Moving to a

low carbon future

GENESIS ENERGY LIMITED
Annual Report 2021 / te pūrongo ā-tau 2021

We are optimistic about Aotearoa New Zealand's energy future and our role in the transition to the low carbon future we all want.

CONTENTS

WAIPIPI WIND FARM
SOUTH TARANAKI

We are an energy generator and retailer supplying electricity and gas to more than 470,000 customers.

The geographic spread and diverse range of our generation assets provides vital support to the backbone of the country's energy sector. This means our business is resilient to supply shocks and generates consistent earnings.

Our vertically integrated gas portfolio, from wellhead to our industrial and residential customers, is a vital part of the country's energy system providing flexibility, security and price stability.

TOKAANU POWER STATION
TONGARIRO POWER SCHEME

We choose to participate in markets for the long term to create value for shareholders in a sustainable way.

In doing this, we are guided by our purpose, to empower New Zealand's sustainable future. We act on this in three ways – enabling a low carbon future for all New Zealanders, leading a sustainable business and playing our part as individuals.

We understand that the climate challenge means we need to change some of the things we do and are led by science in doing this. We have set ambitious science-based targets to remove 1.2m tonnes of carbon by 2025 tied to the international benchmark of limiting global warming to below 1.5°C.

We remain focused on evolving our business model away from pure energy supply to energy management.

This is being achieved by continuing to develop the digital and virtual channels customers can use to interact with us alongside a suite of market leading products and services that provide knowledge and insights that our customers can act on to manage their usage and reduce their carbon footprint.

This is all anchored by our people who are future focused and adaptive and always seeking new and innovative ways of engaging our customers, operating our assets and working smarter.

Chair and Chief Executive's joint letter

He tuhinga nā te Tiamana māua ko te Manahautū

Kia ora shareholders

On many levels, this has been a milestone year for the country, the sector and Genesis. Low hydro inflows and constrained gas supplies punctuated the market.

Our diverse portfolio of assets performed a critical role in ensuring energy security for the market, and the business navigated the challenging market conditions to deliver a sound result. With an eye to the future, we have accelerated the transformation of the business as we play our role in leading New Zealand's transition to a low carbon future.

Despite a disappointing arbitration outcome with Beach Energy over who pays for carbon that affected our reported EBITDAF[1], the underlying business performed well. We continue sharpening our focus on the customer, actively leaning into the climate challenge, and creating a workplace culture that is innovative and inclusive with a can-do attitude. These are key elements to building on our momentum as the country and company start the transition.

1. EBITDAF: Earnings before net finance expense, income tax, depreciation, depletion, amortisation, impairment, fair value changes, and other gains and losses. Refer to the consolidated income statement on page 47 for reconciliation to net profit after tax.

The Climate Challenge

The dominant presence throughout was the work of the Climate Change Commission (CCC) and the release of its first set of recommendations to support the country's ambition to be carbon neutral by 2050. The recommendations and subsequent policy settings will have far reaching implications and provide the framework that will transform New Zealand society and our economy. As part of the backbone of the national energy system, Genesis has an important role to play in the transition and is already putting plans into action, as you will read in this report.

We supported the work of the CCC, and our submissions were concise and focused on the best outcomes for the country. One of the most important things we advocated for is a 30-year national energy strategy that takes into account the interconnectedness of the system and enables the right sequencing and prioritisation of actions to avoid unintended consequences. If we get it right as a country, we can mobilise investment and markets to accelerate our transition and deliver a dependable, low cost and low emissions energy system that underpins the country's transformation.

Marc England
CHIEF EXECUTIVE

Barbara Chapman CNZM
CHAIR

We took bold steps this year, committing to removing 1.2 million tonnes of carbon emissions before 2025 tied to the internationally recognised benchmark of limiting global warming to below 1.5°C of pre-industrial temperatures. This supports New Zealand's commitments under the 2015 Paris Agreement. The targets have been verified by the Science Based Targets initiative (SBT) and Genesis was the first New Zealand generator-retailer to commit to 1.5°C with them. This will mean a 36% reduction in carbon emissions from generation. Despite the market challenges experienced in FY21, we remain steadfast in our commitment to meet these ambitious targets.

Our Future-gen strategy is how we will meet the targets. The objective is to economically displace baseload thermal generation with 2,650 GWh of new renewable generation, sufficient to power 380,000 households a year. The first part of that came in March with the completion of the Waipipi wind farm in South Taranaki where we have signed a 20-year power purchase agreement with Tilt Renewables for all of the electricity generated. We also signed a similar agreement with Tilt Renewables for the Kaiwaikawe wind farm to be built in Northland by early 2024. This is the first agreement from an RFP process we ran as part of the Future-gen strategy. Combined with the agreement to buy up to 62.5 MW of baseload geothermal generation from Contact Energy, and our intention to develop utility scale solar announced in August, we are well on our way to delivering on those goals.

The Emissions Trading Scheme (ETS) and cost of carbon is working to its intended effect. With the price of carbon increasing the marginal cost of thermal generation, building or procuring new renewable generation has become economically viable. Waipipi wind farm and our recently announced agreements for the Kaiwaikawe wind farm and Tauhara geothermal projects are all clear examples of the impact of the ETS driving the build of new renewables.

In this year's report, we continue to increase transparency of how we operate. We are once again reporting in line with the Taskforce on Climate-related Financial Disclosures recommendations, and also reporting our Scope 1, 2 and 3 emissions.

Security of supply

The role Genesis has to play in the transition was highlighted by the difficult market conditions through the latter part of 2020 and into the winter of 2021. Extremely low hydro levels and tight supply of gas combined to put considerable stress on the market. Huntly Power Station was built to support the country's highly renewable system.

Underlining how critical Huntly is to the national electricity system was the supply provided to other major generators and smaller retailers during this period. This was reflected in our supply contracts with generators, known as swaptions, to meet the shortfall from their renewable sources. In FY20 we supplied 154,075 MWh under swaptions, while this year 819,950 MWh was supplied.

The value of Huntly's fuel flexibility was also evident during this time when we were able to reach supply agreements for gas with Methanex and Ballance Agri-Nutrients. These agreements helped support energy security through winter and ensure steady electricity and gas supply to our customers and other market participants.

The diversity of our generation assets and the fact that we operate at the intersection of the electricity and gas markets positioned Genesis as the market participant best placed to broker these types of deals. The on-going supply issue with gas looks likely to remain for some time and poses a challenge for the sector over the foreseeable future. Coal will need to be used to fill the shortfall from time to time however our view is the electricity sector has reached peak coal. With new renewable generation being enabled by Genesis and our competitors we expect much less back up generation over the next few years.

The North Island blackouts in early August were a reminder that short term demand spikes may need different solutions going forward.

In July, we concluded the strategic review of our interest in Kupe. After a thorough review process, the Board concluded that ongoing ownership of Kupe was in the best interests of shareholders and the company. Kupe remains a high-quality gas asset and will continue to play a key role in New Zealand's transition to a lower carbon future.

Digital transformation

We are embarking on another stage of our digital transformation that will deliver a significant step-change in the way we connect and provide services to customers. We have already undertaken work towards being a more data driven organisation that over time will enable us to make better decisions, and unlock new insights into our operations, markets and customers.

Customers continue to engage with Energy IQ in greater numbers. This year there were more than 11.6 million interactions and over 275,000 unique users while we focused on making things easier for customers across a raft of services from moving home, to paying bills and ordering LPG deliveries.

We also had excellent engagement with customers, non-customers and staff through an innovative, marketing campaign that supported our partnership with Emirates Team New Zealand during their successful America's Cup campaign. Using sophisticated technology in custom made shirts, we measured the amount of energy used by supporters watching the races and converted that into power. As a result, 185,141 hours of free power was given to over 600 Genesis powered schools. More than three million Kiwis saw the campaign on TV, and, at its peak, our social media posts reached 1.1 million.

Looking ahead

FY22 is shaping up as another busy year of important milestones for Genesis. The business is well placed to continue successfully executing our strategy and deliver value to our stakeholders. We remain optimistic for the future of our business, and the opportunity for Genesis to continue empowering New Zealand's sustainable future.

Barbara Chapman CNZM
CHAIR

Marc England
CHIEF EXECUTIVE

GENESIS ANNUAL REPORT 2021 / CHAIR AND CE LETTER

Results at a glance

Ngā tīpakotanga

$34m
Net Profit After Tax (NPAT)
FY20 $46m

$75m
Underlying earnings[1]
FY20 $53m

$358m
EBITDAF[2]
FY20 $356m

$191m
Free Cash Flow[7]
FY20 $168m

17.4cps[3]
Total Dividend relating to FY21 result
FY20 17.2 cps

$1,276m
Net debt[4]
FY20 $1,247m

$3.2b
Revenue
FY20 $2.6b

$271m
Operating expenses[5]
FY20 $250m

474,325
Customers
FY20 484,687

47
Customer interaction NPS[6]
FY20 39

$124
Cost to serve
FY20 $138

275,000
Energy IQ unique users

1,149
Full time employees (FTE)
FY20 1,076

67.5
Employee NPS[6]
FY20 59.3

2.6
Recordable injuries
FY20 1.4

42,741
Shareholders
FY20 43,719

1. Refer to note A1 on page 53 for a reconciliation to net profit after tax.
2. EBITDAF: Earnings before net finance expense, income tax, depreciation, depletion, amortisation, impairment, fair value changes, and other gains and losses. Refer to the consolidated income statement on page 47 for reconciliation to net profit after tax.
3. CPS: Cents per share.
4. Includes US Private Placement (USPP) translated using Cross Currency Interest Rate Swap (CCIRS) fixed rate.
5. Operating expenses is made up of other operating expenses and employee benefits as disclosed in note A3 on page 56.
6. Net Promoter Score (NPS).
7. Free cash flow is calculated by taking EBITDAF, less tax paid, interest and other finance charges received and paid and stay in business capital expenditure of $55.3 million (FY20: $68.8 million). Refer to the consolidated cash flow statement on page 50 for tax, interest and other finance charges paid and interest received.

GENESIS ANNUAL REPORT 2021 / RESULTS AT A GLANCE

Aotearoa New Zealand's transition to a low carbon future has begun. We know the responsibility we have in helping the country achieve that.

MOAWHANGO DAM
TONGARIRO POWER SCHEME

Our target is to remove more than 1.2m tonnes of carbon by 2025 from a 2020 base year. We aim to reduce generation emissions by 36% by 2025.

Led by science

The climate challenge is going to dominate New Zealand and global decisions on how we live and work for the next 30 years and beyond. The scale of change is going to be significant and Genesis will be a key enabler in achieving the successful transition we all want.

We are committed to taking action to reduce emissions while balancing climate change considerations, increasing energy demand and ensuring our customers have a reliable and cost-effective energy supply.

We are aligned to five of the United Nations Sustainable Development Goals (SDGs), identified as the areas that we feel we can make the most positive impact in for Aotearoa - SDG 7 affordable and clean energy, SDG 8 decent work and economic growth, SDG 10 reduced inequalities, SDG 13 climate action and SDG 17 partnerships for the goals.

United Nations
Sustainable Development Goals (SDGs)

Underpinning that, we also set ambitious emissions reduction targets tied to 1.5°C to support the country's commitments under the Paris Agreement. These have been verified by the internationally recognised Science Based Targets initiative (SBTi), the first generator-retailer in New Zealand to do so. Our target is to remove more than 1.2m tonnes of carbon over the next five years. We aim to reduce generation emissions by 36% by 2025. This comes on top of having reduced carbon emissions by 1.8m tonnes over the 10 years leading into 2020. Few, if any other, New Zealand companies have reduced emissions at that scale in that timeframe. However, we know we must do more and plan to do so.

Our board and management team chose the 1.5°C target because we want to make a difference, knowing it will be difficult but is achievable, with the right pathway. We also know getting there is not going to be a straight line, but we accept the accountability and have a plan to do so.

Future-gen strategy

A refreshed Future-gen strategy is how we intend to get there.

Through Future-gen, we are aiming to secure 2,650 GWh a year of renewable electricity generation by 2030, with the majority before 2025. The first step toward that happened in March when the Waipipi wind farm in South Taranaki came online with the expectation it will deliver 433 GWh of zero emissions electricity annually. It was the first wind farm built here since 2014. And we recently confirmed a power purchase agreement with Tilt Renewables, operator of Waipipi, for a further 230 GWh of clean electricity from a new wind farm to be built in Northland that will be operational in early 2024. Further renewable opportunities in wind, solar and geothermal are being assessed.

While the future is focused on renewable generation, the country continues the search for clean storage possibilities to offset dry year risk. We have engaged with Ministry of Business, Innovation and Employment (MBIE) as it assesses whether Lake Onslow is an effective and affordable option and have suggested several North Island alternatives as we look for, and offer, solutions. New Zealand faces the challenge of needing about 7,000 GWh of deep energy storage to deal with seasonal shifts in demand. Existing hydro lakes provide about 4,000 GWh of that. Huntly fills the gap of 3,000 GWh, the job it was built to do. This seasonal risk is unique to New Zealand and requires longer-term technology and clean fuel solutions that are currently uneconomic, particularly if we want to keep power prices low enough to encourage other sectors to decarbonise through electrification.

This year, the impact of a La Niña weather pattern for several months saw hydro levels fall to near historical lows. This was compounded by the tight supply of gas due mainly to issues with the Pohokura field. With these very difficult conditions, it was prudent to make available a third Rankine unit.

Operating at the crossroads of the gas and electricity markets also allowed us to drive value through leveraging our fuel diversity. This enabled us to broker short term gas supply arrangements with Methanex and Ballance Agri Nutrients to further support security of supply and market price stability. These gas supply arrangements would not have been possible without Huntly Power Station and underlined the critical importance of fuel flexibility and the back-up role that Huntly plays in ensuring security of supply in New Zealand's highly renewable electricity market. The supply of gas looks tight for the foreseeable future and similar conditions could be likely in 2022 meaning the country will again rely on Huntly to ensure the supply of electricity.

While the government, sector and Genesis continues to look for an alternative back-up for the system, we will do more to remove emissions from baseload thermal generation. Biomass is one option being thoroughly reviewed with regard to the Huntly Rankine units. Future applicability of clean fuels such as biodiesel and green hydrogen are also being closely monitored. Our skilled team of engineers also continue to innovate and improve efficiency at Huntly and across all our hydro generation sites.

↓1.2million

Our purpose is to empower New Zealand's sustainable future.

It shapes what we do and how we do it in three ways – leading a sustainable business, enabling a low carbon future for all New Zealanders and playing our part as individuals.

The sum of our parts – playing our part as individuals

1.

Our people are connected to our purpose, supported by our culture and empowered by our trust. They understand the challenge the country faces and the role our company has in transitioning to a new energy future and are motivated to play their role as individuals.

There is a strong commitment to sustainability and climate change across the business. We support that with a culture that encourages our people to be active participants in the transition at work, and beyond. Nearly three-quarters of staff told us in a survey this year that it was very important for them to work for a company that values sustainability and a similar number wanted to know more about what they can do at home to be more sustainable.

Our Safety and Wellness maxim of 'What's your 50%?' helps guide individuals in deciding what their contribution can be to a more sustainable future. The question is designed to prompt self-reflection on the level of responsibility you're prepared to take. It helps ensure our people are aligned, empowered and accountable.

Building on this, we are working towards a position where our people set themselves a tangible personal sustainability commitment. That might be changing what they eat, being a more conscious consumer, changing out of their ICE vehicle for public transport or an EV or, volunteering in their community with a sense of purpose.

Many are already connecting into their communities with more than 200 volunteering this year, a 25% increase on FY20. We are also looking to move from a transactional model of volunteering that many organisations run to a transformative approach to support the culture we are developing. The transactional model is where the reward for a volunteer is from providing their skill or time and there is limited personal impact or growth beyond that. The transformative approach is about the experience and the impact that has on the volunteer and the self-reflection that it creates. Research shows volunteers who participate like this are more empathic and resilient and bring these characteristics into the workplace.

This has led to our people being involved in a wide range of community work from driving cancer patients to their treatment, working in community kitchens to ocean conservation projects. To help embed the approach, we've also introduced the concept of Volunteer Activators to enable our people to volunteer where their passion is, identify how they want to help and then find and organise volunteers to help support their cause.

25%

Increase on volunteering this year

Getting homework done

Helping young students through a homework club at a low-decile school is a cause close to the heart of Ria Peters, Bhargavi Kotte and Tanisha Singh-Shah.

Ria, a Retail Strategy Analyst, is passionate about working with young children after teaching swimming and drama to youngsters when she was at uni. She was keen to join her colleagues in a homework club through the charity connection organisation, Who Did You Help Today? The charity put Genesis in touch with Glenavon School in Blockhouse Bay, Auckland, where four staff volunteers help 10-15 students aged 7-9 for an hour each week.

"Being able to spend quality time with children is special," says Ria. "They really appreciate and benefit from one on one attention."

The trio are among the first of our Volunteer Activators, a concept we introduced this year to enable our people to volunteer where their passion is, identify how they want to help and then find and organise volunteers to help support their cause. Ria says everyone who has been involved has loved the experience, and it's also become a team-building exercise.

"We share stories about how we might have helped a girl comprehend the words she was reading or explained times-tables to a boy, so he understood the mechanics behind them."

Bhargavi, a Delivery Coach, says staff really appreciate being able to give back, and have their workplace support them in doing so.

"If we make it easy for staff, all they have to do is give up a little of their work time. They get to contribute to their community in a way that has an immediate, tangible benefit, and form a sense of community with their colleagues at the same time."

They are now hoping to scale up the initiative, so that Genesis staff in other parts of the country can help children at their local schools.

Leading a sustainable business in New Zealand

Genesis has been one of the largest contributors to carbon reduction in New Zealand over the last decade and we will continue on that path. While climate action is imperative, sustainability stretches across a business. It includes earning the loyalty of customers as a key to reliable returns, becoming an employer of choice and contributing to the communities in which it operates. We are making good progress on each of these fronts while knowing there is more to do in an evolving social and economic landscape.

2.

Te Tira Manaaki o Kenehi – caring for our vulnerable customers

Looking after customers is one of our top priorities. Over the past year we've developed a new approach with a dedicated team to support the elderly and those with medical or financial circumstances who need extra care.

“It's hard for older people to adjust, you get set in your ways, but Genesis has been very good to me over the years being patient and understanding.

DESIREE, CUSTOMER

Te Tira Maanaki o Kenehi, the Genesis Caring Team, was started with the ethos of supporting customers through good times and bad.

Taking time to understand their circumstances and finding the right solution for these customers differentiates our service. This includes partnering with various social agencies with specialist skills to provide extra help if needed. Our proactive engagement approach with customers showing early signs of financial stress reduces the risk of debt accumulating in a way that becomes damaging. This has been a major contributor to a more than 40% reduction in residential credit disconnections over the past year.

We want to create personal connections and treat our customers like they are part of our whānau.

Desiree is 80-years-old and, like many, lives from pension to pension. She was worried about paying her power bill in winter when the cold bites. Te Tira Manaaki o Kenehi is there to help with patience, empathy and practical assistance.

“It's hard for older people to adjust, you get set in your ways, but Genesis has been very good to me over the years being patient and understanding,” Desiree said.

We have more than 70,000 customers who are over 70 years old, with many living off their superannuation. Being patient and taking time to understand their concerns is the starting point, before making the effort to find solutions.

Team member Fuatai Yardley summed it up like this, “I always remind myself to be kind, because we don't know the situation a customer might be facing. Whoever you're speaking with is someone's mum, someone's nan.”

Rewarding our customers

We also focus on rewarding our customers with magic moments to show how much we value them.

The Power Shout initiative is one way of doing this and continues to gain traction. In June, 23% of customers joining Genesis said Power Shout was their reason for doing so. The free electricity we give back to customers is more than a way of saying thank you. We also give them information about how to reduce their power cost and carbon emissions by using energy at certain times of day or night, empowering them to take an active role in their energy management and run their household in a more sustainable way. For example, customers can aggregate hours to use in winter when heaters and driers are in heavy use. Tuesday, 29 June was one of the coldest days this year, and more than 18,000 customers used their Power Shout hours - four times the number that used them in the previous four Tuesdays combined.

We offered three Power Shouts this year giving away 2,513,308 hours of power and also passed the milestone of giving away 10 million hours since the programme was introduced in 2018.

Giving value back to customers through a new discount structure and migrating our residential customers to new plans was one of the biggest projects we have undertaken this year. This followed a review of the electricity industry in which the government recommended changes to the plans retailers offer through the removal of prompt payment discounts.

The new plans create options for customers on how they want to be rewarded such as e-bill or Dual Fuel discounts. These discounts make things fairer for all customers while rewarding customer behaviour.

During this year we migrated 320,000 customers to the new plans with no material increase in customer churn, despite the appeal prompt payment discounts had with customers. This was achieved by segmenting our customers and tailoring our communication to each of the 360 different customer groups.

Our brand continues to resonate with consumers, finishing the year as the most considered and preferred energy brand in the market.

Among customers, 62% see us as being first to market with new technology to help people manage their energy use, up 19% on the previous year. Regarding sustainability, 42% know we are committed to reducing our emissions and impact on the environment, a 10% lift year-on-year. Both of these reflect our key strategies of being our customers' first choice for energy management and executing our Future-gen plan. They're also a result of our support of Emirates Team New Zealand with an innovative multi-channel campaign that resulted in 185,141 hours of free energy being provided to more than 600 Genesis powered schools across the country.

Change of office, change of ways

Our new offices in Auckland are in a 6 Green Star rated building, one of only nine in the country. It is more than a physical representation of our commitment to being a sustainable business.

The move provided the catalyst to introduce initiatives that would reduce emissions, traffic congestion and enable active and shared travel. As part of the move we no longer provided staff carparks, removed company cars from salary packages and replaced our corporate car fleet with EV car sharing start-up, Zilch. In their place we provided a 25% subsidy for public transport, car-pool hubs in South and West Auckland, a free shuttle service from the eastern suburbs and with top end changing facilities to encourage staff to ride, run or walk to work.

Our people loved it.

Compared to the travel routines in our previous offices which had 205 carparks, we've seen a 50% increase in people taking public transport or using EVs, 102% increase in biking, running, walking or e-scootering to work, 81% of staff have signed up to the public transport subsidy and there are 984 less carbon contributing trips each week (petrol, diesel, motorbike), a reduction of 71%. Staff have collectively reduced carbon emissions by 158t per annum, so far.

Proudly, we are also the first company in the southern hemisphere to add the new, fully electric, Fuso eCanter truck to our commercial fleet. We will learn a lot of valuable information about the technology, charging, maintenance and the cost to run it as we work toward converting more of the fleet over time.

One of the people who has made a big switch in how they get to work since we moved office is Jackie Mullan, Group Manager Legal. Jackie previously commuted to our old offices by car, five days a week. With the move to Wynyard Quarter, she weighed up her options. Driving would mean paying for parking and walking the rest of the way in all weather, laden down with her laptop and gym bag. The train and bus both landed her at Britomart, which meant another 15-minute walk to complete her trip.

Cycling was a clear winner and she made the conscious investment in an e-bike.

"It seemed logical. There's a really good cycle lane from my house to the office, and the bike has saddlebags on the side, so I just pop my laptop and gym gear in there and I'm ready to go – door to door," says Jackie. The extra health benefits of the 22km daily commute haven't gone unnoticed, either. Adding in Pilates three times a week means Jackie is definitely doing more exercise than she was before switching office locations.

"There are some really obvious benefits of the new commute and fitness is a key one for me," she says. "There's also the benefit of feeling good about the exercise, and being out in the fresh air, getting the blood pumping before work – feeling more energised."

> There's a really good cycle lane from my house to the office, and the bike has saddlebags on the side, so I just pop my laptop and gym gear in there and I'm ready to go – door to door.
>
> JACKIE MULLAN, GROUP MANAGER LEGAL – COMMITTED CYCLE COMMUTER

Genesis-Pūhoro partnership unlocking potential of Māori rangatahi in STEM

Genesis is privileged to operate generation sites in some of the most special locations across Aotearoa. This year we launched the ambitious Ngā Ara Creating Pathways programme to create transformational education, training and pathways to prepare young people in our local generation site communities for the future of work.

A cornerstone initiative of the programme is a three-year partnership with Pūhoro Charitable Trust, supporting Māori students in these communities to choose school subjects and career pathways in science, technology, engineering and maths (STEM).

Many of the highly skilled roles in the energy sector are linked to STEM. Inspiring and developing the energy innovators of the future through partnerships like this and our long-running School-gen programme are integral in building a pipeline of talent to support New Zealand's progress towards a lower-carbon future.

Pūhoro assists Māori secondary school students to participate and achieve in STEM subjects to enable them into these careers. Students receive weekly mentoring in their STEM subjects, attend wānanga at tertiary campuses each term, and are offered internship and work experience opportunities to support their learning.

The first three programmes through our Pūhoro partnership launched this year at secondary schools close to our Tongariro and Waikaremoana Power Schemes – Ruapehu College, Wairoa College and Te Kura Kaupapa Māori o Ngāti Kahungunu ki Wairoa.

3 programmes in our local schools

GENESIS ANNUAL REPORT 2021 / WHO WE ARE

Enabling a
low carbon future
for all New Zealanders

3.

As New Zealand charts a path to a low carbon future, Genesis has an important role to play in not only reducing our own emissions but helping high emitting sectors and our customers do the same.

We sit at the intersection of supply and demand for several energy sources as well as being the generator of last resort and this places us in a unique position to see the opportunities and risks that lie ahead for the country, our customers and Genesis.
It allows us to understand the interdependencies of the energy sector, how to transition from fuels without creating unintended consequences across the economy and to make the case for reliable and affordable electricity that can help decarbonise other sectors. Importantly, it also means we can help our customers move towards a more sustainable future by giving them the knowledge and advice they need to take action.

We have a simple maxim for our approach: knowledge, advice, action - providing useful information to customers, tailoring recommendations based on that information and then helping put that into action.

Over the last year we have focused on working with our commercial and industrial customers to help them better understand their energy use and, for some, develop decarbonisation road maps. By year's end we grew the number of customers we engaged with from 6% to more than 20%. We have partnered with Christchurch based carbon and engineering consultants DETA on more than 20 energy audits for medium to large companies across agriculture, manufacturing, tourism and local government.

Over this time, we have noticed a difference between how international companies that operate here and local businesses tackle emissions. Many offshore based companies already have targets, measuring and reporting in place while many local businesses are yet to start. It is not a resistance to change, but an information and education gap with businesses not knowing where to start.

We feel a responsibility to help fill those gaps and enable businesses to develop and accelerate carbon reduction plans to support the country's goal of a low carbon future. Building on the work we have done with large customers we are piloting a new digital platform that will help small-medium businesses measure their energy use plus the costs and emissions from the electricity they use. This allows them to understand their emissions profile and identify ways to reduce it.

Yashili: a roadmap to net zero emissions

The future is low carbon for dairy giant Yashili, after the team at their Pokeno factory has worked with Genesis on a comprehensive energy audit and decarbonisation roadmap.

The Yashili factory produces more than 50,000 tonnes of infant formula for the global marketplace each year, so it uses a considerable amount of electricity and gas. Its vision is to be an energy efficiency leader in its industry, ultimately becoming a net zero dairy processing plant.

Yashili has been working with Genesis for several years, not only supplying energy but also helping measure energy use and find ways to drive efficiency. In 2019, we installed 140 energy monitoring sensors on site as part of an Energy Insights trial. That was our first look into the way energy was used at the Pokeno factory. In November 2020, Genesis and Yashili began working together on a decarbonisation road map which sets out a strategic, technical, and financial path to carbon neutrality, which will allow Yashili to apply for Government funding for fuel-switching and decarbonising technology. In January this year, we completed a site-wide energy audit (in partnership with DETA Consulting), which will help Yashili reach its goal of reducing carbon emissions by 20% over the next five years from its 2020 baseline.

The energy audit produced suggestions for changes which could reduce power use by 13,845,200 MWh, an 18.8% overall reduction. That's the equivalent of removing 3,000 tonnes of CO_2 and would save the company around $650,000 each year. Some of the recommendations have already been implemented, and Yashili is now saving $50,000 a year and reducing its use of natural gas, water and concentrated chemicals.

"We've recently had a report on our progress, which is a very good piece of work, because it gives us an exhaustive list of opportunities we could implement to achieve our decarbonisation roadmap," says Remy Charbonnel, Yashili Operations Director. "The next steps are not easy – it's extremely complicated and capex demanding. But we now have a very good picture of what is feasible, as well as market trends and environmentally friendly new technologies. This is a massive challenge, and we are only at the beginning."

20%

Reduced emissions over the next 5yrs

GENESIS ANNUAL REPORT 2021 / WHO WE ARE

Reducing Transport Emissions

With transport accounting for approximately 20% of the country's emissions we see a key role for electricity to help decarbonise the sector, particularly private vehicles.

Research has identified three main barriers to EV uptake as cost, driving range and charging infrastructure. The government has started the push to get more New Zealanders into EVs with a rebate scheme on new and used EVs. At Genesis we've focused on overcoming the other two barriers.

Over the last year we conducted a trial with a select group of customers to understand their needs, behaviour and usage. The trial involved overnight recharging at home, which is not only the most affordable time, but it also has the least emissions. We saw behavioural changes with many customers shifting the use of appliances such as dishwasher and washing machines to the same off-peak times. As a result, we have developed a plan providing EV owners 50% off the cost of electricity between the hours of 9pm – 7am. We've seen a 6% shift in consumption from on-peak to off-peak so far.

We've built on this by piloting a New Zealand first 'charge anywhere' option. This allows Genesis customers to recharge their car at any public recharging station and have it billed to their Genesis account. It is designed to solve range anxiety and the cost of public charging that some EV owners are concerned about. It has proven to be a clear differentiator with 95% of customers saying they would stay with Genesis due to this product and 44% saying they would recommend it to others.

Energy IQ keeps driving change

Research we did this year with the UMR research company showed 68% of New Zealanders expect climate change to have a lot or reasonable impact on the way they live and work over the next 10 years. But underlining the challenge ahead, 41% said they don't have the information they need to reduce their personal or household carbon footprint and 17% not only don't have the information, they don't know where to find it.

Energy retailers have a crucial role to play in filling that information gap. Developing the tools and information that our customers can use to manage their usage and reduce their footprint is an established part of our operating rhythm. Our Energy IQ platform continues to evolve in providing household customers insights and tools to help better manage their energy use, control their costs and lower their environmental impact.

Customers can compare their energy usage with others, see what areas of their home consume the most power, and monitor emissions when they use their electricity. This year, we have also given customers more tools to better forecast and understand their upcoming electricity bills. Over the financial year there were more than 11.6 million interactions with Energy IQ features, 275,000 unique users, 585,000 views of the new billing insights feature (since April) and more than 100,000 energy saving tips provided.

In addition to the insights it provides, Energy IQ (EIQ) continues to take more pain points away from customers and streamline services across the board from moving home, to paying bills and ordering deliveries. Energy IQ is playing a key role in providing customers with the insights they need to make informed decisions and that will only grow as more New Zealanders understand they have a role to play as individuals and households in a successful transition to a low carbon future.

100K+

energy saving tips provided

11.6 million
interactions with Energy IQ features

585,000
views of the new billing insights feature (since April)

275,000
unique users

Smart metering allows smart choices

We're also providing data that enables customers to make decisions via smart meters. In recent years, our smart meter electricity customers have had access to a wealth of features that allow them to manage their use hourly, forecast their consumption, provide usage spike alerts and a breakdown of their consumption at an appliance level.

One feature recently introduced allows customers to understand what times during the day have high or low carbon generation nationwide allowing them to plan their use to reduce carbon emissions. By using smart meter data, we are able to let customers know at an hourly level how much of their consumption was high or low carbon giving them the insights to plan and optimise their usage.

In a New Zealand first, we also stated rolling out smart meters for reticulated gas customers in May, after two trials earlier in the year. Nearly 600 customers now have them installed with a further 6,000 expected to be in place by the end of this year. The goal is to have 90,000 more rolled out by mid-2024. The meters mean there are no longer any estimates in billing and manual meter readings are no longer required. Customers are able to see their daily usage and we are working to fully integrate EIQ features so they have full visibility across all their energy use.

Our people are our strength

Our industry is constantly changing – driven by market dynamics, technology shifts and evolving consumer needs.

Product innovation, operational excellence and constantly finding new ways to do things better are core to who we are. As we grow and evolve as an organisation, we want our people to do so too.

We believe diverse teams bring diverse thinking and deliver better results.

Work continues in closing the gender pay and leadership gaps. There was slight improvement this year with the total gender pay gap closing by 1.7% to 35.5% and the pay equity gap dropped from 1.9% to 1.7%. The leadership progression gap widened slightly to 55% male, 45% female (see graph).

Data like this is available on dashboards that anyone in the business can access, an initiative put in place by our 14-person Diversity and Inclusion Council.

The council has had a busy 12 months. They have updated our diversity and inclusion policy and started delivery of their strategy which has made its presence felt. The aims are to promote and raise awareness of our diversity, grow our cultural capability, strengthen our connection with the Rainbow community and develop a sense of belonging to a Genesis family. We've started the process toward earning the Rainbow Tick, developed a Te Reo resource for staff and we celebrate cultural dates of significance.

Total Gender Gap

35.5%

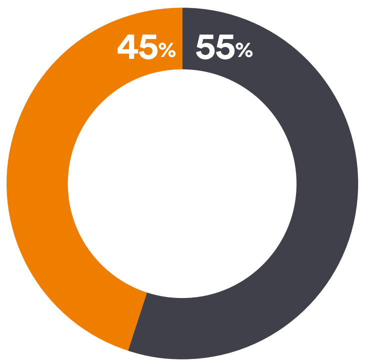
FY20 37.2%

Pay Equity Gap

1.7%

FY20 1.9%

Leadership Progression Gap



Senior leadership roles

Males ● Females ●

Refreshed benefits

We also transitioned to a new suite of benefits for our permanent employees. We worked hard to design a refreshed package that ensured our people were getting the best value from our comprehensive benefits portfolio. In this review we considered the survey feedback from nearly two-thirds of staff. The improvements, across insurance, medical support and wellbeing, KiwiSaver contributions and our employee energy discount, ensure our benefits remain meaningful and provide peace of mind to the Genesis team and their families.

Flexing as a team

Our flexible way of working is a strategic enabler of our diverse and high performing teams. Many organisations talk about leadership from the top down. At Genesis we lead from the inside out. No person in the business has an office. Look around and you'll find our senior leaders sharing workspace as part of our open plan culture. This supports integrity and inclusivity and enables them to lead by example and be among the first to hear and share breakthrough ideas, successes and failures.

Flexible working is well established and is based on four principles – team first, manaaki (care) for yourself and others, be adaptive and take responsibility for your outcomes. Now, 41% of staff are working out of the office between two and four days a week.

It's not just in Auckland that this happens. For 18 months, half of our customer service reps (CSR) have worked from home in various locations across the North Island, around 40 CSRs and 2 team leaders. Last October we introduced flexible hours that enabled our CSRs to work a schedule so they could attend personal and family events such as school assemblies and sports days. This may sound straight forward but in a contact centre where everything is rostered and structured it was quite a change to implement and is working for our people and our business.

Adaptive leadership

Having the right type of leaders across the business is an important part of our future success. We operate in a rapidly evolving environment where, more than ever, we need leaders at different levels who are capable of adapting and have a growth mindset.

Our challenge is to continually balance the need to transform our business for the long term with the need to perform and deliver on multiple fronts in the short term. To help us achieve that we launched the Adaptive Leaders Programme. This is strengthening our ability to navigate and handle the complexities of change and develop high performing teams that are aligned, empowered and accountable.

The course is held over four months and runs in cohorts of 15 people from across the business. They are encouraged to get out of their comfort zone, be honest with themselves and apply what they learnt to help their teams grow also. So far, more than 90 leaders have successfully completed the course and we are already seeing the results ripple across the business.

Innovation in action

Innovation thrives across the business. Our people are always seeking new and innovative ways of engaging our customers, operating our assets and working smarter to be able to create value from uncertainty.

This year, our Predictive Analytics team won the Innovation category at the national Energy Excellence Awards for a project that saw two key people from different teams identify an opportunity to improve the operation of our sites.

Lin-Yi Chou is a data scientist, Michael Eschenbruch an engineer. The pair came together at a company hackathon proposing the concept of creating a predictive analytics model to help with maintenance at different plants. Lin-Yi has developed a front-end software programme that site staff and others with no specialist data or programming skills can select and prepare sensor data points and then build them into predictive models. The parts of a site to be monitored were identified by Michael and he translated years of data for Lin-Yi to use.

Initially they thought they might need 20 or 30 models. Now, there are over 1200 examining historical and current data from thousands of sensors across Genesis' hydro generation sites. The models identify plant anomalies, reducing downtime and maintenance costs and allowing more time to plan safe and effective remedial work. Using data analytics like this is market leading internationally and within the New Zealand energy sector. The next step is moving it to the cloud.

Across Genesis, every team member, whatever their role, carries our reputation with them each day in advocating for the business and providing value to our customers and communities. Across every site and office, our success depends on building a business where people feel proud to work for us and genuinely care about each other. We look forward to continuing to meet and exceed the expectations of our shareholders, customers, partners and other stakeholders.

1200+

historical and current data models

GENESIS ANNUAL REPORT 2021 / WHO WE ARE

The Task Force on Climate-related Financial Disclosures (TCFD)

Strategy
He rautaki

An extensive disclosure was made in the annual report for FY20 much of which remains valid for this financial year. This disclosure focuses on the elements of our climate risk assessment or framework that have changed since the previous disclosure.

1.a. Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term

An overview of our highest-rated climate-related risks and opportunities are included in the table below. Each category has been assessed according to the most relevant timeframe and level of potential impact.

Risk category	Risk/Opportunity	Type of risk	Timeframe	Impact rating*
Regulatory changes that impact thermal generation	Risk & some opportunity	Transitional	Short term (1-10 years)	Moderate
Environmental and physical changes that impact thermal generation	Risk	Physical	Short term (1-10 years)	Moderate
Consumer and investor preference, and perception of other stakeholders, impacting our operating landscape	Risk & some opportunity	Transitional	Short to Medium term (1-20 years)	Moderate – High
Technological disruption	Risk & opportunity	Transitional	Short to Medium term (1-20 years)	High
Long-term climate changes that impact hydro generation	Risk & opportunity	Physical	Long term (gradual increase in likelihood over next 20-30 years)	High
Acute climate events causing damage to critical infrastructure and assets	Risk	Risk	Long term (gradual increase in likelihood over next 20-30 years)	High

*Note: Impact rating corresponds to a defined Genesis risk management matrix. For example, 'high' impact risks or opportunities have the potential to materially impact the business and require significant action across multiple business units.

Regulatory changes that impact thermal generation: Changes to market mechanism or other regulatory interventions could have an adverse impact on the value of thermal generation assets. Mitigating this risk is our diverse range of generation assets and the Future-gen programme to actively transition the role of thermal generation in our portfolio. Also, regulatory changes that drive electrification increase demand in our main core market.

Environmental and physical changes that impact thermal generation: Operation of the Huntly Power Station could be impacted by physical changes in the environment both acute and chronic. An example of this is a potential reduction in cooling capacity due to heating events in the Waikato River. The shorter term rating of this risk recognises the changing role of thermal generation in our portfolio and the impact of the Future-gen programme.

Consumer and investor preference, and perception of other stakeholders, impacting our operating landscape: Potential shifts in investor, customer and stakeholder sentiment around carbon emissions could create brand and reputation risks with consumers and other stakeholders. The introduction of our science based target consistent with a 1.5ºC climate outcome by 2025, supported by the delivery of the Future-gen programme, provides mitigation with a clear target, although failure to meet the target also represents risk to Genesis.

Technological disruption: The global energy transition is driving innovation and rapid changes in technology. The effects could potentially disrupt the energy industry, existing assets, and incumbent participants. Conversely, many of the key trends of the energy transition, in particular electrification as a means of decarbonisation, are potential opportunities to existing energy businesses.

Long-term climate changes that impact hydro generation: Long-term changes in the climate could alter the inflows or operations of hydroelectric generation assets, which are dependent on weather patterns and environmental factors for successful operation.

Acute climate events causing damage to critical infrastructure and assets: Infrastructure assets and physical sites across the country are subject to potential impact from severe weather events, which may increase in frequency and intensity with climate change. Genesis maintains a thorough risk review and maintenance plan across all sites and facilities, however, this risk is noted as in the longer term the extremity of events may exceed current design limits.

Strategy
He rautaki

1.b. Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning.

Genesis' strategy is centred around the role that Genesis plays in the energy markets today and in New Zealand's transition to a low carbon future, encapsulated by our new company purpose of "Empowering New Zealand's Sustainable Future". This includes:

- the Future-gen programme to displace baseload thermal generation with renewable energy and increase portfolio flexibility;
- providing essential back up to New Zealand's renewable electricity system; and
- giving insights to our customers to help them make well informed energy choices.
- The outcome of the arbitration with Beach Energy has no impact on our climate related risks and opportunities.

Our assessment of climate risks highlights some of the key risks and opportunities faced by Genesis over the short-, medium-, and longer-term. Our strategy and plans are intended to minimise the risks and maximise the opportunities.

1.c. Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2ºC or lower scenario.

Scenario planning is an integral part of Genesis' strategic planning process. Our scenarios consider a range of different possible futures, including different climate transition pathways covering 1.5ºC, 2ºC, and 4ºC scenarios. These scenarios are used when reviewing the overall strategy and when making major investments to ensure the resilience of the business across a range of different climate and market outcomes.

The timeframes used when considering climate risks are significantly longer than the normal planning horizon:

- Short Term: one to 10 years
- Medium Term: 10 to 20 years
- Long Term: 20+ years

GENESIS ANNUAL REPORT 2021 / WHO WE ARE

The Task Force on Climate-related Financial Disclosures (TCFD)

Metrics and Targets

Ngā Whāinga

2.a. Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process.

Genesis breaks out Scope 1 emissions into those attributable to supply contracts (swaptions) with other generators, further enhancing transparency about the carbon footprint of the New Zealand electricity market.

2.b. Disclose Scope 1, Scope 2, and if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.

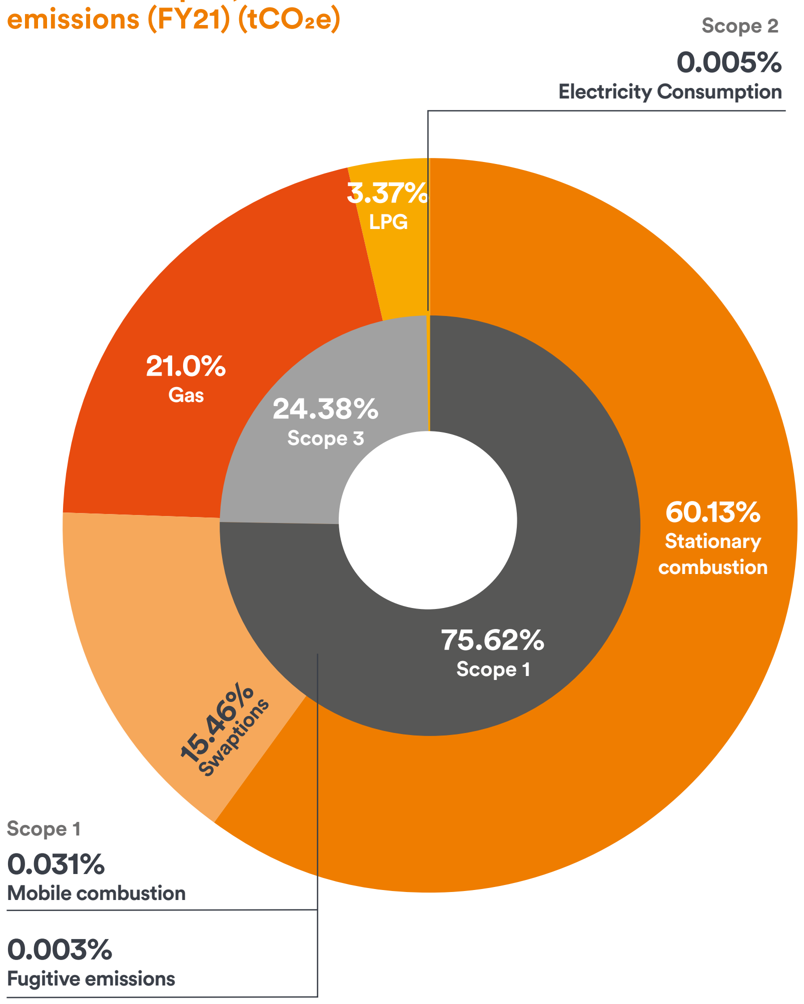
This is the second year as a publicly listed company that Genesis has reported its Scope 1, 2 and 3 emissions in the Annual Report. To ensure data accuracy, limited assurance has been provided by EY (see page 94).

2.c. Disclose the targets used by the organisation to manage climate-related risks and opportunities and performance against targets.

Genesis uses targets verified by the Science Based Targets initiative (SBTi) and tied to the international benchmark of 1.5°C. Our target is to remove more than 1.2m tonnes of carbon over the next five years, we aim to reduce Scope 1 and 2 emissions by 36% and reduce absolute Scope 3 emissions from use of sold products 21% by 2025. These are explained on page 14 of the annual report.

We note that the unfavourable outcome of the Beach arbitration process in August 2021 does not impact the Company's carbon reduction targets or our ability to deliver against these targets. This is because the emissions under the gas supply agreement that was the subject of the dispute have always been included in our TCFD reporting.

Genesis' Scope 1, 2 and 3 emissions (FY21) (tCO_2e)



Scope 1, 2 and 3 emissions (tCO2e)

Scope	Category	FY21 tCO_2e
Direct emissions (Scope 1)	Stationary combustion attributable to thermal generation	3,132,879
	Attributable to supply contracts (swaptions)	805,398
	Subtotal Stationary Scope 1	3,938,277
	Mobile combustion	1,624
	Fugitive emissions	162
Scope 1	Subtotal Scope 1	3,940,063
Indirect emissions (Scope 2)	Electricity consumption (location based)	262
	Subtotal Scope 2	262
Scope 1 & 2	Subtotal Scope 1 & 2	3,940,325
Indirect emissions (Scope 3)	Waste generated in operations	26
	Business travel	215
	Use of sold products - LPG Retail[1]	128,665
	Use of sold products - LPG Wholesale[1]	46,838
	Use of sold products - Gas Retail	441,033
	Use of sold products - Gas Wholesale	653,421
	Subtotal Scope 3	1,270,198
Scope 1, 2 & 3	Total	5,210,523

1. Calculated using NZ Emissions Trading Scheme (ETS) emission factors, not the Ministry for the Environment's emission factors.

Governance

He mana whakahaere

3.a. Describe the Board's oversight of climate-related risks and opportunities.

Genesis' Board is ultimately accountable to shareholders for the long-term stewardship of the Company, including any long-term risks, including climate risk. As part of its core governance function, the Board takes an active role in the Company's executive oversight and sets the Company's overall strategic direction. All key risks and opportunities are considered by the Board as appropriate when reviewing and guiding strategy and the operations of the Company, including as part of its Risk Management Policy and Framework. This is additionally managed by delegation to the Audit and Risk Committee. This year as part of the regular review of policies, "climate risk" was explicitly added as a category of risk in the Genesis Risk Management Policy.

3.b. Describe management's role in assessing and managing climate-related risks and opportunities.

Climate-related risks are a key component of Genesis' long-term risk management and factor into all risk-based policies and frameworks. As New Zealand's largest energy retailer and owner of some of New Zealand's largest hydro and thermal generation assets, Genesis has a responsibility to be transparent about climate change and the related risks it poses to the business and the opportunities afforded by a decarbonised and electrified New Zealand. This affects almost every aspect of the business and these risks are managed from senior leadership down through the business.

Risk Management

Whakatūpato Tūraru

4.a. Describe the organisation's processes for identifying and assessing climate-related risks.

Climate-related risks are a subset of the Genesis' overall risk management process. Risks are identified and assessed by the Risk and Strategy teams, under the supervision of the Group Manager Strategy and Risk. The Group Manager Strategy and Risk reports to the Chief Financial Officer. Risk specialists are tasked with constant research and market analysis to monitor the Company's risk landscape to identify new, emerging or developing risks.

Using defined climate scenarios, the Risk and Strategy teams work with key experts from across the business to identify a wide range of climate-related risks and opportunities. These are then categorised and assessed using a form of the Risk Matrix adapted for use with longer-term climate risks. The results of the risk assessment are reviewed and approved by the Executive Team and incorporated into corporate risk management systems.

4.b. Describe the organisation's processes for managing climate-related risks.

The management of physical climate-related risks is similar to other event-driven risks, for example weather, seismic and volcanic risks. Management is primarily through mitigation. Although financial risks are transferred through insurance, the primary focus is ensuring the highest level of safety. Assets are proactively managed to ensure the continued resilience of these assets in the face of potential events.

The nature of transitional climate-risks is similar to other 'strategic risks' and as such are managed through existing strategic risk management processes. Genesis proactively manages these risks as part of its long-term strategy. This management includes regular monitoring against key risk indicators and scenarios, designed to proactively identify associated risks.

4.c. Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management.

Climate-related risks are incorporated into Genesis' comprehensive risk identification and assessment framework and process as defined by the Risk Management Policy. These processes result in a comprehensive register of risks that are actively managed. Risks that are rated as "extreme" or "high" are reviewed six-monthly by the Audit and Risk Committee of the Board.

Your Board of Directors

Ko tō tātou poari

CHAIRMAN

Barbara Chapman
CNZM, BCom, CMInstD

Barbara Chapman joined the Genesis Board in May 2018 and assumed the role of Chairman in October 2018.

Barbara is also the Chair of NZME and a director of Fletcher Building, and is the deputy-Chair of The New Zealand Initiative. Barbara is the Chair of the APEC CEO Summit Committee and co-Chair of the APEC Business Leadership Group.

Barbara served as Chief Executive and Managing Director of ASB Bank for seven years and has worked in a variety of financial services executive roles in New Zealand and Australia. She is a former Chair of Oxfam New Zealand, a former director of IAG New Zealand, has served on the Board of Supervisors for Oxfam International, and was a previous Chair of the New Zealand Equal Opportunities Trust.

Barbara was named New Zealand Herald's Business Leader of the Year in 2017 and was named the inaugural INFINZ Diversity and Inclusion Leader in 2018.

Barbara was awarded a Companion of the New Zealand Order of Merit (CNZM) for services to business in the 2019 New Year Honours List.

CONTACT THE BOARD

If you have a comment
or question, please email
the Board on: **board@genesisenergy.co.nz**

Catherine Drayton
BCom, LLB, FCA

Catherine Drayton joined the Genesis Board in March 2019. She is the Chairman of the Company's Audit and Risk Committee.

She is currently the Chair of Christchurch International Airport Limited, Guardians of NZ Superannuation and Mint Innovation Limited. She is also a Director of a number of other entities including Southern Cross Medical Care Society and Southern Cross Healthcare Limited.

Her former directorships include Ngai Tahu Holdings Corporation, Powerbyproxi Limited, Beca Group Limited and Meridian Energy Limited.

Catherine's executive career culminated in leading the Assurance and Advisory practice for PricewaterhouseCoopers for Central and Eastern Europe (excluding Russia). Catherine is a Fellow of Chartered Accountants New Zealand and Australia.

Doug McKay
ONZM, BA, AMP (Harvard)

Doug McKay joined the Genesis Board in 2014 and is Chairman of the Company's Human Resources and Remuneration Committee. He is also a member of the Company's Nominations Committee.

Doug is Chairman of the Bank of New Zealand and the Eden Park Trust Board and has directorships with National Australia Bank (NAB), IAG New Zealand Limited and Fletcher Building Limited.

Doug began his career with Procter & Gamble, working in a number of roles both in New Zealand and overseas. He subsequently worked in Managing Director and Chief Executive roles for Lion Nathan, Carter Holt Harvey, Goodman Fielder, Sealord and Independent Liquor, where he was also Chairman.

Doug was the inaugural Chief Executive of the amalgamated Auckland Council until the end of 2013.

Tim Miles
BA

Tim Miles joined the Genesis Board in November 2016 and is a member of the Company's Human Resources and Remuneration Committee and the Nominations Committee.

Tim began his career with IBM and later joined Data General Corporation, rising to Director of Marketing – Asia Pacific. He then joined Unisys Corporation in various senior executive roles before taking up roles as the Chief Executive Officer of Vodafone New Zealand, the Chief Executive Officer of Vodafone UK and the Vodafone Group Chief Technology Officer.

Upon returning to New Zealand, Tim was Managing Director of listed agricultural group PGG Wrightson before taking up a role as Chief Executive Officer of Spark Digital, playing a key role in Spark's transition to becoming New Zealand's leading digital services provider.

Tim is a Director of UDC Finance, Nyriad Limited, Chairman of Gut Cancer Foundation and ASX listed company oOh!media Limited. Tim has also served as a Director of Goodman Property and Chair on the Advisory Boards of Revera Ltd and the CCL Group.

James Moulder
BA, BCA

James Moulder joined the Genesis Board in October 2018 and is a member of the Company's Audit and Risk Committee.

James has strong governance experience having held a number of non-executive Board and Advisory Board positions.

He was Chairman of the Electricity Authority's Market Development Wholesale Advisory Group, and previously chaired the NZ Electricity Commission: Market Development Advisory Group.

James' previous directorships include CO2 New Zealand Limited, Rodney Properties Limited and Bosco Connect. He has held executive leadership positions with Mighty River Power including leading its Mercury Energy business.

More recently James has been involved in the commercialisation of large data sets in New Zealand, Europe and the US, coupled with the development of a carbon asset management business in Australia.

Maury Leyland Penno
BE (Hons), FEng, CMInstD

Maury Leyland Penno joined the Genesis Board in 2016. She is a member of the Company's Audit and Risk Committee, and the Human Resources and Remuneration Committee.

Maury is Chair of The Education Hub, a non-profit organization and Trust Codes. She is a director and shareholder of a number of privately held companies across the food industry. She has been a Director of Spark New Zealand and Transpower New Zealand. She is a Fellow of Engineering New Zealand and a Chartered Member of the Institute of Directors. Maury worked at Fonterra from 2005 until 2016, most recently as a member of the executive team in the role of Managing Director for People, Culture and Strategy. Earlier in her career, Maury worked as a consultant with the Boston Consulting Group and as an engineer for Team New Zealand.

Paul Zealand
MBA, BSc Mech. Eng (Hons)

Paul Zealand joined the Genesis Board in October 2016 and is a member of the Company's Human Resources and Remuneration Committee and the Nominations Committee.

Paul is a professional director, currently sitting on the Boards of New Zealand Refining Company Limited, Lochard Energy and Port Nelson Limited.

Paul has over 40 years' international experience in the oil and gas sector.

His executive roles have included Country Chairman of Shell New Zealand and Chief Executive Officer of the upstream oil and gas business of Origin Energy in Australia.

Through these roles Paul developed skills in strategic business management, health, safety of environmental management, operational risk, and the commercial management of complex assets.

Your Executive team

Ko tō tātou tira ārahi

CHIEF EXECUTIVE

Marc England
MBA, MEng

Marc England joined Genesis in May 2016. He is responsible for the leadership, strategic direction and management of all its business interests.

Prior to joining Genesis, Marc was Executive General Manager New Energy at AGL Energy in Australia and also previously held the role of Group Head of Strategy.

Marc has 13 years' experience in the energy sector across three markets, having also worked at British Gas, a subsidiary of Centrica Plc, in the UK from 2007.

Earlier in his career Marc held a number of corporate finance roles at Ford Motor Company and prior to that was a Petroleum Engineer for Halliburton Energy Services in the Middle East and United States. Marc has a Master of Engineering in Mechanical Engineering and European Studies and an MBA.

Chris Jewell
Chief Financial Officer
BE (Hons), MEM, CIMA

Chris Jewell joined the Genesis Executive Team in 2013 as General Manager Portfolio Management and was appointed Chief Financial Officer in 2016. In 2019 his role was expanded to Executive General Manager of Strategy.

Chris is responsible for leading the Company's strategy formulation and overseeing all finance functions, treasury, tax, risk, corporate finance, mergers and acquisitions, and investor relations.

Chris brings significant senior leadership experience in the energy sector across the disciplines of markets, infrastructure investment and asset operations. Chris sat on the Electricity Governance Board and remains a Director of Kupe Ventures Limited. He previously worked in the telecommunications and infrastructure sectors in the United Kingdom.

In 2020 Chris was appointed to Co-chair the 2050 Low-Carbon Energy Strategy commisioned by the Aotearoa Circle.

James Magill
Chief Digital Officer
BSc (Hons), Dip Corp Finance, MBA (Melbourne/Madrid)

James Magill joined Genesis in October 2016 as Executive General Manager, Customer and Innovation. In 2019, his role expanded to Executive General Manager, Retail Markets.

On 1 September, 2020, James took up the role of Chief Digital Officer. James is accountable for technology and data transformation across the business. In addition, he leads the Energy Online brand and Genesis' Commercial and Industrial customers, as well as the development of energy management products and services.

James brings broad experience in strategy, M&A, retail and technology to Genesis. He has international experience having worked in North America, the UK and Australia prior to joining NZ.

Matthew Osborne
Chief Corporate Affairs Officer
BCom, LLB

Matthew Osborne joined Genesis in May 2018 as General Counsel and Company Secretary and was appointed Chief Corporate Affairs Officer in October that year.

Matthew is responsible for legal, regulatory, government relations, sustainability, corporate relations, compliance and company secretarial functions.

Having worked in a number of international markets, he brings significant experience in executing business strategy and in providing specialist risk management, commercial, legal and regulatory advice.

Prior to joining Genesis, Matthew held senior legal and governance roles with the Vodafone Group in the Middle East and Ireland.

Nicola Richardson
Chief People Officer
BA (Hons)

Nicola Richardson joined the Executive team in 2016. She is responsible for the people and culture focus of Genesis, including recruitment, talent development, cultural change, Agile, property and procurement.

Nicola's leadership focuses on creating a high performing and adaptive culture that embraces empowerment, inclusion and wellbeing.

She has strong international experience through prior senior people leadership roles in the financial services, real estate, manufacturing and human resource consulting sectors in the United Kingdom, Asia and New Zealand.

Nigel Clark
Chief Operations Officer
BBus (Acc), Dip Treasury Mgmt., FCPA, FAICD, CFTP (Snr)

Nigel Clark joined Genesis in October 2016 as Executive General Manager Customer and Service Operations. In 2019, Nigel took on a new portfolio as Executive General Manager Wholesale Operations and Kupe Joint Venture.

In this role Nigel is responsible for driving value creation from our electricity generation assets, environmental management, community relations, our Kupe Joint Venture investment and leading safety and wellness across Genesis.

Nigel brings deep executive-level energy sector experience to Genesis. He has held Managing Director and Chief Financial Officer roles within Australia's energy sector. Nigel is motivated to lead transformational change that delivers real sustainability improvements through direct, transparent and brave leadership.

He served on the Snowy Hydro Board as a Director from 2015 to 2019.

Tracey Hickman
Chief Customer Officer
MA (Hons)

Tracey Hickman joined the Genesis Executive Team in 2012. In 2019, she took on a new portfolio as Executive General Manager Retail Operations. Prior to moving into the Retail business, Tracey led Genesis' Generation, Wholesale and Fuels portfolio businesses as Executive General Manager.

In her current role, Tracey is accountable for the Genesis Retail brand (mass market end to end), as well as LPG and Customer Operations in support of both retail brands.

She brings over 25 years of energy sector experience to the Executive team, having worked in senior leadership roles across multiple areas including environmental management; stakeholder/Iwi relations; generation maintenance and operations; asset, safety and risk management; and information technology operations.

GENESIS ANNUAL REPORT 2021 / WHO WE ARE

Consolidated financial statements

Ngā Tauākī Pūtea Tōpū

For the year ended 30 June 2021

Consolidated financial statements

Notes to the consolidated financial statements

Consolidated comprehensive income statement

For the year ended 30 June 2021

	Note	2021 $ million	2020 $ million
Revenue	A3, A4	**3,221.2**	2,591.5
Expenses	A3	**(2,810.4)**	(2,235.9)
Arbitration decision in respect of a carbon liability dispute			
2021 emission costs	A2, A3	**(16.6)**	-
2020 emission costs	A2, A3	**(15.2)**	-
2018 and 2019 emission costs	A2. A3	**(18.0)**	-
Reimbursement of other associated costs	A2. A3	**(3.1)**	-
Earnings before net finance expense, income tax, depreciation, depletion, amortisation, impairment, fair value changes and other gains and losses (EBITDAF)		**357.9**	355.6
Depreciation, depletion and amortisation	A5	**(196.9)**	(209.8)
Impairment of non-current assets	B1, B3	**-**	(3.0)
Revaluation of generation assets	B1	**27.9**	-
Change in fair value of financial instruments	F5	**(86.8)**	(0.6)
Share of associates and joint ventures		**1.3**	(1.2)
Other gains (losses)		**3.3**	(8.8)
Profit before net finance expense and income tax		**106.7**	132.2
Finance revenue		**0.4**	0.2
Finance expense	E6	**(59.9)**	(70.8)
Profit before income tax		**47.2**	61.6
Income tax expense	A6	**(13.7)**	(15.6)
Net profit for the year		**33.5**	46.0
Other comprehensive income			
Change in cash flow hedge reserve	F5	**(6.1)**	24.1
Income tax (expense) credit relating to items above		**1.7**	(6.7)
Total items that may be reclassified to profit or loss		**(4.4)**	17.4
Change in asset revaluation reserve	B1	**163.6**	-
Income tax expense relating to items above		**(45.8)**	-
Total items that will not be reclassified to profit or loss		**117.8**	-
Total other comprehensive income for the year		**113.4**	17.4
Total comprehensive income for the year		**146.9**	63.4

Earnings per share (EPS) from operations attributable to shareholders		Cents	Cents
Basic and diluted EPS	E3	**3.22**	4.47

The above statement should be read in conjunction with the accompanying notes.

Consolidated statement of changes in equity

For the year ended 30 June 2021

	Note	Share capital $ million	Share-based payments reserve $ million	Asset revaluation reserve $ million	Cash flow hedge reserve $ million	Retained earnings $ million	Total $ million
Balance as at 1 July 2019		597.6	1.7	1,398.2	(59.7)	207.2	2,145.0
Net profit for the year		-	-	-	-	46.0	46.0
Other comprehensive income							
Change in cash flow hedge reserve	F5	-	-	-	24.1	-	24.1
Income tax expense relating to other comprehensive income		-	-	-	(6.7)	-	(6.7)
Total comprehensive income for the year		**-**	**-**	**-**	**17.4**	**46.0**	**63.4**
Revaluation reserve reclassified to retained earnings on disposal of assets		-	-	(0.2)	-	0.2	-
Hedging gains and losses transferred to the cost of assets	F5	-	-	-	(0.5)	-	(0.5)
Income tax on hedging gains and losses transferred to the cost of assets		-	-	-	0.1	-	0.1
Changes associated with share-based payments		0.1	0.1	-	-	-	0.2
Shares issued under dividend reinvestment plan	E2	37.3	-	-	-	-	37.3
Dividends	E4	-	-	-	-	(175.7)	(175.7)
Balance as at 30 June 2020		**635.0**	**1.8**	**1,398.0**	**(42.7)**	**77.7**	**2,069.8**
Net profit for the year		-	-	-	-	33.5	33.5
Other comprehensive income							
Change in cash flow hedge reserve	F5	-	-	-	(6.1)	-	(6.1)
Change in asset revaluation reserve	B1	-	-	163.6	-	-	163.6
Income tax (expense) credit relating to other comprehensive income		-	-	(45.8)	1.7	-	(44.1)
Total comprehensive income (expense) for the year		**-**	**-**	**117.8**	**(4.4)**	**33.5**	**146.9**
Revaluation reserve reclassified to retained earnings on disposal of assets		-	-	(7.3)	-	7.3	-
Hedging gains and losses transferred to the cost of assets	F5	-	-	-	(4.4)	-	(4.4)
Income tax on hedging gains and losses transferred to the cost of assets		-	-	-	1.2	-	1.2
Changes associated with share-based payments		(0.1)	0.4	-	-	0.2	0.5
Shares issued under dividend reinvestment plan	E2	17.3	-	-	-	-	17.3
Dividends	E4	-	-	-	-	(179.6)	(179.6)
Balance as at 30 June 2021		**652.2**	**2.2**	**1,508.5**	**(50.3)**	**(60.9)**	**2,051.7**

The above statement should be read in conjunction with the accompanying notes.

Consolidated balance sheet

As at 30 June 2021

	Note	2021 $ million	2020 $ million
Cash and cash equivalents		**104.3**	32.5
Receivables and prepayments	C1	**339.4**	235.0
Inventories	C2	**93.2**	98.0
Intangible assets	B3	**55.4**	4.9
Tax receivable		**15.1**	25.0
Derivatives	F1	**320.1**	44.1
Total current assets		**927.5**	439.5
Receivables and prepayments	C1	**4.1**	3.1
Property, plant and equipment	B1	**3,485.4**	3,367.7
Oil and gas assets	B2	**293.9**	307.4
Intangible assets	B3	**349.5**	353.4
Investments in associates and joint ventures	D3	**21.0**	6.7
Derivatives	F1	**160.5**	104.5
Total non-current assets		**4,314.4**	4,142.8
Total assets		**5,241.9**	4,582.3
Payables and accruals	C3	**390.5**	233.6
Borrowings	E5	**379.7**	19.9
Provisions	C4	**7.1**	8.9
Derivatives	F1	**404.3**	38.9
Total current liabilities		**1,181.6**	301.3
Payables and accruals	C3	**4.3**	8.1
Borrowings	E5	**1,048.1**	1,347.5
Provisions	C4	**159.1**	151.6
Deferred tax	A6	**621.5**	631.6
Derivatives	F1	**175.6**	72.4
Total non-current liabilities		**2,008.6**	2,211.2
Total liabilities		**3,190.2**	2,512.5
Share capital	E2	**652.2**	635.0
Reserves		**1,399.5**	1,434.8
Total equity		**2,051.7**	2,069.8
Total equity and liabilities		**5,241.9**	4,582.3

The above statement should be read in conjunction with the accompanying notes.

The Directors of Genesis Energy Limited authorise these financial statements for issue on behalf of the Board.

Barbara Chapman
Chairman of the Board

Date 25 August 2021

Catherine Drayton
Chairman of the Audit and Risk Committee

Date 25 August 2021

Consolidated cash flow statement

For the year ended 30 June 2021	Note	2021 $ million	2020 $ million
Receipts from customers		**3,083.7**	2,555.9
Interest received		**0.4**	0.2
Payments to suppliers and related parties		**(2,592.2)**	(2,092.6)
Payments to employees		**(111.9)**	(103.2)
Tax paid		**(56.2)**	(52.8)
Operating cash flows		**323.8**	307.5
Proceeds from disposal of property, plant and equipment		**0.1**	0.1
Payments to associates and joint ventures		**(15.2)**	(7.7)
Purchase of property, plant and equipment		**(47.6)**	(54.3)
Purchase of oil and gas assets		**(20.1)**	(22.0)
Purchase of intangibles (excluding emission units and deferred customer acquisition costs)		**(22.7)**	(19.3)
Investing cash flows		**(105.5)**	(103.2)
Proceeds from lease incentives	E5	**11.1**	-
Proceeds from borrowings	E5	**309.8**	97.6
Repayment of borrowings	E5	**(248.5)**	(126.2)
Interest paid and other finance charges		**(56.2)**	(66.6)
Dividends	E4	**(162.3)**	(138.4)
Acquisition of treasury shares	E2	**(0.4)**	(0.1)
Financing cash flows		**(146.5)**	(233.7)
Net increase (decrease) in cash and cash equivalents		**71.8**	(29.4)
Cash and cash equivalents at 1 July		**32.5**	61.9
Cash and cash equivalents at 30 June		**104.3**	32.5

Reconciliation of net profit to operating cash flows	Note	2021 $ million	2020 $ million
Net profit for the year		**33.5**	46.0
Net (gain) loss on disposal of property, plant and equipment		**(0.2)**	2.1
Net loss on disposal of intangible assets		**-**	0.3
Finance expense excluding time value of money adjustments on provisions		**55.8**	65.8
Advances to associates and joint ventures		**2.2**	-
Change in rehabilitation and contractual arrangement provisions		**1.2**	8.2
Items classified as investing/financing activities		**59.0**	76.4
Depreciation, depletion and amortisation expense	A5	**196.9**	209.8
Revaluation of generation assets	B1	**(27.9)**	-
Impairment of non-current assets	B1, B3	**-**	3.0
Change in fair value of financial instruments	F5	**86.8**	0.6
Deferred tax expense	A6	**(53.0)**	(28.8)
Change in capital expenditure accruals		**3.6**	(14.9)
Share of associates and joint ventures		**(1.3)**	1.2
Other non-cash items		**7.8**	2.6
Total non-cash items		**212.9**	173.5
Change in receivables and prepayments		**(105.4)**	(10.5)
Change in inventories		**4.8**	32.8
Change in emission units on hand		**(50.5)**	2.7
Change in deferred customer acquisition costs		**0.8**	0.6
Change in payables and accruals		**153.1**	(0.5)
Change in tax receivable/payable		**9.9**	(8.8)
Change in provisions		**5.7**	(4.7)
Movements in working capital		**18.4**	11.6
Net cash inflow from operating activities		**323.8**	307.5

The above statement should be read in conjunction with the accompanying notes.

Notes to the consolidated financial statements

For the year ended 30 June 2021

General information and significant matters

General information

These consolidated financial statements comprise Genesis Energy Limited ('Genesis'), its subsidiaries, controlled entities and the Group's interests in associates and joint operations (together, the 'Group'). Refer to section D for more information on the Group structure.

Genesis is registered under the Companies Act 1993. It is a mixed ownership model company, majority owned by the 'Crown', bound by the requirements of the Public Finance Act 1989. Genesis is listed on the New Zealand Stock Exchange (NZX) and the Australian Securities Exchange (ASX) and has bonds listed on the NZX debt market. Genesis is an FMC reporting entity under the Financial Markets Conduct Act 2013.

The core business of the Group and activities carried out by each segment is disclosed in note A3.

On 27 November 2020 Genesis announced that it was undertaking a strategic review in relation to its interest in Kupe. The review considered a number of areas including the returns and risks of a potential drilling programme, the optimal capital structure for Genesis and whether there are more strategically aligned capital investment opportunities. Subsequent to 30 June 2021 the Board concluded that continued ownership was in the best interests of the Company and its shareholders.

Basis of preparation

These financial statements have been prepared:

- In accordance with New Zealand generally accepted accounting practice ('GAAP') and comply with International Financial Reporting Standards ('IFRS') and New Zealand equivalents ('NZ IFRS'), as appropriate for profit-oriented entities;
- In accordance with the Financial Markets Conduct Act 2013, the Financial Reporting Act 2013 and the Companies Act 1993;
- Using the historical cost convention, modified by the revaluation of derivatives, emission units held for trading and generation assets;
- In New Zealand dollars rounded to the nearest 100,000;
- On a Goods and Services Tax ('GST') exclusive basis with the exception of receivables and payables, which include GST where GST has been invoiced;
- Using the accounting policies set out in the notes to the financial statements. The impact of adopting new and revised accounting standards, interpretations and amendments is disclosed below.

Estimates and judgements

In the process of preparing the financial statements Management makes a number of estimates and judgements based on historical experience and various other factors that are reasonable under the circumstances.

The table below lists the key estimates and judgements:

Key estimates and judgements	Note	Page
Fair value of generation assets	B1	59
Depletion of oil and gas producing assets	B2	61
Valuation of rehabilitation and restoration provisions	C4	65
Valuation of electricity derivatives	F8	77

Estimates are also used in determining other items such as the expected credit loss provision (note C1), the useful lives of property, plant and equipment and software (note B1 and B3), and whether assets with indefinite useful lives are impaired (note B3). Judgements are further used in determining whether an event gives rise to a provision or a contingent liability (note G5).

COVID-19

To date the economic disruption caused from the COVID-19 pandemic has not had a material impact on reported results. This is mainly due to the fact that Genesis provides an essential service.

Impairment of assets

Assets that have indefinite useful lives are tested annually for impairment. Assets that are subject to depletion, depreciation or amortisation are reviewed for impairment annually or whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. If an asset's carrying value exceeds its recoverable amount, the difference is recognised as an impairment loss in the income statement, except where the asset is carried at a revalued amount then it is treated as a revaluation decrease up to the amount previously recognised in the revaluation reserve.

Adoption of new and revised accounting standards, interpretations and amendments

Implementation of IFRS Interpretations Committee ('IFRIC') agenda decision on Configuration and Customisation costs incurred in implementing Software-as-a-Service ('SaaS')

The IFRS Interpretations Committee released an agenda decision in April 2021 in relation to accounting for configuration and customisation costs incurred in implementing SaaS arrangements. The agenda decision clarifies how current accounting standards should be applied to these types of arrangements. The Group has completed an initial risk based scoping exercise which has indicated that application of the agenda decision may reduce intangible assets by up to $18.6 million as at 30 June 2021, of which up to $8.1 million may be recognised in the current year income statement and up to $3.0 million in the prior year income statement. A detailed review has commenced and is expected to be completed within the next six months.

Amendment to NZ IFRS 9, NZ IAS 39 and NZ IFRS 7 - Interest rate benchmark reform

A fundamental reform of major interest rate benchmarks is being undertaken globally, including the replacement of some interbank offered rates (IBORs) with alternative nearly risk-free rates (referred to as 'IBOR reform'). These alternative risk-free rates are gradually being adopted; however, there are uncertainties around the timing and method of transition.

The transition from IBOR is expected to have implications on financial accounting including the fair value of financial instruments, hedge accounting and disclosures. The New Zealand Accounting Standards Board issued *Interest Rate Benchmark Reform – Amendments to NZ IFRS 9 , NZ IAS 39 and NZ IFRS 7* to provide temporary relief for hedge accounting requirements. These amendments allow an entity to assume no impact to existing hedge relationships in the period leading up to the reform.

The Group uses interest rate swaps and cross currency interest rate swaps ('CCIRS') to manage interest rate risk. These instruments reference either the Bank Bill Market ('BKBM') or the USD LIBOR. Of these benchmarks the Group expects BKBM to exist as a benchmark rate for the foreseeable future and therefore does not believe its BKBM benchmark fair value or cash flow hedges will be directly impacted by the IBOR reform. The Group has fixed rate United States Private Placement ('USPP') notes which have been swapped back to floating rates using CCIRS which are linked to USD LIBOR. The IBOR reform may impact the level of effectiveness that is obtained from hedge accounting CCIRS. Phase 1 amendments allow the Group to continue hedge accounting by assuming the LIBOR is not altered until such time that the LIBOR is replaced. As the replacement benchmark has yet to be established the likely impact of replacing the LIBOR is unknown at this stage. Refer to note F4 for further information on the CCIRS.

A plan is being developed to prepare for the transition to alternative risk-free benchmarks, which will include actions required to update processes, systems and documentation, including contract changes where necessary.

Accounting standards, interpretations and amendments in issue not yet effective

Phase 2 of the IBOR reform noted above is effective from 1 January 2021. The amendments will enable the Group to reflect the effects of transitioning from IBOR to alternative benchmark interest rates without giving rise to accounting impacts that would not provide useful information to users of financial statements. There are no other standards, interpretations and amendments approved but not yet effective in the current year that are likely to have a material impact to the Group.

A. Financial performance

A1. Underlying EBITDAF and underlying earnings

Underlying EBITDAF and underlying earnings are performance measures used internally to provide insight into the operating performance of the Group by adjusting for items that are outside Management's control or items that relate to strategic rather than operational decisions. Items are excluded from underlying EBITDAF and underlying earnings when they meet the criteria outlined in the Group's non-GAAP financial information policy (refer to www.genesisenergy.co.nz/investors/governance/documents for a copy of the policy).

These measures are considered to be non-GAAP performance measures. They should not be viewed in isolation nor considered a substitute for measures reported in accordance with NZ IFRS. Underlying EBITDAF and underlying earnings are used by many companies; however, because these measures are not defined by NZ IFRS they may not be uniformly defined or calculated by all companies. Accordingly, these measures may not be comparable.

Reconciliation of reported net profit to underlying earnings	Note	2021 $ million	2020 $ million
Net profit for the year		**33.5**	46.0
Change in fair value of financial instruments	F5	**86.8**	0.6
Revaluation of generation assets	B1	**(27.9)**	-
Impairment of non-current assets	B1, B3	**-**	3.0
Unrealised (gain) loss on revaluation of carbon units held for trading		**(0.9)**	6.0
Adjustments before tax expense		**58.0**	9.6
Tax expense on adjustments		**(16.2)**	(2.7)
Adjustments after tax expense		**41.8**	6.9
Underlying earnings		**75.3**	52.9

	Cents	Cents
Underlying EPS	**7.23**	5.14

There were no differences between reported EBITDAF and underlying EBITDAF.

A2. Arbitration decision in respect of a carbon liability dispute

Genesis has been engaged in a contractual dispute relating to the carbon terms of one of its long-term gas supply agreements since 2018. Following an escalation process, in May 2019 the matter was referred to arbitration in accordance with the terms of the agreement. No provision for a liability was recognised in the 2019 or 2020 financial years as Genesis was confident of a favourable outcome and, as a result, the dispute was disclosed as a contingent liability. The arbitrator's decision, released in July 2021, determined that Genesis was required to meet the carbon liability for gas supplied since 1 January 2018, up to the date the contract expires. In addition to this Genesis is obligated under the decision to reimburse the counterparty for their costs associated with the dispute. The arbitrator's decision is final and binding. As a result an accrual for $52.9 million has been recognised in the current year.

	Note	2021 $ million
Emission costs associated with gas supplied in the:		
Current year *		**16.6**
- Prior year		15.2
- From 1 January 2018 to 30 June 2019		18.0
Prior years	A3	**33.2**
Reimbursement of other associated costs **		**3.1**
		52.9
Made up of:		
Trade payables and accruals		**45.9**
Emission obligations		**7.0**
		52.9

* Included in emissions associated with electricity generation in note A3.
** Included in other operating expenses in note A3.

A3. Segment reporting

The Group reports activities under four operating segments as follows:

Segment	Activity
Retail	Supply of energy (electricity, gas and LPG) and related services to end users.
Wholesale	Supply of electricity to the wholesale electricity market, supply of gas and LPG to wholesale customers and the Retail segment and the sale and purchase of derivatives to fix the price of electricity.
Kupe	Exploration, development and production of gas, oil and LPG. Supply of gas and LPG to the Wholesale segment and supply of light oil.
Corporate	Head office functions, including human resources, finance, corporate relations, property management, legal, corporate governance and strategy.

A3. Segment reporting (continued)

Year ended 30 June 2021	Note	Retail $ million	Wholesale $ million	Kupe $ million	Corporate $ million	Total $ million
Electricity		1,328.3	1,413.5	-	-	2,741.8
Gas		162.9	106.9	-	-	269.8
LPG		82.9	11.8	-	-	94.7
Oil		-	-	23.1	-	23.1
Emissions on fuel sales and electricity contracts		0.4	47.6	-	-	48.0
Emission unit revenue from trading		-	39.0	-	-	39.0
Other revenue		2.7	0.7	0.5	0.9	4.8
Total external revenue		**1,577.2**	**1,619.5**	**23.6**	**0.9**	**3,221.2**
Electricity - intersegment		-	596.5	-	-	596.5
Gas - intersegment		-	79.8	89.8	-	169.6
LPG - intersegment		-	23.0	27.3	-	50.3
Emissions on fuel sales - intersegment		-	-	11.1	-	11.1
Total segment revenue		**1,577.2**	**2,318.8**	**151.8**	**0.9**	**4,048.7**
Electricity purchases		-	(1,243.8)	-	-	(1,243.8)
Electricity network, transmission, levies and meters		(495.9)	(16.4)	-	-	(512.3)
Fuel consumed in electricity generation		-	(308.7)	-	-	(308.7)
Gas purchases		(0.1)	(178.4)	-	-	(178.5)
Gas network, transmission, levies and meters		(66.0)	(17.4)	-	-	(83.4)
LPG purchases, inventory changes and transportation costs		(15.3)	(6.9)	0.1	-	(22.1)
Oil inventory changes, storage and transportation costs		-	-	(0.8)	-	(0.8)
Emissions associated with electricity generation *		-	(101.2)	-	-	(101.2)
Emission costs associated with arbitration decision in respect of gas supplied in prior years	A2	-	(33.2)	-	-	(33.2)
Emissions associated with fuel sales		-	(31.6)	(27.3)	-	(58.9)
Emission unit expenses from trading		-	(34.9)	-	-	(34.9)
Other costs		(0.5)	-	(14.0)	-	(14.5)
Total external costs		**(577.8)**	**(1,972.5)**	**(42.0)**	**-**	**(2,592.3)**
Electricity purchases - intersegment		(596.5)	-	-	-	(596.5)
Fuel consumed in electricity generation - intersegment		-	(89.8)	-	-	(89.8)
Gas purchases - intersegment		(79.8)	-	-	-	(79.8)
LPG purchases, inventory changes and transportation costs - intersegment		(23.0)	(27.3)	-	-	(50.3)
Emission costs - intersegment		-	(11.1)	-	-	(11.1)
Total segment costs		**(1,277.1)**	**(2,100.7)**	**(42.0)**	**-**	**(3,419.8)**
Gross margin		**300.1**	**218.1**	**109.8**	**0.9**	**628.9**
Employee benefits		(53.4)	(31.7)	-	(30.7)	(115.8)
Other operating expenses *		(74.4)	(42.3)	(22.4)	(16.1)	(155.2)
Earnings before net finance expense, income tax, depreciation, depletion, amortisation, impairment, fair value changes and other gains and losses (EBITDAF)		**172.3**	**144.1**	**87.4**	**(45.9)**	**357.9**
Depreciation, depletion and amortisation		(28.8)	(123.1)	(37.6)	(7.4)	(196.9)
Revaluation of generation assets		-	27.9	-	-	27.9
Change in fair value of financial instruments		-	(87.3)	(0.1)	0.6	(86.8)
Share of associates and joint ventures		1.8	(0.5)	-	-	1.3
Other gains (losses)		(0.1)	2.9	-	0.5	3.3
Profit (loss) before net finance expense and income tax		**145.2**	**(36.0)**	**49.7**	**(52.2)**	**106.7**
Finance revenue		-	-	-	0.4	0.4
Finance expense		(0.6)	(3.1)	(2.6)	(53.6)	(59.9)
Profit (loss) before income tax		**144.6**	**(39.1)**	**47.1**	**(105.4)**	**47.2**
Other segment information						
Capital expenditure excluding leased assets		26.4	30.7	22.0	6.2	85.3

* These lines include costs associated with the arbitration decision in respect of a carbon liability dispute. Refer to note A2 for further information.

A3. Segment reporting (continued)

Year ended 30 June 2020	Retail $ million	Wholesale $ million	Kupe $ million	Corporate $ million	Total $ million
Electricity	1,326.4	805.2	-	-	2,131.6
Gas	154.2	105.5	-	-	259.7
LPG	77.4	3.3	7.8	-	88.5
Oil	-	-	27.8	-	27.8
Emissions on fuel sales and electricity contracts	0.2	17.1	0.9	-	18.2
Emission unit revenue from trading	-	62.3	-	-	62.3
Other revenue	2.1	0.4	0.3	0.6	3.4
Total external revenue	1,560.3	993.8	36.8	0.6	2,591.5
Electricity - intersegment	-	567.6	-	-	567.6
Gas - intersegment	-	60.7	87.8	-	148.5
LPG - intersegment	-	24.1	20.5	-	44.6
Emissions on fuel sales - intersegment	-	-	2.4	-	2.4
Total segment revenue	1,560.3	1,646.2	147.5	0.6	3,354.6
Electricity purchases	-	(739.1)	-	-	(739.1)
Electricity network, transmission, levies and meters	(566.7)	(17.1)	-	-	(583.8)
Fuel consumed in electricity generation	-	(238.7)	-	-	(238.7)
Gas purchases	(0.2)	(189.5)	-	-	(189.7)
Gas network, transmission, levies and meters	(65.3)	(19.8)	-	-	(85.1)
LPG purchases, inventory changes and transportation costs	(16.2)	(5.7)	-	-	(21.9)
Oil inventory changes, storage and transportation costs	-	-	(0.9)	-	(0.9)
Emissions associated with electricity generation	-	(22.9)	-	-	(22.9)
Emissions associated with fuel sales	-	(21.8)	(17.4)	-	(39.2)
Emission unit expenses from trading	-	(51.7)	-	-	(51.7)
Other costs	(0.1)	-	(12.5)	-	(12.6)
Total external costs	(648.5)	(1,306.3)	(30.8)	-	(1,985.6)
Electricity purchases - intersegment	(567.6)	-	-	-	(567.6)
Fuel consumed in electricity generation - intersegment	-	(87.8)	-	-	(87.8)
Gas purchases - intersegment	(60.7)	-	-	-	(60.7)
LPG purchases, inventory changes and transportation costs - intersegment	(24.1)	(20.5)	-	-	(44.6)
Emission costs - intersegment	-	(2.4)	-	-	(2.4)
Total segment costs	(1,300.9)	(1,417.0)	(30.8)	-	(2,748.7)
Gross margin	259.4	229.2	116.7	0.6	605.9
Employee benefits	(49.7)	(29.8)	-	(25.3)	(104.8)
Other operating expenses	(75.7)	(34.5)	(22.9)	(12.4)	(145.5)
Earnings before net finance expense, income tax, depreciation, depletion, amortisation, impairment, fair value changes and other gains and losses (EBITDAF)	134.0	164.9	93.8	(37.1)	355.6
Depreciation, depletion and amortisation	(26.5)	(135.3)	(39.3)	(8.7)	(209.8)
Impairment of non-current assets	(2.9)	(0.1)	-	-	(3.0)
Change in fair value of financial instruments	-	(1.3)	0.1	0.6	(0.6)
Share of associates and joint ventures	(0.6)	(0.6)	-	-	(1.2)
Other gains (losses)	(0.6)	(7.8)	0.1	(0.5)	(8.8)
Profit (loss) before net finance expense and income tax	103.4	19.8	54.7	(45.7)	132.2
Finance revenue	0.1	-	-	0.1	0.2
Finance expense	(0.7)	(3.5)	(3.1)	(63.5)	(70.8)
Profit (loss) before income tax	102.8	16.3	51.6	(109.1)	61.6
Other segment information					
Capital expenditure excluding leased assets	24.2	57.6	21.9	2.1	105.8

GENESIS ANNUAL REPORT 2021 / NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

A3. Segment reporting (continued)

Segmentation
The segments are based on the different products and services offered by the Group. All segments operate in New Zealand. No operating segments have been aggregated. The Group has no individual customers that account for 10.0 per cent or more of the Group's external revenue (2020: none). Included in the Retail segment result is $41.2 million of costs (2020: $40.5 million) relating to the Technology and Digital team who provide services to all of the segments.

Intersegment revenue
Sales between segments is based on transfer prices developed in the context of long-term contracts. The electricity transfer price per MWh charged between Wholesale and Retail was $90.73 (2020: $85.97).

Reconciliation of expenses in the income statement to the segment note	2021 $ million	2020 $ million
Expenses	(2,810.4)	(2,235.9)
Arbitration decision in respect of a carbon liability dispute		
- 2021 emission costs	(16.6)	-
- 2020 emission costs	(15.2)	-
- 2018 and 2019 emission costs	(18.0)	-
- Reimbursement of other associated costs	(3.1)	-
Total expenses in the income statement	**(2,863.3)**	(2,235.9)
Made up of:		
Total segment costs	(2,592.3)	(1,985.6)
Employee benefits	(115.8)	(104.8)
Other operating expenses	(155.2)	(145.5)
Total expenses in the segment note	**(2,863.3)**	(2,235.9)

A4. Revenue

The accounting policies applied to material revenue streams are disclosed below and the quantum of each revenue stream is disclosed in note A3. Emissions on fuel sales and electricity contracts is not a separate performance obligation under the revenue standard. It has been reported separately as it provides useful information to the financial statement users.

Revenue stream	Contract term	Nature of goods or services and revenue recognition	Payment terms
Electricity (retail), gas and LPG (including emissions)	0-36 months	Daily supply of electricity, gas or metered LPG over the contract period. Revenue is recognised over time at the end of each day when the consumption is known. The amount of revenue recognised is based on the amount the Group has the right to invoice. Individual supply of bottled LPG. Revenue is recognised when the bottle is delivered to the customer.	Customers are invoiced monthly and payment is due between two weeks to one month after invoice.
Electricity (wholesale)	No term	Half hourly supply of electricity. Revenue is recognised over time when each trading period is concluded and the electricity generation is known.	The clearing manager calculates and invoices the revenue. Payment is received on the 20th of the following month.
Emission unit revenue from trading	No term	Sale of emission units. Revenue is recognised at the point in time that the emission unit is confirmed as being transferred into the acquirer's emission unit account.	Payment is due within five business days of the units being transferred.
Oil	12 months	Individual oil shipments. Revenue is recognised on the bill of lading date.	Payment is due no later than 30 days from the bill of lading date.

Judgement used in determining revenue
Where customer meters are unbilled at balance date the Group uses judgement to determine the volume of the unbilled revenue. The Group estimates the unbilled volume using historical consumption information. Unbilled revenue is disclosed in note C1. Where a discount is offered, revenue is initially recognised net of the estimated discount.

A5. Depreciation, depletion and amortisation

	Note	2021 $ million	2020 $ million
Property, plant and equipment	B1	**134.6**	147.4
Oil and gas assets	B2	**35.5**	36.2
Intangibles (excluding amortisation of deferred customer acquisition costs)	B3	**26.8**	26.2
		196.9	209.8

A6. Income tax

	2021 $ million	2020 $ million
Current tax	**66.7**	44.4
Deferred tax	**(53.0)**	(28.8)
Income tax expense	**13.7**	15.6

Reconciliation of pre-tax accounting profit to income tax expense	2021 $ million	2020 $ million
Profit before income tax	**47.2**	61.6
Income tax at 28%	**13.2**	17.2
Tax effect of adjustments:		
Under (over) provided in prior periods	**(0.5)**	(0.4)
Non-deductible expenditure and other adjustments	**1.0**	0.4
Reintroduction of tax depreciation on buildings	**-**	(1.6)
Income tax expense	**13.7**	15.6

Income tax
Income tax is recognised in the income statement unless it relates to other comprehensive income.

Current tax
Current tax is the expected tax payable on taxable income for the year, using tax rates enacted or substantively enacted at the end of the reporting period, together with any unpaid tax or adjustment to tax payable in respect of previous years.

Deferred tax
Deferred tax reflects the differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. The amount of deferred tax provided is based on the expected manner of realisation or settlement of the carrying amounts of assets and liabilities, using tax rates enacted or substantively enacted at the end of the reporting period.

Deferred tax	Property, plant and equipment $ million	Oil and gas assets $ million	Provisions $ million	Intangibles $ million	Derivatives $ million	Other $ million	Total $ million
Balance as at 1 July 2019	625.9	78.8	(45.3)	20.4	(19.9)	(6.1)	653.8
Recognised in the income statement	(10.8)	(6.6)	0.9	(2.4)	0.2	(10.1)	(28.8)
Recognised in other comprehensive income	-	-	-	-	6.6	-	6.6
Balance as at 30 June 2020	**615.1**	**72.2**	**(44.4)**	**18.0**	**(13.1)**	**(16.2)**	**631.6**
Recognised in the income statement	(7.5)	(6.5)	(1.1)	(2.1)	(24.7)	(11.1)	(53.0)
Recognised in other comprehensive income	45.8	-	-	-	(2.9)	-	42.9
Balance as at 30 June 2021	**653.4**	**65.7**	**(45.5)**	**15.9**	**(40.7)**	**(27.3)**	**621.5**

GENESIS ANNUAL REPORT 2021 / NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

B. Operating assets

B1. Property, plant and equipment	Note	Generation assets $ million	Other property, plant and equipment $ million	Capital work in progress $ million	Leased assets $ million	Total $ million
Carrying value at 1 July 2019		3,259.0	79.4	53.3	57.3	3,449.0
Additions		-	-	65.8	4.7	70.5
Change in rehabilitation and contractual arrangement assets		-	-	(0.3)	0.1	(0.2)
Transfer between asset categories		49.3	13.2	(62.5)	-	-
Transfer to intangible assets	B3	-	-	(1.3)	-	(1.3)
Disposals		(1.1)	(1.0)	-	-	(2.1)
Impairment		-	-	(0.1)	-	(0.1)
Depreciation expense recognised in inventories		-	-	-	(0.7)	(0.7)
Depreciation expense	A5	(129.9)	(11.0)	-	(6.5)	(147.4)
Carrying value at 30 June 2020		**3,177.3**	**80.6**	**54.9**	**54.9**	**3,367.7**
Additions		-	-	41.9	26.1	68.0
Revaluation of generation assets						
Increase taken to revaluation reserve		163.6	-	-	-	163.6
Increase taken to the income statement		27.9	-	-	-	27.9
Change in rehabilitation and contractual arrangement assets		-	-	1.7	-	1.7
Transfer between asset categories		24.2	19.6	(43.8)	-	-
Transfer to intangible assets	B3	-	-	(1.6)	-	(1.6)
Disposals		(0.9)	(0.4)	-	(4.7)	(6.0)
Depreciation expense recognised in inventories		-	-	-	(1.3)	(1.3)
Depreciation expense	A5	(118.9)	(9.8)	-	(5.9)	(134.6)
Carrying value at 30 June 2021		**3,273.2**	**90.0**	**53.1**	**69.1**	**3,485.4**

Summary of cost and accumulated depreciation and impairment

	Generation assets	Other property, plant and equipment	Capital work in progress	Leased assets	Total
Fair value or cost	3,307.2	164.8	56.2	134.3	3,662.5
Accumulated depreciation and impairment	(129.9)	(84.2)	(1.3)	(79.4)	(294.8)
Carrying value at 30 June 2020	**3,177.3**	**80.6**	**54.9**	**54.9**	**3,367.7**
Fair value or cost	3,273.2	174.6	54.4	141.2	3,643.4
Accumulated depreciation and impairment	-	(84.6)	(1.3)	(72.1)	(158.0)
Carrying value at 30 June 2021	**3,273.2**	**90.0**	**53.1**	**69.1**	**3,485.4**

Generation assets

Generation assets include land, buildings, and plant and equipment associated with generation assets. Generation assets are recognised in the balance sheet at fair value at the date of the valuation, less any subsequent accumulated depreciation and impairment losses. The underlying assumptions used in the valuation are reviewed at each reporting date. Revaluations are performed with sufficient regularity to ensure the carrying amount does not materially differ from the estimated fair value at balance date.

Any increase in the valuation is recognised in other comprehensive income, unless it reverses a revaluation decrease for the same asset previously recognised in the income statement, in which case it is recognised in the income statement to the extent it reverses a decrease previously recognised. A decrease in carrying amount arising on revaluation is recognised in the income statement to the extent that it exceeds the balance, if any, held in the asset revaluation reserve for that asset. Accumulated depreciation at the date of the revaluation is eliminated against the gross carrying value so that the gross carrying amount after revaluation equals the revalued amount.

Subsequent additions to generation assets are recognised at cost. Cost includes the consideration given to acquire the asset plus any other costs incurred in bringing the asset to the location and condition necessary for its intended use, including major inspection costs, resource consent, relationship agreement costs and financing costs where appropriate.

Generation assets were revalued at 30 June 2021 to $3,273.2 million (2020: no revaluation adjustment was required) resulting in a net gain on revaluation of $191.5 million (2020: nil). The revaluation gain was principally driven by an increase in wholesale electricity prices, partially offset by lower net portfolio generation volumes and higher fuel costs. The revaluation increase taken to the income statement partially reverses previous revaluation decreases for Huntly units 1 to 4.

B1. Property, plant and equipment (continued)

The valuation is based on a discounted cash flow model prepared by Management, calculated by generating scheme, except for the Huntly site where it is calculated by type of unit (units 1 to 4, unit 5 and unit 6). As the key inputs into the valuation are based on unobservable market data, the valuation is classified as level 3 in the fair value hierarchy. It requires significant judgement, and therefore there is a range of reasonably possible assumptions that could be used in estimating the fair value. Refer to note F8 for an overview of the fair value hierarchy.

If generation assets were carried at historical cost less accumulated depreciation and accumulated impairment, the carrying amount would be approximately $1,515.0 million (2020: $1,534.6 million).

Key estimates and judgements

Wholesale electricity price path
The wholesale electricity price path is the key driver of changes in the valuation. The price path is an average of the internally generated price path and price paths published by two independent third parties, and as a result reflects the uncertainty surrounding Tiwai Point smelter operating beyond 2024 and the impact this could have on future prices.

Internally generated price path
The internally generated price path assumes wholesale electricity demand will continue to grow based on the latest available industry analysis and Genesis' view of future economic growth. Forecast hydrology is based on 83 years of historical hydrological inflow data. New and retiring generation plant assumptions are based on publicly available information and Genesis' view on wholesale electricity prices required to support the plant. The internally generated price path assumes that Tiwai Point smelter will continue to operate beyond 2024.

Price paths published by independent third parties
Independent third party price path assumptions on the future of Tiwai Point smelter range from Tiwai Point smelter exiting in 2025 through to operating beyond 2025 or the generation load consumed by Tiwai Point smelter being replaced by other major industrial loads beyond 2025.

Significant unobservable inputs in the valuation model were:

Significant unobservable inputs	Method used to determine input	Sensitivity range	Increase/(decrease) in fair value of generation assets	Inter-relationships between unobservable inputs
Wholesale electricity price path	The average annual wholesale electricity price ranged between $81 per MWh and $190 per MWh referenced to the Otahuhu 220KV locational node from July 2021 to June 2041.	+10% - 10%	$557 million ($557) million	Hydrological inflows affect generation volumes, as well as wholesale electricity prices.
Generation volumes	In-house modelling of the wholesale electricity market. The generation volumes used in the valuation range between 2,678 GWh and 7,628 GWh per annum. The low end of the range relates to periods where there is no thermal generation.	+10% - 10%	$419 million ($419) million	Wholesale electricity prices affect the amount of generation.
Discount rate	Pre-tax equivalent discount rate of 9.3%.	+1% - 1%	($313) million $402 million	Discount rate is independent of wholesale electricity prices and generation volumes.

Other key assumptions

The valuation also includes assumptions around market fuel and electricity supply and demand. Our longer term demand assumption increases from industrial electrification and electric vehicle fleet growth in response to climate change. The impact of COVID-19 has also been considered in the valuation, primarily through the wholesale electricity price path. Our current view is that Genesis' generation will be less affected by COVID-19 as it is an essential service and the vaccine rollout is underway. Changes in these interrelated factors will impact the wholesale electricity price path and generation volumes. These factors are reviewed for reasonableness by senior management personnel who are responsible for the price path used by the business.

Leased assets

Leased assets include right of use assets recognised in relation to office buildings, land for generation sites and LPG depot leases. The cost of leased assets comprises the amount of the corresponding initial lease liability, lease payments made at or before the commencement date, initial direct costs and restoration costs. The leased asset is subsequently measured at cost less accumulated depreciation and impairment losses. The leased asset is depreciated over the lease term.

All other categories of property, plant and equipment

All other categories of property, plant and equipment, with the exception of land and capital work in progress, are recognised at cost less accumulated depreciation and any accumulated impairment losses. Land and capital work in progress are not depreciated.

Depreciation

Depreciation is calculated on a straight line basis. The estimated useful lives are reviewed annually. An asset's carrying amount is written down immediately to its recoverable amount if the carrying amount is greater than its estimated recoverable amount.

Asset category	Estimated useful lives
Generation assets	up to 85 years
Other property, plant and equipment	3 to 50 years
Leased assets	4 to 38 years

B2. Oil and gas assets	Note	Exploration, evaluation and development expenditure $ million	Oil and gas producing assets $ million	Other oil and gas assets $ million	Capital work in progress $ million	Total $ million
Carrying value at 1 July 2019		14.4	287.3	16.8	5.6	324.1
Additions		11.9	0.8	-	9.2	21.9
Transfer between asset categories		-	9.9	0.4	(10.3)	-
Change in rehabilitation asset		-	(2.4)	-	-	(2.4)
Depreciation and depletion expense	A5	-	(35.0)	(1.2)	-	(36.2)
Carrying value at 30 June 2020		**26.3**	**260.6**	**16.0**	**4.5**	**307.4**
Additions		18.1	0.7	-	3.2	22.0
Transfer between asset categories		-	4.2	0.1	(4.3)	-
Depreciation and depletion expense	A5	-	(34.3)	(1.2)	-	(35.5)
Carrying value at 30 June 2021		**44.4**	**231.2**	**14.9**	**3.4**	**293.9**

Summary of cost and accumulated depreciation, depletion and impairment

Cost	44.8	767.7	25.5	4.5	842.5
Accumulated depreciation, depletion and impairment	(18.5)	(507.1)	(9.5)	-	(535.1)
Carrying value at 30 June 2020	**26.3**	**260.6**	**16.0**	**4.5**	**307.4**
Cost	62.9	772.7	25.6	3.4	864.6
Accumulated depreciation, depletion and impairment	(18.5)	(541.5)	(10.7)	-	(570.7)
Carrying value at 30 June 2021	**44.4**	**231.2**	**14.9**	**3.4**	**293.9**

Exploration, evaluation and development expenditure

All exploration and evaluation costs, including directly attributable overheads and general permit activity, are expensed as incurred except for the costs of drilling exploration wells, compression work and the costs of acquiring new interests. The costs of drilling exploration wells and compression work is initially capitalised pending the determination of the success of the wells or compression work. Costs are expensed immediately where the work does not result in a successful discovery. Costs incurred before the Group has obtained the legal rights to explore an area are expensed as incurred.

Exploration, evaluation and development expenditure assets are not amortised; instead, they are assessed annually for indicators of impairment. Any impairment is recognised in the income statement. Once development of a project has been completed, the accumulated expenditure in relation to the project is transferred to oil and gas producing assets.

Oil and gas producing assets

Oil and gas producing assets include costs associated with the production station, platform and pipeline transferred from exploration, evaluation and development expenditure, mining licences and major inspection costs. Depletion of oil and gas producing assets, excluding major inspection costs, is calculated on a unit-of-production basis using proved remaining reserves ('1P') estimated to be obtained from, or processed by, the specific asset. Major inspection costs are depreciated on a straight line basis over the period up to the next major inspection. Major inspections occur every two to ten years depending on the nature of the work undertaken.

Other oil and gas assets

Other oil and gas assets include land, buildings, storage facilities, sales pipeline and motor vehicles. The cost of other oil and gas assets, less any estimated residual value, is depreciated on a straight line basis.

Asset category	Estimated useful lives
Buildings	50 years
Storage facilities	25 years
Sales pipeline	25 years
Motor vehicles	5 years

B2. Oil and gas assets (continued)

Key estimates and judgements

Proved reserves ('1P') are the estimated quantities of oil and gas that geological and engineering data demonstrates with reasonable certainty to be recoverable in future years from known reservoirs, under existing economic and operating conditions. Proved reserves ('1P') are defined as those that have a 90 per cent likelihood of being delivered. Because the geology of the Kupe oil and gas field subsurface cannot be examined directly, an indirect technique, known as volumetrics, has been used to estimate the size and recoverability of the reserve. There are high levels of uncertainty in terms of accessibility of reserves through sealing faults and pressure support.

In the prior year the Joint Venture Operator performed a review of Kupe's reserves. Genesis engaged Gaffney Cline, an independent expert, to review and verify the Operator's reserve estimate, which resulted in an increase in remaining reserves for both proved reserves ('1P') and proved and probable reserves ('2P'). No change in reserves was considered necessary for the current year. A reduction of 10 per cent in these reserves would increase depletion charges going forward by approximately $3.4 million per annum at current production rates. The table below presents the remaining Kupe oil and gas field reserves in Peta joule equivalents ('PJe') of which the Group has a 46.0 per cent interest (2020: 46.0 per cent).

	Proved reserves ('1P') **2021** PJe	Proved reserves ('1P') 2020 PJe	Proved and probable reserves ('2P') **2021** PJe	Proved and probable reserves ('2P') 2020 PJe
Opening remaining field reserves at 1 July	**250.0**	188.1	**340.5**	319.0
Change in reserve estimate	**-**	94.5	**-**	54.1
Production	**(31.7)**	(32.6)	**(31.7)**	(32.6)
Closing remaining field reserves at 30 June	**218.3**	250.0	**308.8**	340.5
Developed	**51.8**	83.5	**108.5**	140.2
Undeveloped	**166.5**	166.5	**200.3**	200.3
Closing remaining field reserves at 30 June	**218.3**	250.0	**308.8**	340.5

A portion of the undeveloped reserves will be reclassified to developed reserves once the inlet compression project is completed in September 2021. Further investment will be required to access the remaining undeveloped field reserves disclosed above.

B3. Intangible assets	Note	Goodwill $ million	Software $ million	Emission units held for own use $ million	Contractual arrangements $ million	Deferred customer acquisition costs $ million	Total $ million
Carrying value at 1 July 2019		228.4	57.2	7.6	72.6	5.8	371.6
Additions		-	18.1	64.2	0.1	3.6	86.0
Transfer from property, plant and equipment	B1	-	1.3	-	-	-	1.3
Disposal or surrender		-	(0.4)	(66.9)	-	-	(67.3)
Impairment		-	(2.9)	-	-	-	(2.9)
Amortisation expense	A5	-	(17.6)	-	(8.6)	-	(26.2)
Amortisation expense included in other operating expenditure		-	-	-	-	(4.2)	(4.2)
Carrying value at 30 June 2020		**228.4**	**55.7**	**4.9**	**64.1**	**5.2**	**358.3**
Additions		-	21.4	69.0	0.7	3.3	94.4
Transfer from property, plant and equipment	B1	-	1.6	-	-	-	1.6
Disposal or surrender		-	-	(18.5)	-	-	(18.5)
Amortisation expense	A5	-	(18.7)	-	(8.1)	-	(26.8)
Amortisation expense included in other operating expenditure		-	-	-	-	(4.1)	(4.1)
Carrying value at 30 June 2021		**228.4**	**60.0**	**55.4**	**56.7**	**4.4**	**404.9**

Summary of cost and accumulated amortisation and impairment

Cost	228.4	201.0	4.9	91.0	22.1	547.4
Accumulated amortisation and impairment	-	(145.3)	-	(26.9)	(16.9)	(189.1)
Carrying value at 30 June 2020	**228.4**	**55.7**	**4.9**	**64.1**	**5.2**	**358.3**
Cost	228.4	223.7	55.4	91.5	9.0	608.0
Accumulated amortisation and impairment	-	(163.7)	-	(34.8)	(4.6)	(203.1)
Carrying value at 30 June 2021	**228.4**	**60.0**	**55.4**	**56.7**	**4.4**	**404.9**

The current portion of intangible assets disclosed in the balance sheet relates to emission units held for own use. All other intangible assets are non-current.

B3. Intangible assets (continued)

Goodwill

Goodwill represents the excess of the cost of a business acquisition over the fair value of the Group's share of the net identifiable assets, liabilities and contingent liabilities at the date of acquisition. Goodwill is assessed as having an indefinite useful life and is not amortised but is subject to impairment testing at each reporting date or whenever there are indications of impairment. For the purpose of impairment testing, goodwill has been allocated to the following cash-generating units ('CGU'):

Goodwill by CGU	2021 $ million	2020 $ million
Retail – electricity and gas	**102.6**	102.6
Retail – LPG	**112.6**	112.6
Kupe	**13.2**	13.2
Total goodwill	**228.4**	228.4

Retail – electricity and gas

The goodwill associated with the electricity and gas business mainly relates to the acquisition of NGC electricity and gas business in 2002 and 2003. The impairment test is based on an estimated discounted cash flow analysis (value in use). Estimated future cash flow projections are based on the Group's five-year business plan for the CGU. Cash flows beyond the five-year business plan are extrapolated using a 1.0 per cent year-on-year growth rate (2020: 1.0 per cent). The estimated future cash flow projections are discounted using a pre-tax equivalent discount rate of 9.3 per cent (2020: 9.4 per cent). Any reasonably possible change in key assumptions on which the recoverable amount is based is not expected to cause the carrying value of the goodwill to exceed its recoverable amount.

Retail – LPG

The goodwill associated with LPG relates to the acquisition of the LPG business from Nova Energy on 1 June 2017. The impairment test is based on an estimated discounted cash flow analysis (fair value less disposal costs) using ten years of forecast information. Cash flows beyond the forecast period are based on an EBITDAF multiple of 7.5x (2020: 7.5x). The estimated future cash flow projections are discounted using a pre-tax equivalent discount rate of 10.3 per cent (2020: 9.4 per cent). The forecast takes into consideration both the acquired and existing LPG business, as the assets of the acquired business are used to service the pre-acquisition LPG customers. Any reasonably possible change in key assumptions on which the recoverable amount is based is not expected to cause the carrying value of the goodwill to exceed its recoverable amount. As the valuation is based on inputs that are not based on observable market data the valuation is classified as level three in the fair value hierarchy. Refer to note F8 for an overview of the fair value hierarchy.

Kupe

The goodwill associated with Kupe relates to the acquisition of the Kupe subsidiaries from New Zealand Oil and Gas Limited ('NZOG') on 1 January 2017. The impairment test is based on an estimated discounted cash flow analysis (value in use). The estimated future cash flow projections are based on proved and probable reserves ('2P'), as disclosed in note B2. The pre-tax equivalent discount rate was 11.3 per cent (2020: 9.4 per cent). Any reasonably possible change in key assumptions on which the recoverable amount is based is not expected to cause the carrying value of the goodwill to exceed its recoverable amount.

Key assumptions in the impairment tests for electricity and gas and LPG were:

Assumptions	Method of determination
Customer numbers and customer churn	Review of actual customer numbers and historical data regarding movements in customer numbers (the historical analysis is considered against expected market trends and competition for customers).
Gross margin (electricity and gas)	Review of actual gross margins and consideration of expected market movements and impacts.
EBITDAF (LPG)	Review of actual EBITDAF and consideration of expected market movements and impacts.
Cost to serve	Review of actual costs to serve and consideration of expected future costs.

B3. Intangible assets (continued)

Software

Software are assets with finite lives. These assets are recognised at cost less accumulated amortisation and impairment losses. Amortisation is recognised in the income statement on a straight line basis over the estimated useful life of the asset from the date it is available for use. The estimated useful life is between one and ten years.

Emission units held for own use

Emission units held for own use are used to settle the Group's emission obligation. The units are initially recognised at fair value and are not revalued. As the units do not have an expiry date they have an indefinite useful life. The units are not amortised but are subject to impairment testing.

Contractual arrangements

Contractual arrangements include customer contracts and relationships acquired through business acquisitions, and sponsorship contracts.

Customer contracts and relationships

Customer contracts and relationships are assets with finite lives. These assets are recognised at cost less accumulated amortisation and impairment losses.

Amortisation of customer contracts and relationships related to Kupe are recognised in the income statement on a units-of-use basis, using proved remaining reserves ('1P') expected to be obtained over the contract period. Remaining reserves used in the calculations range from 129.0 to 218.3 PJe (2020: 160.7 to 250.0 PJe). Refer to note B2 for further information on the reserves estimate.

Amortisation of customer contracts and relationships related to the LPG business are recognised in the income statement on a diminishing value basis over the estimated life of the contract or relationship to reflect the likely churn of customers. The majority of the assets have fifty year lives with one contract having a five-year life.

Sponsorship contracts

Sponsorship contracts are assets with finite lives. These assets are recognised at cost less accumulated amortisation and impairment losses. Amortisation is recognised in the income statement on a straight line basis over the estimated useful life of the asset from the date it is available for use. The useful life is based on the contract period, which ranges between one and fifteen years.

Deferred customer acquisition costs

Customer acquisition costs that are directly attributable to securing a particular customer contract are capitalised and amortised over the length of the average customer tenure (30 months). Amortisation of these costs is included within operating expenditure.

GENESIS ANNUAL REPORT 2021 / NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

C. Working capital and provisions

C1. Receivables and prepayments	2021 $ million	2020 $ million
Trade receivables	**186.9**	113.3
Accrued revenue	**105.2**	103.8
Expected credit loss provision	**(5.0)**	(8.0)
Deferred customer account credits	**4.4**	3.6
Total	**291.5**	212.7
Advances to associates and joint ventures	**2.2**	-
Lease receivable	**3.7**	-
Emission units receivable	**31.8**	5.9
Other receivables	**10.7**	8.9
Prepayments	**3.6**	10.6
Total	**343.5**	238.1
Current	**339.4**	235.0
Non-current	**4.1**	3.1
Total	**343.5**	238.1

Trade receivables and accruals
Trade receivables and accruals are initially recognised at fair value and are subsequently measured at amortised cost. Trade receivables and accrued revenue that are known to be uncollectable are written off. Total bad debts written off during the year was $4.2 million (2020: $6.2 million).

Expected credit loss provision
The expected credit loss provision is calculated using the simplified approach, which takes into account the lifetime expected credit loss on trade receivables and accrued revenue. The allowance for expected credit losses is calculated using a provision matrix, which is based on historic write-offs. Where possible the percentages are adjusted for foreseeable future economic conditions which may impact the collectability of trade receivables and accrued revenue. In the prior year the provision included an additional amount in anticipation of a possible recession as a result of COVID-19, which was expected to impact the collectability of trade receivables and accrued revenue. The Group has not seen a significant change in the collectability of trade receivables and as a result the additional provision made in the prior year of $2.5 million has been released.

Expected credit loss	Residential	Business
0-30 days overdue	0.71%	0.12%
30-60 days overdue	2.92%	1.20%
60-90 days overdue	5.77%	2.75%
90+ days overdue	3.09%	0.47%
Debt at collection agency	85%	58%
Unoccupier debt	100%	100%

Deferred customer account credits
Account credits given to customers are included in the measurement of revenue. The account credit is spread over the term of the customer contract.

Lease receivable
The Group is an intermediate lessor for property leases that it has subleased to another party. The head lease and the sublease are accounted for as two separate contracts. Subleases that transfer substantially all of the risks and rewards of ownership to the lessee are classified as finance leases, all other subleases are classified as operating leases. The assessment is based on the right-of-use asset arising from the head lease. Amounts due from lessees under finance leases are recognised as lease receivables. Finance lease income is allocated to individual periods based on a constant periodic rate of return. Rental income from operating leases is recognised on a straight line basis over the term of the lease.

C2. Inventories	2021 $ million	2020 $ million
Fuel	**47.0**	59.4
Petroleum products	**2.3**	2.5
Consumables and spare parts	**29.5**	29.1
Emission units held for trading	**14.4**	7.0
Total	**93.2**	98.0

Fuel, petroleum, consumables and spare parts
Fuel, petroleum, consumables and spare parts are recognised at the lower of cost and net realisable value. Cost is determined using the weighted average cost basis which includes expenditure incurred in bringing the inventories to their present location and condition, including shipping and handling. Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs necessary to make the sale.

Fuel inventories mainly consist of coal used in electricity production. Fuel inventories (excluding natural gas) expensed during the year amounted to $207.1 million (2020: $103.1 million).

Petroleum products consist of LPG and light crude oil held for resale produced from the Kupe production facility. Petroleum products expensed during the year amounted to $22.4 million (2020: $25.8 million).

Consumables and spare parts are held to service or repair generating assets. Consumables and spare parts relating to Huntly unit 6 are impaired when incurred as the fair value of this unit is nil.

Emission units held for trading
Emission units held for trading are measured at fair value. Changes in the fair value are recognised in the income statement within other gains (losses). The fair value is determined using CommTrade's forward curve. As the fair value is calculated using inputs that are not quoted prices, the units are classified as level two in the fair value hierarchy. Refer to note F8 for an overview of the fair value hierarchy.

C3. Payables and accruals	2021 $ million	2020 $ million
Trade payables and accruals	**297.9**	200.7
Employee benefits	**16.4**	13.4
Emission obligations	**80.5**	27.6
Total	**394.8**	241.7
Current	**390.5**	233.6
Non-current	**4.3**	8.1
Total	**394.8**	241.7

C3. Payables and accruals (continued)

Trade payables and accruals
Trade payables and accruals are recognised when the Group becomes obligated to make future payments, resulting from the purchase of goods or services, and are subsequently carried at amortised cost.

Employee benefits
A liability for employee benefits (wages and salaries, annual and long service leave, and employee incentives) is recognised when it is probable that settlement will be required and the amount is capable of being measured reliably. Provisions made in respect of employee benefits are measured using the remuneration rate expected to apply at the time of settlement.

Emission obligations
Emission obligations are recognised as a liability when the Group incurs the emission obligation. Emission units payable to third parties are recognised at the average cost of emission units on hand, up to the amount of units on hand at the recognition date. Where the emission obligation exceeds the level of units on hand, the excess obligation is measured at the contract price where forward contracts exist or the market price for any obligation not covered by units on hand or forward contracts.

C4. Provisions	Note	Contractual arrangements $ million	Rehabilitation and restoration $ million	Other provisions $ million	Total $ million
Balance at 1 July 2019		51.8	112.2	1.2	165.2
Created		0.4	1.6	-	2.0
Released		(0.6)	(2.4)	-	(3.0)
Used		(6.7)	(1.7)	(0.3)	(8.7)
Time value of money adjustment	E6	1.4	3.6	-	5.0
Balance at 30 June 2020		**46.3**	**113.3**	**0.9**	**160.5**
Created		2.3	4.1	-	6.4
Used		(4.7)	-	(0.1)	(4.8)
Time value of money adjustment	E6	1.1	3.0	-	4.1
Balance at 30 June 2021		**45.0**	**120.4**	**0.8**	**166.2**
Current		5.6	3.3	-	8.9
Non-current		40.7	110.0	0.9	151.6
As at 30 June 2020		**46.3**	**113.3**	**0.9**	**160.5**
Current		4.4	2.5	0.2	7.1
Non-current		40.6	117.9	0.6	159.1
As at 30 June 2021		**45.0**	**120.4**	**0.8**	**166.2**

Contractual arrangements
Contractual arrangements provisions relate to sponsorship and relationship agreements with various parties. The provisions represent the present value of the best estimate of cash flows required to settle the Group's obligations under the agreements. The timing of the outflows is expected to occur over the next 18 years.

Rehabilitation and restoration
The majority of this provision relates to the remediation of the Huntly ash ponds and the Kupe production facility. The provision represents the present value of the Group's best estimate of future expenditure to be incurred to remediate the sites at balance date. Key assumptions include: an estimate of when the rehabilitation and restoration is likely to take place, the possible remediation alternatives available, the expected expenditures attached to each alternative and the foreign currency exchange rate.

There is no provision for the remediation of the Huntly generation site because the Group has the right to lease the site in perpetuity, there is no fixed or planned termination date for the Huntly lease and the site remains a key electricity generation site for the Group. The lease of the site is independent of decisions around the retirement of Huntly units 1 to 4, which are planned to be available to the electricity market until such time they are uneconomic to run. There may be costs and recoveries associated with retiring Huntly units 1 to 4 but these cannot be reliably estimated at this time.

Key estimates and judgements
The key assumptions that could have a material impact on the Kupe production facility rehabilitation estimate relate to foreign exchange rates, mobilisation and demobilisation costs for rig and offshore supply vessel and regulatory requirements in relation to the removal of the subsea pipeline. The majority of costs are based in United States dollars, and therefore are sensitive to fluctuations in foreign exchange rates. If the foreign exchange rate were to decrease by 10 per cent the provision would increase by $11.0 million. Given the equipment required to complete the rehabilitation comes from overseas, the mobilisation and demobilisation costs can fluctuate significantly depending on the volume of work the contractor has nearby at the time the rehabilitation is required to be completed. The full cost of mobilisation and demobilisation has been provided for, given the uncertainty around the ability to share these costs with other entities. If the costs could be shared with other entities the provision would decrease by between $10.3 million and $20.6 million. The provision is based on the removal of the shore section of the subsea pipeline. The remaining pipeline will be flushed and left in situ. If all of the pipeline needed to be removed, the cost would increase the provision by $17.0 million. The rehabilitation is estimated to be completed in approximately 15 years.

GENESIS ANNUAL REPORT 2021 / NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

D. Group structure

D1. Subsidiaries and controlled entities

The consolidated financial statements include Genesis, its subsidiaries and controlled entities listed below. The two Trusts have been consolidated into the Group on the basis that Genesis determined how the Trusts were designed and how they operate; Genesis controls the financing and investing activities of the Trusts and the Trusts are dependent on funding from Genesis.

Name of entity	Principal activity	Place of incorporation	Interest held 2021 %	Interest held 2020 %
Kupe Venture Limited	Joint venture holding company	New Zealand	**100**	100
Genesis Energy Insurance Pte Limited	Captive insurance company	Singapore	**100**	100
Energy Online Limited	Holding company	New Zealand	**100**	-
Genesis Energy Talent Retention Plan Trust	Trust	New Zealand	**-**	-
Genesis Energy Limited Executive Long Term Incentive Plan Trust	Trust	New Zealand	**-**	-

All entities have 30 June balance dates.

D2. Joint operations

The Group has a 46.0 per cent interest in the Kupe production facility and Petroleum Mining Permit 38146 held by the Kupe Joint Venture (2020: 46.0 per cent). The principal activity of the Kupe Joint Venture is petroleum production and sales. The Joint Venture is unincorporated and operates in New Zealand. The Group is considered to share joint control based on the contractual arrangements between the Group and other joint operators that state unanimous decision-making is required for relevant activities that most significantly impact the returns of the joint operation.

Kupe Venture Limited is a party to a Deed of Cross Charge ('Deed'). The Deed was entered into pursuant to the Kupe Joint Venture Operating Agreement ('JVOA') for the purpose of securing the joint venture parties payment obligations under the JVOA. Each joint venture party has granted a security interest in its participating interest in the joint venture (together with certain related assets e.g. its petroleum derived from operations under the JVOA), in favour of the other joint venture parties. If a joint venture party defaults in the performance of an obligation to pay an amount due and payable under the JVOA, the appointed agent may enforce on behalf of the non-defaulting joint venture parties, the security interests created by the Deed.

Kupe Joint Venture is classified as a joint operation under NZ IFRS 11 *Joint Arrangements*. The Group's share of revenue, expenditure, assets and liabilities is included in the Group financial statements on a proportionate line-by-line basis. The operating results of the Kupe Joint Venture are included in the Kupe segment in note A3 and the Group's share of capital expenditure commitments is disclosed in note G4.

D3. Share in associates and joint ventures

The Group has interests in the following arrangements, which are accounted for as either associates or joint ventures using the equity method.

Name of entity	Principal activity	Place of incorporation	Interest held 2021 %	Interest held 2020 %	2021 $ million	2020 $ million
DrylandCarbon One Limited Partnership	Investment in forestry	New Zealand	**25.2**	25.2	**15.1**	5.3
Ecotricity Limited Partnership and Ecotricity GP Limited	Electricity retailer	New Zealand	**60.0**	-	**4.8**	-
Total share in associates					**19.9**	5.3
Sustainable Mobility Limited *	EV car sharing	New Zealand	**40.0**	40.0	**1.1**	1.4
Total share in associates and joint ventures					**21.0**	6.7

* Trading as Zilch

The Group acquired a 60.0 per cent interest in Ecotricity Limited Partnership and Ecotricity GP Limited on 2 February 2021.

The $1.3 million profit recorded in the income statement is made up of $1.6 million profit relating to associates and $0.3 million loss relating to joint ventures.

E. Funding

E1. Capital management

The Group manages its capital to ensure that each entity in the Group will be able to continue as a going concern while maximising the return to shareholders through the appropriate balance of debt and equity. This is achieved by ensuring that the level and timing of its capital investment programmes, equity raisings and dividend distributions are consistent with the Group's capital structure strategy. This strategy remains unchanged from previous years. The capital structure of the Group consists of debt, which includes the borrowings disclosed in note E5, cash and cash equivalents and equity attributable to the shareholders of Genesis, comprising issued capital, reserves and retained earnings, as disclosed in the balance sheet.

Under the Group's debt funding facilities, the Group has given undertakings that the ratio of debt to equity will not exceed a prescribed level and the interest cover will not be below a prescribed level. For the purpose of these undertakings the capital bonds and related interest costs are treated as 50 per cent equity. The covenants are monitored on a regular basis to ensure they are complied with. There were no breaches in covenants during the year (2020: nil).

E2. Share capital	Note	2021 No. of shares million	2021 $ million	2020 No. of shares million	2020 $ million
Balance as at 1 July		**1,036.4**	**635.0**	1,022.4	597.6
Shares acquired for LTI and TRP plans		**(0.1)**	**(0.4)**	-	(0.1)
Shares issued to LTI and TRP participants		**0.2**	**0.3**	0.2	0.2
Shares issued under dividend reinvestment plan	E4	**6.2**	**17.3**	13.8	37.3
Balance as at 30 June		**1,042.7**	**652.2**	1,036.4	635.0
Issued capital		**1,043.6**	**654.6**	1,037.4	637.5
Treasury shares		**(0.9)**	**(2.4)**	(1.0)	(2.5)
Total share capital		**1,042.7**	**652.2**	1,036.4	635.0

All shares are ordinary authorised, issued and fully paid shares. They all have equal voting rights and share equally in dividends and any surplus on winding up. Treasury shares relate to shares held in trust for the Long Term Incentive Plan ('LTI') and the employee Talent Retention Plan ('TRP') (refer to note G1 and G2).

E3. Earnings per share

	2021	2020
Net profit for the year attributable to shareholders ($ million)	**33.5**	46.0
Weighted average number of ordinary shares (million units)	**1,042.1**	1,029.5
Less weighted average number of Treasury shares (million units)	**(0.9)**	(1.0)
Weighted average number of shares used in EPS calculation (million units)	**1,041.2**	1,028.5
	Cents	Cents
Basic and diluted EPS	**3.22**	4.47

E4. Dividends	Note	2021 Imputation	2021 Cents per share	2021 $ million	2020 Imputation	2020 Cents per share	2020 $ million
Dividends declared and paid during the year							
Prior year final dividend		**80%**	**8.675**	**90.0**	80%	8.60	88.0
Current year interim dividend		**80%**	**8.60**	**89.6**	80%	8.525	87.7
			17.275	**179.6**		17.125	175.7
Less shares issued under the dividend reinvestment plan	E2			**(17.3)**			(37.3)
Cash dividend paid				**162.3**			138.4
Dividends declared subsequent to balance date							
Final dividend		**80%**	**8.8**	**91.8**	80%	8.675	90.0

Imputation credits

There were no imputation credits as at 30 June 2021 (2020: nil). Future tax payments will cover the imputation of dividends.

GENESIS ANNUAL REPORT 2021 / NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

E5. Borrowings	Weighted average effective interest rate %	2021 $ million	2020 $ million
Revolving credit facility	Floating	**10.0**	250.3
Term loan facility	4.6%	**30.0**	30.0
Money market and commercial paper	0.5%	**259.8**	2.0
Wholesale term notes	4.5%	**222.7**	172.4
Retail term notes	4.3%	**101.0**	100.8
Capital bonds	5.5%	**474.7**	481.7
United States Private Placement ('USPP')	2.2%	**235.2**	266.5
Lease liability	4.1%	**94.4**	63.7
Total		**1,427.8**	1,367.4
Current		**379.7**	19.9
Non-current		**1,048.1**	1,347.5
Total		**1,427.8**	1,367.4

Reconciliation of change in liabilities arising from financing activities	Note	2021 $ million	2020 $ million
Opening balance		**1,367.4**	1,355.0
Proceeds from borrowings		**309.8**	97.6
Proceeds from lease incentives		**11.1**	-
Repayment of borrowings (excluding leases)		**(241.9)**	(120.0)
Repayment of lease liability		**(6.6)**	(6.2)
Non-cash changes			
Lease liability additions and adjustments	B1	**26.1**	4.7
Change in foreign exchange on USPP		**(17.7)**	9.2
Change in fair value interest rate risk adjustment		**(21.8)**	25.5
Amortisation of capitalised issue costs		**1.8**	1.8
Change in accrued interest		**(0.4)**	(0.2)
Closing balance		**1,427.8**	1,367.4

Borrowings

Borrowings are initially recognised at fair value, net of transaction costs incurred and are subsequently measured at amortised cost using the effective interest rate method. Borrowings designated in a fair value hedge relationship are carried at amortised cost adjusted for the change in the fair value of the hedged risk.

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after the balance date.

Lease liability

On initial recognition the lease liability comprises the present value of the lease payments that are not paid at the commencement date. This includes fixed payments less any lease incentives receivable and variable lease payments that are based on an index or rate. The lease payments are discounted using the incremental borrowing rate, being the rate that the Group would have to pay to borrow the funds necessary to obtain an asset of similar value in a similar economic environment with similar terms and conditions.

The lease liability is subsequently measured by increasing the carrying amount to reflect interest on the lease liability (using the effective interest method) and reducing the carrying amount to reflect the lease payments made. The Group remeasures the lease liability (and makes a corresponding adjustment to the related lease asset) whenever the lease term changes, the lease payments change due to changes in an index or rate or a lease contract is modified and the lease modification is not accounted for as a separate lease. Lease payments on short term leases where the lease term is 12 months or less and leases of low value assets are recognised in operating expenses as incurred.

Analysis of borrowings	2021 $ million	2020 $ million
Money market	**-**	2.0
Commercial paper	**259.8**	-
Revolving credit drawn down	**10.0**	250.0
Accrued interest	**-**	0.3
Total revolving credit, money market and commercial paper	**269.8**	252.3
Expiring FY21	**-**	30.0
Expiring FY22	**70.0**	120.0
Expiring FY23	**325.0**	225.0
Expiring FY24	**50.0**	50.0
Total available revolving credit facilities	**445.0**	425.0
Revolving credit drawn down (excluding accrued interest)	**10.0**	250.0
Total undrawn revolving credit facilities	**435.0**	175.0
Expiring FY24	**30.0**	30.0
Total term loan facility	**30.0**	30.0
Expiring FY23	**120.0**	70.0
Expiring FY25	**100.0**	100.0
Accrued interest	**2.9**	2.6
Capitalised issue costs	**(0.2)**	(0.2)
Total wholesale term notes	**222.7**	172.4
Expiring FY22	**100.0**	100.0
Accrued interest	**1.1**	1.1
Capitalised issue costs	**(0.1)**	(0.3)
Total retail term notes	**101.0**	100.8
Expiring FY47	**225.0**	225.0
Expiring FY49	**240.0**	240.0
Fair value interest rate risk adjustment	**8.9**	17.3
Accrued interest	**3.0**	3.1
Capitalised issue costs	**(2.2)**	(3.7)
Total capital bonds	**474.7**	481.7
Expiring FY26	**71.6**	77.5
Expiring FY27	**143.2**	155.0
Fair value interest rate risk adjustment	**17.9**	31.3
Accrued interest	**2.9**	3.2
Capitalised issue costs	**(0.4)**	(0.5)
Total USPP	**235.2**	266.5

E5. Borrowings (continued)

Commercial paper

A commercial paper programme has been established and the first tranche of notes was issued in October 2020. Notes issued to wholesale investors under the programme are short-term money market instruments, unsecured and unsubordinated. The issue of these notes is the main reason for the increase in the current portion of borrowings. The funds received from the commercial paper programme were used to repay the revolving credit facility. The undrawn revolving credit facilities ensure the Group will have sufficient funds to meet its liabilities when due, including the repayment of any commercial paper, under both normal and stressed conditions.

Wholesale term notes

A $50.0 million wholesale term note was issued in July 2020. The note expires in July 2022.

Capital bonds

The interest rate on the capital bonds resets every five years. The next interest rate reset is June 2022 for the FY47 bonds and July 2023 for the FY49 bonds.

USPP

During the 2015 financial year the Group issued $150.0 million United States dollar-denominated unsecured notes to United States-based institutional investors. Cross currency interest rate swaps ('CCIRS') have been used to manage foreign exchange and interest rate risks on the notes (refer to note F4 for further information on CCIRS).

While the New Zealand dollar amount required to repay the USPP is fixed as a result of the CCIRS, the USPP is required to be translated to New Zealand dollars at the spot rate at the reporting date. Any revaluation of the USPP as a result of this translation is offset by the change in the fair value of the CCIRS.

Fair value of borrowings held at amortised cost

	2021 Carrying value $ million	2021 Fair value $ million	2020 Carrying value $ million	2020 Fair value $ million
Level one				
Retail term notes	**101.0**	**103.4**	100.8	106.3
Capital bonds	**474.7**	**487.6**	481.7	498.6
Level two				
Term loan facility	**30.0**	**31.3**	30.0	32.5
Wholesale term notes	**222.7**	**239.2**	172.4	195.0
USPP	**235.2**	**241.1**	266.5	271.1

The valuation of the term loan facility and the wholesale term notes is based on estimated discounted cash flow analyses, using applicable market yield curves adjusted for the Group's credit rating. The credit-adjusted market yield curves at balance date used in the valuation ranged from 0.8 per cent to 2.1 per cent (2020: 1.5 per cent to 1.8 per cent).

The valuation of USPP is based on estimated discounted cash flow analyses, using applicable United States market yield curves adjusted for the Group's credit rating. The credit-adjusted market yield at balance date used in the valuation was 1.4 per cent (2020: 1.1 per cent).

The carrying value of all other borrowings approximate their fair values.

Security

All of the Group's borrowings are unsecured. The Group borrows under a negative pledge arrangement, which does not permit the Group to grant any security interest over its assets, unless it is an exception permitted within the negative pledge.

E6. Finance expense	Note	2021 $ million	2020 $ million
Interest on borrowings (excluding capital bonds and lease liability)		**27.3**	37.5
Interest on capital bonds		**25.5**	25.4
Interest on lease liability		**3.6**	3.6
Total interest on borrowings		**56.4**	66.5
Other interest and finance charges		**0.9**	0.8
Time value of money adjustments on provisions	C4	**4.1**	5.0
Capitalised finance expenses		**(1.5)**	(1.5)
Total		**59.9**	70.8
Weighted average capitalisation rate		**4.5%**	5.5%

Interest on borrowings, bank and facility fees, and transaction costs are recognised in the income statement over the period of the borrowings, using the effective interest rate method, unless such costs relate to funding capital work in progress. Time value of money adjustments on provisions are recognised in the income statement up to the point the provision is used or released.

Finance expense on capital work in progress (qualifying assets) is capitalised during the construction period. The capitalisation rate used to determine the amount of finance expense to be capitalised is based on the weighted average finance expenses incurred by the Group.

F. Risk management

The Group's activities expose it to a variety of financial risks, including market risk (price risk, interest rate risk and foreign exchange risk), credit risk and liquidity risk. The Board has established policies that provide an overall risk management framework, as well as policies covering specific areas, such as electricity, oil and coal price risk, interest rate risk, foreign exchange risk, credit risk, liquidity risk and the use of derivatives. Compliance with policies is monitored by the risk assurance function.

The Group uses the following derivatives to hedge its financial risk exposures:

- Electricity swaps and options and electricity power purchase agreements ('PPA');
- Oil price swaps;
- Coal price swaps;
- Forward purchase agreements for emission units;
- Foreign exchange contracts;
- CCIRS;
- Interest rate swaps.

A summary of the financial risks that impact the Group, how they arise and how they are managed is presented below:

Market risk

Nature and exposure to the Group	Note	How the risk is managed
Price risk The Group is exposed to movements in the spot price of electricity arising through the sale and purchase of electricity to and from the market, movements in the spot price of light crude oil arising from oil sales, movements in the spot price of coal arising from coal purchases and movements in the spot price of emission units.	F2	The Group aims to hedge price risk on electricity sales and purchases, oil sales, coal purchases and emission costs by entering into electricity swaps and options and PPAs, oil and coal price swaps and forward purchase agreements for emission units, in line with policy limits. The Electricity hedging policy focuses on the Group's net exposure to electricity prices over a three-year period, with greater focus on the near-term period. The Treasury policy requires that 50-90 per cent of oil sales are fixed for a period of up to one year. The range decreases to a maximum of 50 per cent for sales forecasted in two to three years' time. The Market Trading policy requires that 100 per cent of forecast import coal price exposure be hedged for a period of up to one year. The range decreases to 50 per cent price exposure in the second year and 25 per cent in the third year. The Carbon hedging policy focuses on managing price risk using units on hand and forward purchase agreements to cover price risk in the short to medium term.
Interest rate risk The Group is exposed to interest rate risk because Genesis borrows funds at both fixed and floating interest rates. Changes in market interest rates expose the Group to changes in: • Future interest payments on borrowings subject to floating interest rates (cash flow risk); • The fair value of borrowings subject to fixed interest rates (fair value risk).	F3	The Group uses interest rate swaps to manage interest rate risk in line with the Group's Treasury policy. The Treasury policy requires that 50-100 per cent of projected debt is fixed for a period of up to one year. The range decreases as the age profile increases to a maximum of 20 per cent for debt due in 10 to 15 years.
Foreign exchange risk The Group is exposed to foreign currency risk as a result of capital and operational transactions and borrowings denominated in a currency other than the Group's functional currency.	F4	**Capital and operating transactions** The Group uses foreign exchange contracts to manage foreign exchange risk on capital and operational transactions (including maintenance of capital equipment, coal purchases and oil sales) in accordance with the Group's Treasury policy and Market Trading policy. The Treasury policy requires that 50-90 per cent of projected oil sales are fixed for a period of up to one year. The range decreases as the age profile increases to a maximum of 50 per cent for projected oil sales in two to three years' time. The Market Trading policy requires that 100 per cent of forecast import coal price exposure be hedged for a period of up to one year. The range decreases to 50 per cent price exposure in the second year and 25 per cent in the third year. All foreign currency exposures on capital commitments are hedged, as well as operating commitments over $0.5 million. **Overseas borrowings** The Group uses CCIRS to manage foreign exchange risk on overseas borrowings. All interest and principal repayments are hedged. The combination of the foreign-denominated debt and CCIRS results in a net exposure to New Zealand dollar floating interest rates and a fixed New Zealand dollar-denominated principal repayment. The New Zealand dollar floating interest rate risk is managed using the process described in the interest rate risk section above.

F. Risk management (continued)

Other risks

Nature and exposure to the Group	Note	How the risk is managed
Liquidity risk Liquidity risk is the risk that the Group will not be able to meet its financial obligations as they fall due. The Group's approach to managing liquidity risk is to ensure that it will always have sufficient funds to meet its liabilities when due, under both normal and stressed conditions.	F7	The Group has a policy that requires the debt facilities to be maintained with a minimum headroom amount above the projected peak debt levels over the next 12 months. Liquidity risk is monitored by continuously forecasting cash flows and matching the maturity profiles of financial assets and liabilities. The Group's ability to attract cost-effective funding is largely driven by its credit standing (Standard & Poor's = BBB+). Prudent liquidity risk management implies maintaining sufficient cash and marketable securities, the availability of funding through an adequate amount of committed credit facilities and the spreading of debt maturities.
Credit risk Credit risk is the risk that a counterparty will default on its contractual obligations, resulting in financial loss to the Group. The Group has no significant concentrations of credit risk and the carrying amounts of cash and cash equivalents, receivables and derivative assets in the balance sheet represent the Group's maximum exposure to credit risk at balance date.	C1	**Wholesale electricity sales** The Group purchases wholesale electricity for its retail customer base, therefore the credit risk is limited to the net amount receivable after deducting purchases. Market participants are required to provide letters of credit to the market-clearing agent (NZX Limited), which would be called upon should any market participant default. **Retail electricity sales, gas, LPG and oil sales** The Group minimises its exposure to credit risk by applying credit limits, obtaining collateral where appropriate and applying credit-management practices, such as monitoring the size and nature of exposures and mitigating the risk deemed to be above acceptable levels. The credit risk is mitigated by the Group's large customer base and the diverse range of industries customers operate in.
	BS, F1	**Cash and cash equivalents and derivative contracts** Credit risk is managed by using high-credit quality financial institutions and other organisations. The Group's exposure and the credit ratings of its counterparties are continuously monitored to ensure the risk is spread among approved counterparties.

F1. Derivatives	2021 $ million	2020 $ million
Electricity swaps and options and PPAs	**(136.5)**	2.0
Oil price swaps	**(3.2)**	8.8
Interest rate swaps	**(9.6)**	(39.0)
CCIRS	**35.9**	67.5
Foreign exchange contracts	**5.2**	(1.5)
Coal price swaps	**8.0**	-
Other derivatives	**0.9**	(0.5)
Total	**(99.3)**	37.3
Current assets	**320.1**	44.1
Non-current assets	**160.5**	104.5
Current liabilities	**(404.3)**	(38.9)
Non-current liabilities	**(175.6)**	(72.4)
Total	**(99.3)**	37.3

Derivatives

Derivatives are initially recognised at fair value on the date the contract is entered into and subsequently remeasured to fair value. The gain or loss on remeasurement is recognised in the income statement, unless the derivative is designated into an effective hedge relationship as a hedging instrument, in which case the timing of recognition in the income statement depends on the nature of the designated hedge relationship. The Group may designate derivatives as either:

Cash flow hedges where the derivative is used to manage the variability in cash flows relating to recognised liabilities or highly probable forecast transactions.

The effective portion of changes in the fair value of cash flow hedges are recognised in other comprehensive income and accumulate in the cash flow hedge reserve. The ineffective portion of changes in the fair value of cash flow hedges is recognised immediately in the income statement in the change in fair value of financial instruments line.

Amounts accumulated in other comprehensive income are reclassified to the income statement in the period when the hedged item is recognised in the income statement. However, when the forecast transaction that is hedged results in the recognition of a non-financial asset (for example, inventory) or liability, the gains and losses previously deferred in the cash flow hedge reserve are reclassified from the cash flow hedge reserve and included in the initial measurement of the cost of the asset or liability.

Once hedge accounting is discontinued the cumulative gain or loss remains in the cash flow hedge reserve and is reclassified to the income statement either when the transaction occurs or if the forecast transaction is no longer expected to occur, it is reclassified immediately.

Fair value hedges where the derivative is used to manage the variability in the fair value of recognised assets and liabilities.

Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recorded in the income statement, together with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk.

Once hedge accounting is discontinued the fair value adjustments to the carrying amount of the hedged item arising from the hedged risk is amortised to the income statement from that date through to maturity of the hedged item.

Hedge accounting is discontinued when the hedge instrument expires or is sold, terminated, exercised or no longer qualifies for hedge accounting.

The Group's policy is to designate derivatives in hedge relationships on inception when their fair value is zero, applying a hedge ratio of 1:1. The Group determines the existence of an economic relationship between the hedging instrument and the hedged item based on the amount and timing of their respective cash flows, reference rates, pricing dates, maturities, and notional amounts. The Group assesses whether the derivative designated in each hedging relationship is expected to be, and has been effective in, offsetting the changes in cash flows of the hedged item.

Derivatives that do not qualify for hedge accounting

This category includes derivatives that economically hedge financial risks but have not been designated in hedge relationships for accounting purposes. In these cases changes in the fair value are recognised immediately in the income statement within the change in fair value of financial instruments line (refer to note F5).

Certain electricity derivatives, electricity future contracts and PPAs cannot be hedge accounted under NZ IFRS 9. These are principally swap and option contracts that provide dry year cover for counterparties, electricity futures offered to the market to enable other counterparties to hedge their electricity risks and PPAs with renewable energy suppliers. The variable nature of renewable energy makes it difficult to demonstrate that the PPA is highly effective as required by NZ IFRS 9, despite the fact the PPA is an effective economic hedge.

Forward purchase and forward sale agreements for emission units are entered into for both 'own use' and 'held for trading'. Agreements to purchase emission units for the Group's own use are not recognised in the financial statements until the units are delivered. Forward purchase and forward sale agreements held for trading do not meet the 'own use' exemption and are accounted for as derivatives. These contracts are measured at fair value and any gain or loss on remeasurement is recognised immediately in the income statement.

The effects of the Group's application of hedge accounting in respect of derivatives used to manage financial risks are shown in notes F2 to F5.

F2. Price risk	Electricity swaps 2021 $ million	Electricity swaps 2020 $ million	Coal price swaps 2021 $ million	Coal price swaps 2020 $ million	Oil price swaps 2021 $ million	Oil price swaps 2020 $ million
Nominal amount at balance date	**935.7**	862.2	**USD 8.6**	-	**USD 8.0**	USD 19.1
Carrying value of asset at balance date	**138.0**	15.7	**1.4**	-	**-**	8.8
Carrying value of liability at balance date	**(188.6)**	(23.2)	**-**	-	**(3.2)**	-
Recognised in other comprehensive income during the year	**(220.3)**	20.5	**6.3**	-	**(14.3)**	5.8
Reclassified to the cost of assets	**-**	-	**(4.9)**	-	**-**	-
Reclassified to the income statement during the year	**177.2**	9.5	**-**	-	**2.4**	4.7
Hedge ineffectiveness (gain (loss)) during the year	**-**	3.2	**-**	-	**(0.1)**	0.1

Electricity swaps are entered into to manage the variability of cash flows from electricity purchases and sales. Oil and coal price swaps are entered into to manage the variability of cash flows from oil sales and coal purchases. Cash flow hedge accounting is applied.

Realised gains and losses reclassified to the income statement during the year on electricity swaps are recognised in electricity revenue and realised gains and losses on oil price swaps are recognised in oil revenue. Realised gains and losses on coal price swaps are recognised in inventory where they are hedge accounted and other gains and losses where hedge accounting is not applied. Electricity revenue includes $25.7 million (2020: $25.6 million) of option fees on electricity swaps and options.

The main source of ineffectiveness for electricity swaps relates to the difference between the market price and the strike price at inception of the contracts. For oil and coal price swaps ineffectiveness arises due to discounts on oil sales and coal purchases (the hedged item) that are not present in the hedging instrument.

At balance date the net carrying value of non-hedge accounted electricity swaps and options and PPAs was a $88.0 million liability, electricity future options was a $2.1 million asset and coal price swaps was a $6.6 million asset (2020: $13.0 million asset, $3.5 million liability and nil respectively). The nominal value at balance date of non-hedge accounted electricity swaps and options and PPAs was $2,893.4 million and coal price swaps was USD7.8 million (2020: $930.6 million and nil respectively). At balance date there were no non-hedge accounted oil price swaps (2020: none).

F3. Interest rate risk	Cash flow hedge (receive float, pay fixed) 2021 $ million	Cash flow hedge (receive float, pay fixed) 2020 $ million	Fair value hedge (receive fixed, pay float) 2021 $ million	Fair value hedge (receive fixed, pay float) 2020 $ million
Nominal amount at balance date	**550.0**	595.0	**240.0**	240.0
Carrying value of asset at balance date	**11.0**	-	**8.8**	17.2
Carrying value of liability at balance date	**(29.9)**	(56.4)	**-**	-
Recognised in other comprehensive income during the year	**33.4**	(10.0)	**N/A**	N/A
Reclassified to the income statement during the year	**4.1**	(6.5)	**N/A**	N/A
Maturity	**0-10 years**	0-11 years	**2 years**	3 years
Weighted average rate	**3.1%**	3.3%	**2.6%**	2.6%

Interest rate swaps are entered into to manage interest rate risk on borrowings.

Realised gains and losses on interest rate swaps designated as cash flow hedges reclassified to the income statement are recognised in finance expenses.

The fair value hedge adjustment is recognised in finance expenses in the income statement.

At balance date the net carrying value of non-hedge accounted interest rate swaps was $0.5 million asset and the nominal value was $45.0 million (2020: $0.2 million asset and $45.0 million nominal value).

GENESIS ANNUAL REPORT 2021 / NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

F4. Foreign exchange risk

	CCIRS (cash flow and fair value hedge)		Foreign exchange contracts (cash flow hedge)	
	2021 $ million	2020 $ million	2021 $ million	2020 $ million
Nominal amount at balance date	**193.2**	193.2	**166.2**	(26.3)
Carrying value of asset at balance date	**35.9**	67.5	**6.2**	0.2
Carrying value of liability at balance date	**-**	-	**(1.0)**	(1.7)
Recognised in other comprehensive income during the year	**(22.3)**	7.0	**6.4**	(3.0)
Reclassified to the cost of assets	**-**	-	**0.5**	(0.5)
Reclassified to the income statement during the year	**21.5**	(6.0)	**(0.5)**	2.1

The Group enters into foreign exchange contracts to hedge highly probable forecast transactions denominated in foreign currencies. Cash flow hedge accounting is applied. The amount and maturity of the derivative and forecast transactions are aligned to ensure the hedge relationship remains effective.

The Group uses CCIRS to manage foreign exchange risk on the USPP. All interest and principal repayments are hedged. The combination of the foreign-denominated debt and CCIRS results in a net exposure to New Zealand dollar floating interest rates and a fixed New Zealand dollar-denominated principal repayment.

The principal, basis and margin components of the CCIRS are designated as a cash flow hedge and the benchmark component of the CCIRS is designated as a fair value hedge of the USPP notes. The change in fair value relating to the foreign currency basis spread component of the CCIRS is excluded from the hedge relationship. The change is recognised in other comprehensive income in a separate Cost of Hedging Reserve (CoHR).

Realised gains and losses on foreign exchange contracts reclassified to the income statement are recognised in operating expenses and oil revenue. Realised gains and losses reclassified to the income statement on CCIRS are recognised in finance expenses.

F5. Impact of derivatives on the income statement and equity

The tables below provide a break down of the change in fair value of financial instruments recognised in the income statement and a reconciliation of movements in the cash flow hedge reserve.

Change in fair value of financial instruments	Note	2021 $ million	2020 $ million
CCIRS		**(13.1)**	19.5
Interest rate swaps		**(8.4)**	5.8
Fair value interest rate risk adjustment on borrowings		**21.8**	(25.5)
Fair value hedges – gain (loss)		**0.3**	(0.2)
Cash flow hedges – hedge ineffectiveness – gain (loss)	F2	**(0.1)**	3.3
Electricity swaps and options and PPAs		**(95.4)**	(4.6)
Other derivatives		**8.4**	0.9
Derivatives not designated as hedges – gain (loss)		**(87.0)**	(3.7)
Total change in fair value of financial instruments		**(86.8)**	(0.6)

Reconciliation of movements in the cash flow hedge reserve	2021 $ million	2020 $ million
Opening balance	**(42.7)**	(59.7)
Total reclassified from the cash flow hedge reserve to the income statement	**204.7**	3.8
Effective gain (loss) on cash flow hedges recognised directly in the cash flow hedge reserve	**(210.8)**	20.3
Total recognised in other comprehensive income	**(6.1)**	24.1
Total reclassified from the cash flow hedge reserve to the cost of assets	**(4.4)**	(0.5)
Income tax on change in cash flow hedge reserve	**2.9**	(6.6)
Closing balance	**(50.3)**	(42.7)

The amount accumulated in the cost of hedging reserve at 30 June 2021 was $2.3 million (2020: $1.5 million).

F6. Sensitivity analysis for each type of market risk

The table below represents the effect on the income statement and the cash flow hedge reserve at balance date if various market rates had been higher or lower with all other variables held constant. A positive number in the table below represents an increase in profit or the cash flow hedge reserve.

	Post-tax impact on the income statement		Post-tax impact on cash flow hedge reserve (equity)	
	2021 $ million	2020 $ million	2021 $ million	2020 $ million
Electricity prices				
+10%	**13.8**	32.8	**(14.1)**	(0.6)
-10%	**(13.6)**	(32.3)	**14.1**	0.6
Oil prices				
+10%	**-**	-	**(1.1)**	(1.5)
-10%	**-**	-	**1.1**	1.5
Coal prices				
+10%	**1.3**	-	**1.0**	-
-10%	**(1.3)**	-	**(1.0)**	-
Foreign exchange rates				
+10% (NZD appreciation)	**-**	-	**(11.2)**	2.0
-10% (NZD depreciation)	**-**	-	**13.7**	(2.4)
Interest rates				
+100 bps	**(0.1)**	(0.3)	**19.0**	21.8
-100 bps	**0.1**	0.4	**(20.5)**	(23.7)

F7. Liquidity risk

The following table details the Group's liquidity analysis for its financial liabilities and derivatives. Where the amount payable or receivable is not fixed, the amount disclosed has been determined by reference to the internally generated forward price curves existing at balance date. As the amounts included in the table are contractual undiscounted cash flows, these amounts will not reconcile to the amounts disclosed in the balance sheet.

As at 30 June 2021	Less than 1 year $ million	1 to 2 years $ million	2 to 5 years $ million	More than 5 years $ million	Total contractual cash flows $ million
Trade and other payables	(310.2)	(4.3)	-	-	(314.5)
Borrowings (excluding lease liability)	(417.1)	(162.5)	(307.4)	(1,130.2)	(2,017.2)
Lease liability	(11.5)	(9.4)	(27.8)	(72.7)	(121.4)
Total non-derivative financial liabilities	**(738.8)**	**(176.2)**	**(335.2)**	**(1,202.9)**	**(2,453.1)**
Inflows	13.1	8.8	95.3	147.6	264.8
Outflows	(5.2)	(5.1)	(83.6)	(132.0)	(225.9)
Gross-settled derivatives	**7.9**	**3.7**	**11.7**	**15.6**	**38.9**
Net-settled derivatives	**(68.6)**	**(18.7)**	**15.8**	**42.9**	**(28.6)**
Total non-derivative financial liabilities and derivatives	**(799.5)**	**(191.2)**	**(307.7)**	**(1,144.4)**	**(2,442.8)**

As at 30 June 2020	Less than 1 year $ million	1 to 2 years $ million	2 to 5 years $ million	More than 5 years $ million	Total contractual cash flows $ million
Trade and other payables	(223.6)	(5.4)	(3.2)	-	(232.2)
Borrowings (excluding lease liability)	(83.0)	(205.4)	(483.9)	(1,252.5)	(2,024.8)
Lease liability	(9.4)	(8.6)	(18.5)	(54.3)	(90.8)
Total non-derivative financial liabilities	(316.0)	(219.4)	(505.6)	(1,306.8)	(2,347.8)
Inflows	8.7	8.5	25.7	245.9	288.8
Outflows	(5.0)	(4.1)	(12.2)	(199.9)	(221.2)
Gross-settled derivatives	3.7	4.4	13.5	46.0	67.6
Net-settled derivatives	18.2	30.8	7.4	47.8	104.2
Total non-derivative financial liabilities and derivatives	(294.1)	(184.2)	(484.7)	(1,213.0)	(2,176.0)

F8. Fair value measurement

Fair value hierarchy

Generation assets disclosed in note B1, emission units held for trading disclosed in note C2 and derivatives disclosed in note F1 are the only assets and liabilities carried at fair value in the balance sheet. In addition to this, goodwill associated with the retail LPG business is tested for impairment using fair value less disposal costs (refer to note B3). While borrowings are initially recognised at fair value, net of transaction costs, they are subsequently measured at amortised cost in the balance sheet. The fair value of borrowings is required to be disclosed (refer to note E5). The nature of the inputs into the fair value calculation determines the level applied in the fair value hierarchy. Each level is outlined below:

Level one – the fair value is determined using unadjusted quoted prices from an active market for identical assets and liabilities. A market is regarded as active if quoted prices are readily and regularly available from an exchange, a dealer, a broker, an industry group, a pricing service or a regulatory agency and those prices represent actual and regularly occurring market transactions on an arm's length basis.

Level two – the fair value is derived from inputs other than quoted prices included within level one that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices). Financial instruments in this level include interest rate swaps, foreign exchange contracts, oil and coal price swaps, CCIRS and electricity derivatives valued using the ASX forward price curve.

Level three – the fair value is derived from inputs that are not based on observable market data. Financial instruments included in this level are electricity derivatives and PPAs valued using the wholesale electricity price path.

The Group's policy is to recognise transfers into and out of fair value hierarchy levels at the date the change in circumstances occurred. Refer to the reconciliation of level three electricity swaps and options and PPAs table for transfers between levels.

All derivatives disclosed in F1 other than electricity swaps and options and PPAs are considered level two. The $136.5 million electricity swap and option and PPAs net liability comprises a $7.4 million liability classified as level two and a $129.1 million liability classified as level three (2020: $2.0 million liability and $4.0 million asset respectively).

Valuation of level two derivatives

The fair values of level two derivatives are determined using discounted cash flow models. The key inputs in the valuation models were:

Item	Valuation input
Interest rate swaps	Forward interest rate price curve
Foreign exchange contracts	Forward foreign exchange rate curves
Oil price swaps	Forward oil price and foreign exchange rate curves
Electricity swaps and options	ASX forward price curve
CCIRS	Forward interest rate price curve and foreign exchange rate curves
Coal price swaps	Forward coal price curve

Valuation of level three derivatives

Valuation process

The team that carries out the valuations reports directly to the Chief Financial Officer. The results and key drivers of changes in the valuations are reviewed at least six monthly for generation assets and monthly for derivatives. The Chief Financial Officer reports key changes in fair value to the Board. Any changes to the valuation methodology are reported to the Audit and Risk Committee.

F8. Fair value measurement (continued)

Valuation of electricity swaps and options and PPAs

The valuation is based on a discounted cash flow model. The key inputs and assumptions are: the callable volumes, strike price and option fees outlined in the agreement, the wholesale electricity price path ('price path'), 'day one' gains and losses and the discount rate. The options are deemed to be called when the price path is higher than the strike prices after taking into account obligations relating to the specific terms of each contract. No calling is required for the swaps and there are no option fees. The price path is the significant unobservable input in the valuation model. Refer to B1 for information in relation to the method and judgements used to determine the price path.

	2021	2020
Price path	$81 per MWh to $190 per MWh over the period from 1 July 2021 to 4 March 2041.	$88 per MWh to $117 per MWh over the period from 1 July 2020 to 31 May 2041.
Impact of increase/decrease in price path on fair value	A 10% increase would increase the liability by $5.9 million. A 10% decrease would decrease the liability by $6.2 million.	A 10% increase would increase the asset by $39.3 million. A 10% decrease would decrease the asset by $38.7 million.
Discount rate	0.2% - 4.85%	0.2% - 4.27%

Reconciliation of level three electricity swaps and options and PPAs

	2021 $ million	2020 $ million
Balance as at 1 July	**4.0**	(25.0)
Electricity revenue	**47.4**	27.6
Change in fair value of financial instruments	**(90.0)**	(0.6)
Total gain (loss) in the income statement	**(42.6)**	27.0
Total gain (loss) recognised in other comprehensive income	**(220.2)**	20.5
Settlements	**155.4**	7.2
Sales	**(25.7)**	(25.7)
Balance as at 30 June	**(129.1)**	4.0

The change in fair value of financial instruments includes an unrealised loss of $87.4 million (2020: $0.1 million loss).

Deferred 'day one' gains (losses)

There is a presumption that when derivative contracts are entered into on an arm's length basis, and no payment is received or paid on day one, the fair value at inception would be nil. The contract price of non-exchange traded electricity derivative contracts and PPAs are agreed on a bilateral basis, the pricing for which may differ from the prevailing derived market price for a variety of reasons. In these circumstances an adjustment is made to bring the initial fair value of the contract to zero at inception. The adjustment is called a 'day one' gain (loss) and is deferred and amortised, based on expected volumes over the term of the contract. The following table details the movements and amounts of deferred 'day one' gains (losses) included in the fair value of level three electricity swaps and options and PPAs:

	2021 $ million	2020 $ million
Balance as at 1 July	**118.4**	134.5
Amortisation of existing derivatives	**(17.7)**	(16.1)
Balance as at 30 June	**100.7**	118.4

GENESIS ANNUAL REPORT 2021 / NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

G. Other

G1. Share-based payments

The Group operates four share-based payment plans (Long Term Incentive Plan ('LTI'), Performance Share Rights Plan ('PSR'), Talent Retention Plan ('TRP') and Employee Share Scheme ('ESS')) to enable staff to share in the ownership of Genesis.

The cost of the plans is recognised over the period in which the performance and/or service conditions are fulfilled. The total amount expensed is based on the Group's best estimate of the number of equity instruments that will ultimately vest, taking into consideration the likelihood that service conditions will be met, multiplied by the initial fair value of each share.

	Note	2021 $ million	2020 $ million
LTI	G2	**0.2**	0.4
PSR	G2	**0.6**	0.3
TRP		**0.3**	0.2
ESS		**0.2**	0.2
Total expense for the year		**1.3**	1.1

G2. Related party transactions

Majority shareholder and entities controlled by, and related to, the majority shareholder

The majority shareholder of Genesis is the Crown. The Group transacts with Crown-controlled and related entities independently and on an arm's length basis for the following goods and services: royalties, emission obligations, scientific consultancy services, electricity transmission, postal services, rail services and energy-related products (including electricity derivatives). All transactions with Crown-controlled and related entities are based on commercial terms and conditions and relevant market drivers.

During the year the Crown received $92.1 million in dividends (2020: $90.1 million) of which $83.2 million was paid in cash (2020: $71.0 million) and $8.9 million was paid in shares (2020: $19.1 million). The Group is also subject to the Emission Trading Scheme (ETS) which requires the Group to acquire and surrender emission units either directly to the Crown or to third parties who ultimately remit the units to the Crown. Refer to note A3 and C3 for information on the amount expensed and payable in relation to the ETS. There were no other individually significant transactions with the Crown (2020: nil).

The Group has five significant electricity swap and option contracts with Meridian Energy, a Crown-controlled entity. The electricity swap and option contracts period and profile vary between the range of 12.5MW and 150MW, from the period 1 January 2011 to 31 December 2025. In addition to these contracts there are a small number of insignificant contracts with Crown-controlled and related entities.

Approximately 10.3 per cent of the value of electricity derivative assets and approximately 29.2 per cent of the value of electricity derivative liabilities at year end are held with Crown-controlled and related entities (2020: 16.6 per cent and 16.8 per cent respectively). The contracts expire at various times; the latest expiry date is December 2025.

Key management personnel compensation

Key management personnel of the Group consists of the Directors and the Executive Management team.

	Note	2021 $ million	2020 $ million
Short-term benefits		**9.2**	7.3
Post-employment benefits		**0.2**	0.3
Share-based payments (LTI and PSR)	G1	**0.8**	0.7
Total key management personnel compensation		**10.2**	8.3

Included in short-term benefits are directors' fees of $0.8 million (2020: $0.9 million).

LTI

Under the LTI plan senior executives purchase shares at market value, funded by interest-free loans from Genesis. The shares are held on trust by the Trustee until the end of the vesting period. Dividends on the shares during the vesting period are deducted from the loan balance. If the shares vest, each executive is entitled to a cash amount which, after deduction for tax, is equal to the outstanding loan balance on day one for the shares that have vested. That cash amount must be applied towards repayment of the loan balance and the corresponding shares and dividends on the shares during the vesting period are released to the executive.

Vesting of shares is dependent on continued employment throughout the vesting period and achievement of certain performance targets (a relative TSR hurdle compared against industry peers and an absolute TSR hurdle compared against the NZX and ASX).

If the performance targets are not met or if the executive ceases to be employed by the Group other than for qualifying reasons, no shares will vest and the shares will be forfeited to the Trustee without compensation. The relevant executive will receive no benefits under the plan unless the Board exercises its discretion to allow some or all of the shares to vest.

	$	Number of options
Balance at 1 July 2019	1,871,191	899,352
Vested - FY17 tranche	(419,852)	(258,018)
Dividends	(96,478)	-
Balance as at 30 June 2020	1,354,861	641,334
Vested - FY18 tranche	(310,039)	(152,319)
Forfeited	(310,031)	(152,315)
Dividends	(51,095)	-
Balance at 30 June 2021	**683,696**	**336,700**

Grant date	Performance period
FY19*	1 July 2018 - 30 June 2021

* Fifty per cent of the FY19 grant vested in July 2021.

G2. Related party transactions (continued)

PSR

The PSR plan commenced in the prior year. Under the PSR senior executives are granted performance share rights. Vesting of the rights is dependent on continued employment throughout the vesting period and achievement of certain performance targets (a relative TSR hurdle compared against industry peers and an absolute TSR hurdle compared against the cost of equity). Each performance share right that vests entitles the participant to one ordinary share in Genesis for no consideration and 'dividend equivalents' that would have been earned on the share over the vesting period. No share rights will vest if the performance targets are not met or if the participant ceases to be employed by the Group other than for qualifying reasons, unless the Board exercises its discretion to allow some or all of the shares to vest.

Grant date	Performance period
FY20	1 July 2019 - 30 June 2022
FY21	1 July 2020 - 30 June 2023

Other transactions with key management personnel or entities related to them

Key management personnel and their families may purchase gas, electricity and LPG from the Group on an arm's length basis and may purchase shares in Genesis. Key management personnel also participate in the LTI plan and PSR plan discussed on the previous page and above. The total number of shares held by key management personnel (excluding LTI shares) as at 30 June 2021 was 542,535 (2020: 439,252). During the year dividends paid to key management personnel and their families was $207,929 (2020: $238,663). No other transactions took place between key management personnel and the Group (2020: nil). As at 30 June 2021 the balance payable to key management personnel was nil (2020: nil).

G3. Auditor's remuneration

Audit fees comprise $0.1 million for the review of the interim financial statements, $0.5 million for the audit of the annual financial statements (2020: $0.1 million and $0.5 million respectively), and an additional $0.1 million charged in 2021 in respect of the 2020 financial statement audit. In addition to the audit Deloitte provided the following services during the year: provision of non-assurance services for the Corporate Taxpayer Group (of which Genesis is a member) and trustee reporting (2020: provision of non-assurance services for the Corporate Taxpayer Group (of which Genesis is a member), trustee reporting and whistleblower hotline service). Total fees relating to other services was $0.023 million (2020: $0.038 million).

G4. Capital commitments

	2021 $ million	2020 $ million
Less than one year	**8.6**	20.7
One to five years	**12.5**	13.6
Total	**21.1**	34.3

The Group's share of capital commitments in relation to Kupe Joint Venture was nil and DrylandCarbon One Limited Partnership was $0.5 million as at 30 June 2021 (2020: $2.5 million and $1.1 million respectively).

G5. Contingent assets and liabilities

The Group had contingent assets and liabilities at 30 June 2021 in respect of:

Land claims, law suits and other claims

Genesis acquired interests in land and leases from Electricity Corporation of New Zealand Limited ('ECNZ') on 1 April 1999. These interests in land and leases may be subject to claims to the Waitangi Tribunal and may be resumed by the Crown. Genesis would expect to negotiate with the new Māori owners for occupancy and usage rights of any sites resumed by the Crown. Certain claims have been brought to, or are pending against, ECNZ and the Crown under the Treaty of Waitangi Act 1975. Some of these claims may affect land and leases purchased from ECNZ. In the event that land is resumed by the Crown, the resumption would be effected by the Crown under the Public Works Act 1981 and compensation would be payable. The Board cannot reasonably estimate the adverse effect (if any) of the claims and cannot provide any assurance that should a claim be raised it would not have a material adverse effect on the Group's business, financial condition or results of operations.

There are no other known material contingent assets or liabilities (2020: nil).

G6. Subsequent events

The following events occurred subsequent to balance date:
* On 30 July 2021 Genesis executed a conditional 20 year electricity offtake agreement with Tilt Renewables in relation to electricity that will be generated from the Kaiwaikawe Wind Farm. The wind farm is expected to be completed by early 2024;
* On 11 August 2021 Genesis agreed key terms with Contact Energy in relation to a new long-term power purchase agreement for up to 62.5 MW of electricity generated from the Tauhara geothermal field. The agreement will commence on 1 January 2025 and will run for 15 years;
* On 18 August 2021 the country commenced a nationwide level 4 lockdown in response to COVID-19. The lockdown is not expected to have a material impact on the business given Genesis provides an essential service;
* On 25 August 2021 $91.8 million of dividends were declared (refer to note E4);
* In August 2021 the Group restructured its revolving credit facilities which increased the total available facilities by $30.0 million to $475.0 million.

GENESIS ANNUAL REPORT 2021 / NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

Deloitte.

Independent auditor's report

TE PŪRONGO A TE KAITĀTARI KAUTE MOTUHAKE

TO THE SHAREHOLDERS OF GENESIS ENERGY LIMITED

Auditor-General
The Auditor-General is the auditor of Genesis Energy Limited and its subsidiaries ('the Group'). The Auditor-General has appointed me, Bryce Henderson, using the staff and resources of Deloitte Limited, to carry out the audit of the consolidated financial statements of the Group on his behalf.

Opinion
We have audited the consolidated financial statements of the Group on pages 47 to 79, that comprise the consolidated balance sheet as at 30 June 2021, the consolidated comprehensive income statement, consolidated statement of changes in equity and consolidated cash flow statement for the year ended on that date, and the notes to the consolidated financial statements that include accounting policies and other explanatory information.

In our opinion, the consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at 30 June 2021, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with New Zealand Equivalents to International Financial Reporting Standards and International Financial Reporting Standards.

Basis for opinion
We conducted our audit in accordance with the Auditor-General's Auditing Standards, which incorporate the Professional and Ethical Standards and the International Standards on Auditing (New Zealand) issued by the New Zealand Auditing and Assurance Standards Board. Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the consolidated financial statements* section of our report. We are independent of the Group in accordance with the Auditor-General's Auditing Standards, which incorporate Professional and Ethical Standard 1: *International Code of Ethics for Assurance Practitioners (including International Independence Standards) (New Zealand)* issued by the New Zealand Auditing and Assurance Standards Board, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

In addition to the audit we have carried out assignments in the areas of trustee reporting, scrutineer's notice, non-assurance services to the Corporate Taxpayer Group and review of the interim report which are compatible with those independence requirements. These services have not impaired our independence as auditor of the Group.

In addition to these assignments, principals and employees of our firm deal with the Group on normal terms within the ordinary course of trading activities of the Group. Other than the audit and these assignments and trading activities, we have no relationship with, or interests in the Group.

Audit Materiality
We consider materiality primarily in terms of the magnitude of misstatement in the consolidated financial statements of the Group, that in our judgement would make it probable that the economic decisions of a reasonably knowledgeable person would be changed or influenced (the 'quantitative' materiality). In addition, we also assess whether other matters that come to our attention during the audit would in our judgement change or influence the decisions of such a person (the 'qualitative' materiality). We use materiality both in planning the scope of our audit work and in evaluating the results of our work.

We determined the quantitative materiality for the consolidated financial statements as a whole to be $10.5 million.

Key Audit Matters
Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key audit matters	How our audit addressed the key audit matters and results
Valuation of Generation Assets Generation assets are measured at fair value as set out in note B1 of the consolidated financial statements. The carrying amount at 30 June 2021 is $3,273.2 million. The fair value of generation assets is estimated using an internally generated discounted cash flow model. The significant inputs used to assess the fair value of the generation assets are the wholesale electricity price path, generation volumes, and the discount rate. The wholesale electricity price path is estimated by Genesis Energy as described in note B1 of the consolidated financial statements and reflects the impact of Covid-19 and the uncertainty surrounding Tiwai Point smelter and the impact this could have on future prices. The valuation also reflects assumptions relating to changes in demand in response to climate change. The estimate of the wholesale electricity price path is the most significant input in estimating the fair values determined for the generation assets and affects the estimated generation volumes which are also used in the fair value calculation. Changes to the forecast of the wholesale electricity price path could significantly change the estimated fair value of the generation assets. The treatment of the gain on revaluation estimated by Genesis Energy is described in note B1 of the consolidated financial statements. We included the valuation of generation assets as a key audit matter due to the level of judgement required in forecasting the wholesale electricity price path.	Our audit procedures included assessing the key inputs to the model used to estimate the fair value of the generation assets. Our procedures, which included the use of our internal valuation experts, were primarily focused on evaluating the process undertaken by Genesis Energy in forecasting the wholesale electricity price path and challenging whether the forecast was consistent with internal and external data. We assessed the professional competence of the Genesis Energy valuers involved in the forecasting of the electricity price path and valuation of the generation assets. We also compared budgeted performance information from prior periods to actual data to assess the accuracy of the forecasting process. We have evaluated Genesis Energy's methodology in constructing the forward electricity price path including the aggregation of internal and independent third-party data. We also evaluated the assumptions used in forecasting the electricity price path to determine whether they were consistent with assumptions used across the business, including management budgets and valuations of other assets including certain electricity derivatives. We have also considered other key assumptions used within the valuation, as described in note B1 of the consolidated financial statements. We performed sensitivity analysis on the key assumptions applied in determining the fair value of the generation assets and considered the adequacy of the Group's disclosures. We have found the assumptions and resulting valuation to be reasonable.
Valuation of Electricity Derivatives The Group's activities expose it to a number of market risks, including electricity, gas, oil and coal price risk, currency risk and interest rate risk, which are managed using derivative financial instruments. At 30 June 2021 derivative assets were $480.6 million and derivative liabilities were $579.9 million as set out in note F1 of the consolidated financial statements. Many of the Group's derivatives are valued using standard valuation techniques based primarily on observable inputs. However, some electricity swaps, options and Power Purchase Agreements are valued using inputs that are not based on observable market data, such as the wholesale electricity price path forecast which is prepared by Genesis Energy valuers. As explained in the 'Valuation of Generation Assets' section above, the wholesale electricity price path forecast requires significant judgement. Valuations which reflect significant unobservable inputs are considered to be 'level 3' valuations as described in note F8 of the consolidated financial statements. At 30 June 2021, the Group had $129.1 million of electricity derivatives considered to be within level 3. We included the valuation of level 3 electricity derivatives as a key audit matter due to the judgement involved in evaluating the inputs to the valuation models.	We tested the design and operating effectiveness of key controls related to the recording and valuation of the level 3 electricity derivative transactions. We challenged key assumptions applied by management and agreed underlying data to the contract terms on a sample basis. We have independently recalculated the fair value of a sample of electricity derivatives. Our internal valuation experts have evaluated the appropriateness of the methodology applied in valuation models for the level 3 electricity derivatives. We also performed audit work on the wholesale electricity price path as explained above under the section entitled 'Valuation of Generation Assets'. We have found the assumptions and resulting valuations to be reasonable.

Other Information

The Directors are responsible on behalf of the Group for the other information. The other information comprises the information included in the Annual Report, but does not include the consolidated financial statements and our auditor's report thereon.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of audit opinion or assurance conclusion thereon.

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

Directors' responsibilities for the consolidated financial statements

The Directors are responsible on behalf of the Group for the preparation and fair presentation of the consolidated financial statements in accordance with New Zealand equivalents to International Financial Reporting Standards and International Financial Reporting Standards, and for such internal control as the Directors determine is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the Directors are responsible on behalf of the Group for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Directors either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

The Directors' responsibilities arise from the Financial Markets Conduct Act 2013.

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

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Auditor-General's Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of shareholders taken on the basis of these consolidated financial statements.

As part of an audit in accordance with the Auditor-General's Auditing Standards, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of the use of the going concern basis of accounting by the directors and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with the Directors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Directors with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the Directors, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Our responsibilities arise from the Public Audit Act 2001.

Bryce Henderson
Deloitte Limited
On behalf of the Auditor-General
Auckland, New Zealand
25 August 2021

Corporate governance

Te Mana Arataki Rangatōpū

Corporate governance information

This section of the Annual Report provides information on Directors' independence, committees, fees and diversity and inclusion policies and other activities.

Genesis' governance framework is guided by the principles and recommendations described in the NZX Corporate Governance Code. Genesis considers it has followed these recommendations in all material respects during FY21 and as at 30 June 2021[1]. Genesis has reported in detail against the NZX Corporate Governance Code in its separately published Corporate Governance Statement, which, together with other detailed information on Genesis' Board of Directors, Executive team and corporate governance policies, practices and processes, can be viewed on the Genesis Governance section on the Genesis website (www.genesisenergy.co.nz/investors/governance).

Corporate governance documentation

- Genesis' Constitution
- Board Charter
- Audit and Risk Committee Charter
- Human Resources and Remuneration Committee Charter
- Nominations Committee Charter
- Corporate Governance Statement
- Code of Conduct and Ethics
- Diversity and Inclusion Policy
- Trading in Company Securities Policy
- Market Disclosure Policy
- Audit Independence Policy
- Investor Communication Policy
- Risk Management Statement
- Disclosure of Non GAAP Performance Measures Policy
- Information about Genesis' Ordinary Shares
- Information about bonds issued by Genesis

Director independence

The names of the current Directors, together with a short biography of each, are set out on pages 42 and 43. All of the Directors are currently considered to be independent Directors as none of them are executives of the Company or have any direct or indirect interests or relationships that could reasonably influence, or could reasonably be perceived to influence, in a material way, their decisions in relation to the Company. See the Corporate Governance Statement for more detail on Director independence.

Diversity and Inclusion Policy and gender composition

Genesis' Diversity and Inclusion Policy records the Company's commitment to an inclusive workplace that embraces and promotes diversity through a number of initiatives, including a focus on equal opportunity. Genesis has sought to establish measurable objectives for achieving diversity, including gender diversity, as part of its annual assessment of its diversity objectives for FY21. Diversity and inclusion initiatives are described in more detail on page 36.

The Board is comfortable with the Company's FY21 performance with respect to its Diversity and Inclusion Policy and objectives but notes that further work is being done to meet those objectives.

In accordance with NZX Listing Rule 3.8.1 (c), as at 30 June 2021:

- Three out of seven Genesis Energy Directors were women (FY20: three out of seven).
- Two out of eight officers[2] were women (FY20: two out of eight).

1 During the year the Company has not complied with Recommendation 3.6 (takeover protocols) of the Code due to the Crown's share ownership in the Company making it practically impossible for a takeover offer to be made. See the Corporate Governance Statement for more detail.

2 The term 'Officer' is defined in the NZX Listing Rules as a person, however designated, who is concerned or takes part in the management of the public issuer's business and reports to the Board or to a person who reports to the Board. At Genesis our Officers are the Chief Executive and the Chief Executive's direct reports.

SKILL / CAPABILITY	BARBARA CHAPMAN	CATHERINE DRAYTON	DOUG MCKAY	TIM MILES	JAMES MOULDER	MAURY LEYLAND PENNO	PAUL ZEALAND
Business strategy and leadership experience (a proven record of developing and executing business strategy)	●	●	●	●	◕	●	●
Listed company governance experience (experience in listed company governance and driving and assessing the effectiveness of the executive)	◕	◔	●	●	◑	◕	◕
Regulated industry knowledge and experience (electricity sector experience or experience in a similarly regulated industry)	●	●	●	◕	●	◕	◕
Government and stakeholder relationship experience (a proven record of successfully engaging and managing key external stakeholder relationships)	◕	◕	●	◕	◕	◕	●
Finance / Accounting / Audit Committee experience (experience in financial accounting, reporting and internal financial controls)	◑	●	●	◑	◔	◑	◑
Corporate finance / capital markets / transactional experience (experience in corporate finance related transactions – such as capital raising and/or mergers and acquisitions)	◑	◕	●	◑	◑	◑	◕
Large industry operational (capital) project management experience (experience within the electricity sector or similar large scale industrial business)	◔	◔	●	●	◕	◑	●
Health and safety, risk experience (deep understanding of excellence in Health & Safety in strategic and operational context and applicable legislative framework)	◔	◑	●	◑	◑	◕	●
Customer insight, data, marketing and brand experience (experience in consumer retail and execution of marketing and brand strategies to deliver growth)	●	◔	●	●	◕	◑	◔
Technology / innovation and digitalisation experience (detailed understanding of the role of technology and innovation in delivering a superior customer experience)	●	◔	●	●	◕	◑	◑
People / culture / reputation management (deep understanding of the strategic importance of people, values, behaviours and management style as drivers of organisational culture and reputation)	●	◕	●	●	◕	●	●

Board and committee meetings and attendances

DIRECTOR[1]	APPOINTED	BOARD MEETINGS[2]	AUDIT AND RISK COMMITTEE[3]	HUMAN RESOURCES AND REMUNERATION COMMITTEE[3]	NOMINATIONS COMMITTEE[3]
Total Meetings held		**13**	**4**	**4**	**1**
Barbara Chapman (Chairman)	1 May 2018	**13**	-	-	1
Catherine Drayton	14 Mar 2019	**13**	4	-	-
Doug McKay	24 June 2014	**13**	-	4	1
Tim Miles	21 Nov 2016	**13**	-	4	1
James Moulder	10 Oct 2018	**13**	4	-	-
Maury Leyland Penno	1 August 2016	**13**	4	4	-
Paul Zealand	19 Oct 2016	**13**	-	4	1

1. All Directors listed are independent Directors.
2. In addition, Directors participated in a number of stakeholder and investor meetings throughout FY21.
3. The above numbers do not include attendances at Committee meetings by non-member Directors. The Chairman is an ex-officio member of the Audit and Risk Committee and Human Resources and Remuneration Committee and attends all meetings.

Executive remuneration

This following Remuneration Report for the year ending 30 June 2021 sets out remuneration information for the Chief Executive and the Executive Team.

Genesis' remuneration strategy aims to attract, motivate and retain talented employees at all levels of the Company and seeks to align the interests of its shareholders and employees, whilst driving performance and growth in shareholder value and return.

Employee remuneration is also discussed in the Company's Corporate Governance Statement which can be viewed at www.genesisenergy.co.nz/investors/governance/documents.

Genesis Energy follows the New Zealand Shareholder Association's guide to assist all investors to understand how remuneration is aligned with value creation for its shareholders. Genesis' remuneration policy for the Executive Team including the Chief Executive is designed to have them remunerated with competitive salaries, a wide range of benefits and use of performance incentives to achieve outstanding performance and alignment with our shareholders' interests. The Human Resources and Remuneration Committee regularly reviews the Company's remuneration policy. For the Executive Team the policy provides the opportunity to achieve, where performance has been outstanding, a total remuneration package in the upper quartile for equivalent market matched roles. Each year the Committee reviews and approves the performance and remuneration appraisals of the Executive, with the Board approving the Chief Executive's remuneration.

Total remuneration for the Executive Team is made up of three elements: fixed remuneration, short-term incentives and long-term incentives.

Fixed remuneration consists of base salary and benefits and is targeted to be in the third quartile of the market. External benchmarking is commissioned by the Human Resources and Remuneration Committee to be carried out independently by PricewaterhouseCoopers.

Short Term incentives (STI) are 'a pay for performance' component designed to motivate and reward performance in a single financial year. The target value of an STI is set annually as a percentage of the Executive's fixed remuneration. For FY21 the target for the Chief Executive was 50 per cent and for other Executives was between 30 per cent and 50 per cent. The performance measures to achieve the STI are then set across Company KPIs for EBITDAF, Customer, Safety & Wellness, Sustainability, Regulatory, Strategic objectives and individual KPIs. Within each measure, there are three performance levels, 'threshold', 'on target' and 'outstanding'. On appraisal at the end of each year an Executive will be awarded an STI payment for each objective based on their performance between a range of zero per cent for below threshold performance, to 150 per cent for outstanding performance.

The Long Term incentives (LTI) are also 'a pay for performance' component designed to align rewards for the Executive with shareholder value over a three year period. Only the Executive are eligible to participant in the LTI. Genesis Energy's LTI scheme was reviewed and a new performance share rights plan established in FY20 to ensure it continues to attract, retain and motivate high calibre executive members to drive outstanding outcomes for our customers and our shareholders.

Under the LTI plan, executives are granted a number of share rights determined by dividing the gross value of the grant by the value of one Genesis share at the date of the grant. At vesting, subject to meeting the performance hurdles set at the time of grant, each share right is converted to one ordinary share. LTI payments, if achieved, are made in Genesis shares rather than cash. The executive may also receive additional shares representing the value of dividends paid over the vesting period. The executive is liable for tax on any shares received. Under the LTI plan, grants will continue to be made annually with performance measured over a three-year period. The Board retains some discretion over the final outcome.

In FY21 LTI grants were made to the Executive Team and the value of the grants were set at a percentage of fixed remuneration between a range of 25 per cent to 60 per cent.

The total remuneration earned by, or paid to the CEO, Mr Marc England for FY20 & FY21 is as follows

	FIXED REMUNERATION			PAY FOR PERFORMANCE			TOTAL REMUNERATION
Period	**BASE SALARY**	**BENEFITS**	**SUBTOTAL**	**STI**	**LTI**	**SUBTOTAL**	
FY21	1,207,708	90,670	1,298,378	775,854	283,182 *	1,059,036	2,357,414
FY20	1,226,464	79,678	1,306,142	495,793	269,678	765,471	2,071,613

The Base Salary is inclusive of holiday pay paid as per New Zealand legislation. Benefits include employer contributions towards KiwiSaver. The FY19 LTI grant, which matured in FY21, met the absolute Total Shareholder Return (TSR) metric measured against the NZX and ASX performance, but did not meet the relative TSR metric measured against the Peer group ending 30 June 2021 and achieved a 50 per cent vesting outcome.

* The FY21 LTI value above represents the gross LTI bonus earned on vesting of the FY19 grant. The net LTI bonus and a portion of the accumulated cash dividends net of withholding tax of $34,542 were used to repay Marc England's LTI loan balance, the remainder of the dividends were paid to Marc England in July 2021. The dividends are earned subsequent to the initial grant and are excluded from the LTI amount above. Following repayment of his LTI loan balance, 76,427 ordinary shares with a market value of $3.46 per share were transferred to Marc England on 23 July 2021.

GENESIS ANNUAL REPORT 2021 / CORPORATE GOVERNANCE AND DISCLOSURES

Executive remuneration (continued)

Breakdown of CE pay for performance FY21

	FY21 WEIGHTING PERCENTAGE	PERFORMANCE MEASURES	PERCENTAGE ACHIEVED
STI	Set at 50% of fixed remuneration	60% based on Company shared KPI's of EBITDAF, Customer, Safety & Wellness, Sustainability, Regulatory and Strategic objectives. 40% based on Individual KPIs	133%
LTI	Conditional awards of shares under a Long Term Incentive Plan set at 50% of fixed remuneration	50% weighting relative TSR performance against an industry peer group, 50% weighting absolute TSR against NZX and ASX performance	50%

The STI and LTI payments for FY21 were paid in FY22

The following LTI Plan was granted to the CE in FY21, for vesting in FY23 (30 June 2023)

GRANT YEAR	BASIS OF AWARD	FACE VALUE OF AWARD	PERFORMANCE PERIOD	PERFORMANCE MEASURE
FY21	60% of Fixed Remuneration (Base Salary + Benefits)	$700,018 in the form of 280,521 performance share rights	July 2020 - June 2023	50% relative TSR measured against the Industry Peer Group 50% absolute TSR measured against Genesis Cost of Equity.

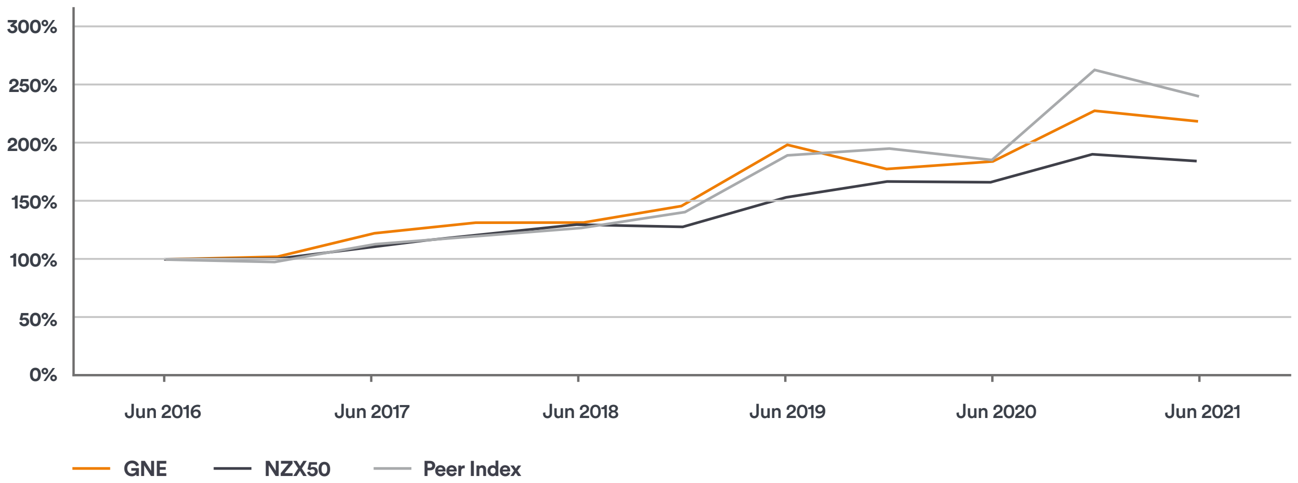
Five year summary - Chief Executive remuneration for Mr Marc England

	TOTAL REMUNERATION	PERCENTAGE STI AGAINST MAXIMUM %	PERCENTAGE VESTED LTI AGAINST MAXIMUM	SPAN OF LTI PERFORMANCE PERIOD
FY21	$2,357,414	89%	50%	July 2018 – June 2021
FY20	$2,071,613	57%	50%	July 2017 – June 2020
FY19	$2,351,631	85%	100%	July 2016 – June 2019
FY18	$2,061,265	79%	100%	July 2015 – June 2018
FY17	$1,429,928	68%	N/A	N/A

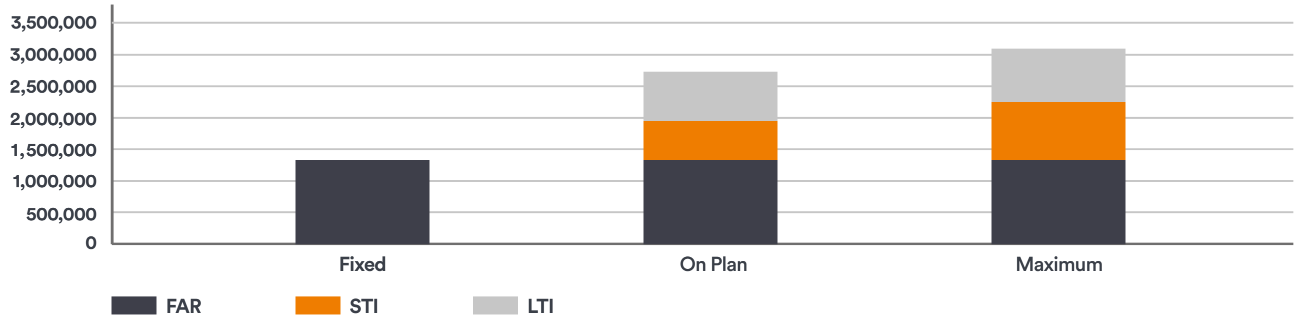
Total remuneration includes Salary, Benefits, and STI and LTI earned in the year but paid in the following year.

Five year summary - TSR Performance

Total Shareholder Return



Chief Executive remuneration performance pay for FY22 (forward looking as per NZSA guidance)



Remuneration of employees earning over $100,000 in the year ending 30 June 2021

There were 426 Genesis and subsidiary employees (or former employees) who received remuneration and benefits in excess of $100,000 (not including Directors) in their capacity as employees during the year ended 30 June 2021, as set out below.

Remuneration of employees

REMUNERATION	EMPLOYEES	REMUNERATION	EMPLOYEES	REMUNERATION	EMPLOYEES
$2,060,000 - $2,070,000 *	1	$310,000 - $320,000	1	$190,000 - $200,000	10
$990,000 - $1,000,000	1	$300,000 - $310,000	1	$180,000 - $190,000	15
$790,000 - $800,000	2	$290,000 - $300,000	1	$170,000 - $180,000	15
$730,000 - $740,000	1	$280,000 - $290,000	2	$160,000 - $170,000	28
$550,000 - $560,000	1	$270,000 - $280,000	3	$150,000 - $160,000	43
$520,000 - $530,000	1	$260,000 - $270,000	2	$140,000 - $150,000	36
$500,000 - $510,000	1	$250,000 - $260,000	3	$130,000 - $140,000	57
$400,000 - $410,000	2	$240,000 - $250,000	4	$120,000 - $130,000	57
$370,000 - $380,000	1	$230,000 - $240,000	5	$110,000 - $120,000	61
$360,000 - $370,000	1	$220,000 - $230,000	2	$100,000 - $110,000	55
$330,000 - $340,000	1	$210,000 - $220,000	2		
$320,000 - $330,000	2	$200,000 - $210,000	8		
Total employees earning $100,000+					426
Employees who are included but who are no longer at Genesis Energy as at 30 June 2021					22

Remuneration includes base salary, employer KiwiSaver contributions, vested shares from employee share schemes, short-term performance payments, settlement payments and redundancy payments for all permanent employees received during FY21. Short-term performance payments and the LTI bonus are paid in arrears; therefore the table above includes the STI and LTI earned in FY20.

* The remuneration paid during the year is lower than the remuneration earned on page 85 as it includes the payment of the FY20 STI and LTI. The FY21 STI and LTI will be paid in FY22.

GENESIS ANNUAL REPORT 2021 / CORPORATE GOVERNANCE AND DISCLOSURES

Director remuneration

Directors' fees

Directors' remuneration is in the form of Directors' fees for non-executive Directors, approved by shareholders.

The Chairman receives a higher level of fees to reflect the additional time and responsibilities that this position involves but does not receive any fees for committee membership or attendances.

Shareholders have also approved remuneration for membership of the various Board committees.

Table 1 sets out the shareholder-approved Directors' fees for the year to 30 June 2021. These fees were last approved by shareholders at the Company's 2016 Annual Shareholder Meeting. Fees were approved on a "per position" basis, and the fees of individual Directors cannot be increased out of the total approved pool.

No Director is entitled to any remuneration from the Company other than by way of Directors' fees and the reimbursement of reasonable travelling, accommodation and other expenses incurred in performing their duties as Directors.

Table 2 sets out the remuneration paid to Directors during the year to 30 June 2021.

Director remuneration is also discussed in the Company's Corporate Governance Statement which can be viewed at www.genesisenergy.co.nz/investors/governance/documents.

Directors received no remuneration or other benefits during the period in relation to their duties as Directors of a subsidiary.

Details of Directors of subsidiary entities forming part of the Genesis Energy Group are set out in the Statutory Disclosures on page 90.

All Directors received the benefit of an indemnity from Genesis and the benefit of Directors and Officers liability insurance cover. The cover extends to liabilities to persons (other than the Company and its subsidiaries or related bodies corporate) that arise out of the performance of their duties as Directors, unless the liability is prohibited from being insured against by law or relates to fraudulent conduct. Remuneration of Company employees, including those acting as Directors of subsidiary companies, is disclosed in the relevant banding on page 87.

Table 1 – Approved Directors' fees

	POSITION	FEES PER ANNUM	TOTAL
Board of Directors	Chairman	180,000	180,000
	Member (x7)[1]	90,000	630,000
Audit and Risk Committee	Chairman	24,000	24,000
	Member (x3)[1]	12,000	36,000
Human Resources and Remuneration Committee	Chairman	15,000	15,000
	Member (x3)	7,500	22,500
Nominations Committee	Chairman[2]	-	-
	Member (x3)	5,000	15,000
Pool for additional work or attendances[3]		17,500	17,500
Total approved pool			**$940,000**

1. During the year the Board consisted of six Directors plus the Chairman and the Audit and Risk Committee had two members plus its Chairman.
2. The Chairman of the Board is the chairman of the Committee and does not receive any fees for Committee membership.
3. In 2016 shareholders approved a $25,000 pool of fees for additional work or attendances. In the FY19 year, $7,500 of the pool was reallocated to permit the appointment of a third member to the Human Resources and Remuneration Committee (plus its Chairman).

Table 2 – Directors' fees paid during FY21

DIRECTOR	BOARD FEES	AUDIT & RISK COMMITTEE	HR & REM COMMITTEE	NOMINATIONS COMMITTEE	TOTAL
Barbara Chapman	180,000	-	-	-	180,000
Catherine Drayton	90,000	24,000	-	-	114,000
Doug McKay	90,000	-	15,000	5,000	110,000
Tim Miles	90,000	-	7,500	5,000	102,500
James Moulder	90,000	12,000	-	-	102,000
Maury Leyland Penno	90,000	12,000	7,500	-	109,500
Paul Zealand	90,000	-	7,500	5,000	102,500
Pool for additional work or attendances	-	-	-	-	-
GRAND TOTAL					**$820,500**

Directors' fees exclude GST and reimbursed costs directly associated with carrying out their duties.

Statutory disclosures

Ngā Whakapuakitanga Whakature

Interests register entries

In accordance with section 211 (1) (e) of the Companies Act, particulars of the entries in the Interests Register of Genesis during the financial year to 30 June 2021 are set out in the table below:

DIR.	POSITION	COMPANY
Barbara Chapman (Chairman)	Director	Fletcher Building Limited
	Director and Deputy Chair	The New Zealand Initiative
	Chair	NZME Limited
	Chair	CEO Summit Committee for APEC 2021
	Patron	New Zealand Rainbow Tick Excellence Awards
	Trustee	Flinton Trust[2]
	Director	Two Tin Pigs Limited[2]
Catherine Drayton	Chair	Guardians of New Zealand Superannuation
	Chair	Christchurch International Airport Limited
	Trustee	Southern Cross Medical Care Society
	Director	Southern Cross Medical Care Society
	Director	Southern Cross Healthcare Limited
	Director	Southern Cross Benefits Limited
	Trustee	Southern Cross Health Trust
	Director	Fronde Systems Group Limited
	Director	Beca Group Limited[2]
	Chair	Mint Innovation Limited[1]
	Director	CMD Associates Limited[2]
	Director	CMD Commercial Limited[2]
	Director	Harbour View Properties Limited[2]
Maury Leyland Penno	Director	Leaft Foods Limited
	Chair	Signum Holdings Limited
	Director and Shareholder	Pure Food Company Limited
	Director and Shareholder	Stem and Stalk Limited
	Chair	Okuora Holdings Limited[2]
	Chair and Trustee	The Education Hub
	Trustee	Arapito Trust
	Trustee	Polperro No. 2 Trust
	Director	Wangapeka River Hops Limited[2]
	Chair	Trust Codes Limited
	Chair	180 Codes Limited
	Chair	Matrex Limited
	Chair	Okuora Farms Limited
	Shareholder	Okuora Holdings Limited
	Director	Cloud Computing Continuation Services Limited

DIR.	POSITION	COMPANY
Doug McKay	Director	Fletcher Building Limited
	Chair	Eden Park Trust Board
	Chair	Bank of New Zealand Group
	Director	IAG New Zealand Limited
	Director	Wymac Consulting Limited
	Director	National Australia Bank
Tim Miles	Director	oOh!media Limited
	Director	UDC Finance[2]
	Director	Nyriad Limited
	Chair	Gut Cancer Foundation
	Director	Khandallah Trust Limited
	Director and Shareholder	Jeffries Miles Consultancy Limited[2]
	Director and Shareholder	Jeffries Miles Property Limited[2]
	Director	Fibre at Bendemeer Limited[2]
James Moulder	Director	Cybele Capital Limited
	Director	Motupipi Holdings Limited
	Director	Motupipi Offshore Investments
	Director	Lycaon Advisory Limited
	Director	Tasman Environmental Markets Pty Limited
	Director	Tasman Environmental Markets Limited Partnership
	Director	TEM Financial Services Limited
	Director	Climate Positive Pty Limited
	Trustee	Moulder Family Trust
Paul Zealand	Director	Lochard Energy
	Director	The New Zealand Refining Company Limited
	Director	Zoenergy Limited
	Director	Port Nelson Limited

1 Entries added by notices given by Directors during the year ended 30 June 2021.

2 Entries removed by notices given by Directors during the year ended 30 June 2021.

Directors of subsidiary companies

As at 30 June 2021:

> The Chief Executive of Genesis, Marc England, and Chief Financial Officer of Genesis, Chris Jewell, were Directors of Kupe Venture Limited.

> Chris Jewell, Warwick Williams, Senior Regulatory Advisor, and George McGhie (resident Singapore-based Director and employed by the Genesis Energy captive manager Willis Management (Singapore) Pte Limited) were Directors of Genesis Energy's captive insurance company incorporated in Singapore, Genesis Energy Insurance Pte Limited.

> Matthew Osborne[1], Chief Corporate Affairs Officer, and James Magill[1], Chief Digital Officer, were Directors of Energy Online Limited.

> James Magill[2], Peter Kennedy[2], GM Growth and Innovation, Alistair Yates and Mark Yates, minority owners and Stephanie Loveday were Directors of Ecotricity GP Limited.

1. Appointed 22 February 2021.
2. Appointed 1 February 2021.

Disclosures of Directors' interests in share transactions

During FY21, in relation to the Company's Directors, the following disclosures were made in the Interests Register by Directors as to the acquisition of relevant interests in Company shares under section 148 of the Companies Act 1993:

a. The acquisition of ordinary shares in the Company pursuant to the Company's Dividend Reinvestment Plan:
 - Barbara Chapman 288 shares.
 - Catherine Drayton 272 shares.

b. The acquisition of 3,820 shares by Doug McKay.

c. The acquisition of 15,000 shares by James Moulder.

Directors' interests in shares

Directors disclosed the following relevant interests in Genesis Energy shares as at 30 June 2021:

DIRECTOR	RELEVANT INTEREST HELD IN SHARES
Barbara Chapman	10,876
Catherine Drayton	10,272
Maury Leyland Penno	19,088
Doug McKay	19,634
Tim Miles	40,410
James Moulder	15,000
Paul Zealand	Nil

Use of Company information

No notices have been received by the Board of Genesis under section 145 of the Companies Act 1993 with regard to the use of Company information received by Directors in their capacities as Directors of the Company or its subsidiary companies.

Chief Executive share ownership

The Chief Executive's ownership of shares in Genesis at 30 June 2021 is as follows (excluding shares and performance share rights held under Long Term Incentive plans and the Genesis Energy Employee Share Scheme): 156,096.

Donations

In accordance with section 211 (1) (h) of the Companies Act 1993, Genesis records that it made donations of $56,901 during the year ended 30 June 2021. Genesis policy prohibits the making of political donations. Genesis subsidiaries did not make any donations.

Waivers from the NZX

During the year, the Company did not seek to rely on any waivers previously issued to the Company from the requirements of the NZX Listing Rules.

Credit rating

As at the date of this Annual Report Standard & Poor's long-term credit rating for Genesis was BBB+ Stable.

Exercise of NZX disciplinary powers

The NZX did not exercise any of its powers under Listing Rule 9.9.3 in relation to Genesis during FY21.

Auditor's fees

Deloitte, on behalf of the Auditor-General, has continued to act as auditor for the Company. Audit fees (including half year review fees) and non-audit fees in FY21, are disclosed in Note G3 to the Financial Statements on page 79.

Stock exchange listings

Genesis' ordinary shares are listed and quoted on the NZX Main Board (NZSX) and the Australian Securities Exchange (ASX) under the company code 'GNE'. Genesis has three issues of retail bonds listed and quoted on the NZX Debt Market (NZDX) under company codes 'GNE030', 'GNE040' and 'GNE050'. Genesis' listing on the ASX is as a Foreign Exempt Listing. For the purposes of ASX listing rule 1.15.3, Genesis confirms that it continues to comply with NZX Listing Rules.

Shareholding restrictions

The Public Finance Act 1989 includes restrictions on the ownership of certain types of security issued by each mixed-ownership-model company (including Genesis) and the consequences of breaching those restrictions. Genesis' constitution incorporates these restrictions and mechanisms for monitoring and enforcing them.

A summary of the restrictions on the ownership of shares under the Public Finance Act and the constitution is set out in the separately published document "Information about Genesis Energy Ordinary Shares" which can be viewed at www.genesisenergy.co.nz/investors/governance/documents. Genesis has a 'non-standard' (NS) designation on the NZX Main Board due to particular provisions of the company's constitution, including the requirements that regulate the ownership and transfer of Genesis securities.

Twenty largest registered shareholders as at 30 June 21*

NAME	UNITS AT 30 JUNE 2021	% OF UNITS
Her Majesty The Queen In Right Of New Zealand Acting By And Through Her Minister Of Finance And Minister For SOE	534,640,124	51.23
Forsyth Barr Custodians Limited	28,074,484	2.69
Citibank Nominees (New Zealand) Limited	26,654,426	2.55
HSBC Nominees (New Zealand) Limited	25,056,401	2.40
HSBC Nominees (New Zealand) Limited A/C State Street	20,924,880	2.01
Accident Compensation Corporation	19,455,093	1.86
JBWere (NZ) Nominees Limited	14,995,784	1.44
JB Morgan Nominees Australia Limited	13,517,801	1.30
JP Morgan Chase Bank Na NZ Branch-Segregated Clients Acct	12,824,508	1.23
FNZ Custodians Limited	12,335,650	1.18
New Zealand Depository Nominee Limited	10,595,272	1.02
ANZ Wholesale Australasian Share Fund	9,183,240	0.88
Custodial Services Limited	8,658,314	0.83
HSBC Custody Nominees (Australia) Limited	7,328,498	0.70
Custodial Services Limited	7,317,650	0.70
BNP Paribas Nominees (NZ) Limited	6,437,875	0.62
Citicorp Nominees Pty Limited	5,279,595	0.51
ANZ Custodial Services New Zealand Limited	4,351,030	0.42
Custodial Services Limited	4,187,685	0.40
BNP Paribas Nominees (NZ) Limited	3,877,773	0.37
Totals: Top 20 holders of Ordinary Shares	**775,696,083**	**74.34**

* In the above table the shareholding of New Zealand Central Securities Depository Limited (NZCSD) has been allocated to the applicable members of NZCSD.

Substantial security holders

The following information is given pursuant to section 293 of the Financial Markets Conduct Act 2013 (FMCA). According to notice given to the Company pursuant to section 280 (1) (b) of the FMCA, the substantial security holder in the Company and its relevant interests as at the date of the notice are noted below. The total number of voting shares on issue as at 30 June 2021 was 1,043,568,651.

	DATE OF SUBSTANTIAL SECURITY NOTICE	RELEVANT INTEREST IN THE NUMBER OF SHARES DATE OF NOTICE	% OF SHARES HELD AT DATE OF NOTICE
Her Majesty The Queen In Right Of New Zealand	6 July 2015	**519,723,781**	**51.97**

Genesis Energy Limited (GNE030) — 4.14% Bonds 18/03/2022 (Total)

Top Holders As Of 30/06/2021

Composition: G001

RANK	NAME	UNITS	% UNITS
1	FNZ Custodians Limited	11,181,000	11.18
2	Forsyth Barr Custodians Limited	7,092,000	7.09
3	BNP Paribas Nominees (NZ) Limited	6,600,000	6.60
4	Custodial Services Limited	6,065,000	6.07
5	Custodial Services Limited	4,999,000	5.00
6	Custodial Services Limited	4,879,000	4.88
7	Citibank Nominees (New Zealand) Limited	4,741,000	4.74
8	Custodial Services Limited	4,194,000	4.19
9	Commonwealth Bank Of Australia	3,471,000	3.47
10	Westpac Banking Corporate NZ Financial Markets Group	3,372,000	3.37
11	Custodial Services Limited	2,562,000	2.56
12	Generate Kiwisaver Public Trust Nominees Limited	2,079,000	2.08
13	Southern Cross Medical Care Society	2,000,000	2.00
14	ANZ Custodial Services New Zealand Limited	1,721,000	1.72
15	Hobson Wealth Custodian Limited	1,697,000	1.70
16	HSBC Nominees (New Zealand) Limited O/A Euroclear Bank	1,610,000	1.61
17	Tea Custodians Limited Client Property Trust Account	1,100,000	1.10
18	JBWere (NZ) Nominees Limited	970,000	0.97
19	Mt Nominees Limited	946,000	0.95
20	Investment Custodial Services Limited	885,000	0.89
Totals: Top 20 holders of 4.14% BONDS 18/03/2022 (Total)		**72,164,000**	**72.16**
Total Remaining Holders Balance		**27,836,000**	**27.84**

GENESIS ANNUAL REPORT 2021 / CORPORATE GOVERNANCE AND DISCLOSURES

Genesis Energy Limited (GNE040) — 5.70% Bonds 09/06/2047 (Total)

Top Holders As Of 30/06/2021 — Composition: G004

RANK	NAME	UNITS	% UNITS
1	Forsyth Barr Custodians Limited	42,804,000	19.02
2	JBWere (NZ) Nominees Limited	26,479,000	11.77
3	Hobson Wealth Custodian Limited	16,308,000	7.25
4	Custodial Services Limited	16,094,000	7.15
5	FNZ Custodians Limited	15,247,000	6.78
6	Custodial Services Limited	9,370,000	4.16
7	Custodial Services Limited	8,314,000	3.70
8	Citibank Nominees (New Zealand) Limited	5,041,000	2.24
9	Custodial Services Limited	4,473,000	1.99
10	Custodial Services Limited	3,639,000	1.62
11	Ponz Capital Limited	3,146,000	1.40
12	Tea Custodians Limited Client Property Trust Account	2,291,000	1.02
13	Public Trust Class 10 Nominees Limited	2,170,000	0.96
14	Custodial Services Limited	2,158,000	0.96
15	Forsyth Barr Custodians Limited	1,919,000	0.85
16	National Nominees Limited	1,888,000	0.84
17	Fletcher Building Educational Fund Limited	1,600,000	0.71
18	Forsyth Barr Custodians Limited	1,457,000	0.65
19	Hobson Wealth Custodian Limited	1,395,000	0.62
20	Vincent Ka Soon Chia & Vui Yung Chia	1,300,000	0.58
Totals: Top 20 holders of 5.70% BONDS 09/06/2047 (Total)		**167,093,000**	**74.26**
Total Remaining Holders Balance		**57,907,000**	**25.74**

Genesis Energy Limited (GNE050) — 4.65% Bonds 16/07/2048 (Total)

Top Holders As Of 30/06/2021 — Composition: G005

RANK	NAME	UNITS	% UNITS
1	Forsyth Barr Custodians Limited	66,110,000	27.55
2	JBWere (NZ) Nominees Limited	29,477,000	12.28
3	Custodial Services Limited	15,578,000	6.49
4	Hobson Wealth Custodian Limited	14,846,000	6.19
5	Custodial Services Limited	14,017,000	5.84
6	Custodial Services Limited	11,376,000	4.74
7	FNZ Custodians Limited	8,613,000	3.59
8	Custodial Services Limited	5,289,000	2.20
9	Forsyth Barr Custodians Limited	4,918,000	2.05
10	Custodial Services Limited	4,651,000	1.94
11	Investment Custodial Services Limited	2,554,000	1.06
12	Custodial Services Limited	2,450,000	1.02
13	Forsyth Barr Custodians Limited	886,000	0.37
14	KPS Society Limited	835,000	0.35
15	Custodial Services Limited	677,000	0.28
16	Best Farm Limited	600,000	0.25
16	JBWere (NZ) Nominees Limited	600,000	0.25
18	BNP Paribas Nominees (NZ) Limited	525,000	0.22
19	JML Capital Limited	500,000	0.21
20	Custodial Services Limited	487,000	0.20
Totals: Top 20 holders of 4.65% BONDS 16/07/2048 (Total)		**184,989,000**	**77.08**
Total Remaining Holders Balance		**55,011,000**	**22.92**

Distribution of ordinary shares and shareholdings as at 30 June 2021

HOLDING RANGE	HOLDER COUNT	% HOLDER COUNT	HOLDING QUANTITY	% HOLDING QUANTITYS
1 to 999	4,637	10.85	2,784,616	0.27
1,000 – 4,999	30,041	70.29	70,051,227	6.71
5,000 – 9,999	3,612	8.45	24,497,263	2.35
10,000 – 49,999	3,949	9.24	75,101,479	7.20
50,000 – 99,999	308	0.72	20,009,930	1.92
100,000 and over	194	0.45	851,124,136	81.55
Totals	42,741	100.00	1,043,568,651	100.00

Debt listings

Genesis Energy's subordinated, unsecured capital bonds are listed on the New Zealand Debt Market Exchange.

Distribution of holders of quoted securities

INVESTOR RANGES: 30 JUNE 2021
SECURITY CODE: GNE030

HOLDING RANGE	HOLDER COUNT	% HOLDER COUNT	HOLDING QUANTITY	% HOLDING QUANTITY
1,000 to 4,999	1	0.16	4,000	0.00
5,000 – 9,999	138	22.26	805,000	0.81
10,000 – 49,999	343	55.32	6,735,000	6.73
50,000 – 99,999	76	12.26	4,550,000	4.55
100,000 and over	62	10.00	87,906,000	87.91
Totals	620	100.00	100,000,000	100.00

INVESTOR RANGES: 30 JUNE 2021
SECURITY CODE: GNE040

HOLDING RANGE	HOLDER COUNT	% HOLDER COUNT	HOLDING QUANTITY	% HOLDING QUANTITY
5,000 to 9,999	136	10.78	787,000	0.35
10,000 – 49,999	833	66.01	17,915,000	7.96
50,000 – 99,999	166	13.15	9,752,000	4.33
100,000 and over	127	10.06	196,546,000	87.36
Totals	1,262	100.00	225,000,000	100.00

INVESTOR RANGES: 30 JUNE 2021
SECURITY CODE: GNE050

HOLDING RANGE	HOLDER COUNT	%HOLDER COUNT	HOLDING QUANTITY	% HOLDING QUANTITY
1,000 to 4,999	1	0.06	1,000	0.00
5,000 – 9,999	116	7.32	651,000	0.27
10,000 – 49,999	1,119	70.60	23,362,000	9.73
50,000 – 99,999	215	13.56	12,312,000	5.13
100,000 and over	134	8.46	203,674,000	84.87
Totals	1,585	100.00	240,000,000	100.00

Building a better working world

Independent Limited Assurance Statement to the Management and Directors of Genesis Energy Limited

Assurance Conclusion

Ernst & Young ('EY', 'we') was engaged by Genesis Energy Limited ("Genesis") to undertake limited assurance as defined by the International Standards on Assurance engagements (New Zealand) 3000, over Genesis' voluntary greenhouse gas emissions inventory ("GHG inventory") disclosures (including scope 1, waste 2 and certain scope 3 emissions from business travel, office waste and use of sold products) for the year ended 30 June 2021. Based on our limited assurance procedures, nothing came to our attention that caused us to believe that Genesis' GHG inventory for the year ended 30 June 2021 disclosed in the Genesis 2021 Annual Report, has not been prepared and presented fairly, in all material respects, in accordance with the Criteria defined below.

What our review covered

The subject matter and criteria covered by our assurance procedures are detailed in the table below.

Subject Matter	Criteria
Genesis' total greenhouse gas emissions inventory (including scope 1, scope 2 and certain scope 3 emissions from business travel, office waste and use of sold products) for the year ended 30 June 2021, disclosed in Genesis' 2021 Annual Report.	Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard New Zealand Ministry for the Environment's guidance for voluntary corporate greenhouse gas reporting 2019

Reviewed GHG inventory

Total scope 1, 2, and 3 emissions (tCO_2-e)	5,210,523

Key responsibilities

EY's responsibility and independence

Our responsibility was to express a conclusion on Genesis' voluntary GHG inventory disclosure for the year ended 30 June 2021 based on our review.

We have complied with the relevant ethical requirements relating to assurance engagements, which include independence and other requirements founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality, and professional behaviour.

In accordance with the Professional and Ethical Standard 3 (Amended), Ernst & Young Limited maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Genesis' responsibility

Genesis management ("management") was responsible for selecting the Criteria and preparing and fairly presenting the GHG inventory for the year ended 30 June 2021 in accordance with that Criteria. This responsibility includes establishing and maintaining internal controls, adequate records and making estimates that are reasonable in the circumstances.

Our approach to conducting the engagement

We conducted this review in accordance with the International Standard on Assurance Engagements ISAE (NZ) 3000: Assurance Engagements Other than Audits or Reviews of Historical Financial Information and ISAE (NZ) 3410 Assurance Engagements on Greenhouse Gas Statements and the terms of reference for this engagement as agreed with Genesis on 16 June 2021.

Summary of procedures performed

A limited assurance engagement consists of making enquiries and applying analytical, appropriate testing, and other evidence-gathering procedures.

Our procedures included, but were not limited to:

- Conducting interviews with personnel to understand the business and reporting process
- Checking that the flow of information from site metering or monitoring through to calculation spreadsheets is accurate
- Identifying and testing assumptions supporting the calculations
- Comparing year-on-year activities-based greenhouse gas and energy data, where possible
- Checking organisational and operational boundaries to test completeness of greenhouse gas emissions sources
- Tests of calculation and aggregation
- Checking that emissions factors and methodologies have been correctly applied as per the criteria
- Reviewing the appropriateness of the presentation of disclosures.

We believe that the evidence obtained is sufficient and appropriate to provide a basis for our limited assurance conclusions.

Limited Assurance

Procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

While we considered the effectiveness of management's internal controls when determining the nature and extent of our procedures, our assurance engagement was not designed to provide assurance on internal controls. Our procedures did not include testing controls or performing procedures relating to checking aggregation or calculation of data within IT systems.

Use of our Assurance Statement

We disclaim any assumption of responsibility for any reliance on this assurance report to any persons other than Management and the Directors of Genesis or for any purpose other than that for which it was prepared.

Ernst & Young Limited
Pip Best
Partner – Climate Change and Sustainability Services
New Zealand
11 August 2021

A member firm of Ernst & Young Global Limited

OFFICE LOCATIONS

Head/Registered Office
Genesis Energy
Level 6, 155 Fanshawe Street,
Wynyard Quarter,
Auckland 1010
P: 64 9 580 2094
F: 64 9 580 4894
E: info@genesisenergy.co.nz
investor.relations@genesisenergy.co.nz
board@genesisenergy.co.nz
media@ genesisenergy.co.nz
W: genesisenergy.co.nz
energyonline.co.nz

Hamilton
94 Bryce Street, Hamilton

Huntly Power Station
Cnr Te Ohaki and
Hetherington Roads, Huntly

Tokaanu Power Station
State Highway 47, Tokaanu

Waikaremoana Power Station
Main Road, Tuai RD5,
Wairoa 4195

Tekapo Power Station
167 Tekapo Power House Road,
Tekapo 7999

PRINTED REPORT PAPER STOCK

Our Annual Report is printed on Tauro Offset paper stock, which is made from material from well-managed, FSC® -certified forests and other controlled sources. The fibre used to produce Tauro Offset is elemental chlorine free (ECF).

FSC
www.fsc.org
MIX
Paper from responsible sources
FSC® C014371

RANGIPO DAM
TONGARIRO

GENESIS ENERGY LIMITED
Annual Report 2021 / te pūrongo ā-tau 2021