express this is that NZX has an overall gender pay gap of 14.74% for base salary.
202-1	Wage level	Operating Responsibly: Our People. See page 32 NZX adopted a commitment to the Living Wage in 2020. At 31 December 2022 100% of NZX permanent and fixed term employees are paid at or above the 2022 Living Wage. The Living Wage was revised by the NZ Government in September 2022.
408. 409	Risk for incidents of child, forced or compulsory labour	Not material for the NZX Group. NZX people policies, processes and guidelines are aligned with the International Labour standards set by the International Labour Organisation (ILO). In addition, all our people policies, processes and guidelines are compliant with NZ employment law and human rights protections. No risks identified for the year ending 2022 nor any incidents reported by staff.
401-1	New employee hires and employee turnover	For the year ending 31 Dec 2022, the NZX Group had 102 new employee hires (57% male, and 43% female). For the year ending 31 Dec 2022, NZX had 78 resignations (51% male, and 49% female).
403-2	Health and safety	Operating Responsibly: Our People. See page 34 Total Recordable Incident Rate (TRIR) per 200,000 hours worked in 2022 is 1.16 for total workforce. The Absentee Rate (AR) for total workforce for 2022 year as at 31 December 2022 is 2.21% NZX facilitates workers' access to non-occupational medical and healthcare services, and the scope of access provided for employees and workers. This is further boosted by the generous Sick Leave policy.
404-1, 404-3	Training provided	Operating Responsibly: Our People. See page 33 For the NZX Group, the average training and development expenditure per employee for the 2022 year is $1,319. During 2022 100% of total permanent employees (including all men and women; and all employees by category) received a regular performance and career development review.

PLANET – environmental disclosures		
302-1	Energy consumption within the organisation	The NZX Group has a commercial arrangement with Toitū Envirocare to provide carbon management tools, guidance, and certification., NZX has committed to the Toitū net carbonzero programme and met the programme requirements to be a certified net carbonzero organisation in 2021 and 2022. Energy consumption, scope 1-3 emissions, and reduction of GHG emissions are reported in Operating Responsibly: Our Environment. See page 36 Energy intensity: absolute energy consumption (including diesel purchases, purchased electricity, and transmission and distribution losses) totalled 65.0 tCO2e. Energy intensity per full-time equivalent employee was 0.20 tCO2e. Energy intensity per million dollars of revenue was 0.68 tCO2e. NZX purchases its electricity from electricity retailers that supply from the national electricity supply using predominantly renewable sources. In the year to 30 September 2022, 89.6% of NZ's electricity supply was generated from renewable sources (2022 full year data not yet available). GHG emissions intensity: Total gross measured emissions per million dollars of revenue were 3.88 (gross tCO2e / $Millions) which improved from 7.22 in the baseline year. Gross emissions intensity for scope 1 and 2 sources is 0.63 tCO2e per million dollars of revenue, which has improved from 0.72 tCO2e in the baseline year. Emissions intensity per employee is 1.16 (gross tCO2e / per FTE per annum) which improved from 2.22 in the baseline year.
302-3	Energy intensity	
305-1	Direct (Scope 1) GHG emissions	
305-2	Energy indirect (Scope 2) GHG emissions	
305-3	Other indirect (Scope 3) GHG emissions	
305-4	GHG emissions intensity	
305-5	Reduction of GHG emissions	
	TCFD implementation	The New Zealand government has introduced legislation requiring mandatory climate-related financial disclosures for some entities and published disclosure standards (the Aotearoa New Zealand Climate Standards) in December 2022 that are consistent with TCFD and other GHG reporting standards. NZX Group is a climate reporting entity required to make mandatory climate-related disclosures for the accounting period commencing 1 January 2023. In the interests of transparency, NZX has chosen to report voluntarily for the 2022 financial year, in line with ANZCS and the recommendation of TCFD, where data is available. See page 132
201-2	Financial implications and other risks and opportunities due to climate change	Risk Reporting. See page 54
Nature loss	Land use and ecological sensitivity	Not material for NZX Group. NZX Group does not own, lease, manage in, or adjacent to, protected areas or areas of high biodiversity value outside protected areas.
Freshwater availability	Water consumption and withdrawal in water-stressed areas	Not material for the NZX Group
Solid waste	Impact of solid waste disposal	The NZX Group recognises that society and environmental impacts of solid wastes streams, and the company measures emissions from waste to landfill within its Toitū net carbonzero certification. Emissions from waste to landfill totalled 7.2 tCO2e in 2022.
	Single-use plastics	The NZX Group recognises that the consumption and disposal of single-use plastics is an issue of high public concern, and the company will be assessing our corporate supply chain within efforts to measure and manage a wider range of scope 3 emissions.
307-1	Non-compliance with environmental laws and regulations	No breaches of environmental laws, regulations or consents have been identified in the period. No environmental fines have been incurred.

PROSPERITY – economic disclosures		
203-1	Infrastructure investments and services supported	Operating Responsibly: Our Markets and Economic Performance. See page 40-42. NZX, in partnership with EEX, developed and, from 2021, manages the New Zealand Emissions Trading Scheme Auctions for New Zealand Units under contract with the Ministry for the Environment.
401-1	Economic contribution	Operating Responsibly: Our Markets and Economic Performance. See page 40-42
	Absolute number and rate of employment	Operating Responsibly: Our Markets and Economic Performance. See page 40-42
	Financial investment contribution	Operating Responsibly: Our Markets and Economic Performance. See page 40-42
Community and social vitality	Total tax paid	Notes to the Group Financial Statements. See page 91

Appendix 2

NZX 2022 CLIMATE STATEMENT

Governance of climate matters

NZX is committed to comprehensive ESG and sustainability reporting. This report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards, and with reference to the recommendations of the World Economic Forum's Measuring Stakeholder Capitalism Towards Common Metrics and Consistent Reporting of Sustainable Value Creation (2020) and the Taskforce for Climate-related Financial Disclosures (TCFD).

Governance body oversight

The NZX Board has oversight of all climate-related risks and opportunities. The Audit and Risk Committee is responsible for the oversight and monitoring of NZX's risk culture and the management of risk, including climate risks. Refer to www.nzx.com for Board and committee charters.

Governance of climate and ESG matters requires a wide range of skills in a multi-faceted business of this nature. A board skill matrix is used to ensure the Board has an appropriate range of skills and competencies. Skills and competencies related to climate matters include legal expertise, regulatory governance, and environmental and energy sector experience.

NZX's strategy is developed by management in consultation with the NZX Board and approved according to delegated authorities. Climate-related opportunities are integral to NZX's strategy including through the energy and environmental markets, products and services.

Consideration of climate-related risks and opportunities is integrated in board processes for considering risks and opportunities across the Group to ensure appropriate prioritisation. The NZX Board and its subsidiary boards approve the respective annual workplans for the Group and associated key performance indicators for the CEO or business unit leader. Business unit or subsidiary level annual plans and key performance indicators are then cascaded to their respective senior leaders and teams. Where these include metrics and targets for climate-related matters, the NZX Board oversee achievement through reporting to the Board including annual performance review processes. The Head of Sustainability develops annual ESG workplans and targets for NZX Board approval, and reports progress against NZX's ESG workplan and associated climate-related metrics and targets to the NZX Board quarterly, with quarterly risk updates to the Audit & Risk Committee also.

The method for measuring the company's performance is set out in the remuneration policy (available at www.nzx.com). Where applicable, executive remuneration is linked to the achievement of climate-related KPIs through the Short-Term Incentive (STI) scheme. The STI is designed to reward achievement of short-term business goals that are set as part of plans to meet NZX's longer-term strategy. Any short-term incentive plan payment is conditional on performance criteria set by NZX and includes NZX's financial performance; division and/or business unit performance; and individual performance. Long-term incentives for senior executives are designed to encourage longer-term decision-making and to align senior managers' and shareholders' interests.

Management's role

The NZX CEO has overall responsibility for NZX's management of climate-related risks and opportunities. The Head of Sustainability role leads the sustainability function for the NZX Group including ESG strategy, plans and reporting, and reports to the Chief Financial & Corporate Officer. Revenue-generating climate opportunities are managed by their respective business unit leaders, and risks are assigned to relevant business owners.

Respective management committees have responsibility for monitoring and managing climate-related opportunities and risks, both current and emerging, in each business unit and meet quarterly or monthly. The senior leadership team project prioritisation committee meets quarterly to consider new project proposals including capital allocation and to monitor delivery of in-flight projects including climate-related opportunities. Education sessions were provided for senior managers in 2022 on key climate topics.

Impact of climate matters on strategy

Current impacts

As an office-based organisation operating in a temperate climate country, the current physical impacts of climate on our business are minimal. Impacts on NZX's operations from current climate impacts are primarily the strategic and regulatory impacts of the global and local economic transition. NZX is a climate reporting entity under the mandatory climate-related disclosures framework (Aotearoa New Zealand Climate Standards ANZCS) that came into effect on 1 January 2023. NZX's subsidiary company, Smartshares, is a separate climate reporting entity as an investment scheme manager and will report in line with ANZCS in 2024 for the 2023/24 year. The financial markets regulator, the Financial Markets Authority, will monitor compliance against ANZCS.

In addition to NZX's own reporting obligation in line with the ANZCS, NZX has an important role to ensure market policy is appropriate, and consistent with New Zealand law and investor expectations. NZX has a role to ensure listed issuers and other customers are well supported and educated to adapt to this change.

NZX is leveraging its core business capabilities and strong reputation to support New Zealand's climate transition, which is today most clearly demonstrated in the operation of the carbon auction market for the New Zealand Government's Emissions Trading Scheme. As New Zealand continues its transition to a low-emissions climate-resilient future, NZX is well placed to further support this transition by providing markets and services that meet the evolving needs of New Zealand investors, businesses and customers. For example, the establishment of Green and Sustainability bond segments in the NZDX Debt Market has been well received and we expect further development in the short-term and beyond.

NZX earns revenue for markets and services it provides, including climate-related markets and services outlined in this report.

Financial information for NZX is disclosed at a Group level, with segmental information also provided in the annual financial statements. Financial information relating to climate matters is reported within the relevant business segment e.g. markets, data and insights, funds management.

Scenario analysis

Scenario analysis will be undertaken in 2023 to further advance the resilience of NZX's strategy under three possible climate-related scenarios. Mandatory reporting in New Zealand will require analysis at a 1.5 degree scenario, a 3.0 degree or higher scenario, and a third scenario.

Climate-related risks and opportunities

A significant review of physical and transition climate-related risks was completed in 2022. The physical risk of a potential extreme weather event leading to unplanned disruption to business operations resulting in adverse operational impact is well managed at this time.

Transition risks include regulatory and emerging strategic, financial and reputation risks that have the potential to impact our business over time. For example, strategic risks could include impacts on the strategic growth or performance of one or more of NZX's markets depending on the pathway of global or local transition over the medium and long term; changes in global market competition due to differing regulation in different jurisdictions; investor demand for NZX listed companies or products changing; and impacts on NZX listed issuers' long-term prospects. Detailed assessments of these risks are being undertaken and integrated through NZX's risk management processes.

Climate risks and opportunities have been mapped across short-, medium- and long-term timeframes, being defined as 1-3 years, 4-9 years, and 10+ years. These timeframes enable NZX to monitor emerging risks and opportunities on the horizon.

NZX has identified climate opportunities to provide products, services and markets that support NZ's transition to a low-emissions economy. These are described on page 136. Both physical and transition climate-related risks have been identified. In some cases, aspects of the transition may present both risk and opportunity depending on NZX's response eg. our reputation may be impacted positively or negatively depending on stakeholders' individual views on NZX's actions.

NZX's strategic planning processes focus on annual plans (see annual reports, investor presentations at www.nzx.com). Capital deployment and funding decisions are made within annual budgeting decision-making processes to ensure appropriate prioritisation of capital and resourcing across the Group for best overall shareholder value.

Anticipated impacts and financial impacts

NZX has evaluated its anticipated impacts with reference to local and international scientific projections (including the Ministry for the Environment's 2020 National Climate Change Risk assessment for New Zealand; and IPCC Climate Change 2014 Synthesis Report) as well as industry related guidance. Acute and chronic physical risks are assessed as low impact in the short-term given the effectiveness of management plans in place. Recent events such as pandemic lockdowns and extreme weather events, as well as crisis scenario tests, have shown our business continuity plans and technology infrastructure to be fit for purpose to withstand acute physical events.

NZX could benefit from positive climate impacts such as increased operational efficiency or resilience as a result of its growing attention to GHG emissions in its business and supply chain. NZX could, and does currently, see increased revenue from climate-related products and markets it provides. It is expected that as different needs evolve in New Zealand's transition, that will give rise to new products or services to be provided within current markets (e.g. sustainability bonds on the NZDX; ESG indices and ETFs in NZSX) as well as new markets to be established (e.g. spot and derivative markets in carbon). Through these changes NZX will look to continue to create sustainable value for shareholders and other stakeholders.

The introduction of climate-related disclosures for many of NZX's listed issuers and investment scheme managers effective from 2023 and 2024 could attract greater interest from investors. Depending on their analysis of these disclosures, increased or decreased trading revenue for NZX could result.

Anticipated financial impacts of climate-related impacts are dependent on market uptake of the services NZX provides, and therefore difficult to forecast particularly for new and emerging products, services or markets. Revenues and costs are reported within the annual financial statements, including segmental reporting of revenue.

Anticipated financial impacts of climate-related opportunities are considered within annual earnings guidance issued at the start of each financial year.

Time horizons over which anticipated climate-related opportunities could reasonably be expected to occur are noted in page 136. Time horizons over which anticipated climate-related risks could reasonably be expected to occur are in development and will be refined in line with climate change scenario analysis.

Risk management of climate matters

NZX recognises risk management is an integral element of good management practice and governance, and has a well established risk management framework and practices. A significant refresh of physical and transition climate-related risks was undertaken in 2022, using risk classifications recommended by the Taskforce for Climate-related Financial Disclosures (TCFD). The process included education sessions by independent climate experts, then a climate mapping exercise by senior executives and managers to identify and assess risks, informed by local and international scientific projects and relevant industry guidance. Assessing climate risks across short-, medium- and long-term time horizons was made where possible. This analysis will be further refined in 2023, along with scenario analysis and management plans.

On an ongoing basis NZX operates a risk management committee comprising senior leaders and managers from across the business, including the CEO, GM Group Risk & Compliance, and Head of Sustainability. The committee meets monthly and reports to ARC quarterly. Physical and transition climate risks have been added to the risk register and these risks are integrated into NZX's overall risk management processes for further assessment and ongoing management.

No parts of the value chain were specifically excluded however it is anticipated that future efforts to measure a wider range of Scope 3 emissions will provide an opportunity to identify any further risks across the value chain.

Climate risks are assessed by management quarterly and reported to ARC and the Board twice a year.

NZX assesses and prioritises climate risks in accordance with its risk management framework, including established criteria for defining impact, likelihood, and risk appetite.

Metrics and targets for climate matters

Targets

NZX's first target was to reach net carbon zero. This target was set and achieved in 2021, and again in 2022. Achieving Toitū net carbonzero certification means our carbon footprint, emissions reductions, and offsets have been independently verified to Toitū's international standards. Each year we work to maintain this target through verification of the year's emissions and offsets. No interim targets are applied.

NZX has also committed to continually manage and reduce our emissions on a six-year cycle, and report on this each year as part of our commitment to achieve Toitū net carbonzero certification. NZX is targeting a 21% reduction in absolute emissions by 2025 from a 2019 baseline year. This absolute emissions reduction target has been determined using a science-based target calculated with an absolute contraction approach, as described by the Science Based Targets Initiative (SBTi), and is in line with limiting our impact to a 1.5 degree warming scenario.

Annual targets are also set for climate-related opportunities (by respective business units) and specific emission reductions initiatives. In the 2022 year, revenue earned from climate related opportunities was estimated to total $2.83m (3.0% of total operating revenue). No assets are linked to climate-related opportunities.

In addition to reducing absolute emissions, NZX compensates for remaining emissions by purchasing high quality carbon credit offsets from New Zealand based projects as recommended under the Toitū programme to achieve net zero emissions.

In 2022 the following was achieved:

– NZX again met its net carbonzero commitment
– Absolute gross GHG emissions were 26.0% lower than the baseline 2019 year
– Initiatives were identified to reduce absolute emissions, including one targeting a 29% reduction in electricity usage in one office that has been approved for implementation. Results against target will be measured in 2023.

Looking ahead it is anticipated that targets related to developing a complete scope 3 inventory, and reducing scope 3 emissions sources, will also be relevant.

GHG emissions

Since 2021 NZX has been a member of the Toitū net carbonzero programme that provides internationally reputable, independent verification of our carbon footprint, emissions reduction and offsets. Toitū net carbonzero certification is accredited by the Joint Accreditation System of Australia and New Zealand (JAS-ANZ) which was the world's first to be accredited under ISO 14065, and is also accredited by the CDP (formerly Carbon Disclosure Project). The programme requirements that NZX meets under the Toitū net carbonzero programme meet and exceed international standards and best practice, including ISO 14064-1 and the GHG Protocol.

Toitū net carbonzero organisation certification is proof an organisation is positively contributing to the sustainability of our future through measuring, reducing and offsetting their carbon footprint. To achieve Toitū net carbonzero certification, NZX measures all operational greenhouse gas (GHG) emissions required under the international standard for carbon footprints, ISO 14064-1, including vehicles, business travel, fuel and electricity, paper, and waste. The emissions are measured annually, and the inventory is independently verified to ensure it is accurate and complete. In addition to measuring our footprint, NZX must develop plans to continually manage and reduce our emissions on a six year cycle. Each year, unavoidable emissions are offset through the purchase of quality carbon credits to achieve net zero emissions. NZX chooses to purchase quality carbon credits in New Zealand based projects only.

An operational control consolidations approach is used in the measurement of GHG emissions. The emissions of the NZX Group including all wholly owned subsidiaries are included, and the GDT partnership which NZX has a one-third share in with Fonterra and EEX is excluded as NZX does not have operational control of that entity.

The GHG emissions sources included in this inventory are those required for Programme certification and were identified with reference to the methodology described in the GHG Protocol and ISO 14064-1:2018 standards as well as the Toitū Programme Technical Requirements. All emissions were calculated using Toitū calculation methodology with emissions factors and Global Warming Potentials provided. Global Warming Potentials (GWP) from the IPCC fourth assessment report (AR4) are the preferred GWP conversion.

The Aotearoa New Zealand Climate Standards will require NZX to work towards measuring all material sources of Scope 3 emissions over time. To date we have measured all Scope 3 emissions sources that sit within the Toitū programme requirements. A focus for the future is to expand the range of Scope 3 emissions sources we measure, to enable a full understanding of the emissions within our value chain and to reach full compliance against the new Climate Standards in accordance with the adoption provisions.

Assurance of GHG emissions

Assurance of NZX's 2022 gross GHG emissions has been completed by Toitū Envirocare in accordance with GHG protocols and consistent with the ISO 14064-1:2018 standard. Assurance was obtained to a 'reasonable' level of assurance for categories 1 Direct Emissions (company car fuel) and Category 2: Indirect emissions from purchased electricity, and to a 'limited' level of assurance for remaining categories measured (air travel, accommodation, taxis, car rental, working from home, waste to landfill, and electricity transmission and distribution losses). Location-based emissions were reported where applicable. Data quality was noted as high. Further information is available on request in our Toitū net carbonzero certification reporting.

Types of opportunities (consistent with TCFD)	Opportunity for NZX	Description	Time horizon
Resource efficiency	Reduce operating costs through efficiency	Opportunities exist to reduce operating costs through reducing emissions from business air travel, energy efficient offices, and waste minimisation.	Short-term
Energy source	Reduce emissions by increasing electricity from renewable sources	More than 80% of NZX's electricity usage comes from renewable electricity already. The NZ electricity industry is pursuing a goal of 100% decarbonisation. In the medium-term, NZX could reduce electricity emissions by purchasing renewable electricity certificates, however our short-term focus is to first explore all options to reduce our emissions through energy efficiency.	Medium-term
	Reduce operating costs through better electricity efficiency	Initiatives to reduce emissions by reducing electricity usage have been identified and will be implemented in the short-term.	Short-term
Products and services	Increase revenue through GSS bonds	GSS bonds have been positively received. We expect further development of the DX market and growth in GSS bonds. Aspiration is to grow GSS bonds from 27% of the DX in 2022 to 35% in 2027.	Short-term and medium-term
	Increase revenue through ESG indices and ETFs	Launching climate or ESG themed indices and ETFs on NZSX gives investors choice to align their investment decisions to companies that emphasise climate performance. NZX is a facilitator and works with issuers to educate issuers on the implications of new indices. Smartshares sees opportunities to broaden the range of products as well as investment approaches it offers, to meet the evolving demands of investors interested in climate and ESG themed investment. Smartshares' high level of transparency is a competitive advantage in helping customers make informed choices.	Short-term
	Increase revenue through data services	Mandatory climate-related financial disclosures came into effect in 2023 for NZX listed issuers above $60m market capitalisation. Opportunities to support the availability of high-quality climate information will be explored.	Medium-term
Markets	Increase revenue by developing Carbon Markets	NZX made a successful entry into the compliance carbon market with the launch of the NZU auction service for the NZ Government's Emissions Trading Scheme in 2021. The NZ ETS is internationally recognised, and demand for well governed markets is growing. NZX's operation of the NZU auctions positions us well to further assist with secondary market liquidity development. NZX has a 5-year strategy to grow Carbon Markets in NZ further. NZX is actively involved in public consultations relating to further improving the market infrastructure in New Zealand's spot and derivatives markets for carbon.	Short-term and medium-term
	Increase revenue by developing Energy Markets	NZX provides the electricity market operator service for the NZ government's Electricity Authority. New Zealand's drive towards 100% renewable electricity for NZ, and increasing electricity demand from electrification, brings new opportunities for NZX to expand its services into supplying an integrated market operator platform.	Medium-term
Resilience	Increase business resilience by managing physical risks in business operations and in value chain	Measuring Scope 3 emissions (particularly from purchased goods and services) may identify opportunities to lift climate resilience in our business and reduce emissions in our value chain.	Short-term

Corporate directory
Getting in touch

Board of Directors
James Miller (Chair)
Frank Aldridge
Nigel Babbage*
Richard Bodman*
Elaine Campbell
Rob Hamilton**
Peter Jessup
Dame Paula Rebstock***
Rachel Walsh**
Lindsay Wright

Chief Executive Officer
Mark Peterson

Chief Corporate and Financial Officer
Graham Law

General Counsel and Company Secretary
Sara Wheeler

Registered Office
NZX Limited
Level 1 / NZX Centre
11 Cable Street
PO Box 2959
Wellington

+64 4 472 7599
info@nzx.com
nzx.com

Auditors
KPMG
10 Customhouse Quay
Wellington

+64 4 816 4500

Share Register
Link Market Services Limited
PO Box 91976
Auckland 1142

+64 9 375 5998
enquiries@linkmarketservices.co.nz
linkmarketservices.co.nz

* Nigel Babbage and Richard Bodman resigned from NZX Board effective 22 November 2022 and 31 December 2022 respectively.

** Rob Hamilton and Rachel Walsh were appointed to the board effective 12 October 2022.

*** Dame Paula Rebstock was appointed to the Board effective from 1 February 2023.

NZX