Livestock Improvement Corporation Limited (LIC) **Sustainability Report**

For the year ended 31 May 2024

The DNA of a more profitable and sustainable dairy herd for New Zealand farmers

There's always room for improvement

LIC®

About this report

This report presents information about LIC's environmental, social and economic performance for the year ended 31 May 2024 and has been reviewed by LIC's Board of Directors. LIC has reported in accordance with the Global Reporting Initiative (GRI) Standards for the period 1 June 2023 to 31 May 2024.

The report is intended to meet our commitment to report on LIC's environmental, social and economic performance, but it's also an opportunity to demonstrate how we are responding to sustainability challenges facing our farmers and the New Zealand dairy sector. It outlines how we are helping farmers understand and improve their emissions and demonstrates that, with a sharper focus on herd improvement, NZ farmers can produce high quality milk products from sustainable, high performing cows.

Our external auditors KPMG have performed procedures to ensure that financial data included in this Sustainability Report is consistent with LIC's Annual Report.

We are committed to open and transparent reporting on sustainability and will continue to further develop our reporting framework over time.

Contents

Who we are

We exist to deliver superior genetics and technological innovation to help our shareholders sustainably farm profitable animals.

LIC is a New Zealand dairy farmer-owned co-operative and leader in pasture-based dairy genetics and herd improvement.

LIC is headquartered in the Waikato, with over 25 sites across New Zealand, Australia, UK and Ireland. With origins dating back to 1909, LIC has a long history of delivering world-leading innovations for the dairy sector. This is even more relevant to farmers today given the rapid change the sector is undergoing and the growing climate challenges we're facing. Who we are and what we do has never been more important for Kiwi farmers, our sector and New Zealand.

As a farmer-owned co-operative, all of our profit is returned to our farmer shareholders in dividends or reinvested into new solutions and research and development (R&D).

LIC shares are listed on the NZX. To be a shareholder in LIC, you have to farm dairy cows in New Zealand, supply a New Zealand milk processor and buy a minimum amount of qualifying products and services from LIC every season.

Why sustainability matters to LIC

Kiwi farmers, our sector and the New Zealand Government are focused on a more sustainable approach to farming, so we must continue to improve our environmental credentials.

Sustainability is not only important to us as a business, but also because of the critical role we play in helping dairy farmers meet their own sustainability goals.

Our strategy focuses on building a strong, sustainable co-operative, leading in our field and delivering value for our shareholders and sector. As a co-op, we understand the role we must play in driving positive change through collective action on climate change in New Zealand and supporting our farmer shareholders on the journey. We are committed to driving sustainability improvements and helping to reduce emissions on-farm, with projects and initiatives in both these areas underway.

At LIC we believe in supporting our farmers and their herds in reducing biogenic methane. We have expanded our number of trial animals in recent years to focus on R&D in this area, as well as improving heat tolerance, on behalf of the sector. We expect this research to lead to lower methane-emitting bulls in our bull team, as well as contributing to lower methane emissions in the national herd.

We support our 9,000+ shareholder farmers through genetics, genomics, milk testing and diagnostics, together with leading research and innovation, to produce the most sustainable and efficient animals and the highest value product.

Key Highlights

Environment

Supporting shareholders to produce the most sustainable and efficient animals and reducing emissions at LIC

If we're milking fewer cows, we need to milk better ones.

394.5 kgMS[1]

Rolling 3 year average milk production

Up 1.3% from 389.4 kgMS prior rolling 3-year average

4.67 MILLION[1]

Cows in national herd

3.46% decrease on previous year

14.7%

Reduction in LIC's Scope 1 & 2 CO_2 Emissions

2.6%

Increase in LIC's biogenic methane CO_2 Emissions

2023/24 change compared to 2018/19 (base year)

20.5 gBW

Five-year rolling average increase in genetic gain

(Genomic Breeding Worth) For long-term users of LIC genetics (across 2018 – 2023 cohorts)

[1]Source: New Zealand Dairy Statistics 2022-23

Economic

Delivering value to our farmer shareholders by investing in initiatives to help them breed the most profitable and sustainable animal

$267.3 MILLION

Total revenue from continuing operations

Down 3.3% from $276.5 million last year

$26.8 MILLION

Total dividends

Final dividend declared $8.3 million or 5.84 cents per share, Special dividend paid $18.5 million or 13 cents per share

$48.9 MILLION

R&D and investment in business

Investment & capital spend (excluding NMR share sale) $27.6m up 34.1% from last year

R&D investment $21.2m up 14.2% from last year

Social

Caring for our staff and our farmer shareholders

74

'BeHerd' Engagement survey result

This is the first result from our new engagement survey using Microsoft's Viva Glint software in May 2024 and is just below the top quartile of global organisations using the same tool. There was an 84% employee response rate.

2.35

Lost time injury frequency rate

(Per 200,000 hours worked)

Up from 2.23 last year

900+

Full time equivalent employees

Plus close to 1,700 seasonal workers

Letter from the Chair & Chief Executive

Our ongoing focus on sustainability is important and we're pleased to report on the progress we've made in the last year. This report is an important way for us to be transparent, hold ourselves accountable and measure the progress we are making on our sustainability journey as we deliver on our commitments to our farmer shareholders. This is also our first year of climate reporting and our Climate Statements for the year ended 31 May 2024 are available on LIC's website at Climate Disclosure Reporting.

Sustainability is at the heart of everything we do for farmers today and in the future

The most significant impact we can make as a business is through helping to reduce the environmental footprint of the national dairy herd.

While making meaningful contributions to New Zealand's emissions targets is a long-term game, now is the time to help our farmer shareholders breed more efficient and climate-friendly cows. We continue to roll up our sleeves and sharpen our focus on providing farmers with the tools they need to do just that.

While we are continuing to provide farmers with precision genetics and technology tools today, we are also keeping a watchful eye on what farmers need in the future. To this end, we continue to invest heavily in research and development (R&D) to help farmers do what they do best, but for a changing world.

Partnering to breed a low methane cow

We are always looking at how we can innovate to provide our farmers with a range of products to help them solve climate change challenges. The successful programmes we have built with our partners are enabling us to make significant progress towards achieving our commitment to help farmers reduce emissions on farm.

Our methane research programme, in collaboration with CRV and Pāmu and with funding from the NZ Agricultural Greenhouse Gas Research Centre (NZAGRC), is progressing well. We continue to investigate the link between methane emissions from bulls and their offspring with the intention of breeding more climate-friendly cows that produce less methane.

The programme is now in its fourth year. We initially found that a bull's genetics do play a role in how much methane they emit: the lowest bulls in the trial emitted around 15-20% less methane than the average after accounting for food eaten. Last year, these bulls were mated with heifers from Pāmu farms and we are now testing the methane emissions from these offspring to ensure the genetic variation is representative of their fathers and will report on these results in the coming year.

We hope to produce a methane breeding value and give dairy farmers the opportunity to access low methane elite genetics by 2026. This has the potential to make a real difference to farmers by helping to ensure emissions reductions don't come at the cost of reducing milk production.

Developing a genetic solution for heat tolerance

Another long-term commitment we have made is to our heat tolerance research programme. The aim of the programme is to provide New Zealand farmers with high genetic merit dairy cows with improved heat tolerance.

Heat stress has significant welfare implications for animals. For dairy cows it can also impact feed intake, milk production, fertility and calf birth weight. Introducing the 'slick' gene into the country's dairy herd could allow for a significant improvement in dairy cow performance in hotter temperatures over the long term.

We have completed a climate-controlled study on calves, which was a follow-on from a pilot trial conducted last year to test the response to cold stress. This trial had positive results, showing no significant difference in response to colder conditions between slick calves and non-slick calves.

Today, our commitment remains to breed better cows, faster

Over the last year, we invested $21.2 million into our R&D efforts, which includes both our methane and heat tolerance programmes. We are committed to these investments and are continually innovating to create a sustainable future for New Zealand's dairy sector and the farmers within it.

The dairy sector needs to continue to evolve - for climate change and because of it, and therefore the production efficiency of our national herd has never been more important.

Efficient cows produce more milksolids per kg of feed eaten, have a fertility advantage and have a lower emissions footprint per kg of milksolids.

Farmers consistently using our genetics are breeding genetically superior animals, and at a faster rate. In fact, long-term users of LIC genetics have continued to double the rate of genetic gain in their herds over the last 10 years - these gains are cumulative and permanent, delivering long-term benefits into the future.

Throughout the last year we have worked hard to support both our organisation and farmers through managing cost pressures and other challenges. We would like to thank our employees and farmer shareholders for their ongoing support and hard work.

We continue to believe that the co-op is in a strong position to navigate the unique challenges facing the dairy sector, both now and into the future. We look forward to keeping you updated on LIC's sustainability journey and how we are continuing to push for more improvement that will support New Zealand farmers to reduce intensity of emissions and retain their position as the world's most efficient dairy milk producers.

Corrigan Sowman
Chair

David Chin
Chief Executive

17 September 2024

Our strategy

Creating value for our farmer shareholders is at the heart of everything we do.

Our strategy focuses on building a strong sustainable co-operative, leading the world in our field and delivering outstanding value for our customers, shareholders and sector, next year, in five years and for another 100 years.

Doing what we are good at.
Playing to our strengths.

Our Farmers

Deepen our understanding of the current and future needs of all of our farmers.

Animal

Most sustainable & efficient animal. Highest value products.

Data & Digital

Modernising the animal data & digital capabilities.

Innovation

Research & development. Responsive innovation.

How we drive value for our farmers

Our three commitments.

Our strategy makes three commitments to our farmer shareholders.

1 **Operational Excellence**
We commit to getting the basics right and delivering for you, on time, every time.

2 **Faster Genetic Improvement**
We commit to having your back when it comes to helping you meet the environmental challenges you face, in particular animal efficiency and methane mitigation.

3 **Software Reliability and Performance**
We commit to being better at delivering our software to you. We renew our commitment to continuous improvement and transparency around delivery of new features.

Measuring our three commitments

If we can measure it, we can manage it.

Our farmers rightly ask how they can hold us accountable for delivering on the commitments - this continues to be a priority for us. There are measures and targets in place for each commitment and progress is monitored throughout the year. The measurements provide our business with clear goals and expectations for what delivering on our commitments looks like.

The measurements and targets are not about perfection, they are the improvement we are aiming for. We report to farmer shareholders annually on progress at events such as our Annual Meeting.

While these metrics have been recognised as important to farmers and these targets are where we believe we can improve and make a difference, we know that the needs of farmers can change. The measurements and targets are reviewed and updated annually as needed.

2023-24 Commitment Measurements

Key: Target met · Some exceptions · Target not met

We're pleased to report that we have achieved most of our Commitment targets this year, although we recognise that the semen quality batch issue experienced in November 2023 is not represented in the below metrics.

Operational excellence:

Milk Pregnancy Testing

10 working day turnaround time for test results (from the sample being collected on-farm)

10

99.2%

Achieved

Artificial Breeding

Achieve a sexed semen NRR differential of <=5% compared to conventional fresh semen

3.3%

Achieved

Herd Testing

50% reduction in negative feedback received on Herd Testing set ups

38%

Achieved

Customer Experience Centre

Answer 70% of calls within 30 seconds

75%

Achieved

Artificial Breeding

98% of frozen semen straws on-farm at least one day prior to the required-on-farm date (for all orders placed 7 days in advance of the required-on-farm date)

99.8%

Achieved

Johne's Disease Testing

10 working day turnaround time for test results (from the sample being collected on-farm)

10

99.4%

Achieved

Artificial Breeding

Deliver a Non-Return Rate (at an AB Tech group level) within +/- 9.99% of the AB Supervisor average for the area

99.9%

of AB Tech groups (1 AB technician near low group)

Achieved

GeneMark®

4-week turnaround time for test (from booking week) for 95% of samples

4

99%

Achieved

Key: Target met Some exceptions Target not met

Faster Genetic Improvement:

Sire Proving Scheme Bull Team genetic gain

3-year rolling average rate of increase in the gBW of the Sire Proving bulls to exceed the 10-year historical average rate of increase by 20%, resulting in 29.2% target

31.2%

Achieved

Premier Sires Bull Team genetic gain

3-year rolling average rate of increase in the gBW of the Premier Sires bull teams to exceed the 10-year historical average rate of increase by 20%, resulting in 31.7% target

34%

Achieved

Rate of genetic gain on farm

17 gBW 5-year rolling average gain (for herds with >80% replacements sired by LIC bulls)

20.5gBW

Achieved

Software Reliability:

MINDA® availability including allowable downtime

Available 99% of time

99.9%

Achieved

MINDA® Roadmap

95% delivery of the published MINDA® and integrations roadmap

100%

Achieved

MINDA® availability excluding allowable downtime

Available 97% of time

98.9%

Achieved

Integrated software partners

LIC systems are available to receive information from integrated partners 99% of time

99.9%

Achieved

MINDA® performance

95% of events are processed through the holding pen within 5 minutes

97.7%

Achieved

Environmental Sustainability

The most significant impact we can make is through helping to reduce the environmental footprint of the national dairy herd.

The dairy sector needs to continue to evolve, for climate change and because of it. At LIC, we are committed to reducing the environmental footprint of our business.

Herd improvement is what we do - we provide farmers with the precision genetics and technology tools they need to improve their herds and be more sustainable, while remaining profitable and productive. We're amplifying this through genomic science to deliver results for farmers at a faster rate.

The results some farmers are achieving show that, if we sharpen our focus on herd improvement, we can reduce intensity of emissions and continue to have the world's most efficient dairy herd. High producing, climate-friendly cows aren't just a hope for the future - they exist in the national herd today and are well within reach for every dairy farmer. We simply need more of them and our products and services provide farmers with an opportunity to do just that.

Key Metrics

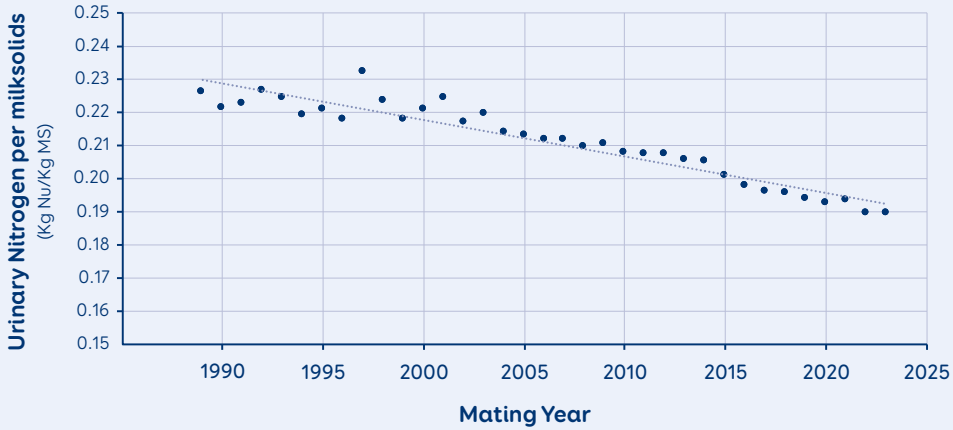
By assessing genetic data, our models estimate that over the past 30 years the genetic improvement in our Premier Sires® semen delivered on-farm has resulted in a 11% reduction in enteric methane and 14% less urinary nitrogen emission intensity per kilogram of milksolid produced, noting that the size of the dairy herd increased 80% during that period (1993 to 2023 increase - New Zealand Dairy 2022/23 Statistics report), which increased absolute methane emissions of the national herd.

The increased rate of genetic improvement in production and fertility traits without any increase in animal liveweight, and the shorter generation interval that genomic selection enables has created a consistent trend of New Zealand farmers breeding more emissions efficient cows and, year-on-year, they're doing it faster.

New Zealand dairy farmers continue to embrace a range of tools to improve herd sustainability and productivity. The New Zealand Dairy Statistics report 2022/23, produced by LIC and DairyNZ, shows that over 80% of cows were herd tested and this is one of a number of tools that farmers are using to help improve milk quality and production. The percentage of cows artificially inseminated increased to 82.0% from 81.4% in the previous season. This reflects a continued trend of New Zealand farmers remaining focused on improving the production efficiency of their herds, and utilising data and insights to support on-farm decisions.

Furthermore, the trend of declining cow and herd numbers also continued but was accompanied by a 0.3% increase in kilograms of milksolids processed compared to the previous season.

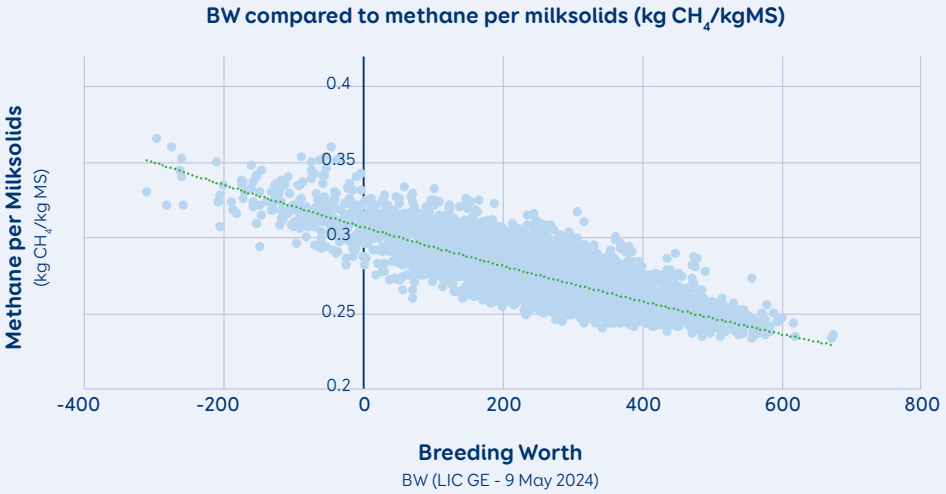
Nitrogen - Premier Sires 1989 to 2023

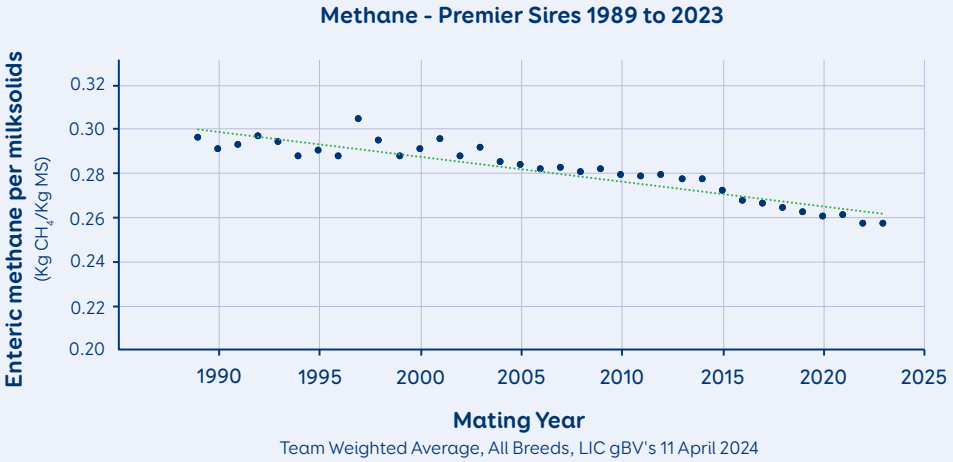


Team Weighted Average, All Breeds, LIC gBV's 11 April 2024

Urinary nitrogen

Urinary nitrogen deposited from cattle, particularly lactating cows, is a source of surplus nitrogen which is susceptible to be lost as a contaminant to its surrounding environment either as nitrous oxide, a potent greenhouse gas, or leached from the soil as nitrate. Similar to methane, the recent trends of improved efficiency are greater than the long-term trend.





Enteric methane

Enteric methane is a key emission from ruminant livestock and the main greenhouse emission produced in pastoral dairy farming. Using our genetic data, LIC has been able to model the genetic potential enteric methane emissions relative to milksolids production for the lifetime of the female progeny of the Premier Sires teams. The 2023/24 season was consistent with the previous season. The consistent trend over the past nine years can be attributed to better genomic selection and uptake of the genomically selected Forward Pack products by farmers. Forward Pack and genomic selection results in shorter generation interval, which is now showing a consistent trend, greater than the 30-year average trend.

Reducing the environmental footprint of our national herd

We're helping farmers breed better cows and get the best from them.

As part of our commitment to faster genetic gain, our team of scientists has investigated the full spectrum of MINDA® herds in search of the 'best cows' and whether a clear correlation existed between genomic Breeding Worth (gBW) and milk production efficiency.

All cows aren't created equal

The research reaffirms that the best cows (with high gBW) are more efficient at turning feed into milk - they produce more, have a fertility advantage and are more emissions efficient. If we're going to help our sector meet its environmental goals, New Zealand farmers must breed more of those highly efficient cows that sit at the top, and fewer of those who sit at the bottom.

We don't need more cows - we need better cows

At an individual farm level there can be many variable factors, but it is conceivable that by 2030 a farmer's whole herd could be performing at the level of their top 25% cows today. The goal is to maintain total milk production from fewer cows, therefore reducing on-farm emissions intensity.

Breeding better cows, faster, is the key to helping farmers solve the challenge of being profitable and sustainable. We've made good progress over the years but, to continue on this trajectory, we need to sharpen our focus.

Long term users of LIC genetics are already doing this - they've doubled the speed of improvement in their herds over the last decade. They're breeding better cows faster, and genomics is the key contributor.

Over the past 30 years we have invested significantly in genomics and, alongside farmers' herd management decisions, it has played a key role in the faster rates of genetic improvement we've seen.

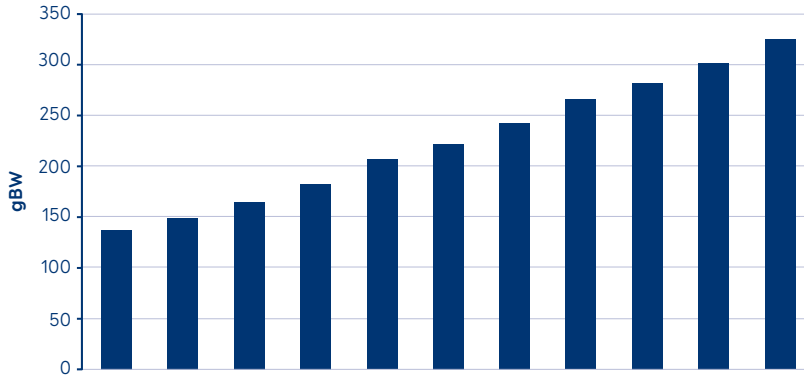
The increased utilisation of genomics in our breeding programme and increased farmer uptake of young genomically selected sires has gone hand-in-hand with higher rates of increased genetic gain in farmers' herds.

Genomic records, ancestry information and technology allow us to accurately identify elite bulls at a young age so we can start using those animals to breed the next generation of cows sooner. The use of genomics in our breeding programme means we can reduce the generation interval from five years to two.

Farmers are making the switch to high gBW genomic bulls for the value that they deliver on farm. Genomic sires feature in our premium artificial breeding offerings, including the Premier Sires® Forward Pack, A2/A2, Alpha® and liquid sexed semen. During the 2023/24 year, 79.5% of fresh semen straws used for breeding replacements were from our premium bull teams (2.25 million straws), up from 78.9% the year prior (2.30 million straws).

Long-term users of LIC genetics are ahead of the pack and moving at pace to increase the speed of improvement in their herds.

Average Genetic merit of animals born each year, sired by LIC bulls (gBW)



Key updates and refinements to our herd improvement toolbox

1. Enhancing our GeneMark® DNA testing service

GeneMark® Genomics

LIC has combined its DNA parentage testing and genomic evaluation services into one service to help farmers identify their highest genetic merit animals to improve their herd. Every eligible sample for female animals sent to LIC's GeneMark® lab will receive parent verification as well as a confirmed genomic evaluation (GEv). By offering parentage verification and genomic evaluation in one service, farmers can take the guesswork out of matching calves to their parents for added precision in their breeding programme, while also receiving data to assist in selecting the highest genetic merit animals to join their milking herd. The significant number of genotypes that will be collected through the use of this product will also enable the selection of the best genomic heifers as bull dams to drive approximately 9% improvement in the rate of genetic gain (equating to a reduction of 1.4 years in the cow-to-bull pathway).

Identify calves with genetic variants

During the course of a five-year research programme, LIC scientists discovered multiple genetic variants that impact animal health to the tune of up to $10 million in lost production each year across the national dairy herd. Animals that are tested through GeneMark® are now automatically screened for variants that have the most impact, free of charge, and farmers are informed of any affected animals in their herd. Identifying these animals via GeneMark® helps to ensure that farmers rear the healthiest, higher performing animals.

2. Animal health testing

Johne's disease is a contagious infection estimated to cost New Zealand more than $40 million in lost production each year. It is caused by a bacterium which infects the gut of dairy cows and other ruminant animals. Common side effects include lower milk production, difficulty reproducing and rapid weight loss.

This disease is common in dairy cows, but it can be difficult to detect. LIC provides individual animal testing for Johne's disease; in the year ended 31 May 2024 testing increased by 10% to a record level of nearly 1.28 million tests.

LIC has developed an innovative JD testing reporting dashboard that combines the Johne's test results with other animal data held in MINDA®. The dashboard is now undergoing beta testing. The purpose of the dashboard is to identify any trends in relation to Johne's disease. The dashboard will help farmers optimise value from their livestock by presenting information in an accessible way to assist vets and farmers to monitor and enhance their on-farm.

Johne's control strategies, creating the opportunity to drive down Johne's prevalence and improve animal health and production.

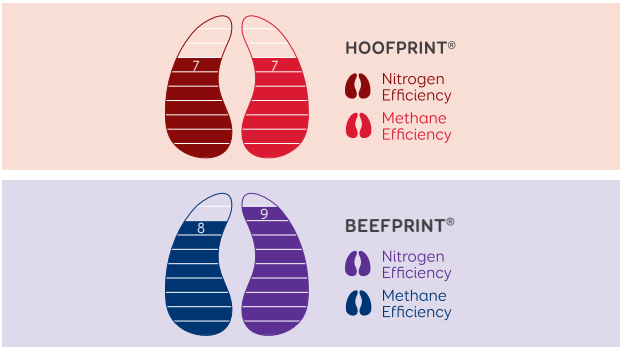
In addition, LIC has conducted analysis of data collected over the last ten years from 2,700 dairy herds over 16 regions to identify risk factors and associations. Results from this analysis will offer valuable insights for disease management and are expected to be published later in 2024.

3. Sexed semen

We have a state-of-the-art laboratory solely dedicated to the production of sexed semen, which sits alongside our bull farm and semen processing lab and is the world's biggest fresh sexed semen sorting facility.

Our fresh sexed semen is accelerating genetic gain within our dairy herds by enabling farmers to get more high-quality replacement heifer calves from top performing cows. We are the only provider of fresh sexed semen in New Zealand, which delivers a higher conception rate than frozen sexed semen options. A resulting pregnancy has approximately a 90% chance of producing a heifer, providing more high genetic merit heifer calves to enable the best to be selected and be part of the next generation of our national dairy herd.

Sexed semen non-return rate performance for the most recent season was back within the expected range of no less than below 5% compared to conventional fresh semen after disappointing results in the previous season - the actual result was 3.3% below conventional fresh semen. We continue to work on maintaining results going forward.



4. HoofPrint and BeefPrint

Our HoofPrint and BeefPrint indexes rank our artificial breeding bulls on their environmental efficiency. The 10-point ranking systems enable farmers to select bulls based on their predicted ability to generate offspring with a lower environmental impact – the higher the score, the more environmentally efficient they are.

HoofPrint ranks and compares enteric methane and urinary nitrogen per kilogram of milksolids produced. BeefPrint is based on the same methodology principles, although it ranks beef bulls for their lifetime enteric methane and urinary nitrogen per kilogram of meat produced.

5. FarmWise® consultants

Our FarmWise® consultants are increasingly focused on helping farmers adjust to changing seasons and weather patterns. They tailor solutions appropriate to the farm and region, including changes to calving and milking patterns, stocking rates, cropping and alternative pasture species. Anticipating and planning for change rather than relying on historical methods and thinking is critical to navigating climate change.

Looking to the future

Our R&D investment and focus on innovation is helping Kiwi dairy farmers retain their position as the most efficient milk producers in the world, playing a critical role in helping the sector meet its climate targets.

We are one of the largest investors in R&D in the primary sector. In the reporting period we invested $21.2 million, the equivalent of 7.9% of revenue.

We invest in the areas where we have unique capability to maximise the value our farmer shareholders generate from their livestock and their product, taking innovations from lab to paddock.

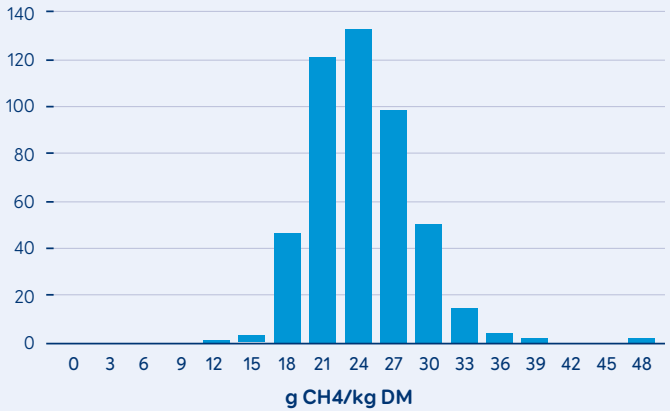
Methane Research Programme

Our methane research programme has confirmed that bulls' genetics play a role in how much methane they emit, highlighting the potential for farmers to breed low methane-emitting cows in the future.

In its first year the programme, backed by the New Zealand Agricultural Greenhouse Gas Research Centre and partnering with CRV, measured the feed intake and methane emissions from 281 young bulls set to father the next generation of New Zealand's dairy cows. We found there is genetic variation in the amount of methane emitted after accounting for the feed eaten by the bulls, with the lowest bulls emitting around 15-20% less methane than the average. The second year of the research measured methane emissions from approximately 300 young bulls from LIC's 2022 Sire Proving Scheme and CRV's 2022 Progeny Scheme.

In collaboration with Pāmu, we are breeding from bulls that we have identified to be high or low methane emitters. Now that their daughters have been born we will measure their emissions as growing yearlings and during their first milking season to ensure their methane emissions are representative of their fathers. The target is to generate 200 daughters from 25 of the highest and 200 from 25 of the lowest methane sires from 1,050 pregnancies. We are tracking these animals from birth and have recently received the first group of heifers into our methane measuring facilities on our Tauwhare farm, with results from the measurements expected in early 2025. We will also be measuring standard measurements such as growth rates, reproductive performance and milk production.

Variation in methane emissions of trial bulls



Estimated timeline to offer low-methane genetics

- **2022** — Inseminations with bulls that are either high or low for methane production.
- **2023** — 400 heifer calves born
- **2024** — Methane measurements from daughters
- **2025** — First daughter lactations: For herd testing and analysis of milk composition
- **2026** — Include methane variation in bull selection
- **2027** — LIC Bull Catalogue includes low methane emitting bulls

Increasing heat tolerance in cows

LIC is conducting a seven-year breeding programme assessing the impact of the 'slick' gene in cattle, which produces a short hair coat and improves heat tolerance.

Heat stress has significant welfare implications for animals. Dairy cows are especially susceptible to heat stress due to their high metabolic heat load associated with the demands of lactation. For dairy cows it also impacts feed intake, milk production, fertility and calf birthweight.

The pilot trial found cows with the 'slick' gene had lower rumen temperatures (0.5-1.0°C) compared to their non-slick counterparts when the Temperature Humidity Index exceeds 73 (around an ambient temperature of 26°C and a humidity of 60%). Furthermore, no significant differences in rumen temperatures have been observed between the two groups during the New Zealand winter months.

The aim of the breeding programme is to provide New Zealand farmers the opportunity to have high genetic merit dairy cows with improved heat tolerance by 2029. Before we offer heat tolerant genetics to farmers, we want to make sure cows that have the 'slick' coat also have the high genetic merit and milk production expected of New Zealand dairy cows. We are using genomic technology to speed up the breeding programme as we can screen an animal's DNA at birth to determine whether it possesses the slick gene.

The current step in the breeding programme is to mate slick genetics with elite cows on selected commercial farms in New Zealand. This step will significantly increase the rate of genetic improvement of animals with slick genetics, while increasing the number of slick animals on the ground and the diversity in LIC's breeding programme. The trial work remains ongoing to ensure that, when these genetics are released to New Zealand farmers, LIC has a robust understanding of the performance of the slick gene and its potential to improve the welfare of our dairy cows in the future. If progress continues as expected, in 2029 farmers will be able to breed from high genetic merit SLICK KiwiCross® sires, with the resulting offspring having a significant improvement in animal welfare and milk production during heat stress events.

Dairy-beef product

Farmers are proactively looking at ways to mitigate consumer, environmental and animal welfare concerns

That's why over the past few years we have been running a breeding programme to develop an easily identifiable dairy-beef product with good calving ease and growth traits, targeting the crossbreed and Jersey markets. This programme could support an increase in value from calves but is reliant on the full supply chain being in place, including rearers, finishers and processors, as well as beef being a financially viable option.

The performance of animals being bred is being compared to other beef breeds each season.

Resilient Dairy: Innovative breeding for a sustainable future

We continue to lead the 'Resilient Dairy' research programme, with investment and support from MPI and DairyNZ. The seven-year Sustainable Food and Fibre Futures programme, launched in June 2019, seeks to enhance the health and wellbeing of the national dairy herd and drive a step-change in sustainable milk production by producing better cows.

This programme involves investing in new disease management technologies and advancements in genomic science to produce better cows with improved health, wellbeing and environmental resilience. We are using our genomics sequencing technology to find genetic strands and discover which cows have particular viruses or bacteria.

Milkomics™

The Milkomics™ workstream has identified and quantified a significant number of species in milk, including bacteria, viruses, protozoans and fungi. Our team has produced a dashboard that allows us to compare the number of bacteria at the individual farm level and at a regional scale. We have enough baseline data to establish national baselines for the species present and can produce individual farm reports. Knowing what microbes and viruses are present within the herd and at what level means that pathogens can be dealt with in a timely and appropriate fashion. By comparing the qualitative and quantitative profile of targeted pathogens with profiles obtained from a national, regional and/or farm level it should be possible to identify potentially problematic microbes and viruses and establish a plan to eradicate these from the herd if appropriate.

Facial eczema

Facial eczema is a disease caused by the ingestion of toxic spores of a fungus that grows on pastures in New Zealand. The fungus prefers warm, moist conditions and is seen mostly in the North Island, typically over the summer and autumn. The disease causes liver damage, in the worst cases affected animals die. The challenge in collecting facial eczema phenotypes is the incidence varies from season to season. Herds can be impacted one year and not impacted again for several years. However, climate change is likely to increase the presence of the fungus.

A milk biomarker test has been a breakthrough in the collection of phenotypes. The test has been validated and used to investigate the genetic susceptibility of facial eczema and the biomarker has been used to identify herds with liver damage via blood sample. Over 10,000 individual cows have been blood sampled over the past 3 years and testing has confirmed we can measure genetic variation in facial eczema, with around 23% estimated due to genetics. LIC has developed the facial eczema breeding value (FE) to enable farmers to breed cows that are more resistant to the disease.

Resilient Dairy is a long-term research programme and we look forward to updating shareholders as more findings from the programme become available.

Reducing the environmental footprint of our business

LIC is a Climate Reporting Entity and we have published our first Climate Statements for the year ended 31 May 2024. LIC has adopted certain exemptions available for the first year of reporting and this Sustainability Report has been prepared on the same basis for consistency.

Our focus has been on accurately reporting the emissions directly associated with our operations and activities, as well as those emissions that occur upstream and downstream of our value chain where we have significant influence. As a result, LIC has adopted the first year exemption provision in relation to not reporting Scope 3 emissions calculated to ensure we can fully report our Scope 3 emissions once we have materially established our full value chain.

In October 2021, LIC pledged its support for Pathways to Dairy Net Zero, a new global initiative which aims to accelerate climate change action and reduce greenhouse gas (GHG) emissions across the dairy sector.

We have a public, science-aligned, emissions reduction target. We are working with suppliers to reduce their emissions, and we consistently build sustainability into our purchasing decisions.

Science-aligned emissions targets

LIC previously set the below emission reduction targets based on science using tools and methodologies freely available from the SBTi (Science Based Target initiatives) as well as the NZ Government Climate Change Response Act 2020, to reduce our greenhouse gas emissions and contribute to limiting the temperature increase to 1.5°C of pre-industrial levels against our 2018/19 base year:

46.2%

Reduction of Scope 1 & 2 emissions (excluding biogenic methane) by 2030

10%

Reduction of Scope 1 biogenic methane by 2030

While we have been working hard on reducing emissions, the organisation is in the process of reviewing the above targets and the base year calculation to ensure that the metrics are appropriate given the challenges with sufficient novel technology and innovation being available to achieve the targeted emissions reduction, as well as to reflect LIC's unique role in assisting the New Zealand dairy sector to drive down methane emissions.

Our emissions

We first measured our emissions in the 2018/19 financial year (1 June 2018 - 31 May 2019). These measurements currently serve as our base year for all future emissions to be compared against

From our base year 2018/19 to 2023/24 we have had an overall reduction in our total Scope 1 & 2 CO_2 emissions of 14.7%, the equivalent of 716.9 tCO_2.

Our 2023/24 Scope 1 biogenic methane emissions have increased by 2.6% from base year, the equivalent of 83.2 tCO_2. However, most of the increase was due to a significant increase in trial animals compared to base year, which is expected to decrease again over time.

The table to the right highlights our scope 1 & 2 emissions profile and how we are tracking compared with the base year.

[2]Measuring emissions: A guide for organisations: 2024 detailed guide | Ministry for the Environment

	2018/19 Base year	2023/24	Reduction/Increase
Scope 1 Direct emissions tCO_2-e	4,502.3	3,944.3	-12.4% ↓
Scope 2 Indirect emissions tCO_2-e	377.1	218.3	-42.1% ↓
Scope 1 Biogenic methane - Direct emissions CH4 (tCO_2-e)*	3231.1	3,314.3	2.6% ↑
Total Scope 1 & 2 emissions	8,110.5	7,476.9	-7.8% ↓

*Increase in biogenic methane is primarily due to an increase in trial animals compared to the base year.

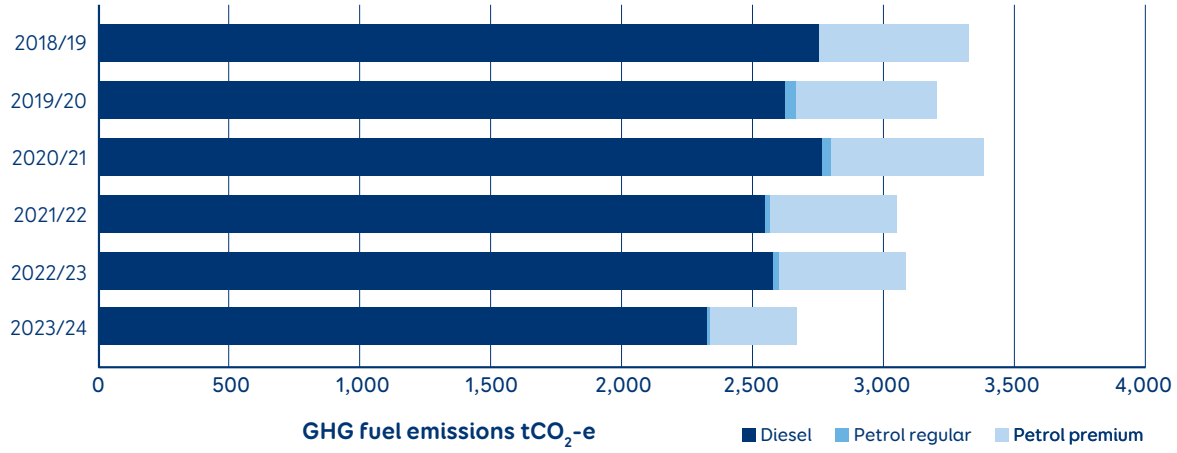
The 2018/19 Scope 1 - Direct emissions base year has been recalculated to include Crop N_2O 50.3 tCO_2-emissions to ensure comparability with the current year. Crop N_2O is not a material emissions source but is higher than the *de minimis* threshold under Ministry for the Environment guidance material[2].

LIC's top ten emissions sources were:

	Emission source	2018/19	2023/24	23/24 change from base year
Scope 1	Diesel	2,756.0	2,327.9	-15.5% ↓
	Petrol regular	568.1	337.6	-40.6% ↓
	LPG stationary commercial	84.3	93.6	11.1% ↑
	Natural Gas distributed commercial	89.5	92.1	3.0% ↑
	Excreta N_2O	689.3	696.4	1.0% ↑
	Fertiliser N_2O	84.4	105.2	24.6% ↑
	Crop N_2O	50.3	89.4	77.8% ↑
	Indirect N_2O emissions	140.5	135.9	-3.3% ↓
Scope 1 Biogenic methane	Enteric fermentation methane	3,193.5	3,219.1	0.8% ↑
Scope 2	Electricity	377.1	218.3	-42.1% ↓

Fuel emissions continue to decline with petrol emissions having a 40.6% reduction from base year and diesel reducing by 15.5%. LIC diesel emissions decreased by 16.7% from the previous reporting year, however this is likely to stagnate until viable vehicle alternatives are available to reduce our fleet diesel emissions. Petrol emissions decreased from the previous year by 30.9%.

Total Scope 1 agricultural biogenic methane emissions increased by 2.6% from base year in the 2023/24 reporting year due to increased stock numbers, including animals in LIC trials across NZ that are not on LIC farms. The number of beef and heat tolerant trial animals increased from 172 in the base year to 447 animals in 2023/24, equating to an additional 537 tCO_2 emissions. The total number of trial animals reduced by 53 animals in the 2023/24 reporting year compared to 2022/23 and is expected to continue to reduce in the future. This also impacted elements of Scope 1 CO_2 emissions.



Further initiatives we have underway or planned for 2024/25 to help reduce our emissions are outlined in the table below:

Objective	Actions
Reduce fuel emissions – Scope 1 emissions	• Replacing fuel-based vehicles with EVs/Hybrids wherever practical – target of 50% of 30 vehicles due to be replaced in 2024/25 • Install further EV charging stations at LIC locations and in employee homes for LIC EV vehicles • Purchase electric ATV for Awahuri bull farm
Reduce use of artificial fertilisers – Scope 1 emissions	• Whole farm soil testing to enable targeted fertiliser applications on paddock basis
Energy reduction plan – Scope 1 emissions	• Energy audit at Newstead • Implement initiatives from Year 1 of the LIC Energy Strategy 2024-2030 – Trial IoT system, data analysis from newly installed solar systems.
Reduce biogenic methane emissions	• Methane reduction research programme to breed for lower methane emitting bulls in future • Reduce stocking rate while keeping production level - increased feed growing on farm utilisation and conversion to milk, reduce bought-in feed • Improve effluent management at our dairy farm
Improve Scope 3 data capture	• Survey staff on transport information to and from work
Staff engagement	• Organise events to engage with staff in reducing their carbon footprint including guest speakers

To ensure we are accurately reporting GHG data we use Toitū Envirocare's external carbon calculator. Some data quality improvements have been made since our last report. Our full GHG Inventory Report is reviewed by LIC's Senior Leadership Team.

We are not currently utilising carbon credit offsetting. The Board will review our position on offsetting over time as our emission calculations continue to mature. LIC's farms would also likely be impacted if an agriculture farm-level emissions pricing scheme is introduced in future.

Emission Scopes	LIC GHG inventory inclusions
Scope 1 **Direct GHG emission sources**	Diesel, petrol, reticulated natural gas and LPG, and agricultural emissions from our farms (excluding biogenic methane)
Scope 2 **Indirect GHG emission sources**	Purchased electricity
Scope 3 **Other GHG indirect emission sources**	Methane from our livestock and the onsite wastewater treatment plant at our Newstead Head Office

What we're doing to improve business sustainability

Environmental Management System

We have an Environmental Management System as a framework to manage our environmental impacts. This includes an Environmental and Sustainability Management Committee, which has representatives from each business unit. The committee reviews the environmental aspects and the inherent and residual risk of all activities, products and services of our business and suppliers and contractors, and evaluates current/suggested controls to avoid, mitigate or remedy any adverse effects of each aspect. The members of the committee maintain LIC's Environmental Aspects Register for each area of the business.

Strategy Documents

In March, the Environment Team presented the Environment and Sustainability Strategy for 2024-2027 to the Senior Leadership Team (SLT). The strategy encompasses waste reduction, greenhouse gas inventory improvements, transition planning, energy initiatives, and the integration of Te Ao Māori Principles for environmental sustainability, along with work in the biodiversity space, and sustainable transport solutions. A survey was conducted in February 2024 which will be used to further shape our strategy and transition plan going forward.

The Energy Strategy for 2024-2030, an in-depth companion to the Environment and Sustainability Strategy, was also presented to the SLT in April. The Energy Strategy is based on a 'record, replace, reduce' framework to help LIC transition to cleaner energy sources.

Solar panels

LIC has a target of reducing its Scope 2 GHG (Greenhouse Gas) emissions from electrical power usage by 46.2% by 2030. Rooftop solar power panels have been installed at Innovation Farm and our Newstead head office has installed more than 480 solar panels that are expected to produce over 1,500 kilowatt hours per day in summer and half that in winter. This is conservatively estimated to reduce our grid usage by approximately 20% and Scope 2 GHG emissions by 13%. Further to the environmental benefits, solar power can potentially provide added resilience to the organisation's power supply, with an additional power source to electricity through the grid. In future, we will consider where we can introduce battery capability and solar panels across other LIC sites.

Initiatives to support our staff and suppliers to reduce their greenhouse gas emissions include:

- Vehicle tracking to enable vehicle efficiency
- Allowing employees to charge their EVs while at work through our significant footprint of EV chargers at various LIC sites
- Soft plastics recycling, e-waste, and battery collections on site

- Environmental Training Module - the course offers a brief overview of LIC's Environmental Management System and Environmental Policy
- Polystyrene recycling at Newstead and Riverlea - includes polystyrene from either work or personal activities
- Changed our Waikato milk supplier to Dreamview Creamery, a local Raglan supplier who uses sustainable practices and provides the milk in reusable glass bottles

Vehicles

To help reach our targets we're transitioning our fossil fuel company cars to include options of EV and hybrid models and we continue to grow the number of vehicles that are EV or hybrid, with the current fleet including 10% EVs and 19% hybrid vehicles.

We have 69 EV chargers installed, including 34 home chargers for employees with company vehicles and 1 super-fast (60kw/hour) charger at our Head Office in Waikato. Staff with personal EVs are able to charge

their vehicles on site at no cost to them with the aim of encouraging staff to select an EV when purchasing a new car. We have upgraded the power infrastructure at head office, which will allow for an additional 26 chargers to be installed as demand increases. We have plans to add a further seven chargers in the near future.

Travel

We encourage video conferencing for meetings involving our people and partners to reduce travel where possible and support flexible working with the benefit of reduced emissions from commuting.

Farms

We have an ongoing programme of investment to continue to upgrade our waste management infrastructure across our farms, as well as shade planting for animal welfare and riparian planting to lessen the impact of our farming activities on the environment. Each LIC farm has its own individual environmental management plan and staff are trained to ensure compliance. The Farm Environment Plans cover aspects such as soil type, stocking rates/ policy, riparian plantings, waterways, flood risks, effluent, pasture renewal/cropping, fertiliser use and GHG emissions. They are comprehensive documents that review our whole farm system and identify areas for improvement in terms of environmental performance. We have set timelines for implementing the improvements we have identified.

We have numerous policies relating to animal welfare and all animals entrusted to our care are treated with respect in accordance with the Dairy Cattle Code of Welfare 31/10/2019 (a Code of Welfare issued under the Animal Welfare Act 1999).

We also use fencing to keep our animals away from waterways and sensitive areas on our farms.

We are working, in partnership with Ravensdown, to install an EcoPond effluent treatment system trial at Innovation Farm. The EcoPond uses a dosing system and is expected to reduce up to 99% of methane emissions derived from microorganisms in the effluent pond. The system is expected to reduce water pollution and GHG emissions and could also serve as an educational resource for our staff and visitors, showcasing the benefits of responsible water management.

On LIC farms we generate waste oil from our equipment. Scrap metal oil filters and other parts are recycled and we are in the process of procuring a 1,000 L waste oil storage tank. An external party will then collect the waste oil for no charge and recycle the oil.

Water management

We have consents to discharge trade-waste from operations at Riverlea in the Waikato and in Christchurch and have a consent to discharge to land from the wastewater treatment plant (WWTP) at head office. The WWTP uses anaerobic reticulation to treat waste before being fed through a wetland filtration system and finally discharging to land. We also have several bore water wells on farm.

There have been a number of instances of planned discharges which breach existing resource consent conditions (notably in Christchurch) but no unplanned events/ discharges.

We have been working with Christchurch council for some time and in June completed an upgrade of the Tradewaste treatment facilities in Christchurch, which should mean that the site discharges should now be within resource consent levels for the upcoming season.

Waste management

We recycle farm materials such as silage wrap and plastic drums and are seeking new ways to reduce water and energy use across all our sites. E-waste items, such as obsolete laptops and phones, are sold where possible or recycled.

Our animal health laboratory at Riverlea in Hamilton receives numerous polystyrene cool store boxes and we have a recycling process to manage this waste. We also allow LIC staff to bring in clean polystyrene from their homes to recycle at work. In 2023/24 we diverted 66.8 m^3 of polystyrene from landfill, recycled through an external company.

We began a food waste recovery system in our onsite cafeteria at Newstead and have diverted over three tonnes of food waste from landfill since July 2023 through a local worm farm in the Waikato. We are in the process of expanding this service across the Newstead campus and investigating food waste recovery at our other sites.

LIC expanded its soft plastic recycling scheme to Christchurch in late 2023. The scheme allows staff to bring in soft plastics from home as well as recycle all viable soft plastics from our processes. In 2023/24 we recycled 378 bags of soft plastics through the programme, equating to approximately 2.3 tonnes of soft plastics being diverted from landfill.

Our Australian subsidiary, Beacon Automation Pty Ltd, produces heat patches and is working on identifying options to recycle plastic waste from the production process and produce products that could be more environmentally friendly. They have also calibrated their machinery so that they need less raw material to produce their products and in turn reduce the volume of scrap waste to landfill through the production process. This change has reduced waste by approximately 3%.

Waste left on farm

When AB services are performed on farm, our technicians generally leave materials that have been used during the process, such as gloves and wipes, although we are looking at options to safely recycle items such as gloves. This year we had 50 of our Spring technicians participate in a trial to recycle insemination gloves and sheath bags. So far, we have diverted over 200kgs of soft plastics that would have been left on farm to Future Post to contribute to the manufacturing of their fence posts. The next step is to roll this out nationally for the 2024 Winter and Spring AB seasons.

Where we perform services on farm that collect biological material, such as herd testing, strict processes are followed to minimise the chance of any transfer of disease between farms.

To minimise the risk of disease transferral:

- Our AB Technicians ensure that boots are cleaned and disinfected on entering a farm, use single-use gloves that cover up shoulder and chest area, single-use disposable sheaths and isopropyl wipes to clean equipment between farms;
- An additional antibiotic is added to semen diluent that targets M.bovis; and
- New young bulls are quarantined from existing bulls for a period of time, bulls used for international markets are quarantined and tested as required under regulations and double-fencing is used to separate individual bulls in the core bull team, as well as daily monitoring for any health concerns.

Social sustainability - caring for our people

For LIC social sustainability is all about caring for our people, ensuring that they have the tools and support they need to continue to deliver value to our farmer shareholders.

We are focused on fostering a culture that embraces change, builds capabilities, encourages people and ultimately drives results to deliver greater customer value. We invest in our people to develop their talent and ensure they are in a positive and safe working environment.

Alongside our full-time employees, in peak season we also employ close to 1,350 seasonal employees in the Artificial Breeding (AB) area and 350 other seasonal or casual workers throughout the year to help in other areas of the business, such as herd testing. Each year, our qualified AB technicians visit farms in their local area, artificially inseminating millions of cows, with the peak season being from September to December.

Key Metrics

900 — **More than 900 full-time equivalent employees, of which 582 are women**

9,000 — **Over 9,000 farmer shareholders**

2.35 — **Lost Time Injury Frequency Rate (per 200,000 hours worked) up from 2.23 last year**

Governance Structure

Our governance structure includes a Board of Directors, Shareholder Reference Group, and Senior Leadership Team. These groups all contribute to driving value for our farmer shareholders.

Board of Directors

Our Board is responsible for the overall governance of LIC on behalf of our farmer shareholders to improve the prosperity and productivity of our customers. LIC Directors set the vision and long-term goals of the co-operative. This includes the strategy to achieve that vision, as well as the monitoring of its implementation. Information on sub-committees of the Board is available in the governance section of LIC's annual report.

The Board must be comprised of at least six elected farmer directors, and up to four independent directors to allow specialist expertise to be added when needed, while balancing the number of Elected Directors between the North and South Island.

At the annual meeting in October 2023, Board Chair Murray King stepped down and Victoria Traynor was elected as Elected Director for South Island in his place. Corrigan Sowman was appointed as Board Chair and Board Director Ken Hames was replaced by Duncan Coull as North Island Director.

Elected Directors Matt Ross and Dr Alison Watters have both advised that they are not seeking re-election at the end of their current terms. Appointed Director Candace Kinser is due to retire by rotation in October 2024 and has decided not to seek re-appointment.

Left to right (as at 31 May 2024): Victoria Trayner, Ben Dickie, Candace Kinser, Matt Ross, Corrigan Sowman, Tim Gibson, Alison Watters, Duncan Coull, Sophie Haslem

From left to right (as at 31 May 2024): Mark Hooper (Chair), Michelle Oldham-Smith, Phil Lowe, Andrew Wiffen, Dan Joho, Aleisha Bloomfield, Johan van Ras, Ben Smith (Deputy Chair), Jared Clarke, Mark Benns, Shaun Baxter.

Shareholder Reference Group

Our Shareholder Reference Group is an independent body of shareholders who work collaboratively with our Board and management. The group serves to promote the interests of shareholders and help us deliver on our purpose and vision.

The Shareholder Reference Group is solely comprised of farmer shareholders. It is made up of 12 members across four territories. Eight members are elected by shareholders and four are appointed by the existing members of the Shareholder Reference Group to ensure diversity and a broad range of skills in the Group.

From left to right: Brent Mealings (Chief Financial Officer), Roz Urbahn (Chief People Officer and Acting GM NZ Markets), David Chin (Chief Executive), Mark Julian (GM Operations & Service), Emma Blott (GM Commercial), Richard Spelman (Chief Scientist), Dhaya Sivakumar (Chief Information Officer)

Senior Leadership Team

Our SLT is tasked with working alongside the Board to develop and implement our short and long-term strategy and to establish the key metrics that we will be measured against, so that we know we are delivering on the commitments made to shareholders.

Caring for our people

Wellness

Creating a supportive and sustainable internal culture across our business has been vital to achieving the successful results we've seen in recent years.

'Well Aware' is our centralised health and wellness strategy, incorporating physical, mental and social wellbeing, and has been in place for around four years. The Well Aware Hub on the LIC intranet provides a one-stop shop for information on a well body, well mind, and a balanced life for our staff.

'Mental Wellbeing at Work' is the flagship programme of the 'Well Aware' strategy and is available to all permanent and fixed contract staff. It is designed to support our employees to thrive within a work environment through an introduction to a holistic approach to wellbeing, and connection to support services we have available under each area (well body, well mind, well life). In addition, Well Aware also offers a compulsory module called 'Supporting Mental Wellbeing at work' for all people leaders. This module is led by a registered EAP psychologist and is designed to upskill our people leaders on how to appropriately support employees experiencing an emotional/mental crisis.

A Resilience workshop module is also in the final stages of being completed, this workshop will be available for all staff to sign up to.

EAP Services continue to remain our EAP provider and this support is free, confidential, and available to all LIC staff and their immediate family members.

The 'Well Aware' strategy promotes health and wellbeing at every level, leading to an engaged, safe and sustainably high-performing workforce. The programme continues to organise a series of guest speakers to provide staff with additional information to support mental, emotional and physical wellbeing at work. Recent examples in the past year have included:

- How to claim back your energy - mid-year energiser strategies
- This changes everything: the menopause talk
- The power of financial wellbeing
- From burnout to thriving

Organisational Health

The focus is always on improving with the support of our employees. We have previously used the McKinsey Organisational Health Index (OHI) methodology to survey employees on the impact of our organisation practices and culture on performance against international benchmarks. This year we decided to review the type of survey we were using.

In partnership with Microsoft Viva Glint, LIC's new 'BeHerd' survey helps us build on our previous work to create a positive working environment where employees can all be their best selves. This was launched in May 2024 for the first time to permanent employees. We achieved a high response rate of 84% participation in the survey.

The result was 74 out of 100 in engagement, which was based on two key questions: 'How happy are you working at LIC' and 'I would recommend LIC as a great place to work'. The results from over forty questions in the survey and a large volume of verbatim comments has provided excellent material for insights and for opportunities for improvement to be identified. The next BeHerd survey is intended to be repeated in November 2024.

We are also currently creating a specific survey for our employees that work at LIC in seasonal roles, which is due to go out later in 2024.

Diversity, Equity & Inclusion

Given the size and nature of our business we have a diverse workforce. To continue recognising diversity in the workplace and creating an inclusive environment, we have a staff-led Diversity, Equity and Inclusion Committee to champion these concepts.

Regular communications are sent out to all of LIC on key events and topics of interest. The Diversity, Equity & Inclusion newsletter highlights cultural and international events and celebrations, and provides information on topics relating to diversity, equity and inclusion.

For 2023/24 the Committee focused on

- Implementation of a Te Ao Māori Strategy; and
- Establishment of a Women in Leadership group.

Te Ao Māori

With the partnership of Tira (formerly Tutira Mai) we have finalised a Te Ao Māori Strategy. The strategy identified a summary of next steps to embed into LIC:

1. Principles - strategy name Te Whakapiki, reinforce in team meetings, display on website, compose a karakia.
2. Knowledge - provide learning opportunities and improve through practice to include te reo and tikanga.
3. Legacy - how we act now should be about people's mana and what is left behind should benefit those that are yet to come. Mana whenua and its story of the land that LIC is on. By active communication, publish whakapapa and include on website, display signage and iconography.

A key part of our Head Office campus was rebuilt over the past year and officially opened in November 2023. As part of this project local mana whenua kaumātua, Ngāti Haua, our cultural advisor and a cultural artist were consulted and invited for a blessing of the building. The blessing was a special opportunity to acknowledge and bury Piki, the Mauri stone that was gifted to LIC by Ngāti Haua. The stone was blessed and buried under our new walkway into the building, and a plaque added to acknowledge the stone's significance.

Women in Leadership

LIC launched the Women in Leadership group in 2023, which showcased two panel discussions and a Knowledge Share.

During 2023/24:

- 68 members have now joined the online Women in Leadership group.
- We held two Women in Leadership focused panel discussions:
  - One with three prominent leaders at LIC and focussed on the challenges they have faced as women in leadership positions and the strategies they employed to overcome them.
  - Another with four up-and-coming leaders at LIC. The discussion focused on the challenges they have faced as women new to leadership and one panellist brought a different perspective as a father of four young women.
- There was a presentation by Linda Cooper, previous LIC CFO and Chair of Agri-Women's Development Trust. Linda joined us on International Women's Day to talk through some of the highlights and challenges she has faced during her career.

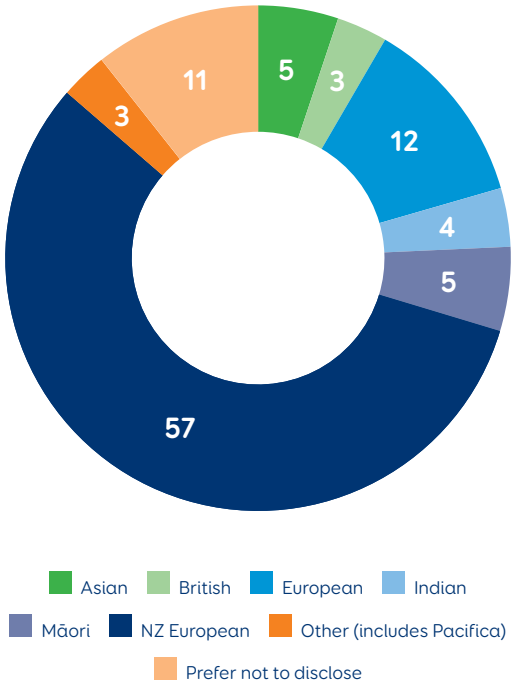
The Committee's focus for 2024 has also been to review roles and responsibilities and create a Purpose Statement. The Committee aims to be more focused on prioritising deliverables and targets. Key projects that have been identified are:

- Women in Leadership
- Te Whakapiki Strategy
- Neurodiversity
- Family and Caregiving
- Hiring
- Knowledge Share presentations

The latest employee survey collected demographic statistics, which will be again used to identify areas where further objectives could be focused.

Ethnic Diversity %

Based on responses to the 2024 BeHerd survey



Engagement with Diversity Works NZ is ongoing and our membership of this organisation allows access to a wide range of resources.

Health & Safety (H&S)

The health and safety of our staff, our customers, contractors, and anyone else we come in contact with, remains our highest priority. Our health and safety system provides the framework to keep workers healthy and safe, regardless of their location.

Our Health, Safety and Wellbeing policy sets out our commitments and reflects our intent to continue to develop our health and safety culture. The focus is on becoming more proactive - where we continue to take personal ownership, learning safety lessons from our safety events, and anticipate future safety risks and needs.

The annual ACC Accredited Employers Programme audit was completed over three days in February 2024. LIC successfully passed the audit, retaining its secondary level accreditation. The auditor noted several examples of continuous improvement initiatives. These included: highlighting investigations and actions taken concerning fatigue management, the development of a new "Plant and Equipment checklist" to assess risks associated with new and changed equipment, a thorough operations review by an external agency to confirm risk assessment and controls as well as follow-up manager training. The auditor also noted the development of improved contractor control processes and increased quality and quantity of records of contractor monitoring, improvement of risk registers with significant input from staff, and evidence of improved awareness.

The auditor highlighted several areas for improvement, including the need to standardise methods for recording PPE issued to workers, increasing employee representation across under-represented workgroups, targeted analysis of first aid and emergency equipment requirements across sites, and ensuring that appropriate processes are in place to ensure that any claimant entitled to indexation is promptly identified and provided with this entitlement. Plans are currently underway to address these areas.

Some of the specific focus areas for the Health, Safety & Environment (HSE) team this year included:

1. Leadership development

- A learning group was created to review platform use in Herd Testing to improve risk understanding with the aim of introducing better controls.
- Collaborative response between the HSE team and Shannon lab leadership team to address risk control shortcomings in minimising exposure to MEK (methyl ethyl ketone), a hazardous substance used in the AB long last liquid laboratory.
- AB leaders proactively requested tailored risk management training for leaders and H&S Representatives following MEK risk control review, which the HSE Team provided.

2. Working together

As part of our focus on improving our staff engagement, we have invested in improving our workers' voice in health and safety and wellbeing. LIC has one elected H&S Representative for every 19 permanent workers. Our Health & Safety Governance Forum, chaired by our Chief Executive Officer and attended by a range of managers and employee representatives from business units, allows workers and senior leaders to collaborate on H&S matters. The forum specifically reviews critical risks reporting from each business unit and tracks improvement against the 48-hour event reports and seven-day event investigation timeframes.

LIC is finalising consultation with workers on changing the current single workgroup to multiple workgroups that work better for business units and better represent workers in the regions. Initial feedback from teams is that they have welcomed the reset and the opportunity to formalise how workers will be represented in their own work areas, especially for those who predominately work out in the field.

3. Critical risk management

SLT members and Board Directors spend time with workers to understand our critical risk profiles and gain assurance that the controls are effective. During the year, 17 SLT and 9 Director site visits were carried out, reviewing all critical risks in a range of locations. The improved understanding of our risk profiles allows us to ensure adequate resources are made available. A number of H&S site visits, including 121 H&S audits, by the team provides another layer of assurance that critical risks are identified and controlled.

LIC has 66 identified instances of hazards that pose an extreme risk to workers' health and/or safety, based on the LIC enterprise risk matrix rating (extreme risks are deemed to be critical H&S risks).

The HSE team has assisted all but one of the business units and national teams with a review and consolidation of their risk registers, and work is underway with the outstanding team. This exercise has resulted in a risk register that is significantly shorter and clearer, saving time taken to conduct risk reviews.

4. Asking the right questions

We have set specific H&S objectives designed to focus our attention on improving our systems and practices. Our progress against these objectives is reviewed on a quarterly basis by the H&S Governance Forum. LIC has also started a review of 'violence and threatening behaviour' risk following several adverse experiences by staff while serving our customers. This is unacceptable and additional controls are currently being developed. The objectives for 2024/25 have been refreshed and H&S reporting to senior leaders and board members continues to be reviewed and improved.

5. Supporting our injured and ill workers

As a member of the ACC Accredited Employers Programme we are responsible for the vocational, medical and social rehabilitation of our workers. There has been a steady improvement in rehabilitation and return to work rates for our injured employees over the last three years. In the last year both the number of claims and the associated rehabilitation costs have decreased. For the last three years, we have attained secondary level accreditation against ACC audit standards.

6. Improving the safety of our AB technicians

Providing secure, appropriate Artificial Breeding (AB) facilities is not only critical to creating a safe working environment, but it also gives our AB technicians the best opportunity to get cows in-calf. To help our farmers get the best results from our AB service and ensure the safety of our AB technicians, we have developed a national standard which details the minimum requirements that an AB facility must meet for us to provide our AB technician service.

We are working with farmers to further remove the risk of working from heights, which we consider to be a critical risk, in relation to herringbone sheds. The first step was to cease the AB service from the pit of a herringbone shed on a trolley from May 2023, and we continue to work with our farmers to move away from working from the pit of the herringbone shed altogether by May 2025.

LIC has also signed the Farm Without Harm pledge by Safer Farms, reinforcing our dedication to creating safer conditions across our farms and protecting our people from preventable harm.

Employee Data

This employee data relates to the total LIC group and is sourced from our Human Resource (HR) system. The data for permanent and fixed-term employees is reported on a full-time equivalent (FTE) basis.

We employed a total of 1,688 seasonal workers throughout the year ended 31 May 2024 (1,747 for prior year), particularly during peak season for a relatively short period of time, primarily as artificial insemination technicians, with 1,344 technicians and assists in this area and 344 other seasonal or casual workers throughout the year to help in other areas of the business, such as herd testing.

The reporting period is for the financial year ended 31 May 2024 (FY24), with final permanent and fixed-term employees reported as at 31 May and comparatives for the prior period (FY23). Our only significant location is New Zealand, with less than 5% of employees employed in any other individual country.

Our HR system does not currently capture gender options alternative to male/female. Some age data is not available as employees are not obliged to disclose date of birth.

FTEs by employment contract by gender

	Permanent		Fixed term/Casual		Total	
	FY23	**FY24**	**FY23**	**FY24**	**FY23**	**FY24**
Female	487.2	521.9	81.5	60.1	568.7	582.0
Male	323.0	319.2	13.0	15.0	336.0	334.2
Total	**810.2**	**841.1**	**94.5**	**75.1**	**904.7**	**916.2**

FTEs by employment contract by region

	Number of FTEs (Permanent and fixed-term/casual)	
	FY23	**FY24**
New Zealand	879.6	890.2
Australia	19.1	20.0
UK & Ireland	6.0	6.0
Total	**904.7**	**916.2**

FTEs by employment type by gender

	Full-time		Part-time		Total	
	FY23	**FY24**	**FY23**	**FY24**	**FY23**	**FY24**
Female	540.2	548.2	28.5	33.9	568.7	582.1
Male	326.8	322.8	9.2	11.3	336.0	334.1
Total	**867.0**	**871.0**	**37.7**	**45.2**	**904.7**	**916.2**

New permanent employee headcount hires, by gender and age group for primary region

	<30 yrs age	30-50 yrs age	>50 yrs age	Age not disclosed	NZ region FY24	%
Female	25	30	6		61	64
Male	3	26	6		35	36
Total	**28**	**56**	**12**		**96**	
%	**29**	**58**	**13**		**100**	

Employee headcount turnover, by gender and age group for primary region

	<30 yrs age	30-50 yrs age	>50 yrs age	Age not disclosed	NZ region FY24	%
Female	28	31	8		67	63
Male	5	18	17		40	37
Total	**33**	**49**	**25**		**107**	
%	**31**	**46**	**23**		**100**	

There were 17 permanent employees (2%) covered by a collective bargaining agreement at 31 May 2024, and a further 26 (1.5%) seasonal workers during the period. For employees not covered by collective bargaining agreements, individual contracts are entered into at the time of employment.

During the year, there were 33 females (no males) on parental leave and 19 females returned from parental leave.

If significant operational changes are proposed within the organisation, LIC will consult with potentially impacted employees for a two week period on the proposed changes, with a minimum of six weeks in total from notice of proposed change until implementation of any final changes. For any employees covered by collective bargaining agreements, notice period and provisions for consultation and negotiation are specified in those agreements.

LIC engages with suppliers to provide workers, such as IT contractors, recruitment firms and directly with independent contractors. This number is not material compared to the number of LIC employees.

The ratio of the annual total compensation for the organisation's highest-paid individual to the median annual total compensation for all permanent employees (excluding the highest-paid individual) for the year ended 31 May 2024 was 7.25:1 and 6.35:1 for the annual relative % increase, noting that total compensation includes bonus payments.

Economic Sustainability

Delivering value for our farmer shareholders is at the centre of everything we do, and strong financial performance enables us to do just that - through our herd improvement products and services, a solid dividend and, importantly, the right R&D investment to keep their herds profitable and sustainable into the future.

On 18 July 2024 the LIC Board announced its financial result for the 2023/24 year, ending the year with no debt and a modest profit and dividend for shareholders while continuing to invest in innovations for shareholders.

The Board noted that the 2023/24 financial year had produced some difficult conditions for the co-operative with a reduced milk price environment, a subsequent reduction in activity driving a lower bull valuation, ongoing cost inflation, tax changes, and a semen quality issue that resulted in over $2 million worth of credits paid to farmers ($1.4 million impact on NPAT and Underlying Earnings).

Farmer shareholders are the heart of our co-operative and it was a particularly difficult year for them with a lower milk price environment alongside continuing high input and debt servicing costs. The impacts of the lower milk price were felt across New Zealand and were reflected in the 3.3% reduction in revenue.

Throughout the 2023/24 financial year the organisation identified cost savings to offset reduced revenue and this allowed the co-op to still post a profit and pay out a dividend to its shareholders.

Key Metrics from 2023/24 full year results

Summary of financials*

$7.7m

Net Profit After Tax (NPAT)

Down 71.7% from $27.4 million last year

$358.6m

Total assets, Strong balance sheet with no debt at year-end

Down 6.2% from $382.3 million last year

$13.9m

Underlying Earnings

Down 41.6% from $23.7 million last year

$267.3m

Total Revenue

Down 3.3% from $276.5 million last year

$16-22m

Outlook

The co-op expects Underlying Earnings* for 2024/25 to be in the range of $16-22 million

$26.8m

Total Dividends

Includes the $18.5m Special Dividend paid earlier this year

Tax

LIC's Audit, Finance and Risk board sub-committee oversees tax compliance, including LIC's Tax Policy and annual Tax Management Plan, which identifies areas of tax change. LIC seeks to comply with all aspects of the New Zealand and international tax acts for jurisdictions that our subsidiaries reside in. Management has responsibility to ensure that it has a broad understanding of all major tax issues that arise from the ordinary business, major transactions, business structures or strategies undertaken by LIC. LIC uses external tax experts and tools to ensure appropriate tax compliance governance and controls are in place.

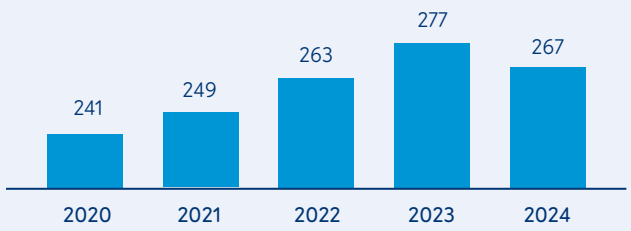
Tax legislation enacted in March 2024 removed the ability to depreciate commercial buildings for tax purposes from the 2024/25 income tax year. The application of this tax change created a one-off, non-cash accounting adjustment to tax expense at year end of approximately $4 million, with a corresponding increase in LIC's deferred tax liability balance.

*For notes to the financial information please reference our FY24 Annual Report.

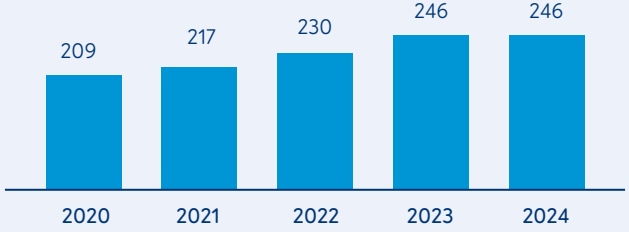
Financial Metrics

These charts represent our key financial metrics to provide a historical summary of our performance.

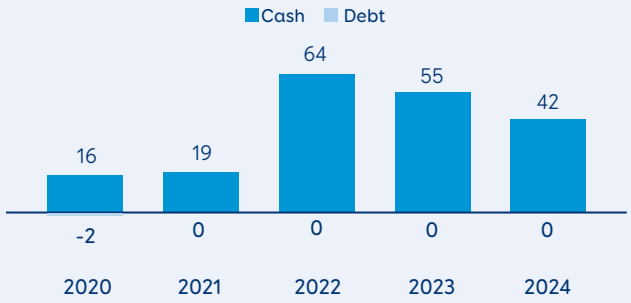
Revenue ($ millions)*



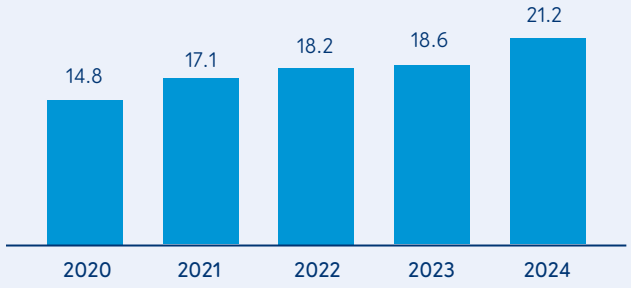
Operating Expenses ($ millions)**



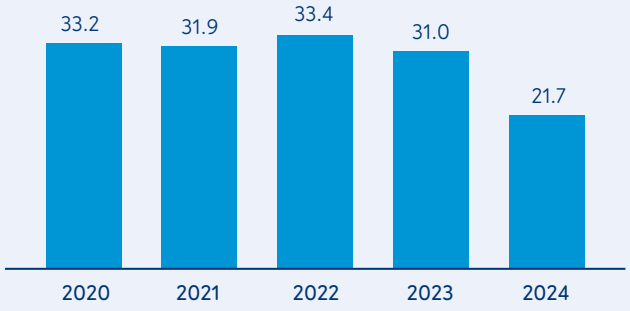
Funding ($ millions)



R&D spend ($ millions)*



EBIT ($ millions)**



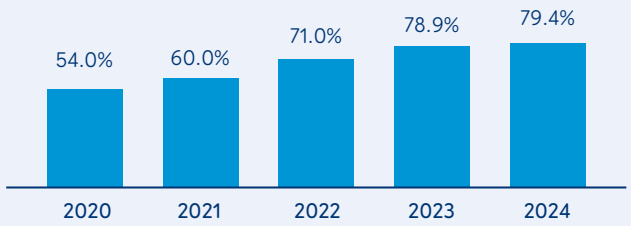
Total Dividends ($ millions)***

* Data excludes Discontinued Business operations - the Automation business was divested in June 2021

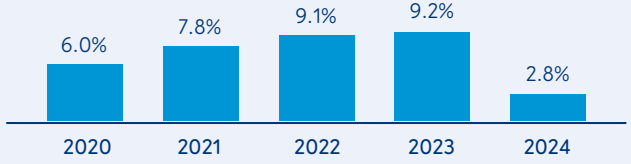
** Excludes bull team & nil paid share revaluations and Discontinued Operations

*** The full year dividend declared is paid in the subsequent year, while special dividends are paid within the year

% Premium (incl Genomic) **Replacement Straws**

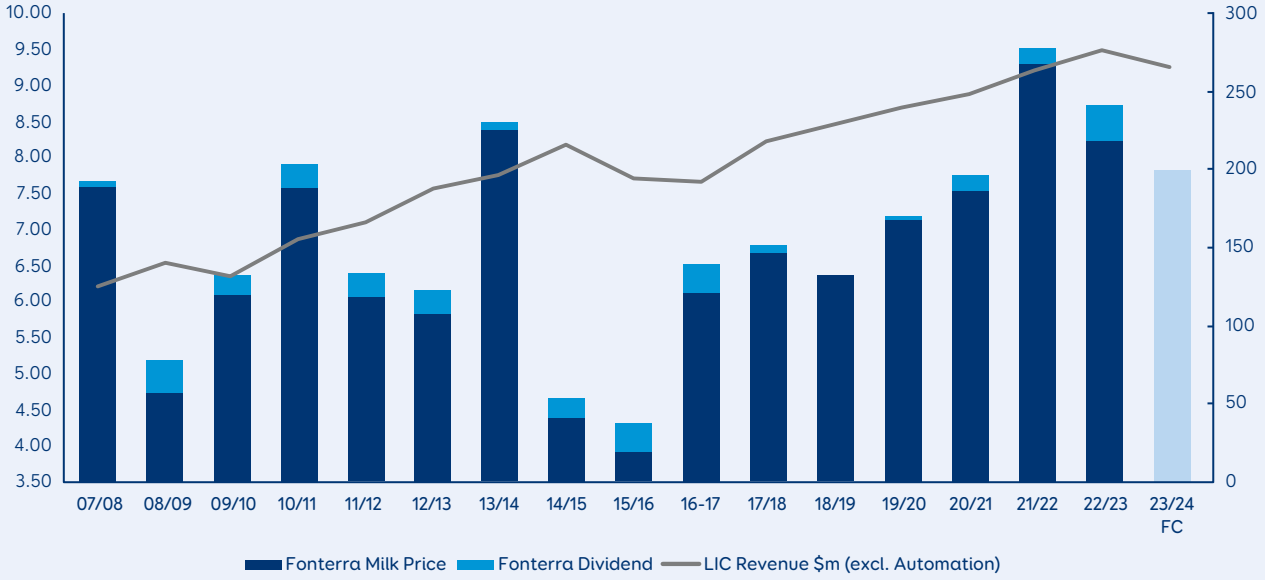


Return on equity %



LIC Share Price $

New Zealand Milk Price Payouts kg/MS



Trends

		2020	2021	2022	2023	2024
Revenue *	NZ$000	240,932	249,013	263,182	276,506	267,288
R&D spend	NZ$000	(14,844)	(17,124)	(18,184)	(18,577)	(21,215)
Net profit after tax	NZ$000	17,487	22,944	26,723	27,352	7,734
EBIT **	NZ$000	32,224	31,904	33,372	30,955	21,712
Underlying Earnings	NZ$000	22,685	22,261	25,677	23,732	13,856
Total dividends***	NZ$m	18.1	17.8	40.4	23.3	26.8
	Cents per share	12.75	12.51	28.43	16.38	18.84
	Gross yield %	23.0	14.7	26.4	22.8	23.4
Operating cashflow	NZ$000	52,018	40,456	57,130	36,791	40,052
Net capital & investment spend****	NZ$000	(21,401)	(16,115)	(17,889)	(20,581)	(27,600)
Total Assets	NZ$000	379,940	382,005	385,610	382,291	358,608
Total Equity/Net Assets	NZ$000	290,242	294,123	293,057	297,494	274,913

Sales data

Premium (incl Genomic) straws	1,666,564	1,792,648	2,071,321	2,303,537	2,248,792
Other replacement straws	1,397,386	1,206,049	864,709	616,923	582,337
Total straws (NZ)	4,438,732	4,343,830	4,322,316	4,418,263	4,230,761
International straws	857,427	1,059,777	1,055,168	1,035,888	1,020,756
Herd testing samples	10,407,918	11,170,134	11,199,277	11,274,641	10,207,239
GeneMark® testing	768,943	629,166	728,876	757,851	661,339
Animal health testing	1,045,487	1,294,996	1,571,509	1,723,489	1,808,327
MINDA® animals	6,998,649	7,006,900	6,912,997	6,807,164	6,688,007

For our full financial results please refer to our FY24 Annual Report

* Excludes Discontinued Business operations - the Automation business was agreed to be divested in June 2021

** Excludes bull team & nil paid share revaluations and Discontinued Operations

*** Includes dividends declared, which are paid in the subsequent year. There was an additional Special Dividend of $14.2 million, or 10 cents per share, paid in January 2022 following the Automation divestment. The 2023 dividend includes an additional amount of $4.3 million to return cash retained from dividends paid in 2022 to repay nil paid shares (2022 included a similar additional amount of $5.7 million). There was an additional Special Dividend of $18.5 million, or 13 cents per share, paid in February 2024 following the sale of National Milk Records shares

**** Excluding proceeds from sale of National Milk Records plc shares in 2024

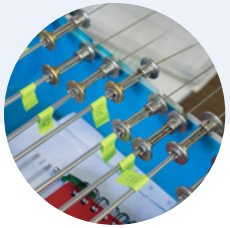
Our Business

LIC exists to deliver superior genetics and technological innovation to help our shareholders sustainably farm profitable animals.

We are the DNA of the New Zealand dairy sector, breeding up to 75% of cows in the national dairy herd. We take our role seriously as an important player in the team supporting farmers with the right herd improvement tools to breed more efficient and climate resilient cows.

Our primary sector is the New Zealand dairy sector. Our core customers are New Zealand dairy farmers. Other customers include veterinarians who support farmers, international semen distributors, overseas dairy farmers, users of dairy herd data and beef producers.

Keeping New Zealand farmers profitable and sustainable is critical. We are owned by New Zealand dairy farmers and therefore invest to fund research and technology which will benefit not only this generation of farmer shareholders and their herds, but successive generations and their herds.

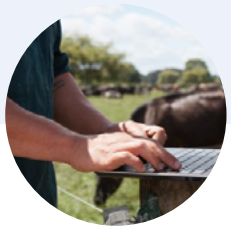


Artificial Breeding (AB)

AB dairy and beef genetics and technician services, with products such as Premier Sires®, Sexed Semen, Short Gestation Length, Alpha®, Customate, training of AB and DIY technicians, deep freeze storage

Heat detection products

LIC heat patch, LIC Bulls-i®, Kamar® Heatmount detectors



MINDA® Herd management software

Herd testing of milk samples, including EZ Link® scanning

DNA parentage testing and genomic evaluation service

Animal health testing

Bovine Viral Diarrhoea (BVD), Johne's disease, milk pregnancy testing, Staph aureus

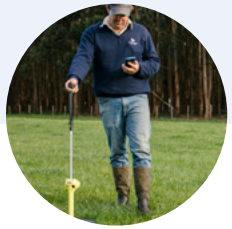
On Farm Support

Increase efficiency of farm operations, including assisting with herd records, herd testing, weighing and DNA sampling

SPACE™ satellite and pasture cover evaluation reporting

Tags

Range of NAIT approved electronic (EID) tags and management tags from Allflex, Z Tags and Flexa



Farm accessories

Electronic plate meters, EID readers and wands

FarmWise®

Consulting service for farm visits and project work

How we work

LIC is structured to best support farmers and our operational teams to effectively supply products and services to customers, as well as to leverage opportunities to deliver genetic improvements to farmers and better returns to shareholders.

NZ Markets

Sales operations, contact centre, customer training, marketing, communications, oversight of product development, including MINDA® herd management

Operations & Service

Artificial breeding collection & insemination, herd milk testing, genetic diagnostics, animal health testing, LIC bull and dairy farms, FarmWise® consultants, on-farm support

Research & Development

Genetic, genomic and reproduction research and development and analytics; both inhouse and in collaboration with university and sector partners; animal evaluation, bull selection

Commercial

International genetics sales, business development, new ventures, investments and partnerships, leverage of beef opportunities

Technology

Development and support of customer facing systems such as MINDA® and LIC internal systems and IT infrastructure

Support Services

Payroll, finance & accounting, procurement, legal, intellectual property, governance, shareholder services, risk management, property management, Business Information Unit, NAIT transformation, enterprise project management office

People & Performance

People & Performance partners; employee experience, organisational development, health, safety and environment

Our Supply Chain

Key categories of goods and services we procure

- **Labour hire**
- **Professional consulting services**
- **IT software and hardware**
- **Laboratory supplies**
- **Building materials and products**
- **Farm supplies**
- **Recruitment services**

The most critical component of LIC's supply chain is our permanent and seasonal employees, as well as our bull team. For our external suppliers our Strategic Procurement team has policies and processes in place to identify and manage critical risks that could impact our supply chain. An example is our New Zealand and international air freight and technology services. Where there is a higher risk to our products and services, particularly during peak season or where components are sourced internationally, at least one year of input components are held in advance of need, such as consumables used for artificial insemination and diagnostics testing.

The Procurement Policy requires that all procurement decisions should also take into consideration the potential impact to the environment, sustainability, Health and Safety and compliance with any other relevant legislative obligations and we continue to work with suppliers in relation to sustainability measures. For example, this year we changed our Waikato milk supplier to Dreamview Creamery, a local Raglan supplier who uses sustainable practices and provides the milk in reusable glass bottles.

Partnerships

Partnerships are critical to our work and are a strategic priority to develop. We work with others to deliver to farmer needs, collaborating or partnering with other organisations to deliver a seamless service to farmers. We already work closely with other sector participants, including:

- DairyNZ and NZ Animal Evaluation Ltd (subsidiary of DairyNZ)
- Government ministries and agencies on joint funding of R&D, such as MPI, MBIE and Callaghan Innovation
- Milk processors
- Specialist beef operations
- Sexing Technologies, providing the critical technology for our sexed semen product
- Rural professionals, such as vets
- Animal wearable device companies
- Research specialists, such as at Auckland University and Massey University

We are focused on building relationships with other sector companies such as processors, fertiliser companies and device companies.

New and ongoing initiatives with partners of note include:

Farmlands, Silver Fern Farms and LIC - Leadership and Governance Development training

We have partnered with Farmlands and Silver Fern Farms to offer shareholders of all three companies the opportunity to learn more about governance in co-operatives and develop skills needed to operate at board level through a unique leadership and governance development programme called "To the Core".

Fonterra's Governance Development Programme

We also partner with Fonterra who offer one LIC shareholder a place in its Governance Development Programme to build their governance capabilities and leadership skills. Running for approximately one year, the content is provided by Fonterra and Massey University's College of Business.

Rural Support Trust

We have partnered with Rural Support Trust to provide farmer facing staff with a resource that offers guidance on providing mental health support to farmers.

House of Science Central Waikato (HSCW)

The House of Science Central Waikato (HSCW) is committed to bringing scientific literacy tools to schools across the Waikato region. Their vision is to raise science literacy which will have huge economic and social benefits to New Zealand. We are proud to continue our collaboration that started in 2021 with HSCW and support them in a variety of ways. This includes providing HSCW with a LIC vehicle to deliver science kits to rural schools in the Waikato. Some of our fantastic R&D staff also volunteer their time each week to put together the science kits.

LIC supports the dairy sector, rural communities and our farmers by sponsoring a variety of initiatives, events, programmes and organisations. This provides opportunities and promotes excellence within the sector. Examples include:

- New Zealand Dairy Industry Awards
- Lincoln University Dairy Farm
- Southern Dairy Hub
- South Island Dairying Development Centre
- South Island Dairy Event
- Owl Farm at St Peter's School, Waikato
- Dairy Women's Network
- Kellogg Rural Leadership Programme
- Massey University Dairy #1 Farm
- Ayrshire NZ Conference
- Jersey NZ Conference
- Holstein-Friesian Association Conference
- Smaller Milk and Supply Herds Conference
- Once a Day Conference
- Distributing computer equipment no longer needed to rural schools
- Support of calf club and pet days in schools

Our employees are given a day off annually to do a variety of volunteer activities in the community.

We are also members of Cooperative New Zealand, the Sustainable Business Council, Toitū, and the Climate Leaders Coalition.

Refer to our website for further details.

How we create value

Value for our farmer shareholders is at the heart of our strategy.

We drive value, innovate, and deliver a positive impact for our customers and shareholders by focusing on helping our farmers optimise value from their livestock by helping them to produce the most sustainable and efficient animals and the highest value product.

We estimate that LIC delivers at least $640 million of value on farm from the products that farmers purchase from us:

- Genetic improvement of the dairy herd generates the majority of the value, based on the increase in gBW over time.
- Health data provided to identify mastitis reduces the costs of treatment and reduces the number of cows culled due to this issue. Other disease testing identifies cows for farmer culling decision-making and reduces further spread of disease within a herd.
- Production Worth data is used to identify lower performing cows, enabling informed farmer decision making.
- Short Gestation Length (SGL) dairy inseminations provide an additional 21 days of milk on average and beef inseminations provide an additional 8 days of milk on average.
- SPACE™ provides reporting on accurate pasture cover data.
- We are working towards being able to calculate the value of environmental improvements through genetic improvements reducing enteric methane and nitrogen impacts.

LIC contribution to value on Farm

Value created for our stakeholders

Shareholders / Customers

Delivering quality products and services, advancing genetic improvement of herds, re-investing profits in further R&D or returning to shareholders through dividends

Employees

Providing a safe workplace with development opportunities and strong engagement

Sector Partners

Collaborating on research and development, providing quality data inputs

Government & Regulators

Complying with regulatory and financial reporting requirements, reducing our own environmental footprint and that of the national herd, responsible taxpayer

Community

Providing employment, lowering our environmental footprint, support through sponsorship and scholarships

The resources we rely on

Relationships

Positive relationships with shareholders, farmers, vets, government and regulators, sector and research partners, employees and the farming community

Intellectual capital

Our collective know-how, systems and intellectual property that more than 50 years of R&D has generated

Financial capital

Our farmers and shareholders create a strong financial base to operate and invest for the future, as well as our banking partner debt facilities

Assets & infrastructure

Our property, equipment and animals allow us to run our business and distribute products and provide services

People

We rely on our talented employees, sector partners and suppliers to help deliver our products and services

Natural environment

New Zealand's natural environment is a key factor, particularly rain, sun and quality soil supporting grass growth for animals

Engaging with our stakeholders

The Board and Senior Leadership Team regularly consider different stakeholders and mechanisms to engage with them, as well as making decisions on when not to engage. This is commonly discussed at regular management and Board meetings, with recommendations made to Board, or requests from the Board.

Our latest Net Promoter Score (NPS) was a positive result of 8 based on 638 farmer shareholder responses. NPS is a measure of customer experience that ranges between -100 and +100.

Our farmer shareholders & customers	Our People	Suppliers & Partners	Regulators & other agencies	Communities
Goal				
Deepen our understanding of the current and future needs of all our farmers	Develop talent and foster a culture that embraces change, builds capability and drives better results	Work with others to deliver farmers' needs, including partnering to deliver a seamless service	Ensure long-term sustainability of our co-operative, farmers, environment and the NZ dairy sector	
How we engage				
• In person with tailored advice • Customer call centre • Net Promoter Score and other surveys • Fieldays®, events and training • Feedback groups • Annual meeting, Shareholder Reference Group, Roadshows • Publications (such as The Bulletin) • Digital channels	• BeHerd annual engagement survey • Employee events and in-person/ online business updates • Wide range of training & development • Internal communication, including Chief Executive email updates	• Strategic procurement team • Supplier evaluations • Partnership relationships • Collaboration with innovators & researchers • R&D investment	• Direct engagement with government and agencies by CE and relevant employees • Submissions on proposed law and regulation	• Support of sector groups • Scholarships and internships • Social media channels
Needs & expectations				
• Deep customer relationships • Quality products and services, on time consistently • Reliable MINDA® software that is easy to use • Ongoing genetic improvement • Innovation • Prompt issue resolution	• Positive culture • Safe, diverse and inclusive environment, where wellbeing is important • Investment through training and development • Market-comparable remuneration and benefits • Innovative working tools	• Reliable and sustainable supply chain, providing quality inputs • Strong, productive partnership relationships • Robust science-based R&D projects	• Strong governance and management of legal requirements • Insightful input on issues and proposed change • Appropriate and prompt response to incidents • Positive, proactive relationships • High quality external reporting	• Positive employment and growth opportunities • Responsible organisation (e.g. as a taxpayer, purchaser) • Respond appropriately to issues raised • Transparent reporting • Key partner to farming community • Respect for diversity
Response				
Our primary focus is delivering value for our farmer shareholders and we commit to operational excellence, faster genetic improvement and software reliability and performance	We live our corporate values: "Integrity, Innovation, Spirit of Co-operation, In tune and Passion"; we work on providing a safe and positive environment where our people can thrive	We work with others to build long-term trusted relationships, and will have increasing focus on relationships with other organisations in the agri sector	Collaborative interactions with Government and agencies, respect for our license to operate, strong focus on compliance	We help farmers to meet the current and future challenges, in particular water quality and methane, through research, investment and tools

Materiality Assessment

In 2021 the Board and management partnered with an external firm to refine our strategy. The strategy was informed by feedback from farmer shareholders, other stakeholders and local and global trends.

The strategy is to do what we're good at and play to our strengths. It is built on four solid foundations, Environment, Sustainable Co-operative, People and Partnership, and at its core is about delivering value for farmer shareholders.

When refining our strategy we also made three commitments to our farmer shareholders. The second commitment, faster genetic improvement, commits to "having farmers' backs when it comes to helping them meet the environmental challenges they face, in particular animal efficiency and methane mitigation". The strategy and commitments drive a focus on improving sustainability within LIC as well as helping the dairy sector to reduce its impact on the environment.

Management and the Board also worked together to carry out a materiality assessment on topics where the company may have significant economic, environmental and social impacts. We identified potential topics of importance based on our strategy foundations, reports and guidance from the dairy sector, farmer feedback and issues identified by risk assessments. Materiality was determined by considering the significance of our impact, the importance of the issue to stakeholders and our ability to control and/or influence the issue. Farmer elected directors provided key input in relation to importance of issues for stakeholders and LIC regularly holds farmer engagement meetings in different regions, or brings groups of farmers to the Waikato, to continue to gather feedback that is used in reviewing the below topics.

The business has also run a series of workshops with farmers on key drivers for 'breeding the herd for your farming future'.

Topic	Impact	Report reference	GRI Standard
Climate change Supporting shareholders to produce the most sustainable and efficient animals. Reducing our emissions at LIC.	Reduce negative impacts from direct and indirect GHG emissions	Reducing the environmental impact of our national herd Reducing the environmental footprint of our business	302-1, 302-3, 302-4, 305-1 to 6
Animal health & biosecurity Providing animal health products and information services to identify diseases and health conditions. Working with farmers to minimise risk on farm of disease spread.	Increase/continue positive impact on animal welfare	Reducing the environmental impact of our national herd	
Employment and sustainable income creation Caring for our staff and our farmer shareholders through meaningful employment and sustainable income creation.	Increase/continue positive impact on staff and farmer shareholders	Social sustainability - caring for our people Delivering a strong result for our farmers	201-1
Health, safety & wellbeing Protecting the health and safety of people at work, including their wellbeing.	Increase/continue positive impact on staff	Social sustainability - caring for our people	403-2
Human rights Protecting the employment rights and working conditions of our people, including diversity and inclusion.	Increase/continue positive impact on staff	Social sustainability - caring for our people	406-1
Water Using water responsibly, including water quality, availability and disposal.	Reduce negative impacts on environment	Reducing the environmental footprint of our business	303-2
Waste Improvement of waste management and disposal practices.	Reduce negative impacts on environment	Reducing the environmental footprint of our business	306-3
Responsible procurement Influence our key suppliers in relation to sustainable business practices.	Reduce negative impacts on environment and increase/ continue positive social impacts	Our business - our supply chain	

GRI content index

The report has been prepared in accordance with the Global Reporting Initiative (GRI) Standard.

GRI	Disclosure title	Location or reference - in Annual report or links to materials on LIC website
2-1	Organisational details	Who we are - pg 4
2-2	Entities included in the organisation's sustainability reporting	The report includes the full LIC consolidated group of entities. A list is available in the Annual report, corporate governance report
2-3	Reporting period, frequency and contact point	About this report - pg 2, for enquiries contact Communications@lic.co.nz
2-4	Restatements of information	There has been a minor restatement of base year Scope 1 GHG data to include Crop N_2O
2-5	External assurance	Our external auditors KPMG have performed procedures to ensure that financial data included in this report is consistent with LIC's Annual Report
Activities and workers		
2-6	Activities, value chain and other business relationships	Our Business - pg 47
2-7	Employees	Employee data - pg 40
2-8	Workers who are not employees	Information unavailable/incomplete: description included in Employee data - pg 40. Data currently gathered has insufficient detail to correctly identify workers
Governance		
2-9	Governance structure and composition	Governance structure - pg 33. There is limited disclosure on under-represented social groups (due to the nature of our business farmer representation is the most critical representation) and only general information provided on competencies
2-10	Nomination and selection of the highest governance body	Annual report, corporate governance report
2-11	Chair of the highest governance body	Annual report, corporate governance report
2-12	Role of the highest governance body in overseeing the management of impacts	Annual report, corporate governance report, Governance structure - pg 33
2-13	Delegation of responsibility for managing impacts	Annual report, corporate governance report
2-14	Role of the highest governance body in sustainability reporting	Governance structure - pg 33, Annual report, corporate governance report
2-15	Conflicts of interest	Annual report, corporate governance report
2-16	Communication of critical concerns	Annual report, corporate governance report, there is no specific disclosure on the number and nature of critical concerns communicated due to confidentiality constraints - material matters related to this report are disclosed
2-17	Collective knowledge of the highest governance body	Annual report, corporate governance report
2-18	Evaluation of the performance of the highest governance body	Annual report, corporate governance report
2-19	Remuneration policies	Annual report, corporate governance report
2-20	Process to determine remuneration	Annual report, corporate governance report, Annual Meeting
2-21	Annual total compensation ratio	Employee data - pg 40

GRI	Disclosure title	Location or reference - in Annual report or links to materials on LIC website
Strategy, policies and practices		
2-22	Statement on sustainable development strategy	Letter from the Chair and Chief Executive - pg 7
2-23	Policy commitments	Annual report, corporate governance report; Code of conduct & ethics
2-24	Embedding policy commitments	
2-25	Processes to remediate negative impacts	
2-26	Mechanisms for seeking advice and raising concerns	
2-27	Compliance with laws and regulations	Not applicable: there have been no significant instances of non-compliance, fines or non-monetary sanctions; minor breaches reported under Reducing the environmental footprint of our business - pg 25
2-28	Membership associations	Partnerships - pg 50
Stakeholder engagement		
2-29	Approach to stakeholder engagement	Materiality assessment - pg 56
2-30	Collective bargaining agreements	Employee data - pg 40
Sector Standard		
13	Agriculture Aquaculture and Fishing Sectors 2022	
13.1	Emissions	References included under topic disclosures below as appropriate
13.2	Climate adaption and resilience	LIC Climate Statements, available at Climate Disclosure Reporting | LIC
13.3	Biodiversity	References included under topic disclosures below as appropriate
13.4	Natural ecosystem conversion	Not considered applicable to LIC as we do not undertake ecosystem conversion
13.5	Soil health	Not considered material - soil management included as part of Farm Environment Plans which are referenced in the report
13.6	Pesticides	Not considered material as we do not use significant amounts of pesticide
13.7	Water and effluents	References included under topic disclosures below as appropriate
13.8	Waste	References included under topic disclosures below as appropriate
13.9	Food security	Not considered applicable to LIC as no food loss incurred by our operations
13.10	Food safety	References included under topic disclosures below as appropriate
13.11	Animal health and welfare	Not considered a material issue. Some information included in Reducing the environmental footprint of our business
13.12	Local communities	References included under topic disclosures below as appropriate
13.13	Land and resource rights	Not applicable - no locations of operations where land and natural resource rights (including customary, collective, and informal tenure rights are impacted by operations
13.14	Rights of indigenous peoples	References included under topic disclosures below as appropriate. Te Ao Māori strategy referenced in the report
13.15	Non-discrimination and equal opportunity	References included under topic disclosures below as appropriate
13.16	Forced or compulsory labour	References included under topic disclosures below as appropriate
13.17	Child labour	References included under topic disclosures below as appropriate
13.18	Freedom of association and collective bargaining	References included under topic disclosures below as appropriate
13.19	Occupational health and safety	References included under topic disclosures below as appropriate
13.20	Employment practices	Not considered a material issue
13.21	Living income and living wage	Not considered a material issue
13.22	Economic inclusion	References included under topic disclosures below as appropriate
13.23	Supply chain traceability	Not considered a material issue
13.24	Public policy	References included under topic disclosures below as appropriate

GRI	Disclosure title	Location or reference - in Annual report or links to materials on LIC website
13.25	Anti-competitive behaviour	References included under topic disclosures below as appropriate
13.26	Anti-corruption	References included under topic disclosures below as appropriate
Material topics		
Economic topic disclosures		
201-1/ 13.22.2	Direct economic value generated and distributed	Trend data, pgs 44 - 46, Annual Report, Financial statements
201-4	Financial assistance received from government	Annual Report discloses R&D grants and tax incentives received from NZ Government in Note 1 to the financial statements, no government ownership of LIC
207-1	Approach to tax	Economic Sustainability - Tax pg 43
207-2	Tax governance, control; and risk management	Economic Sustainability - Tax pg 43, Annual Report external audit report includes audit of tax disclosures
Environmental topic disclosures		
302-1	Energy consumption within the organisation	(All 302) Reducing the environmental footprint of our business - pg 25, LIC Climate Statements available at Climate Disclosure Reporting | LIC. Additional sector recommendation not included as we do not have land use change emissions
302-2	Energy consumption outside of the organisation	
302-3	Energy intensity	
302-4	Reduction of energy consumption	
305-1 13.1.2	Direct (Scope 1) GHG emissions	
305-2/ 13.1.3	Energy indirect (Scope 2) GHG emissions	
305-3/ 13.1.4	Other indirect (Scope 3) GHG emissions	
305-4/ 13.1.5	GHG emissions intensity	
305-5/ 13.1.6	Reduction of GHG emissions	
305-6/ 13.1.7	Emissions of ozone-depleting substances (ODS)	(All 302) Reducing the environmental footprint of our business - pg 25, LIC Climate Statements available at Climate Disclosure Reporting | LIC. Additional sector recommendation not included as we do not have land use change emissions
306-3/ 13.8.4	Waste generated	
Social topic disclosures		
401-1	New employee hires and employee turnover	Employee data - pg 40
401-3	Parental leave	Information unavailable/incomplete: not all data tracked currently. Employee data - pg 40
402-1	Minimum notice periods regarding operational changes	Employee data - pg 40
403-2/ 13.19.3	Hazard identification, risk assessment, and incident investigation	Critical Risks management- pg 39
415-1/ 13.24.2	Political contributions	Annual Report, corporate governance report - donations
Topics determined to be not material		
Economic topic disclosures		Explanation
201-1/ 13.2.2	Financial implications and other risks and opportunities due to climate change	We have reported separately on this topic as part of Climate Statement reporting requirements available at Climate Disclosure Reporting | LIC
201-3	Defined benefit plan obligations and other retirement plans	Not applicable: LIC does not operate a defined benefit or retirement plan
Market Presence		Explanation
202-1	Ratios of standard entry level wage by gender compared to local minimum wage	Information unavailable/incomplete: NZ is only material market - not considered a material issue
202-2	Proportion of senior management hired from the local community	Not applicable: all senior management employed in NZ (most significant market) are local
Indirect Economic Impacts		Explanation
203-1/ 13.22.3	Infrastructure investments and services supported	Not applicable: no significant infrastructure investments, no impact on communities and local economies

GRI	Disclosure title	Location or reference - in Annual report or links to materials on LIC website
203-2/ 13.22.4	Significant indirect economic impacts	Not applicable: no significant indirect economic impacts identified
Procurement practices		Explanation
204-1	Proportion of spending on local suppliers	Not applicable: majority of spending is with local suppliers
Anti-corruption		Explanation
205-1/ 13.26.2	Operations assessed for risks related to corruption	Not applicable: corruption not considered an issue in NZ, which is only material market
205-2/ 13.26.3	Communication and training about anti-corruption policies and procedures	Not applicable: corruption not considered an issue in NZ
205-3/ 13.26.4	Confirmed incidents of corruption and actions taken	Not applicable: no incidents
Anti-competitive behaviour		Explanation
206-1/ 13.25.2	Legal actions for anti-competitive behaviour, anti-trust and monopoly practices	Not applicable: no legal actions
Tax		Explanation
207-3	Stakeholder engagement and management of concerns related to tax	Not applicable - NZ is only material market
207-4	Country-by-country reporting	Not applicable: NZ is only material market
Materials		Explanation
301-1	Materials used by weight or volume	Not applicable: as mostly services provided (i.e. not manufacturing goods)
301-2	Recycled input materials used	
301-3	Reclaimed products and their packaging materials	
Energy		Explanation
302-5	Reductions in energy requirements of products and services	Not applicable: GHG reporting is not considered material by product/service
Water and effluents		Explanation
303-1/ 13.7/2	Interactions with water as a shared resource	Information unavailable/incomplete: not considered to have material water-related impact. This report does note consents to discharge tradewaste
303-2/ 13.7.3	Management of water discharge-related impacts	Information unavailable/incomplete: not considered to have material water-related impact. This report does note any breaches
303-3/ 13.7.4	Water withdrawal	Information unavailable/incomplete: not considered to have material water-related impact
303-4/ 13.3.5	Water discharge	Information unavailable/incomplete: not considered to have significant water-related impact
303-5/ 13.3.56	Water consumption	Information unavailable/incomplete: not considered to have significant water-related impact
Biodiversity		Explanation
304-1/ 13.3.2	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Not applicable: LIC does not have sites that are adjacent to a protected area or areas of high biodiversity
304-2/ 13.3.3	Significant impacts of activities, products, and services in biodiversity	Not applicable: no material impacts
304-3/ 13.3.4	Habitats protected or restored	Not applicable: no such habitats. The report notes riparian planting carried out on farms
304.4/ 13.3.5	IUCN Red List species and national conservation list species with habitats in areas affected by operations	Not applicable: operations do not affect any such areas. NZ has 67 species currently on the Red List. LIC does not believe our operations affect the habitats of species on the Red List
Emissions		Explanation
305-7/ 13.1.8	Nitrogen oxides (NOx), sulfer oxides (Sox), and other significant air emissions	Not applicable: LIC does not have material air emissions
Waste		Explanation
306-1/ 13.8.2	Waste generation and significant waste-related impacts	(All 306) Information unavailable/ incomplete: data is included in GHG emission calculations to the extent available and the report notes action being taken to reduce waste
306-2/ 13.8.3	Management of significant waste-related impacts	
306-4/ 13.8.5	Waste diverted from disposal	
306-5/ 13.8.6	Waste directed to disposal	

GRI	Disclosure title	Location or reference - in Annual report or links to materials on LIC website
Supplier Environmental Assessment		Explanation
308-1	New suppliers that were screened using environmental criteria	Information unavailable/incomplete: the report notes that consideration of sustainability factors is part of the Procurement policy and practices for strategic procurement processes
308-2	Negative environmental impacts in the supply chain and action taken	Information unavailable/incomplete: no material impacts identified
Employment		Explanation
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Not applicable: not considered to be material differences
Occupational Health and Safety		Explanation
403-1/ 13.19.2	Occupational health and safety management system	(All 403) Information unavailable/ incomplete: key information considered material is provided in Health and Safety section of the report, but not to the detail specified by these disclosures
403-3/ 13.19.4	Occupational health services	
403-4/ 13.19.5	Worker participation, consultation and communication on occupational health and safety	
403-5/ 13.19.6	Worker training on occupational health and safety	
403-6/ 13.19.7	Promotion of worker health	
403-7/ 13.19.8	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	
403-8/ 13.19.9	Workers covered by an occupational health and safety management system	
403-9/ 13.19.10	Work-related injuries	
403-10/ 13.19.11	Work-related ill health	
Training and Education		Explanation
404-1	Average hours of training per year per employee	Information unavailable/incomplete: not considered a material issue
404-2	Programmes for upgrading employee skills and transition assistance programmes	
404-3	Percentage of employees receiving regular performance and career development reviews	Information unavailable/incomplete: not considered a material issue – LIC has a specific tool for completing and overseeing reviews and development plans
Diversity and Equal Opportunity		Explanation
405-1/ 13.15.2	Diversity of governance bodies and employees	Information unavailable/incomplete: gender information is provided in report (annual report for governance body) but other diversity factors are not considered a material disclosure
405-2/ 13.15.3	Ratio of basic salary and remuneration of women to men	Information unavailable/incomplete: not considered a material issue
Non-discrimination		
406-1/ 13.15.4	Incidents of discrimination and corrective actions taken	Not applicable: none identified
Freedom of Association and Collective Bargaining		Explanation
407-1/ 13.18.2	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	Not applicable: none identified
Child Labour		Explanation
408-1/ 13.17.2	Operations and suppliers at significant risk for incidents of child labour	Not applicable: primary market in NZ, none identified
Forced or Compulsory Labour		Explanation
409-1/ 13.16.2	Operations and suppliers at significant risk for incidents of forced or compulsory labour	Not applicable: primary market in NZ, none identified
Security Practices		Explanation
410-1	Security personnel trained in human rights policies or procedures	Not applicable: LIC does not employ security personnel.
Rights of Indigenous Peoples		Explanation
411-1/ 13.16.2	Incidents of violations involving rights of indigenous peoples	Not applicable: No incidents reported

GRI	Disclosure title	Location or reference - in Annual report or links to materials on LIC website
Local Communities		Explanation
413-1/ 13.12.2	Operations with local community engagement, impact assessments and development programmes	(All 413) Not applicable: no such operations
413-2/ 13.12.3	Operations with significant actual and potential negative impacts on local communities	
Supplier Social Assessment		Explanation
414-1	New suppliers that were screened using social criteria	(All 414) Information unavailable/ incomplete: due to the sources of supplies, not considered a material issue. This report includes general content on suppliers
414-2	Negative social impacts in the supply chain and actions taken	
Customer Health and Safety		Explanation
416-1/ 13.10.2	Assessment of the health and safety impacts of product and service categories	Not applicable: not considered material issue. H&S changes in relation to delivery of AB services on farm in Herringbone sheds is included in the report
416-2/ 13.10.3	Incidents of non-compliance concerning the health and safety impacts of products and services	Not applicable: no incidents reported
Marketing and Labelling		Explanation
417-1	Requirements for product and service information and labelling	Not applicable: products and services relate to animals so not considered material issue
417-2	Incidents of non-compliance concerning product and service information and labelling	Not applicable: no incidents reported
417-3	Incidents of non-compliance concerning marketing communications	
Customer Privacy		Explanation
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	Not applicable: no complaints received

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