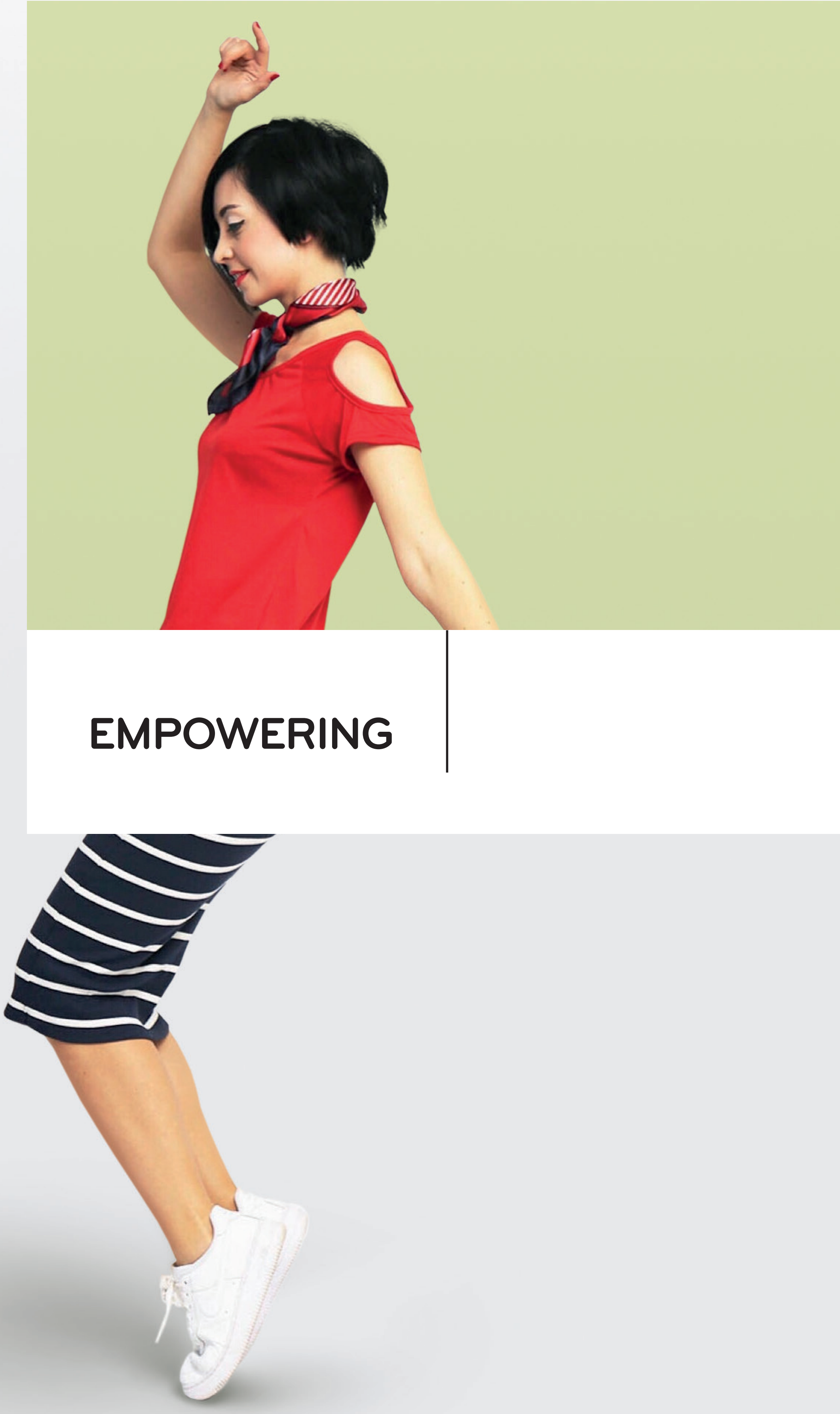
VECTOR://



EMPOWERING

AR 2018

YOU.

FOR NEW ZEALAND'S ENERGY CONSUMER REVOLUTION.

Vector

··· 01/05:

TODAY

POWERFUL FORCES ARE SHAPING ENERGY USE.

NEW ENERGY TECHNOLOGIES ARE IMPROVING. CONSUMERS ARE EXPECTING MORE AND MORE CHOICE AND CONTROL. THE ECONOMY IS PROGRESSIVELY ELECTRIFYING – STARTING WITH TRANSPORT. USE OF SOLAR, WIND, AND BATTERY IS ON THE WAY UP. CLIMATE CHANGE IS INCREASINGLY BEING FELT. VECTOR IS EMBRACING ALL THESE FORCES – TO PUT MORE POWER IN YOUR HANDS.

VECTOR.CO.NZ
EMPOWERING
YOU.

02/05:

STAYING AHEAD OF THE CURVE.

WE BELIEVE IT'S ABOUT SHOWING LEADERSHIP, TECHNOLOGICALLY, CONNECTIVELY AND SUSTAINABLY. LEADERSHIP ON ENERGISING YOUR LIFE, HOME, AND BUSINESS. LEADERSHIP ON DIVERSIFYING INTO NEW BUSINESSES AND NEW ENERGY TECHNOLOGIES TO CREATE FRESH CUSTOMER SOLUTIONS. LEADERSHIP ON CREATING CHANGE TO BENEFIT CONSUMERS. LEADERSHIP ON ADDRESSING CLIMATE CHANGE AND EXTREME WEATHER EVENTS. LEADERSHIP ON SAFETY, DIVERSITY, AND THE THINGS THAT MATTER MOST.

··· 03/05:

CHANGE WILL ONLY ACCELERATE.

VECTOR HAS COME A LONG WAY OVER THE YEARS. WE'VE STRENGTHENED OUR CONNECTION TO AUCKLAND, AND REPOSITIONED FOR THE FUTURE. WE'RE THINKING BEYOND TODAY, AND LEARNING FAST AS WE GO. NEW ZEALAND'S ENERGY FUTURE WILL BE EVEN MORE DISRUPTIVE, MORE CONSUMER ORIENTED, MORE TECHNOLOGY-ENABLED, MORE RESILIENT, MORE DEMOCRATIC, MORE SUSTAINABLE AND, ULTIMATELY, MORE ABOUT CHOICE. YOUR CHOICE.

04/05:

COMMITTED TO THE LONG GAME.

ACCELERATING CHANGE MAKES OUR VISION MORE VITAL THAN EVER. WE HAVE TO KEEP MOVING AND STAY COMMITTED TO PLAYING THE LONG GAME, BEING RESILIENT AND BEING RESPONSIVE TO THE POWERFUL FORCES THAT ARE SHAPING ENERGY USE. WE ARE UNDERPINNING NEW ZEALAND'S ENERGY CONSUMER REVOLUTION FOR HOWEVER YOU CHOOSE TO POWER YOUR LIFE.

WHY?

BECAUSE IT'S THE RIGHT THING TO DO.

TO EMPOWER YOU.

05/05:

TAKING THE LEAD.

VECTOR HAS ALWAYS LOOKED TO THE FUTURE, TO STAY READY FOR ENERGY CHANGE.

2002

- A lines company 100% owned by Auckland Energy Consumer Trust (AECT)
- Michael Stiassny appointed to Vector's Board
- Acquired UnitedNetworks (including Northern Auckland and Wellington electricity networks, plus gas distribution in Auckland and broadband in Wellington and Auckland)

2004://

- Acquired majority stake in NGC Holdings Ltd to continue diversifying

2005://

- AECT floated 25% of Vector on NZX to raise capital for further diversification into new energy solutions and to complete full takeover of NGC Holdings Ltd

2007://

- Began trialling micro wind turbine technology
- Invested in advanced metering technology to better manage infrastructure and give more transparency over power bills

2008://

- Divested Wellington electricity network to focus on Auckland

2009://

- Supported the introduction of one of the first bottle swap programmes in New Zealand

2010://

- Partnered to trial New Zealand's largest installation of solar panels
- Acquired Siemens' 50% shareholding in Advanced Metering Services Limited (AMS) to become 100% owner

2011://

- Bought Kwik-Swap (that then became Bottle Swap)

2012://

- Deployed solar and battery arrays for Department of Conservation on Hauraki Gulf islands
- First photovoltaic solar and battery storage system installed at Quay Street substation

2013://

- Connected first residential customer to solar power and battery technology
- Completed the acquisition of Contact Energy's gas metering business
- Outage Manager app launched

2014://

- Joined the '25% group' of corporates having at least 25% female representation on its board
- Acquired Arc Innovations from Meridian Energy, further expanding advanced metering

2015://

- Announced a new vision for the company: 'Creating a New Energy Future'
- Switched on our first electric vehicle charging station, the first of many across Auckland
- Advanced metering business continued to grow, now supplying more than one million meters
- Implemented a new policy requiring lines work to be undertaken in a de-energised state wherever possible, putting the health and safety of its people first

2016://

- Switched on New Zealand's first Tesla Powerwall battery
- Installed a state-of-the-art grid-sized battery in Glen Innes substation to strengthen network resilience
- Collaborated with Ngāti Whātua Ōrākei to demonstrate future community energy solutions
- Sold national gas transmission and non-Auckland distribution businesses to focus on Auckland
- Awarded 'Rainbow Tick' for efforts to create an open and inclusive workplace
- First Australian advanced meters went live in Sydney
- Major shareholder, AECT, rebranded to become Entrust

2017://

- Invested in E-Co Products Group and PowerSmart to help enable distributed generation, energy democracy and more consumer choice
- mPrest machine learning introduced to help identify failure risks before they happen. Vector acquired stake in mPrest
- Committed to the United Nations Sustainable Development Goals, initially focusing on seven that specifically support our strategic focus on decarbonisation and climate action and social inequalities
- New state-of-the-art bottle swap plant in Papakura commissioned, with first accepted Major Hazard Facility Safety Case in New Zealand
- Commenced a digital transformation by establishing a strategy to drive new levels of efficiencies
- First large New Zealand corporate to be Living Wage accredited
- Vector committed to be Net Zero Carbon by 2030

2018+

- In partnership with Auckland Council, 'Vector Lights' illuminated Auckland's Harbour Bridge with 90,000 LED bulbs, showcasing the potential of solar and battery technology to light New Zealand's energy future.
- Founding member of Climate Leaders Coalition Group

About this report://

This report, dated 23 August 2018, is a review of Vector's economic, social, and environmental performance for the financial year ended 30 June 2018.

The financial information has been prepared in accordance with appropriate accounting standards, and has been independently audited by KPMG.

The social, economic and sustainability information has been compiled in line with NZX rules and recommendations for investor reporting, as well as Vector's commitments to the United Nations Sustainable Development Goals. Our greenhouse gas (GHG) emissions as reported on page 51 were also independently assured by KPMG in accordance with ISAE3410. The approach is also consistent with GHG protocol.

The report has drawn from a wide range of information sources. These include: our stakeholders, our customers, our communities, our sustainability framework, our value drivers, our risk register, our Board reports, our asset management plan, our financial accounts, and our operational reports.

Throughout the report, we have focused on what matters most to our stakeholders and our business.

Care has been taken to ensure all information in this report is accurate, including internal assurance and verification processes and Board approval.

Forward-looking statements in this report are based on best available information and assumptions regarding Vector's businesses and performance, the economy and other future conditions, circumstances and results. As with any forecast, forward-looking statements are subject to uncertainty. Vector's actual results may vary from those expressed or implied in these forward-looking statements. ■

SECTION:

01.

14 — 27 | **New Zealand's energy consumer revolution://**

We've been playing the long game, to help empower you for the energy consumer revolution that is coming.

02.

28 — 35 | **Vector today://**

A more integrated look at how Vector strives to create long-term value.

03.

36 — 61 | Operations, leadership and sustainable business://

A closer look at the Vector Group and operations.

04.

62 — 134 | Statutory report://

All the statutory numbers and information.

POWERING THE FUTURE; EMPOWERING CONSUMERS.

–

MICHAEL STIASSNY
CHAIRMAN

Benjamin Franklin missed one vital point when he noted that nothing is certain in life except death and taxes – he should have added a third, change.

When I joined the Board of Vector in 2002, the New Zealand electricity sector was in a state of flux on the back of the Bradford reforms and Commerce Commission intervention. Today, the electricity sector is once again transforming as new energy technology emerges, consumers take the driver's seat and the regulatory environment struggles to keep pace with what are extraordinary changes and times.

Change has been a constant. Increasingly, consumers have sought greater control and choice of the services they rely on to live their lives. Energy has not been immune. Vector's response has been to determine how best to meet that desire for control and choice.

Over the past 16 years, we have worked to transform our network from a traditional, one-way grid to an intelligent, connected, open and innovative platform. Vector is now at the centre of the 'Internet of Energy', the ultimate enabler for innovative retailers, both domestic and international, to create exciting new products and services to directly benefit consumers.

What has set Vector apart has been our ability to identify those new trends, to pivot and to evolve to meet the future. We have chosen to lead, not to follow; to embrace change and to shake off the shackles of a traditional network business focused solely on electricity distribution. Today, Vector is a diversified, sustainable energy group; change has been hardwired into our DNA and as a result, we are well positioned to create and deliver a new energy future.

Vector continues to play the long game for the best interests of consumers. We sold out of natural gas transmission in anticipation of the inevitable move away from fossil fuels; we have invested in intelligent network capabilities, advanced metering, batteries and the 'Internet of Energy', fully aware that energy democratisation was on its way. We have stopped 'live lines' work wherever possible, in the knowledge that while it might affect our regulated operating performance measures, putting lives at risk is simply wrong.

Over the past 12 months, we have also continued to accommodate Auckland's relentless and rapid growth through smart investment in quality network infrastructure, adding more than 14,000 new electricity and gas connections to our network. This is our responsibility, but we do so with an eye on the future and what's coming down the track to ensure that we avoid unnecessary expenditure on obsolete technologies or traditional assets that load unnecessary costs on consumers.

There are newer and better ways to grow and improve the network to meet Auckland's needs. And while we have a projected $2 billion investment spend to meet growth over the next 10 years, it can only be spent once. Vector can't afford to get it wrong, so investment and technology decisions are not made lightly.

Vector is committed to contributing to a decarbonising economy, and as New Zealand's largest energy distributor we can, and will, lead by example. We are championing the adoption of clean

> **"Increasingly, consumers have sought greater control and choice of the services they rely on to live their lives. Energy has not been immune."**
>
> —

energy technology to not only improve the network, but also to reduce Auckland's carbon footprint and ensure the region can grow sustainably. Swimming against the status quo tide is never easy, but it was and remains the right thing to do.

Shareholders will receive a fully imputed final dividend of 8.0 cents, taking the full year dividend to 16.25 cents per share, up from 16.0 cents per share in 2017.

Despite delivering 12 consecutive years of dividend growth, as signalled last year, Vector is a business operating in a challenging environment and responding to change therefore does come at a cost. Adjusted EBITDA of $470.1 million – slightly below last year's result – underscores the need for Vector to continue to strategically diversify to ensure long-term profitability.

Our ability to pay ongoing increasing dividends could also be significantly impacted by the reset of our electricity network revenues in 2020, which is largely a function of interest rates prevailing at the time, and expenditure allowances set by the Commerce Commission.

Looking ahead, to the next decade and beyond, Vector will need to continue our transformation. Change within the sector and wider environment will continue unabated and while the business has increasingly taken a customer-focused path, there is much work still to do to be considered a market leader in this regard.

It is certain that the industry will continue to be disrupted and Vector will need to not only stay ahead of the curve, but also to balance the needs of customers today with those of the next generation.

From where I sit, it is clear that electrification of the economy will continue to accelerate, driven by the downward cost curves in technology, the convergence of transport and energy, and the need to respond to the imperative of climate change. There are significant risks and opportunities for Vector's businesses as a consequence.

In May I announced I would not be seeking re-election, and will be standing down at this year's annual shareholders meeting.

I leave Vector knowing that it is in the best possible position to mitigate the risks and capitalise on the opportunities that lie ahead.

Earlier this year, Vector welcomed David Bartholomew and Sibylle Krieger to the Board, both of whom have significant industry and Australian experience. I am confident that as my tenure comes to an end, Vector has the necessary governance expertise in place to continue to successfully navigate energy sector disruption and the change that will always be a constant.

It has been a pleasure to serve Vector's shareholders and the people of Auckland. I will view Vector Lights on Auckland Harbour Bridge as a constant reminder of what the new energy future is capable of achieving. ■

Michael Stiassny
Chairman

BOARD TRIBUTE TO THE CHAIRMAN

"SOMEONE'S SITTING IN THE SHADE TODAY BECAUSE SOMEONE PLANTED A TREE A LONG TIME AGO."

WARREN BUFFETT

AFTER 16 YEARS OF SERVICE TO VECTOR'S SHAREHOLDERS AND THE PEOPLE OF AUCKLAND, MICHAEL STIASSNY'S LEGACY IS HAVING SECURED A SUSTAINABLE FUTURE PATH FOR VECTOR.

Michael's leadership has been instrumental in achieving a successful public listing on the NZX, ensuring Aucklanders retained ownership of their energy assets, and in making sure that Vector could both maintain and invest in our traditional network, while at the same time exploring solutions for very different future possibilities.

Michael has been unafraid to challenge those around him to think laterally, to grasp the issues of today and navigate the technological solutions of the future. As a result, his influence has seen Vector lead innovation in the electricity sector through early adoption of disruptive technologies in production, storage, delivery and management, and in doing so, clearly empower consumers. On the global stage, Vector is acknowledged as being at the forefront of energy democratisation.

Under Michael's stewardship, the Vector Board and management team have delivered 12 consecutive years of dividend growth, 75% of which was delivered directly to the people of Auckland by way of the Entrust dividend. However, he has also been outspoken in his belief that Vector's continued financial health requires further diversification, rejection of the industry status quo and a sharp eye on macro-trends.

A genuine advocate for diversity both within the organisation and at the boardroom table, Michael has championed Vector's diversity and Rainbow Tick initiatives, the Living Wage accreditation, our sustainability leadership and introduced the Future Directors' programme. He has also been unequivocal in his support for Vector's strong health and safety policies that has seen the company cease 'live lines' work wherever possible to protect maintenance crew's lives.

Never one to shy away from controversy or making tough calls, Michael Stiassny has led Vector with unswerving dedication to improve Auckland's energy future by planning today for what will happen tomorrow.

OPERATING IN A CLIMATE OF CHANGE.

–

SIMON MACKENZIE
GROUP CHIEF EXECUTIVE

RESULTS REFLECT THE CHANGING WORLD AROUND US.

Vector's financial and operational results for FY18 reflect the relentless and continual changes to our operating environment.

These include ongoing changes to the sector, consumer preferences, technology, and even to New Zealand's climate. The Vector team, across our entire group, continue to embrace change and lead responses to these forces on behalf of our customers and Auckland.

Despite challenging circumstances, our FY18 financial results were broadly on-target, with adjusted EBITDA of $470.1 million slightly below last year's result of $474.4 million. While revenue was up across all business areas, group net profit was down 11.3% to $149.8 million, primarily due to a significant increase in depreciation and amortisation in the period.

Adjusted EBITDA (excluding capital contributions) in our Regulated Networks segment of Vector fell 0.7% to $358.6 million, with higher maintenance costs of $7.5 million required to address additional vegetation and tree management needs in Auckland and costs associated with the April 2018 storm.

The ferocious wind-storm in April caused widespread damage across Auckland and caused significant inconvenience for many customers, as well as drove an additional $4 million in unexpected network repair costs.

Climate change modelling indicates extreme weather will likely become more common. The impact on physical infrastructure may be felt in many ways, including increased erosion, flooding, and, as we saw in April, increased wind damage to trees.

As well as the massive impact, the storm saw our outage app fail, resulting in a poor customer experience and causing other customer channels to be impacted. Following the storm, the Vector outage app was hacked, resulting in some users of the app having their contact details accessed by a third party. Vector took this matter extremely seriously and took immediate steps to contain the breach and protect the customers information to the full extent possible.

Since the storm, Vector has reviewed its storm procedures and response, has undertaken extensive engagement with a wide range of industry and Government stakeholders, and a number of corrective actions based on lessons from the storm are well underway. These include an overhaul of outage management systems, processes and tools to improve the customer experience.

The storm review also highlighted shortfalls in tree management regulation. The thousands of trees that damaged lines in April were not owned by Vector and under current regulations we have restricted abilities to manage them.

Undergrounding is not necessarily a panacea. While 55% of the electricity network is underground, the cost to underground the remaining 45% of the network with overhead lines in Auckland is enormous (we estimate over $5 billion), and we believe there is little consumer or political appetite for the large energy price increases that would be required to fund this.

Gas Trading adjusted EBITDA fell 6.8% to $34.4 million from $36.9 million a year earlier. The prior year's result included an insurance settlement of $5.3 million in relation to damage to the Liquigas facilities at Lyttelton during the 2012 earthquake. Excluding this one-off, underlying Gas Trading EBITDA was up 8.9% with strong volumes and higher production at the Kapuni Gas Treatment Plant being offset by lower natural gas margins.

Adjusted EBITDA in the Technology business rose 6.5% to $130.5 million with further gains on smart metering following the Power of Choice reforms in Australia and continued meter deployment in New Zealand. That said, we are disappointed that growth in our Technology business area was not higher. This can largely be attributed to a lower than expected heat-pump business performance by E-Co Products Group, and by the investment in launching HRV Solar. The underlying E-Co Products Group business is well positioned to play a role supporting Government initiatives for energy efficient and healthy homes.

Capital expenditure (capex) rose 3.8% to $381.2 million from $367.4 million in the prior period. This was driven by Auckland growth, higher network replacement capital expenditure and an increase in Australian meter deployments. This was partially offset by lower Gas Trading capex (the prior period included investment in the Bottle Swap processing plant) and a slow-down in meter deployment rates in New Zealand.

Our balance sheet remains healthy, with gearing as at 30 June 2018 at 48.8%, up from 47.1% a year earlier, and 47.3% as at 31 December 2017.

SOLID OPERATIONAL PROGRESS.

Reflecting on the past 12 months, and indeed on the past decade, we've made solid progress on our mission to create a new energy future. We are continuing to take the lead on developing new energy technologies, customer-focused innovation and on the sustainability of our sector. We've continued to diversify into areas like metering, 'Internet of Energy', data analytics, solar and batteries.

Central to Vector's business is our responsibility to ensure we continue to deliver reliable energy to Auckland. Every year we spend significant amounts on vegetation management and network maintenance to pre-empt problems for customers before they occur.

We invest in network upgrades to reflect the ways in which energy use is changing. The development, integration, and use of new energy technologies like solar panels, storage batteries, and electric vehicle (EV) chargers on our power network is trending upwards. Peer-to-peer capabilities are opening up multi-directional energy flows.

The city we serve is rapidly changing also. As one of the fastest growing developed cities in the world, about a quarter of New Zealanders now call Auckland home. No other developed nation has such a concentration of its population in a single urban area. Auckland's population is expected to hit two million by 2028 according to Auckland Council. Growth is a resilience challenge, as infrastructure must accommodate it smartly, reliably, and cost-effectively. One consequence of this growth is traffic congestion, which hampers response times for Vector's field crews seeking to restore critical services each time the network is damaged and power is cut.

Vector must provide the platform for new technologies while at the same time keeping the lights on for more and more people. We must continue to execute on our network and customer strategies to proactively respond to emerging technologies and the expectations of customers, now and into the future. To help this, Vector has, alongside tech start-up company mPrest, developed a 'system of systems' energy platform solution called DERMS (or Distributed Energy Resource Management System). This is allowing Vector to build an 'Internet of Energy' platform for the future, enabling a flexible and dynamic environment that responds quicker to new technologies and consumer preferences.

In July 2018 Vector announced it will distribute more than $16 million of Loss Rental Rebate (LRR) surpluses directly to Auckland electricity account holders as an annual payment. LRRs are the surplus created once the costs in New Zealand's electricity wholesale market have been calculated and they vary year by year. While historically Vector has provided LRRs to retailers, our concern has been that for retailers whose customer base extends beyond the Auckland area, it is difficult to ensure that the rebates are returned solely to Auckland customers. We believe direct distribution is fairer and more transparent.

Gas Trading saw a growth in revenue on the back of increased Kapuni field production and higher LPG and Bottle Swap volumes, with the state-of-the-art new bottling plant opened in Papakura significantly increasing bottle fill and refurbishment capacity. Bottle Swap volumes were up 8% on the previous year, and the new plant is delivering significant efficiencies and safety benefits, as well as being the first Major Hazard Facility in New Zealand to have an accepted Safety Case.

Our technology and unregulated businesses continue to develop. Vector Advanced Metering Services Australia (VAMSA), our Australian smart meter business, is successfully deploying smart meters for most of the major Australian electricity retailers following the Power of Choice market reforms in 2017. Vector has built a strong track-record of meter deployment in both Australia and New Zealand.

Vector is putting the finishing touches on a large 5MW battery for Territory Generation in Alice Springs in the Northern Territory, while a similar PowerSmart project in Niue in the South Pacific is well underway.

Strong connection growth and an increase in replacement capex has resulted in a significant increase in regulated capex, up to $245.8 million from $210.6 million in the prior year.

RECENT AWARDS

2018 DELOITTE ENERGY EXCELLENCE AWARDS

Our OnGas Bottle Swap Plant in Papakura won the Health and Safety Initiative of the Year.

Our project with Dominion Salt to design and build a new, innovative system integrating battery power with wind energy was a finalist in the Large Energy User Initiative of the Year.

2018 PUBLIC RELATIONS INSTITUTE OF NEW ZEALAND AWARDS

Vector Lights won the Marketing Communication Award for Public Relations.

2018 RESPONSIBLE BUSINESS NETWORK AWARDS

Finalist in the Communications Campaign of the year for Vector Lights.

2017 SUSTAINABLE BUSINESS NETWORK AWARDS

Our project with Ngāti Whātua Ōrākei property investment arm Whai Rawa to install a networked system of solar panels and battery storage on the 30 home Kāinga Tuatahi housing development won the Revolutionising Energy award at the Sustainable Business Network Awards.

2017 NEW ZEALAND INNOVATION AWARDS

Our Glen Innes network-tied battery was highly commended in the Technology Solutions category.

Given the size of the investment required to support the ongoing anticipated growth of Auckland's energy networks, it is of significant concern that our regulated electricity network is not earning its regulatory cost of capital. Vector's electricity network ROI for the 2018 regulatory year was only 5.49% - significantly lower than the regulatory WACC of 7.19%. This is largely due to Commerce Commission forecast errors in the current regulatory parameters. Absent these errors, Vector's electricity revenues for the 2018 regulatory year would have been almost $28 million higher. We anticipate the majority of these errors will be corrected at the next reset (April 2020), but will continue to significantly impact network returns until then.

Although the regulatory environment is relatively stable, balancing safety, price, service quality, and investing in the future can be challenging for network operators and regulators alike. In that regard, we are working closely with the Commerce Commission on penalties for breaches of quality thresholds.

The reality is the Commerce Commission's current regime may not adequately account for congested Auckland traffic, changes to health and safety best-practice, and more extreme weather events. As a result, meeting quality targets will be a significant challenge for Vector and the wider industry. It is crucial that this issue is addressed no later than at the 2020 reset of regulatory parameters.

Our approach to health and safety is informed by the founding principle that nothing matters more than people. This is true also of our approach to our own people. Vector is proud to have been the first large corporate in New Zealand to become an accredited Living Wage employer. Alongside this, we are taking steps to proactively identify and address any pay equity issues within our business.

The year also saw changes to the Vector management team with Rod Snodgrass joining us in November 2017 as Chief Customer Officer, and Brian Ryan, our GM for Emerging Technologies, departing in July 2018 after four years with Vector to take up a role in the United Kingdom.

In July 2018 Vector was also proud to be one of the founding companies of the Climate Leaders Coalition, a collective of business leaders who have committed to act on climate change, a move consistent with our commitment to be Net Zero Carbon by 2030.

LOOKING AHEAD.

We have many reasons to be confident about the future. As the economy continues to progressively electrify, trends such as widespread EV adoption must be planned for at an industry, network and community level to ensure those who can afford new energy technologies are not being, in effect, subsidised by those who cannot, in the form of costly upgrades to, or cost impositions from, generation, transmission or distribution assets.

With the pace of change rapidly increasing, Vector must invest dynamically to ensure good optionality, and have the flexibility to pivot as and when scenarios emerge. This will help avoid poor investment decisions as well as maximise the benefits to consumers of new energy technologies. More dynamic investment also requires us to better understand customers energy use. Right now, a significant challenge is that distribution companies do not have ready access to smart meter data held by retailers. This impedes the ability of networks to adequately respond to storms as they cannot 'see' faults at the household level. As a collective industry, it is clear there needs to be better sharing of secure real-time information to deliver improved customer service.

A political review of the New Zealand electricity sector is currently underway. We welcome the review, because distribution companies are already fully transparent through regulation and we hope to see greater transparency across the sector. The New Zealand generation and retail market has not been looked at in earnest for around a decade and it is right to question whether consumers are receiving the benefits of competition. Recent reviews in similar markets such as the United Kingdom and Australia have identified genuine market concerns at both the retail and generation levels of the market.

Technology has an ever more powerful role to play in New Zealand's future – as an enabler, it will unlock greater choice, increased resilience, lower costs, and a reduction in carbon. Regardless of what we or others wish, industry disruption will march on, so Vector must stay ahead of the technology curve and meet the needs of customers, tomorrow as well as today.

Looking ahead we expect largely flat Regulated Network earnings through to the next electricity reset in 2020, and continued growth in our Technology business. We expect adjusted EBITDA for FY19 to be between $470 - $480 million.[1] ■

Simon Mackenzie
Group Chief Executive

---

1 This excludes any impact from the adoption of IFRS 16 *Leases*.

CASE STUDY://

WHEN ENERGY AND TRANSPORT CONVERGE.

There is no denying that the threat of climate change has turned the world of energy on its head.

Under the Paris climate accord, ambitious carbon targets have been set, and businesses around the globe have been challenged to step up and help deliver.

As more industries move away from fossil fuels and towards cleaner electricity, Vector is firmly focused on preparing Auckland for a new energy future.

A key area of focus for us is the growing convergence of the energy and transport sectors.

It's clear that the popularity of EVs is on the rise and that the reign of the internal combustion engine (ICE) is on the decline. What is less obvious is the impact these trends will have on our network, and our place in the new energy ecosystem.

THE RISE OF ELECTRIC VEHICLES IN NEW ZEALAND.

New Zealand's mostly renewable energy supply puts us in a unique position to transition swiftly to an EV nation. Consumer appetite for EVs is already evident, with 4,363 EVs registered on Auckland roads as at January this year compared to just 600 in 2016.

When respected futurist Tony Seba visited New Zealand last year, he boldly predicted EVs will be cheaper than petrol cars within a decade.

This is all good news for the environment and the air we breathe, but the rapid rise of EVs is going to bring its own set of challenges, including to network management.

If we don't work collectively to solve these challenges, it could hold New Zealand back from reaching its target of net zero carbon emissions by 2050.

SDG://

7 AFFORDABLE AND CLEAN ENERGY
11 SUSTAINABLE CITIES AND COMMUNITIES
13 CLIMATE ACTION

PREPARING THE MARKET FOR AN EV REVOLUTION.

Next generation EVs will have bigger batteries, which will mean longer charges. By today's standards, one slow EV charger (7kW) adds the equivalent of 2.8 houses to the grid. Every fast charger (22kW) adds 8.8 houses and a rapid charger (50kW) adds 20 houses.

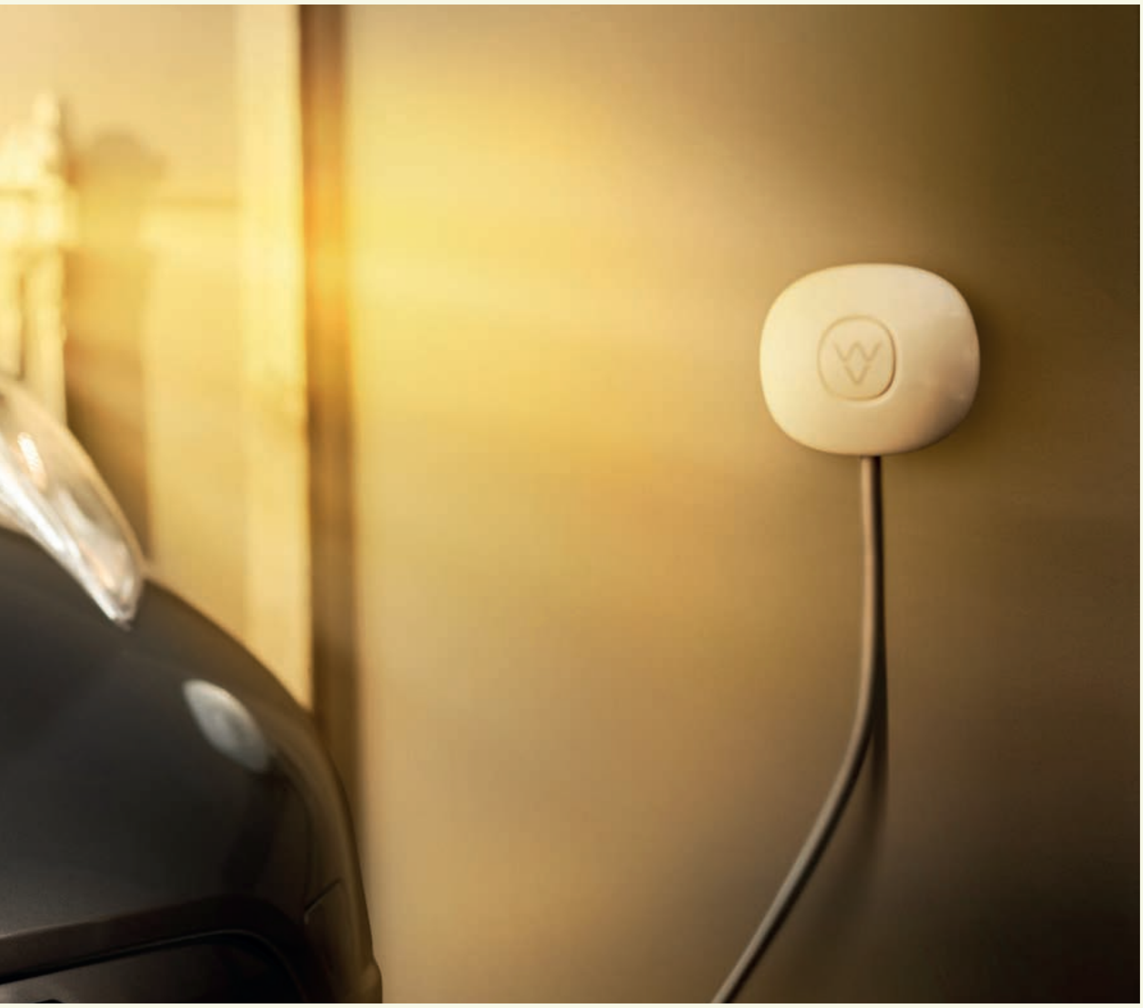
This level of demand is expected to put unprecedented pressure on the network, which will ultimately require significant technology upgrades.

Under the current market and regulatory settings, these upgrade costs will compete with other demands for network expansion and investment. They will need to be spread out evenly across all electricity users – regardless of whether they are in the position to upgrade to an EV.

For these reasons, Vector is working to raise awareness of the expected (and unexpected) consequences of energy and transport convergence.

Our goal is to ensure the next set of policy and regulatory decisions gives us the certainty we need to make smart investment decisions that more equitably benefit all Aucklanders now and in the future.

CONVERGENCE //



"Although there will be speed bumps along the way, the reality is that, ready or not, the EV revolution is coming. It's just a matter of when."

—

OPPORTUNITY, INNOVATION AND NEW TECHNOLOGY.

Recently Vector introduced a two-way EV charger that transforms EVs into mobile power sources.

When connected to a Vehicle-to-Grid charger at home or work, charge from an EV can be used as a power boost for the building, as a cheaper power source when electricity prices are at their peak, and will eventually be able to power homes during electricity outages.

This type of technology has the potential to smooth out the growing impact EVs will have on our peak electricity demand, while also giving people energy reserves on demand, greater flexibility and an alternative to using energy from the grid.

When you add solar and battery systems into the home along with emerging home energy management systems, you've got a truly future-ready smart energy home that diversifies energy supply, lowers carbon emissions and reduces consumer energy costs.

EVS COULD BE THE ANSWER.

Although there will be speed bumps along the way, the reality is that, ready or not, the EV revolution is coming – transforming the energy world in the process. It's just a matter of when.

Beyond clearing the air and achieving our carbon neutral targets, Vector believes EVs could assist the resilience of power networks – particularly as the frequency of extreme weather events increases and demands we diversify supply as much as possible.

As a leading voice in the new energy future discussion, Vector is committed to understanding these trends and providing solutions for consumers. ■

CASE STUDY://

THE INTERNET OF ENERGY.

The world of energy is rapidly becoming more complex, and transitioning from 'hardware driven' to 'hardware and software driven'.

How you receive, use and store your energy in 10 years' time will be significantly different to now. Can you remember how your day played out before the iPhone was launched in 2007? How you had to physically go to the bank or sit at a desktop to transfer money? Or how you got around in a new town before clicking to open Google maps? Ten years is not that long.

Vector is doing everything it can to help you stay ahead of the curve by investing in an intelligent, connected, open and innovative platform that will allow smarter network management and enable innovative retailers to create exciting new products and services for consumers.

HOW YOU MIGHT USE ENERGY IN THE FUTURE.

Picture this: you've just arrived home in your EV. It's been a sunny day, so the HRV solar panels on your roof have generated enough energy to fully charge your home battery. The family is turning on the heater, the television, and appliances in the kitchen in preparation for dinner.

The price of using power may have changed from earlier in the day. But it's all good – you've got a full storage battery, so you can use that to power your home. And while that's happening, you've plugged your EV into the wall to discharge energy left in your car's battery to sell onto the Auckland energy network and make a little bit of money. As you're getting ready for bed, you reverse the charge of your car battery to fill it up for the commute to work tomorrow – either from what's left in your storage battery, or directly from the power grid now that the price of electricity has changed again. The next day you repeat the cycle.

SDG://

7 AFFORDABLE AND CLEAN ENERGY
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
11 SUSTAINABLE CITIES AND COMMUNITIES

All of this is occurring while, at the same time, Vector's network control has full visibility of when and where spikes in the demand for energy will occur, so that we can better plan for and control the network, and manage energy load to lessen stress on infrastructure. It also means that as the city grows and evolves we can seamlessly upgrade and future-proof Auckland's energy platform to help 'plug-in to the grid', whatever the future has in store.

In this way, our network can provide you with the freedom to take up energy alternatives, as well as sell energy back to the network, trade energy via peer-to-peer trading, or store energy via batteries. It sounds futuristic. But it wasn't that long ago that the idea of solar panels powering homes was scoffed at – now they're going to be compulsory in all new homes in California from 2020.

DERMS.

Today, across Vector's energy network, there are thousands of solar panel and storage battery connections on the network. In the past five years, the number of EVs in New Zealand has skyrocketed from just 192 in January 2013 to 9,241 in July 2018 – a 4,713% increase. This spike in EVs and other distributed

energy resources (DERs) is in line with our projections for tens of thousands of these DERs to be connected to the grid by 2020. This prompted Vector to develop and introduce a sophisticated management and control 'system of systems' energy platform solution called DERMS (Distributed Energy Resource Management System).

In development for 12 months, the first DERMS product release in April 2018 gave us the ability to monitor batteries on substations such as in Glen Innes. Later this year, an additional release will allow integration of EV chargers and home batteries onto DERMS. When fully operational, it will connect traditional infrastructure (like electricity lines and substations) with new energy generation and storage (like solar and battery energy solutions) onto one platform. It will allow Vector to integrate, oversee, manage, and optimally power more than half a million homes and businesses in real-time. Or to put it another way, the 'Internet of Energy'.

The potential benefits are enormous. For example, we will be able to better predict potential transformer overloads and draw from other energy sources to avoid outages. We will be able to dynamically shift loads in response to sudden changes in demand or during significant weather events such as the storm in April 2018. We will be able to easily move energy around the network and to and from homes. We also see it as a way to help democratise energy and address energy poverty through greater network control and by providing a platform for choice and innovation. We can help enable consumers to make the most of any distributed technology, including solar, battery and peer-to-peer trading.

In introducing the Internet of Energy, we have had to develop a hybrid delivery model. Alongside traditional network engineering we've had to work with relatively new IT concepts such as an open micro-service architecture, and exponential technologies such as artificial intelligence, machine learning, and cloud storage and management.

It's a new and exciting prospect for the energy sector – not just for New Zealand but even globally there has been significant interest in this emerging network technology. ■

"How you receive, use, and store your energy in 10 years time will be significantly different to now."

—

CASE STUDY://

A BEACON FOR THE FUTURE OF ENERGY.

Globally, the energy sector is being transformed through innovation and new technology. It's one of the most exciting times to be involved in the industry, but it is also one of the most unpredictable.

As New Zealand's biggest energy distributor, Vector must lead the adoption of clean energy technology to improve the network, reduce Auckland's carbon footprint, and to ensure the region's infrastructure can keep pace.

In this age of technology steamrolling over traditional business operating models it's about making the right choices and providing customers with options to support Auckland's long-term interests. Investing in the network is about ensuring resilience as the city grows, and doing what we can to make sure the lights stay on for Aucklanders – especially during major weather events outside of our control, like the storm in April 2018.

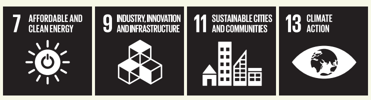
Vector Lights on Auckland Harbour Bridge, part of a 10 year smart energy partnership with Auckland Council, has become a symbol of new energy. It has its lighting needs met by solar and battery technology, with almost 3km of LED pixels (over 90,000) installed. It serves as a reminder to us and our customers in Auckland that times are changing.

To get an idea of the pace of change in energy technology, it's worth trying to imagine retrofitting old technology in place of new. If Vector Lights consisted of over 90,000 filament lightbulbs instead of LED's, not only would the installation give off a disconcerting warmth while driving across the Auckland Harbour Bridge, but it would also burn five times as much energy. To light the bridge with old-school light bulbs would have required 1,240 solar panels – compared with 248 currently – which would need the equivalent of more than 100 household rooftops to accommodate.

Vector Lights is also an example of how new and exciting technology can come together to provide innovative energy solutions. Solar power, storage batteries, and peer-to-peer capabilities virtualise the connection between battery to bridge and power a massive lighting structure in a completely renewable and sustainable way which doesn't put added pressure on our network or cost the earth in carbon emissions.

There is no reason why the same thinking which led to Vector Lights being supported by a 'micro-grid' of sorts, such as the ones being developed by PowerSmart in the Pacific Islands, couldn't be applied to more remote areas of Auckland. These areas are often connected by lines traversing many kilometres of rugged bush or coastline. In this way, Vector Lights is a real-world example of the exciting new energy solutions Vector can tap into for the benefit of Aucklanders.

SDG://



FUTURE PROOF //

"Vector Lights is an example of how new and exciting technology can come together to provide innovative energy solutions."

—

As well as transforming the Waitematā Harbour as a guiding light toward a smart energy future, Vector Lights has also become an experience and a destination, giving Aucklanders a focal point for celebration and recognition.

Since its launch on Auckland Anniversary Weekend in January 2018, Vector Lights has played host to light and sound shows celebrating a breadth of diversity. From Māori history to Chinese New Year, Auckland Pride, Pasifika Festival, and Matariki celebrations, Vector Lights has quickly become a cultural destination in Auckland.

Vector Lights on Auckland Harbour Bridge enhances an icon of the city, adding vibrancy and interest to Aucklanders and visitors from around the world. As an energy company owned by Aucklanders, it is Vector's responsibility to contribute to our city's shared future. Vector Lights is the highlight of that commitment and our work to prepare the region for the new energy future. ■

EMPOWERING

02.

VECTOR TODAY.

VECTOR.CO.NZ
EMPOWERING
YOU.

$ 149.8 MILLION	$ 470.1 MILLION	$ 358.6 MILLION
Group Net Profit	Group Adjusted EBITDA	Regulated Networks Adjusted EBITDA
$ 164.9 MILLION	563,076 ELECTRICITY CONNECTIONS	109,229 GAS CONNECTIONS
Unregulated business Adjusted EBITDA	Net electricity connections up 7,976 (1.4%)	Net gas connections up 2,559 (2.4%)
1,405,936[1] SMART METERS	$ 381.2 MILLION	16.25 CENTS PER SHARE
Smart meters (cumulative)	Capital expenditure	Full year dividend

1 Includes meters managed not owned.

April's storm saw 200 km/h plus winds cut power to over 150,000 homes

Now deploying smart meters across three Australian states

PowerSmart projects underway in South Pacific and New Zealand

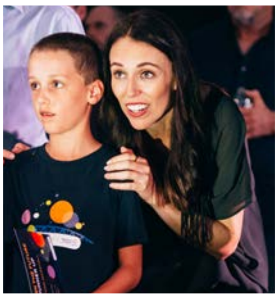
Internet of Energy 'system of systems' DERMS in production

Record number of new electricity connections in Auckland (11,135)

Opened new OnGas Bottle Swap plant in Papakura, with first accepted Safety Case for a Major Hazard Facility in New Zealand

Announced return of Loss Rental Rebates directly to consumers

Announced target to be Net Zero Carbon by 2030



Vector Lights launched January 2018

First large New Zealand corporate to be Living Wage accredited

HRV Solar launched

Increase in percentage of women directly reporting to the management team, up from 21% to 34%

THE WORLD IN WHICH VECTOR STRIVES TO CREATE VALUE//:

HOW VECTOR THINKS ABOUT CREATING VALUE //

We have applied the international integrated reporting framework to capture how we create value. This framework allows us to show how we use our resources or capital. We have represented our core business activities and how our business outputs help achieve our targeted outcomes. We also recognise the important enabling activities that support our various business activities.

— To create a new energy future, all parts of the Vector Group need to focus on customer choice and control.

— In doing this, we will encounter opportunity and risk.

— At a macro level, these opportunities and risks are all filtered through the lens of climate change, financial prudence, technological change, and changes to consumer expectations.

— In response to these forces, and to create value, we have built a portfolio of energy businesses and/or brands, with varying degrees of maturity.

— We take a long-term view with our portfolio.

— Each business has its own strategy to create new customer solutions.

— They are all supported by active consideration of our portfolio mix and potential partnerships and collaborations with like-minded others, and by a foundation of enabling qualities such as leadership, innovation, sound governance and customer focus.

– Our targeted outcomes are consistent with the United Nations Sustainable Development Goals (SDG's), in particular SDG 3, 7, 9, 10, 11, 13 and 17.

INPUTS (RESOURCES)

Financial
- Cash and cash equivalents
- Debt
- Investment in infrastructure

Manufactured
- Property, plant and equipment
- Buildings and facilities
- Network

Intellectual
- Vector and utility-specific skills
- Research and development

Social & relationship
- Relationships with customers and suppliers
- Employees
- Collaboration with stakeholders
- Partnerships

Human
- Experienced and diverse workforce
- Responsible leadership

Natural
- Land: for infrastructure and operations
- Solar: for generation of solar power
- Gas: for processing and distribution

VECTOR FOUNDATION AND ENABLERS//:

VECTOR IS OPERATING AMIDST A WIDE RANGE OF ENVIRONMENTAL, TECHNOLOGICAL, ECONOMIC, SOCIETAL, POLITICAL AND INDUSTRY FORCES//:

BUSINESS ACTIVITIES

Vector's **core business** activities are facilitated through the following:

Regulated Networks:

- Delivery of sustainable, safe, reliable and resilient electricity and gas networks for Auckland (Vector)

Gas Trading:

- Sale and distribution of gas products to residential, commercial and industrial customers (OnGas)
- Processing of natural gas for transmission and distribution
- Production of LPG and natural gasoline

Technology:

- Design and provision of residential and commercial energy management solutions (E-Co Products and PowerSmart)
- Provision of end-to-end metering services to energy retailers and distributors (AMS)
- Provision of fibre and telecommunications services (Vector Communications)
- Development of new energy technologies for benefit of consumers (Vector Group-wide)

OPERATIONAL OUTPUTS

Financial outputs

- Shareholder dividends
- Regulated and unregulated income
- Appropriate investment in diversification
- Improved cost efficiencies

Operational outputs

- Number of electricity and gas connections
- EV charging sessions
- MWh of installed solar energy
- Number of connected distributed energy resources
- Volume of gas bottles filled, refurbished and distributed
- Customer satisfaction measures
- Greenhouse gas emissions
- Number of meters deployed
- Regulated performance measures

Technological outputs

- Number of new energy customer solutions
- Improved network and digital capabilities

People outputs

- Strong talent development programmes
- Effective stakeholder engagement and collaboration
- Total recordable and lost time injury rates
- Diversity statistics

TARGETED OUTCOMES

- Strong and ongoing dividend flow
- Meet electricity and gas needs for Auckland population growth
- Maintain optimal balance between price and quality of service
- Maximise consumer benefits of energy technology change
- Market leader in new energy solutions
- Market leader in healthy home and energy solutions
- Net zero carbon by 2030
- Continual reduction in Lost Time Injury Frequency Rate (LTIFR) and Total Recordable Injury Frequency Rate (TRIFR)
- Preferred workplace for talent, diversity and inclusiveness
- Brand recognised as trusted, innovative and leading

SOUND GOVERNANCE (see pages 52-53, 128-131) // **STRONG MANAGEMENT** (see pages 54-55) // **SAFETY ALWAYS APPROACH** (see pages 44-51) // **TECHNOLOGY LEADERSHIP** (see pages 22-27, 38-43) // **ACTIVE COMMUNITY & STAKEHOLDER ENGAGEMENT** (see page 35) // **PROTECTIVE RISK MANAGEMENT** (see pages 125-127) // **FAIR REMUNERATION** (see pages 132-133)

MATERIAL VALUE DRIVERS AND KEY STAKEHOLDERS //

Determining what matters involves identifying potentially important matters using a range of sources, including media articles, trend updates, business unit planning, and stakeholder engagement. These matters are then assessed for importance, to Vector and our stakeholders.

EXTREME WEATHER EVENTS

The increasing frequency and severity of storms impacts on the reliability of our network, as seen during the April 2018 storm. Extreme weather events have the potential to disrupt our network for long periods, and we need to understand how they will impact us, and what we can do about it.

ENERGY AFFORDABILITY

Ensuring pricing is fair and transparent, particularly in the face of increased distributed energy, pricing reforms and rising energy poverty. Our customers want fair and transparent pricing, and we advocate on their behalf.

ENERGY RELIABILITY

Making sure our network has the ability to meet the demands of a growing Auckland. Customers want to have energy available at all times, we need to ensure our network is resilient to storms, and can meet peak demands of a growing population and electrifying economy.

ELECTRIFICATION OF TRANSPORT

The transition to electrification and automation of all forms of transport, from passenger vehicles to public transport. This will impact how customers use and interact with energy, shifting and increasing demand.

CUSTOMER CHOICE

Customers have more control over how they use and consume energy than ever before. They are empowered and want access to a range of options. We need to diversify and provide choice for customers, so that we have a role in how technology and people interact with our network in the future.

WORKER SAFETY

Vector's working environment has a number of potential hazards, largely associated with electricity and gas. Our focus on health and safety is critical to ensuring these hazards are managed.

CYBER SECURITY

We are seeing an increased number of cyber threats on our systems, including a data breach of our outage app in April 2018. Ensuring the safety and security of these systems is key to building a resilient business. Our network is critical for the success of New Zealand, and any cyber threats need to be treated seriously. We need to have the right tools in place to mitigate any potential threats.

SOCIAL INEQUALITY

Inequality in society has been increasing year on year, especially in relation to income and home ownership. We support equitable pay policies, including the Living Wage, and we advocate for equitable and fair remuneration with our supply chain.

SECTOR CONVERGENCE

A number of sectors are converging, including energy, transport and information technology. Sector convergence will lead to more competition, particularly for talent, and will provide customers with access to easy and convenient energy options.

POLITICAL AND REGULATORY UNCERTAINTY

Regulations control the way our business operates and interacts with our customers. We must actively work with political and regulatory stakeholders on behalf of consumers.

LOW CARBON TRANSITION

We support the low carbon transition by decarbonising our own operations through efficiency and substitution while assisting in the global transition. We are creating new products and services that will reduce carbon from the energy and transportation sectors.

ENGAGING WITH KEY STAKEHOLDERS

MATERIAL MATTER	CUSTOMERS	EMPLOYEES	SUPPLIERS	SHARE-HOLDERS	REGULATORS	ENERGY INDUSTRY	COMMUNITIES	MEDIA	CENTRAL GOVERN-MENT	LOCAL GOVERN-MENT	IWI
Extreme weather events	●	●	●	●	●	●	●	●	●	●	●
Energy affordability	●			●	●	●		●	●	●	●
Energy reliability	●	●	●	●	●	●	●	●	●	●	●
Electrification of transport	●	●	●	●	●	●	●	●	●	●	●
Customer choice	●	●		●	●	●		●	●		●
Worker safety	●	●	●	●	●	●	●	●	●	●	
Cyber security	●	●	●	●	●	●		●	●		
Social inequality	●	●		●	●		●	●		●	●
Sector convergence		●		●	●	●			●	●	
Political and regulatory uncertainty		●		●	●	●		●	●	●	
Low carbon transition	●	●		●	●	●	●	●	●	●	●

HOW WE ENGAGE WITH OUR STAKEHOLDERS

STAKEHOLDER	HOW DO WE ENGAGE?
Customers	Websites / Media releases / Customer contact centres / Sales / Direct mail / Dividends
Employees	Staff events / Internal communications / Internal social media / Green papers
Suppliers	Contract negotiations / Supplier briefings / Tenders
Shareholders	Annual and half year reports / Investor presentations / Continuous disclosure through NZX / Dividends
Regulators	Policy submissions / Thought leadership engagements / Green papers / Meetings / Participation in workshops
Energy Industry	Participation in working groups / Open engagement / Membership of industry associations / Green papers
Communities	Websites / Media releases / Social media / Sponsorships / Schools programme
Media	Media releases / Opinion-editorials / Partnerships
Central Government	Policy submissions / Participation in working groups / Thought leadership engagement
Local Government	Regular meetings / Policy submissions / Thought leadership engagements
Iwi	Regular meetings / Engagement on developments / Customer Advisory Board / New technology developments

EMPOWERING

03.

OPERATIONS, LEADERSHIP AND SUSTAINABLE BUSINESS.

VECTOR.CO.NZ
EMPOWERING
YOU.

REGULATED NETWORKS

Revenue for our Regulated Networks business increased 4.6% to $776.2 million from $741.9 million the year before. This was largely driven by the release of accumulated Loss Rental Rebates[1] and an increase in capital contributions – up 14.7% to $70.2 million – reflecting continued connection growth and significant infrastructure development taking place across Auckland.

Underlying revenue (net of contributions, loss rental rebates, and pass-throughs) was flat, with growth in connections offset by declining electricity consumption and lower gas revenue following the regulatory reset of gas distribution prices from 1 October 2017 which resulted in a 14% reduction in prices. From April 2018, our electricity revenue has also been impacted by the settlement[2] with the Commerce Commission, which will see $13.9 million returned to Auckland consumers by reducing the amount of revenue we recover over two regulatory years. The impact on the FY18 result is $1 million.

New electricity connections rose 21.9% to 11,135 from 9,138 on the back of continued Auckland growth."

—

SDG://

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
10 REDUCED INEQUALITIES
11 SUSTAINABLE CITIES AND COMMUNITIES
13 CLIMATE ACTION

New electricity connections rose 21.9% to 11,135 from 9,138 on the back of continued Auckland growth. New gas connections fell 10.0% to 3,165 from 3,515. Total connections to the electricity network stood at 563,076 at year end, up 1.4% from 555,100 a year ago. Total gas connections were 109,229, up 2.4% from 106,670 a year ago.

Aided by the increase in connections and the colder temperatures in the latter part of the year, volumes transported across the electricity network rose 1.3% to 8,442GWh from 8,332GWh. Auckland gas distribution network volumes were up slightly at 14.5PJ from 14.3PJ the previous year, due largely to connection growth.

Adjusted EBITDA (which excludes capital contributions) fell slightly (0.7%) on the prior year to $358.6 million from $361.2 million on the back of higher maintenance costs. The rise in maintenance costs ($7.5 million) is driven by an increase in vegetation maintenance targeting the worst performing feeders and the April 2018 storm which resulted in additional costs of $4 million.

Strong connection growth and an increase in replacement capex has resulted in a significant increase in regulated capex, up to $245.8 million in FY18 from $210.6 million in the prior year.

Given the size of the investment required to support the ongoing anticipated growth of Auckland's energy networks, it is of significant concern that our regulated electricity network is not earning its regulatory cost of capital. Vector's electricity network ROI[3] for the 2018 regulatory year was only 5.49% - significantly lower than the regulatory WACC[4] of 7.19%. This is largely due to Commerce Commission forecast errors in the current regulatory parameters.

Absent these errors, Vector's electricity revenues for the 2018 regulatory year would have been almost $28 million higher. Whilst we anticipate the majority of these errors will be corrected at the next reset (April 2020), they will continue to significantly impact network returns until then.

Our Regulated Asset Base (RAB) now stands at $3.4 billion. The electricity RAB amounts to $3.0 billion and the Auckland gas distribution RAB is around $405 million.

Vector has been in ongoing discussions with the Commerce Commission regarding penalties for historic breaches of its regulated SAIDI performance quality targets. The challenge for Vector, and indeed all line companies, is that the current regime provides limited guidance for balancing price and quality. Lack of precedent means it is difficult to predict the potential financial impact. This makes meeting quality standards very challenging in an environment of rapid technological change, increased customer expectations, greater focus on health and safety, increased dependence on electricity, and ongoing city growth. ■

—

1 Vector will pass Loss Rental Rebate surpluses directly to Electricity account holders. The accumulated Transpower receipts have been released to Other Income and a provision for payment is reflected in Other Expenses.

2 In 2014/15 the assumptions we made around customers being placed by their electricity retailer on the most suitable plan did not eventuate. As a result, we unintentionally earnt more than allowed by the Commerce Commission.

3 Return on Investment, as defined by the Commerce Commission.

4 Weighted average cost of capital.

–
THE APRIL 2018 STORM SAW MASSIVE DAMAGE FROM TREES DRAGGING DOWN POWER LINES.

CASE STUDY: BATTLING THE ELEMENTS

To better understand the potential physical impact of climate change on Auckland's electricity and gas network, Vector commissioned an assessment of how projected increases in global warming might lead to physical impacts on assets. The business was already acutely aware of the impact of high wind events and a review of network fault and outage data against historical wind speeds confirmed this correlation. However, less was known about other climate parameters and how these, along with wind, would be affected under climate change.

To understand how the climate is expected to change, we chose two different scenarios that relate to how the world's greenhouse gas emissions will track out to 2030 and 2050. The first (RCP4.5) of these aligned to the world meeting the Paris agreement and keeping warming to within two degrees. The second (RCP8.5) was more closely aligned to the current rate of emissions continuing with significantly more impact expected.

The modelling covered the climate variables of wind, precipitation and temperature, and revealed that wind will continue to have the most significant impact on Vector's assets with the number of hours with wind in the 70-80km/h range projected to increase materially.

While not specifically modelled, flooding and landslides/erosion were considered to pose a moderate risk, while both sea level rise/storm surge and wildfires were projected to be low risk. Although low lying areas of Vector's network will be increasingly vulnerable to high tides and coastal events as sea levels continue to rise, key assets including substations and grid exit points are generally not at elevations that will be affected by sea level rise out to 2050.

SDG://

–
STATE OF THE ART TECHNOLOGY HELPS CONTROL AUCKLAND'S NETWORK.

CASE STUDY: PROTECTING THE CROWN JEWELS

At the heart of our regulated business is a control system that manages the operation of the distribution network. Traditionally, control systems were 'air gapped' (a network security measure) from IT/Corporate systems to provide a layer of protection. As more internet connected distributed energy resources (DER), fault sensors and hot water load controllers become standard components of a modern distribution network, relying only on this type of defence is less effective as the potential attack and risk of compromise of our control system increases.

In response to this, we have deployed a solution which provides real-time artificial intelligence-based threat detection. This solution has visibility of connected network assets on the electricity distribution control network to enable early visibility of any potential attacks. This improves our responsiveness and limits the potential impact of any breach.

SDG://

Revenue for our Regulated Networks business increased:

4.6% ↑ to $776.2M

This was largely driven by the release of accumulated Loss Rental Rebates and an increase in capital contributions – up 14.7% to $70.2 million – reflecting continued connection growth and significant infrastructure development taking place across Auckland.

GAS TRADING

Revenue for the Gas Trading business increased 3.0% to $290.3 million from $281.8 million a year earlier. This is on the back of higher field production at Kapuni up 11.9% to 9.4PJ, natural gas volumes at 18.3PJ, and higher Liquigas, LPG and Bottle Swap volumes.

Gas Trading adjusted EBITDA fell 6.8% to $34.4 million from $36.9 million a year earlier. The prior year result included an insurance settlement of $5.3 million in relation to damage to the Liquigas facilities at Lyttelton during the 2012 earthquake.

Excluding this one-off, underlying Gas Trading EBITDA was up 8.9% with strong volumes across most segments and higher production at the Kapuni Gas Treatment Plant being offset by lower natural gas sales margins, due to strong competition in the market.

Vector's LPG operations continue to occupy a strong market position. All segments of the LPG business saw increased volumes. The new Bottle Swap plant in Papakura is fully operational and is helping drive efficiencies and further growth in our Bottle Swap operations. Bottle Swap 9kg volumes were up 8.0% to 652,859 bottles from 604,391 a year earlier.

LPG tolling volumes were up 8.6% to 183,540 tonnes from 169,046 tonnes a year earlier.

Industry reaction to the Government's ban on new offshore block offers for oil and gas suggests that the decision will have limited impact in the short to medium-term as this ban does not affect existing exploration licences. That said, the change is an important signal of the Government's policy intentions for the longer-term.

SDG://

3 GOOD HEALTH AND WELL-BEING

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

13 CLIMATE ACTION

GAS TRADING //

CASE STUDY: A FIRST IN NEW ZEALAND FOR VECTOR

Late last year Vector became the first organisation in New Zealand to submit and gain acceptance of a Safety Case by WorkSafe. Required for all upper-tier Major Hazard Facilities in New Zealand since the Health and Safety at Work Act came into force in April 2016, a Safety Case demonstrates that a Major Hazard Facility's owner has the ability and means to control major incident hazards effectively.

The Safety Case was for our new OnGas Bottle Swap Plant in Papakura, which started operating in August 2017. The plant was officially opened by the Hon. Iain Lees-Galloway, Minister for Workplace Relations and Safety, in February 2018.

Preparing the Safety Case required significant input from a wide range of stakeholders over a 12 month period and was a key milestone in ensuring effective health and safety controls were in place for the new plant.

The first accepted Safety Case in New Zealand represents a 'step change' in the management of facilities where there is significant risk from hazardous substances to workers and possibly the public. It's only through acceptance of a safety case by the regulator that an operator gains their license to operate.

The first Major Hazard Facility to be built under the new Act, the plant at Papakura will join our existing Kapuni Gas Treatment Plant in Vector's portfolio of Upper Tier Major Hazard Facilities.

–

THE NEW ONGAS BOTTLE SWAP PLANT WAS THE FIRST ACCEPTED SAFETY CASE FOR MAJOR HAZARD FACILITIES.

SDG://-

3 GOOD HEALTH AND WELL-BEING

TECHNOLOGY

The Technology business unit revenue rose 27.9% to $273.6 million from $214.0 million a year earlier, driven largely by increased deployment of smart meters and the acquisition of E-Co Products Group (trading as HRV) and PowerSmart from 31 March 2017. Adjusted EBITDA for the Technology division rose 6.5% to $130.5 million, with gains from the smart meter roll-out diluted by a disappointing result from E-Co's heat pump division.

> **"Adjusted EBITDA for the Technology division rose to $130.5 million from $122.5 million."**
>
> —

This year we installed 84,878 advanced meters in New Zealand and approximately 40,000 advanced meters in Australia. Our smart meter base grew 9.8% to 1.41 million[1] from 1.28 million the year before. Vector has now largely completed our mass smart meter roll-out in New Zealand, and we are now targeting a reduced deployment of around 70,000 meters over the next 12 months by managing the existing electricity meter fleet and installing new and replacement meters as required.

Australia remains our next area of growth for the metering business. The Power of Choice reforms took effect from 1 December 2017. This means metering has become competitive across New South Wales, Queensland, and South Australia. Vector has contracts with most major Australian electricity retailers and is currently deploying more than 7,000 meters a month.

Vector's electricity business restructured its arrangements with Vector Communications over the fibre used to provide SCADA connectivity across its network. As a result, Vector Communications' revenue (and Regulated Networks operating expenditure) has decreased by $5.4 million relative to the prior year. Excluding this change, Vector Communications has delivered a steady result in what is a highly competitive market.

As mentioned in the 2018 half year result, we have been disappointed by the performance of E-Co's heat pump division. The E-Co result was also impacted by the closure of the retrofit window business and a significant investment in developing the HRV solar business. E-Co's core ventilation products have continued to perform strongly and we remain confident that the business will remain a market leader for healthy and energy efficient home solutions. ■

1 Including 135,284 meters which are managed, but not owned, by Vector.

SDG://

7 AFFORDABLE AND CLEAN ENERGY
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
11 SUSTAINABLE CITIES AND COMMUNITIES
17 PARTNERSHIPS FOR THE GOALS

TECHNOLOGY //

–

NEW ENERGY SOLUTIONS WILL CONTINUE TO PROVIDE CONSUMERS WITH MORE CONTROL AND CHOICE.

Revenue for the Technology business increased:

27.9% ↑ to $273.6M

Driven largely by increased deployment of smart meters in New Zealand and Australia and the acquisition of E-Co Products Group (trading as HRV) and PowerSmart from 31 March 2017.

PEOPLE, SAFETY AND RISK

Building resilience across our business, and empowering our people is what our People, Safety and Risk team does best. From implementing diversity and inclusion initiatives, investing in our peoples learning and development, ensuring everyone gets home healthy and safe, to guarding the future sustainability of Vector, everything our team does is about creating and protecting value. This enhances our reputation, making sure that we attract and retain the best people, while keeping pace with a constantly changing and challenging environment.

> "Women now make up 34% of our direct reports to the executive team, up from 21% in FY17."
>
> —

SDG://

3 GOOD HEALTH AND WELL-BEING | 10 REDUCED INEQUALITIES | 11 SUSTAINABLE CITIES AND COMMUNITIES | 13 CLIMATE ACTION | 17 PARTNERSHIPS FOR THE GOALS

AN INCLUSIVE EMPLOYER//

We are determined to foster a culture of innovation and diversity of thought as we see this as essential for future proofing our business to be able to embrace disruption. This includes targeting our demographic mix, tackling inequalities and investing in our people.

Workforce demographics

We are starting to make traction on our goal to have a workforce representative of New Zealand's population – across gender, ethnicity and age.

We have seen a slight improvement in the percentage of women working in our business overall. However, for women in leadership positions the change has been significant. Women now make up 34% of our direct reports to the executive team, up from 21% in FY17. At the governance level, an additional female director has been appointed this year, resulting in 38% female representation.

Vector's ethnicity demographics have recorded minor movements since 2017 with employees identifying as Asian increasing by 1.7% and Māori 0.6%. Despite respective 2.0% increases since 2014, Māori and Pasifika remain under-represented in our workforce. This is something we are actively addressing through leadership initiatives such as Te Whakaterehia Māori Acceleration Programme and Vector's Growing Pasifika Niu Leaders Programme.

The age of our employees hasn't had any significant changes from FY17. We remain under-represented in the 20 to 29 age group. We are seeking to address this through several initiatives to attract youth.

Each year we run direct programmes to bring young people into the business including summer internships, graduate placement and apprenticeships. In FY18 we enrolled 12 young people across these programmes.

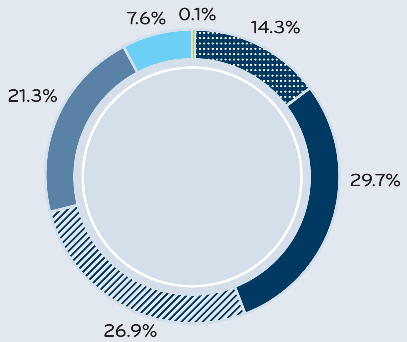
Women in STEM

As an engineering, technology and increasingly digital business Vector has supported a range of initiatives that promote Science, Technology, Engineering and Mathematics (STEM) to young women to encourage them to choose a career in these fields.

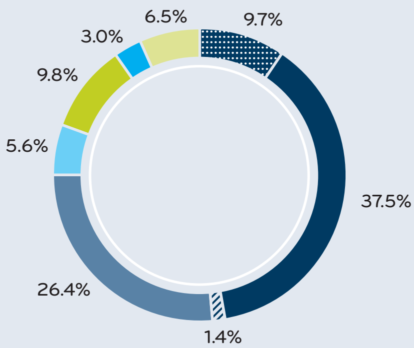
Vector participated in ShadowTech, an initiative that provides girls in Years 9 to 11 with an opportunity to experience what working in the technology sector is like, hosting and mentoring students. We also continue to sponsor the EPro8 Challenge and were involved in Future in Tech's Tiaki Programme.

These STEM focused programmes provided an opportunity to meet and interact with some of our female engineers. Our ongoing schools programme where we teach pupils about energy safety and sustainability is another area where girls are exposed to the industry. Our Kapuni facility also participated in Girls with High Vis, inviting young women to try jobs that traditionally are more popular with men.

VECTOR EMPLOYEES BY AGE

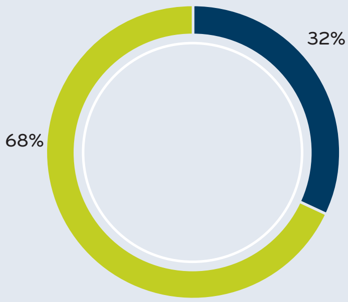


VECTOR EMPLOYEES BY ETHNICITY



* Middle Eastern, Latin American, and African

VECTOR EMPLOYEES BY GENDER



VECTOR LEADERSHIP GROUP BY GENDER

VECTOR GENDER BREAKDOWN	MALE 2018	FEMALE 2018	MALE 2017	FEMALE 2017
Directors	5 (62%)	3 (38%)	5 (71%)	2 (29%)
Executive team	6 (86%)	1 (14%)	5 (83%)	1 (17%)
Direct reports to the executive team	25 (66%)	13 (34%)	30 (79%)	8 (21%)
Across Vector Group	563 (68%)	271 (32%)	548 (69%)	244 (31%)

VECTOR EMPLOYEES BY AGE AND GENDER

AGE	MALE	FEMALE	GRAND TOTAL
UNDER 20	1	1	**2**
20-24	25	9	**34**
25-29	50	35	**85**
30-34	78	49	**127**
35-39	84	37	**121**
40-44	77	41	**118**
45-49	65	41	**106**
50-54	75	34	**109**
55-59	55	14	**69**
60+	53	10	**63**
GRAND TOTAL	**563**	**271**	**834**

Data in all charts and tables on this page exclude statistics from subsidiaries PowerSmart and E-Co Products Group.

Diversity and inclusion initiatives

One of the strengths of our diversity and inclusion programme is that our people develop the initiatives themselves.

He Kete Harakeke, Vector's Māori group, launched a Māori cultural mobile phone app 'Vector Te Kete', with the aim to increase awareness and interest in Te Reo and Tikanga.

Our Rainbow Committee designed, developed and organised our involvement in the annual Auckland Pride Festival. Vector Lights provided a rainbow hued light show for the duration of the festival. For the Pride Parade itself over 80 Vector employees and their family members walked the route. Vector has been accredited with the Rainbow Tick since 2016 in recognition of our ongoing commitment to the LGBTI+ community.

Members of our Diversity and Inclusion Committee also created an event to support the anti-bullying campaign, Pink Shirt Day.

Pay Equity

This year we undertook our first pay equity audit to ensure our employees were receiving fair remuneration. Based on average remuneration, there is a 14.9% average pay gap between females and males, which is close to the New Zealand average.

Following the audit we have updated our remuneration policy and set up the framework to complete an annual pay equity audit and to address any variances immediately.

Living Wage

Vector was the first large corporate organisation in New Zealand to be accredited as a Living Wage Employer by the Living Wage Movement. This accreditation affirms our pledge to fairness and equity in our approach to remuneration. The commitment extends beyond direct employees with Vector also encouraging subsidiaries, contractors and suppliers to adopt the same approach. Being part of this movement and helping to raise the wages floor in New Zealand is one way Vector can contribute to reducing inequality.

Learning and Development

We have a comprehensive learning and development programme which blends e-learning, facilitator-led workshops and action learning syndicates all designed to grow skills and behaviours aligned to our values. One of the highlights this year has been the impact of the no nonsense and simple messages from the workshops delivered by All Black Manager, Gilbert Enoka, on leadership and driving high performance.

We continue to build on the leadership programmes that we launched in 2017, with our second Women in Leadership and Pasifika programmes now underway. Forty women have been involved in the Women in Leadership programme. A key strength of this initiative is that the participants learn by undertaking real Vector projects.

Our second Pasifika Niu Leaders Programme has been launched, and has expanded from 12 participants to 18 representing 12 organisations. The Growing Pasifika Niu Leaders Programme was designed by Vector after we saw a gap in tailored leadership programmes. We wanted to reach beyond Vector to other corporates to create a network of leaders of Pasifika origin. The programme provides Pasifika leaders an opportunity to explore and develop their leadership potential through the lens of a shared Pasifika heritage with leaders from other corporates to build a strong support network.

We have now had more than 60 people complete our emerging and first-time leader programme, Foundations of Leadership. The initiative is building a strong pipeline of talent for our business, and the understanding that everyone, not just those who manage people, has a role as a leader.

We hosted a "career thinking" series at our Auckland, Wellington and Christchurch offices. Inspirational speakers on the topics of personal and professional development encouraged our people to think about their careers.

11,099

Hours of training completed

—

2017 GRADUATE OF PASIFIKA NIU LEADERS PROGRAMME,
JO LEPUA,
AUCKLAND TRANSPORT

"The key area for me is going from a person who enjoyed blending into the background, being invisible, to now co-leading a Pasifika Network within Auckland Transport."

—

To help build capability around sustainable business practices Vector sends directors, executives and a mix of both senior and junior employees on courses run by the Cambridge Institute for Sustainability Leadership. Our Chief Risk Officer is part of the faculty sharing Vector's experience with other businesses across Australasia.

FUTURE WORKPLACE

Future proofing our business means identifying how our people want to work, and creating a range of options that meet their needs. We have started by considering how we redesign our head office more effectively to create a modern work space which is flexible, collaborative and responsive.

In May 2018, we began a three-month trial of a concept called Core Working Hours. This trial is aimed at providing options for employees who wish to reduce time spent in peak commuting times, as well as allowing flexibility for people to drop off or pick up children or to provide care for others. The concept builds upon a recent employee survey which indicated that 67% of respondents are accessing informal flexible working arrangements.

LOOKING AFTER OUR PEOPLE//

Our focus on worker safety and the wellbeing of our people continues to mature. A culture of safety is leading to better engagement and more robust reporting of incidents, and our wellbeing initiatives continue to focus on wellbeing from a physical, mental, social and work perspective, which has seen our programmes become more holistic.

Managing Family Violence

This year, we introduced our Managing Family Violence policy and training. Our policy details how employees who are experiencing or escaping family violence can be supported and to guide the response of managers to employees whose work life is affected by family violence.

Awareness has been increased through the rollout across the Vector group of a family violence e-learning module and training workshops were facilitated by Women's Refuge. This training was further reinforced by the launch of an e-learning module on preventing bullying and harassment.

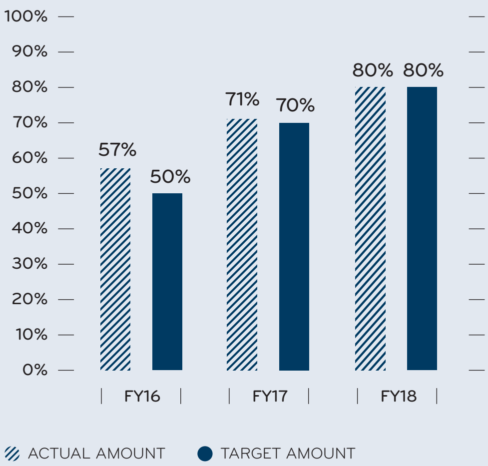
Wellbeing Programme

FY18 was the second year that Vector has run a concentrated and dedicated wellbeing programme. Over the past 12 months Vector employees have been able to take part in a wide range of wellbeing initiatives. One of our biggest successes this year was the increase in participation for the monthly Resilience and Wellbeing (RAW) challenges of 158%. The challenges target four key areas of wellbeing – social, mental, physical, and work wellbeing and encourage participants to undertake activities over a month-long period. The Auckland HSE Committee also organised and ran a Health, Safety and Environment (HSE) Expo at the Head Office, highlighting a number of health, environmental and safety topics and activities.

We have also seen a continued increase in participation in the Wellbeing 360 survey – going from a 71% participation rate in FY17 to 80% in FY18.

Our wellbeing programme is underpinned by the provision of a range of free occupational health services and wellness monitoring.

WELLBEING 360 PARTICIPANTS (%)



Ensuring we have competent and trained employees is key to our ability to deliver our services and products safely and efficiently.

Our people have completed over 5,825 hours in HSE specific training during FY18, covering topics such as lone worker safety, management of fatigue, management of stress, and carbon emissions.

HSE leadership engagements are a vital part of building on our HSE culture as it allows senior management to interact and engage with the wider workforce and develop strong HSE conversations. A total of 195 leadership engagements took place over FY18.

Vector RAW Personal RESILIENCE AND WELLBEING PROGRAMME

195
HSE Leadership engagements undertaken

5,825
HSE Training hours completed

3,218
Students attended Stay Safe around Electricity schools programme

Safety Performance

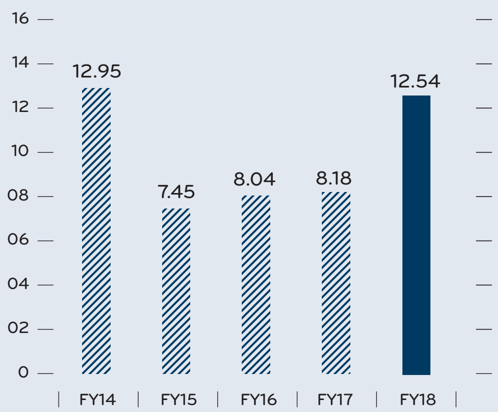
In addition to lead indicators, we also track a number of lag indicators which include Lost Time Injury Frequency Rate (LTIFR), and Total Recordable Injury Frequency Rate (TRIFR). Further, the severity of lost time indicators is measured by tracking and counting the number of working days lost due to the injury. Vector consolidates all contractor and direct employee safety statistics to provide a holistic picture of safety performance across our total business. We have made an 8.7%, improvement in our LTIFR over FY17. Our TRIFR has increased by 53%, which we attribute to having a more open and transparent reporting culture amongst our workforce.

4801
AS/NZS
Certification maintained for New Zealand and Australia business

7901
NZS
Certification maintained for Vector's safety management system for Public Safety

TOTAL RECORDABLE INJURY FREQUENCY RATE

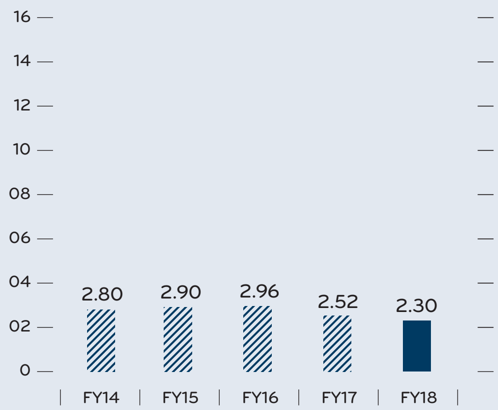
Number of recordable cases per million hours worked including contractors



TRIFR – COMBINED

LOST TIME INJURY FREQUENCY RATE

Number of lost-time injuries per million hours worked including contractors



LTIFR – COMBINED

ACTION ON CLIMATE CHANGE//

Climate change is being recognised as an economic issue with real costs but also offering opportunities for businesses that are embracing a clean energy future.

Vector has taken a significant step forward by making an ambitious commitment on reducing greenhouse gas emissions and improving our understanding of climate change impacts as part of our commitment to climate action.

In 2017 Vector announced a commitment to achieve net zero carbon emissions by 2030. This acknowledges that while 2050 is the proposed target for the country, early action will avoid significant costs in the future.

The commitment to net zero carbon has been supported by a range of leadership action. Our Group Chief Executive has co-led a leadership group from the business community on climate action which culminated in the creation of a Climate Leaders Coalition. The Coalition is committing to emissions reduction in line with the Paris Agreement. Vector has also brought two important thought leaders to New Zealand – Professor Will Steffan and Simon Corbell, who spoke on the science of climate change and the experience of the Australian Capital Territory in tackling climate change.

To help spur practical action at a city level, Vector sponsored and actively participated in Auckland's first Climathon, hosted by the University of Auckland. This 24-hour hackathon exposed participants to design thinking processes and they emerged with a number of concepts for reducing emissions.

Vector supported the inaugural New Zealand Sustainable Development Goals (SDG) Summit this year through sponsorship and by contributing to the business session.

In addition, over the last year Vector has also completed two major pieces of work to understand the impacts of climate change on the business.

The assessment of physical impacts was focused on the Auckland electricity and gas networks and has been used to inform the latest Asset Management Plans for both networks. The modelling of transition impacts to a two degree world was economy-wide, recognising Vector's exposure to a range of sectors and interdependence with a number of key areas of decarbonisation such as EV and solar uptake.

There are clear financial implications for the business from both the transition to a two degree economy and the physical impacts on assets. Vector is following the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) to guide disclosure on how we are responding to climate change. As part of this, Vector has submitted a climate response to the Carbon Disclosure Project (CDP).

At a regulatory level, Vector has been actively engaged in the Productivity Commission inquiry into the Low Emissions economy and early consultation on the proposed Zero Carbon Bill.

ENVIRONMENTAL MANAGEMENT//

Vector has continued to achieve the milestones in our FY16 to FY19 Environmental Strategy. In FY18 we successfully maintained ISO14001 certification of our environmental management system, expanded our GHG emissions reporting, completed environmental monitoring plans in all our businesses, undertook a review of our waste management activities and set our first carbon reduction target.

We have continued to address gaps identified in our initial environmental gap analysis with 97% of actions now complete. We have also focused on raising environmental awareness through delivery of carbon and environmental e-learning modules to more than 80% of our people.

For the FY18 year we have expanded our reporting on GHG emissions to include our most material scope 3 emissions (generated from business travel and fuel consumption by our network field service providers).

Our scope 1 emissions have increased by 9% from FY17. This rise is the result of increased production volumes at the Kapuni Gas Treatment Plant which we are unable to control. Scope 2 emissions have decreased by 8% due to lower electricity transmission losses.

Successful initiatives undertaken during the year to reduce greenhouse gas emissions included:

- Completing the transition of our corporate vehicle fleet to 100% electric or PHEV vehicles
- Completing an upgrade of our air-conditioning systems and IT servers in our head office resulting in a 66% reduction in electricity usage for this equipment
- Solar installation on two further substations.

To engage our people and signal the increasing importance of climate action for our business we set a modest target of 10% reduction in carbon intensity of our corporate carbon emissions for the year. We achieved the target with a 14% reduction in intensity (reduction in absolute emissions was 15% or 200.84 tonnes CO_2-e). This covers business travel, fleet fuel use, and electricity consumption across our offices – activities that all of our people can influence in some way. This target is part of the short term incentive for all employees creating a financial imperative for action.

We received one environmental infringement notice from Auckland Council during FY18. This occurred when a contractor, while working on an excavation, inadvertently pumped sediment laden water from a trench into the stormwater drain. A detailed investigation was completed, which resulted in the contractor's environmental management procedures being updated and employee awareness training undertaken. ■

CARBON AVOIDED THROUGH VECTOR EV CHARGERS

FY17
195.64 tCO_2e

FY18
642.29 tCO_2e

ISO
14001
certified

CARBON BASELINE

	FY18	FY17	% CHANGE
Scope 1*	369,946 tCO_2e	340,176 tCO_2e	9%
Scope 2**	29,069 tCO_2e	31,597 tCO_2e	-8%
Scope 3***	5,866 tCO_2e	–	–

* The majority (over 89.89%) of our scope 1 emissions relate to both the energy used to process gas at Vector's Kapuni Gas Treatment Plant and the fugitive carbon emitted as part of the Benfield process applied at the site. The volume of gas that Vector is required to process at this site is determined by the gas field owner, who is the "miner" under the Climate Change Response Act. Vector is unable to control this in any way and is required to process the gas under the Kapuni Gas arrangements implemented by the New Zealand Government in the 1970's when it was the Natural Gas Corporation of New Zealand.

** Our scope 1 and 2 carbon data is inclusive of the cogeneration facility at Kapuni Gas Treatment Plant, which has been apportioned 50% between the two joint venture parties, but excludes emissions from subsidiaries PowerSmart NZ Limited and E-Co Products Group Limited.

*** Scope 3 emission sources include business travel, transmission and distribution loss for purchased electricity ex Auckland, and fuel consumption for our Networks Field Service Providers.

CASE STUDY:// TWO DEGREE ECONOMIC MODELLING

During the year Vector commissioned a report on the economic impacts of a transition to a two degree world with a particular focus on the sectors of most relevance to the business. The modelling used three scenarios for how New Zealand might achieve net zero GHG emissions. These scenarios included one to achieve the target by 2050; another with the same 2050 timeframe but with any real action delayed until after 2030; and a third that sets an ambitious timeframe of 2040.

The exercise has provided Vector with valuable insights into the key changes that would be required in the energy sector, including transport, for New Zealand to be able to successfully achieve net zero carbon. It has also enabled a level of optimism that the transition can be completed while continuing with modest economic growth.

Vector will utilise this information in our strategic assessment of risks and opportunities that are likely to result from the transition.

SDG://

FUTURE FOCUS AREAS//

Future of Work

We recognise that artificial intelligence and robotics are significantly disrupting the way we work and we therefore need to identify what will add value and how we can upskill employees to ensure a fair transition into new roles. A cross functional project team is investigating opportunities associated with artificial intelligence and robotics and is collaborating with other New Zealand corporate businesses to share ideas.

Circular Economy

We are beginning the process of reducing materials consumption and waste to landfill by taking a circular economy approach. This will incorporate not only the materials we use directly but also consideration of products that are part of our value chain including batteries and solar panels.

Safety 2

Safety 2 focuses on looking at what goes right 99% of the time and why – rather than a retrospective view once something has gone wrong. It is a new lens to safety but one that we are confident in progressing with the business.

Mental Wellbeing

In recognition that mental health traverses both personal and work lives we are seeing a need to provide a more formal support network for our people. An initial step on this journey will be the creation of mental health first aiders.

Our experienced directors hail from diverse backgrounds and lead Vector on behalf of our shareholders and other stakeholders

—
MICHAEL STIASSNY

—
DAVID BARTHOLOMEW

—
JAMES CARMICHAEL

—
SIBYLLE KRIEGER

MICHAEL STIASSNY

BCom, LLB, CA, FInstD

CHAIRMAN, INDEPENDENT NON-EXECUTIVE DIRECTOR

APPOINTED ON 11 SEP 2002

Michael Stiassny is a fellow of Chartered Accountants Australia and New Zealand and prominent strategic adviser, specialising in issues resolution. He is a director of a number of public and private companies, Chairman of the NZ Transport Agency and is Chairman of Ngāti Whātua Ōrākei Whai Rawa Limited and Tower Limited. Michael is a fellow and former president of the Institute of Directors in New Zealand (Inc).

DAVID BARTHOLOMEW

BE (Hon), MBA

INDEPENDENT NON-EXECUTIVE DIRECTOR

APPOINTED ON 28 FEB 2018

David Bartholomew is the former Chief Executive of DUET Group, an ASX-listed utilities and energy company. Aside from Vector, he is a non-executive director of Endeavour Energy, the NSW electricity distributor; Northern Territory Power & Water Corporation; Dussur, the Saudi Arabia Industrial Investment Company; and The Helmsman Project, a not-for-profit organisation providing coaching and leadership development programmes for Year 9 students in Western Sydney. Before joining DUET, David was Director of Infrastructure at Hastings Funds Management. His prior experience includes roles with LendLease, The Boston Consulting Group and BHP Minerals.

JAMES CARMICHAEL

BE, FIPENZ, CMInstD

NON-INDEPENDENT NON-EXECUTIVE DIRECTOR

APPOINTED ON 23 OCT 2008

James Carmichael is a trustee of Entrust and an executive of Energy Trusts of New Zealand Inc. His significant international energy sector experience included responsibility for multi-billion-dollar energy assets and acquisition strategy for Power-Gen International Limited and thermal and hydro power generation investment decisions for Ranhill Power Berhad.

SIBYLLE KRIEGER

LLB (Hons), LLM, FAICD, MBA

INDEPENDENT NON-EXECUTIVE DIRECTOR

APPOINTED ON 1 MAY 2018

Sibylle Krieger is an experienced non-executive director and board chair, with a focus on regulated sectors and sectors undergoing rapid change. She has over 35 years of commercial experience. Sibylle is the independent Chair of Xenith IP Group Limited, a publicly listed company, and an independent director of MyState Limited. She is also an independent non-executive director of the Australian Energy Market Operator Limited. In the past Sibylle has served on a range of boards of both for profit and not-for-profit organisations. From 2006 to 2012 Sibylle spent two terms as a Tribunal member of IPART, the principal NSW economic regulator. In her executive career, Sibylle was a partner of two major commercial law firms, and held a number of management roles in both firms.

STRONG GOVERNANCE //

—
JONATHAN
MASON

—
DAME
ALISON
PATERSON

—
KAREN
SHERRY

—
BOB
THOMSON

JONATHAN MASON

MBA, MA, BA

INDEPENDENT NON-EXECUTIVE DIRECTOR

APPOINTED ON 10 MAY 2013

Jonathan Mason has extensive commercial experience. He has worked in financial management positions in the oil and gas, chemicals, forest products and dairy industries in New Zealand and the USA for International Paper, ExxonMobil Corporation, Carter Holt Harvey, Cabot Corporation and Fonterra. Jonathan also has experience as a non-executive director on boards in both New Zealand and the USA and is currently a director of Air New Zealand Limited, New Zealand Assets Management Limited (NZAM), Westpac New Zealand Limited and Zespri Group Limited. He is also an Adjunct Professor of Management at the University of Auckland, focusing on finance.

DAME ALISON PATERSON

DNZM, QSO, DCom(hc), FCA, ADistFInstD

INDEPENDENT NON-EXECUTIVE DIRECTOR

APPOINTED ON 7 MAR 2007

Dame Alison Paterson is Chair of the Forestry Industry Safety Council, Kiwi Wealth Group, Te Aupouri Commercial Development Limited and Te Aupouri Fisheries Management Limited. She is also a member of the New Zealand Markets Disciplinary Tribunal and a member of the Health Quality & Safety Commission New Zealand.

KAREN SHERRY

QSM, BA, MA (Hons), LLB (Hons), C.FInstD.

NON-INDEPENDENT NON-EXECUTIVE DIRECTOR

APPOINTED ON 24 JUL 2006

Karen Sherry is a director and shareholder of the firm Bell-Booth Sherry Limited where she specialises in commercial and trust law. She is a trustee and former Chair of Entrust. Karen is the Chair of Energy Trusts of New Zealand Inc and a director of the Energy Efficiency and Conservation Authority. She is also a chartered fellow of the Institute of Directors in New Zealand.

BOB THOMSON

BEng (Electrical), DipBS

INDEPENDENT NON-EXECUTIVE DIRECTOR

APPOINTED ON 18 MAR 2005

Bob Thomson was chief executive of Transpower Limited and, since 2004, has been an adviser to Energy Trusts of New Zealand Inc. Prior to his appointment at Transpower, he held a range of senior management and engineering positions in the New Zealand Electricity Department and Electricity Corporation of New Zealand Limited. Bob was involved in the reform of the electricity industry, including as a board member of the Electricity Market Company Limited from 1994 to 1998. He is a fellow of Engineering New Zealand (formerly the Institution of Professional Engineers New Zealand).

Vector's management team are experts in their field, committed to delivering world-class infrastructure services, and attuned to the rapidly evolving demands of our customers.

—
SIMON MACKENZIE

—
KATE BEDDOE

—
ANDRE BOTHA

—
DAN MOLLOY

SIMON MACKENZIE

Grad DipBS (Dist), DipFin, NZCE

GROUP CHIEF EXECUTIVE OFFICER

Simon Mackenzie is passionate about the power of technology to transform the energy industry and consumers' lives. As Group Chief Executive Officer, he has expanded and driven Vector's portfolio of businesses to embrace innovative technologies and strategies to deliver efficient, sustainable energy solutions to consumers.

Simon was appointed Vector's Group Chief Executive Officer in 2008. His tertiary qualifications include engineering, finance and business studies, and the Advanced Management Programme at the Wharton School, University of Pennsylvania.

KATE BEDDOE

BA, LLB

CHIEF RISK OFFICER

Kate Beddoe leads Vector's people, safety, sustainability and risk teams to ensure these areas are aligned and support Vector's strategy and culture. Areas of her responsibility include enterprise risk management, sustainability, business continuity management, internal audit, cyber security, HSE and human resources. Kate's background includes strategic and operational risk management, business continuity, OHSE, sustainability, insurance and commercial law. Prior to joining Vector in July 2012, Kate was with Amcor Limited where she held the global position of Vice-President, Risk and Sustainability and has held management roles with Toyota and Bonlac Foods (Fonterra).

Kate is also a director and Vice President of RIMS (Risk Management Society) Australasia and a faculty member of the Cambridge Institute for Sustainability Leadership – Business and Sustainability Executive Leadership Programme (Melbourne).

ANDRE BOTHA

BEng, MEng, PG DipBus

CHIEF NETWORKS OFFICER

Andre is Vector's Chief Networks Officer, accountable for Vector's regulated electricity and gas businesses.

He brings 28 years' experience in the energy sector with a proven track record at executive level, initially as Chief Engineer with Eskom in South Africa and most recently as Chief Operations Officer with Western Power in Australia.

Andre holds an ME (Electrical) degree from the University of Pretoria and a PGDip (Finance) from the University of Auckland.

DAN MOLLOY

BSc

CHIEF FINANCIAL OFFICER

Dan Molloy leads Vector's finance team and is responsible for financial and management reporting, corporate finance, procurement, transaction processing, investor relations, treasury and tax. He has 15 years' experience in the professional services sector across a range of disciplines, including corporate finance, valuation, insolvency, restructuring and business turnaround. Dan joined Vector from Northpower, where he was Chief Financial Officer.

EXPERIENCED LEADERSHIP //

—
NIKHIL
RAVISHANKAR

—
BRIAN
RYAN

—
ROD
SNODGRASS

NIKHIL RAVISHANKAR
BSc BComm (Hons)
CHIEF DIGITAL OFFICER

Nikhil Ravishankar leads the Vector Group Digital team and is responsible for managing Vector's IT and digital functions. He works across the group to help shape Vector's response to disruptive technologies and evolve Vector's customer engagement, business enablement, and Energy Internet of Things capabilities. Prior to joining Vector, Nikhil was with Accenture where he held the position of Managing Director for New Zealand operations and also sat on its Global Advisory Council for Telecommunications and Media practice. Prior to his role at Accenture, he was the Head of Technology Strategy for Spark and was part of their group transformation office.

BRIAN RYAN
MBA (Hons), BTech
GROUP GENERAL MANAGER EMERGING TECHNOLOGIES

Brian Ryan led the Emerging Technologies team, focused on the company's growth and development, through the implementation of disruptive customer solutions and new technologies. He headed the Vector Communications business, having previously held strategic and commercial executive roles in both the technology and manufacturing environments. Brian was a board member and Vector's representative for the Elemental Excelerator, a not-for-profit organisation with offices in Palo Alto, California, and Hawaii that helps start-ups change the world, one community at a time. Brian left Vector on 6 July 2018.

ROD SNODGRASS
BCA, CA, MinstD
CHIEF CUSTOMER OFFICER

Rod Snodgrass joined Vector in November 2017 as Chief Customer Officer. His focus is on delivering great customer experiences and new products, services and revenues through the design and delivery of new business models that leverage innovative, renewable and sustainable technologies. Rod has over 20 years experience in corporate strategy, innovation, digital growth and transformation in the New Zealand telco, media, internet and digital sectors. Rod is currently on the board of Metlife Care, Jucy and SMX, has sat on numerous local and global boards and is passionate about building and executing corporate, market, business and product shaping strategies and innovation. Prior to that he was Chief Executive of Spark Ventures, leading from inception Spark's incubator and innovation arm.

FROM LEFT TO RIGHT

SEATED: PAUL HUTCHISON, KAREN SHERRY, AND MICHAEL BUCZKOWSKI (DEPUTY CHAIRMAN)

STANDING: WILLIAM CAIRNS (CHAIRMAN) AND JAMES CARMICHAEL.

ENTRUST IS VECTOR'S MAJORITY SHAREHOLDER.

Entrust exists to ensure Aucklanders' best interests remain at the heart of Vector's new energy future. For 25 years, through strong and consistent ownership, Entrust has helped Vector navigate new technology, economic disruption and other challenges. As we look to the future, Entrust's focus remains locked on delivering outcomes for beneficiaries, and energy consumers.

About Entrust

Entrust, which was formerly known as the Auckland Energy Consumer Trust (AECT), was formed in 1993 as part of the corporatisation of the Auckland Electric Power Board (AEPB). Shares in the new company, which later became Vector, were transferred to Entrust to hold on behalf of residential and business consumers in the AEPB supply area.

Entrust's role

Entrust's mandate is to ensure Aucklanders get value from the 75.1% stake they hold in Vector. There are more than 325,000 households and businesses in the former AEPB supply area.

Entrust plays a key role in proposing and appointing directors to the Vector Board, with two of Vector's directors also Entrust trustees. They approve all of Vector's major financial transactions and investment decisions.

Entrust is actively involved in regulatory and industry issues – advocating for energy consumers throughout Auckland and beyond. Recently Entrust has spoken out about a proposal to increase Auckland's transmission prices which they believe is unfair and unnecessary.

Entrust also funds a proportion of the undergrounding of overhead lines in the Entrust district, and promotes new technologies such as solar, batteries, and community and emergency generators.

Auckland benefits

Vector's asset base has grown strongly in the 25 years Entrust has been at the helm of Auckland's shareholding stake. Entrust has supported Vector to achieve this through diversification into new sectors like energy metering, gas distribution and new technologies.

Vector's growth has allowed Entrust to distribute more than $1.3 billion to its beneficiaries. In the past year alone it distributed over $110 million.

Entrust trustees

Entrust has five trustees, who are elected every three years. The trustees are: William Cairns (Chairman), Michael Buczkowski (Deputy Chairman), Karen Sherry*, James Carmichael* and Paul Hutchison. ■

ENTRUST ONLINE://

www.entrustnz.co.nz
www.facebook.com/entrustnz
0508 ENTRUST (0508 368 7878)
PO Box 109626, Auckland 1149

* James Carmichael and Karen Sherry sit on the Vector Board.

Vector has investments in a number of businesses that complement our network businesses and strengthen our capabilities in the energy services field.

50%

KAPUNI ENERGY JOINT VENTURE

Vector Kapuni Limited (a wholly owned subsidiary of Vector) holds a 50% interest in an unincorporated joint venture that operates a cogeneration plant situated at the Kapuni Gas Treatment Plant, producing electricity and steam for the gas treatment plant and other customers.

Treescape

50%

TREESCAPE

Vector holds a 50% shareholding in Tree Scape Limited, one of Australasia's largest specialist tree and vegetation management companies, with depots throughout New Zealand and in Queensland and New South Wales. Treescape employs more than 500 employees. Its customers include councils, utilities, government agencies, construction companies and developers. Treescape implements Vector's planned vegetation management programme, which plays a major role in minimising the impact of severe weather on Vector's electricity network.

www.treescape.co.nz

Liquigas

60.25%

LIQUIGAS

NGC Holdings Limited (a wholly owned subsidiary of Vector) holds a 60.25% shareholding in Liquigas Limited, New Zealand's leading company for tolling, storage and distribution of bulk LPG. Liquigas has employees and depots in Auckland, New Plymouth, Christchurch and Dunedin.

www.liquigas.co.nz

mPrest

7.77%

mPREST

Vector holds a 7.77% shareholding in mPrest Systems (2003) Limited. The mPrest technology allows network companies to better monitor, analyse, and control energy networks and connect traditional infrastructure like electricity lines and substations with new technology like solar and battery energy solutions.

www.mprest.com

VECTOR OPERATING STATISTICS

YEAR ENDED 30 JUNE	2018	2017
ELECTRICITY		
Customers[1, 4]	563,076	555,100
New connections	11,135	9,138
Net movement in customers[2]	7,976	5,047
Volume distributed (GWh)	8,442	8,332
Networks length (km)[1]	18,694	18,503
SAIDI (minutes)[3]		
Normal operations	226.2	173.3
Extreme events	31.2	38.8
Total	257.4	212.1
GAS DISTRIBUTION		
Customers[1, 4]	109,229	106,670
New connections[5]	3,165	3,515
Net movement in customers[2]	2,559	2,348
Volume distributed (PJ)[6]	14.5	14.3
GAS TRADING		
Natural gas sales (PJ)[6]	18.3	17.8
Gas liquid sales (tonnes)[7]	77,656	73,119
9kg LPG bottles swapped[8]	652,859	604,391
Liquigas LPG tolling (tonnes)[9]	183,540	169,046
TECHNOLOGY		
Electricity: smart meters[1, 10]	1,405,936	1,280,889
Electricity: legacy meters[1]	86,505	96,529
Electricity: prepay meters[1]	62	3,555
Electricity: time-of-use meters[1]	12,327	12,134
Gas meters[1]	224,770	221,495
Data management and service connections[1]	8,810	8,823

1. As at 30 June.
2. Net number of customers added during the period, includes disconnected, reconnected and decommissioned ICPs.
3. Regulatory year - 12 months to 31 March (audited).
4. Billable ICPs.
5. The number of new connections in gas distribution for the year ended 30 June 2018 includes an adjustment for 341 ICPs following a data cleanse by one of the retailers. The change was first applied in the 3 months ended 30 September 2017 and so has no impact on the comparative period.
6. Excludes gas sold as gas liquids. These sales are included within the gas liquids sales tonnages.
7. Total of retail and wholesale LPG and natural gasoline.
8. Number of 9kg LPG bottles swapped and sold during the year.
9. Includes product tolled in Taranaki and further tolled in the South Island.
10. The number of smart meters deployed as at 30 June 2018 includes 135,284 meters managed but not owned by Vector (30 June 2017: 102,808).

Vector's standard profit measure prepared under New Zealand Generally Accepted Accounting Practice (GAAP) is net profit. Vector has used non-GAAP profit measures when discussing financial performance in this document. The directors and management believe that these measures provide useful information as they are used internally to evaluate performance of business units, to establish operational goals and to allocate resources. For a more comprehensive discussion on the use of non-GAAP profit measures, please refer to the policy 'Reporting non-GAAP profit measures' available on our website (**vector.co.nz**).

Non-GAAP profit measures are not prepared in accordance with New Zealand International Reporting Standards (NZ IFRS) and are not uniformly defined; therefore, the non-GAAP profit measures reported in this document may not be comparable with those that other companies report and should not be viewed in isolation from or considered as a substitute for measures reported by Vector in accordance with NZ IFRS.

DEFINITIONS

EBITDA:	Earnings before interest, taxation, depreciation and amortisation from continuing operations
Adjusted EBITDA:	EBITDA from continuing operations adjusted for fair value changes, associates, impairments, capital contributions, and significant one-off gains, losses, revenues and/or expenses.

GAAP TO NON-GAAP RECONCILIATION

YEAR ENDED 30 JUNE ($ MILLION)

Group EBITDA and adjusted EBITDA from continuing operations	2018	2017
Reported net profit for the period (GAAP)	149.8	168.9
Add back: net interest costs[1]	130.7	137.3
Add back: tax (benefit)/expense[1]	36.8	34.1
Add back: depreciation and amortisation[1]	225.9	199.6
EBITDA	543.2	539.9
Adjusted for:		
Associates (share of net (profit)/loss)[1]	1.5	(1.6)
Capital contributions[1]	(71.5)	(62.3)
Fair value change on financial instruments[1]	(3.1)	(1.6)
Impairment[1]	–	–
Adjusted EBITDA	470.1	474.4

1. Extracted from audited financial statements

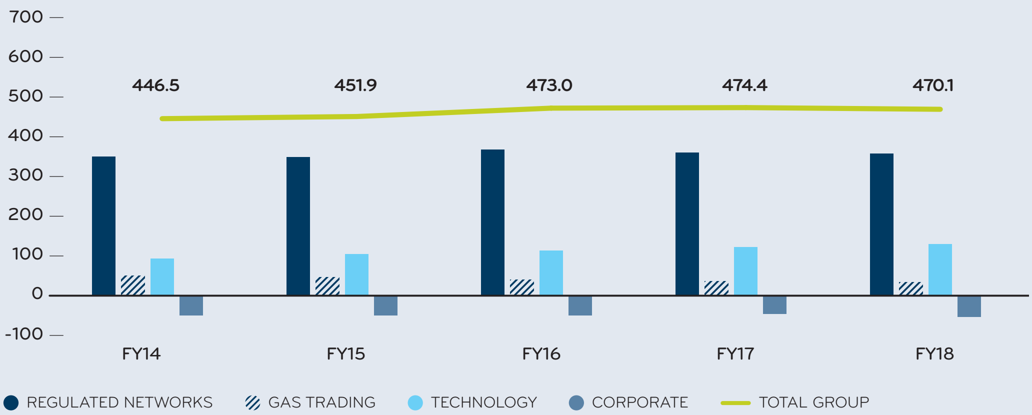
YEAR ENDED 30 JUNE ($ MILLION)	2018			2017		
Segment adjusted EBITDA	REPORTED SEGMENT EBITDA	LESS CAPITAL CONTRIBUTIONS	SEGMENT ADJUSTED EBITDA	REPORTED SEGMENT EBITDA	LESS CAPITAL CONTRIBUTIONS	SEGMENT ADJUSTED EBITDA
Technology	131.8	(1.3)	130.5	123.6	(1.1)	122.5
Gas Trading	34.4	–	34.4	36.9	–	36.9
Unregulated segments	166.2	(1.3)	164.9	160.5	(1.1)	159.4
Regulated segment	428.8	(70.2)	358.6	422.4	(61.2)	361.2
Corporate	(53.4)	–	(53.4)	(46.2)	–	(46.2)
TOTAL	541.6	(71.5)	470.1	536.7	(62.3)	474.4

FIVE YEAR FINANCIAL PERFORMANCE

YEAR ENDED 30 JUNE ($ MILLION)	2018	2017	2016	2015	2014
PROFIT OR LOSS – CONTINUING OPERATIONS[1]					
Total income	1,328.4	1,226.7	1,144.6	1,153.4	1,122.3
Adjusted EBITDA	470.1	474.4	473.0	451.9	446.5
Depreciation and amortisation	(225.9)	(199.6)	(194.6)	(179.0)	(168.5)
Adjusted EBIT	244.2	274.8	278.4	272.9	278.0
Net profit – continuing operations	149.8	168.9	58.9	88.3	114.4
PROFIT OR LOSS – DISCONTINUED OPERATIONS					
Total income	–	–	110.7	140.6	136.6
Adjusted EBITDA	–	–	75.3	88.5	90.5
Depreciation and amortisation	–	–	(5.8)	(16.2)	(15.3)
Adjusted EBIT	–	–	69.5	72.3	75.2
Net profit – including discontinued operations	149.8	168.9	274.4	149.4	171.3
BALANCE SHEET					
Total equity	2,457.9	2,448.3	2,398.3	2,298.6	2,307.8
Total assets	5,808.0	5,574.6	5,603.0	6,123.0	5,839.1
Economic net debt (borrowings net of cash and deposits)	2,377.8	2,220.1	1,932.9	2,745.1	2,625.0
CASH FLOW					
Operating cash flow	389.9	335.7	352.1	369.2	366.6
Capital expenditure	(386.8)	(354.3)	(340.1)	(311.8)	(327.4)
Dividends paid	(163.9)	(161.0)	(159.2)	(155.4)	(156.7)
KEY FINANCIAL MEASURES					
Adjusted EBITDA/total income	35.4%	38.7%	41.3%	39.2%	39.8%
Adjusted EBIT/total income	18.4%	22.4%	24.3%	23.7%	24.8%
Equity/total assets	42.3%	43.9%	42.8%	37.5%	39.5%
Return on assets (adjusted EBITDA/assets)	8.1%	8.5%	8.4%	7.4%	7.6%
Gearing[2]	48.8%	47.1%	43.7%	53.6%	52.5%
Net interest cover – continuing ops (adjusted EBIT/net finance costs) (times)	1.9	2.0	1.6	1.5	1.6
Earnings (NPAT) per share (cents) including discontinued activities	14.8	16.7	27.2	14.6	16.9
Dividends declared, cents per share (fully imputed)	16.25	16.00	15.75	15.50	15.25

1. Prepared on a continuing basis, excluding contribution from gas transmission and Non-Auckland gas distribution for all periods presented.
2. Gearing is defined as economic net debt to economic net debt plus adjusted equity. Adjusted equity means total equity adjusted for hedge reserves.

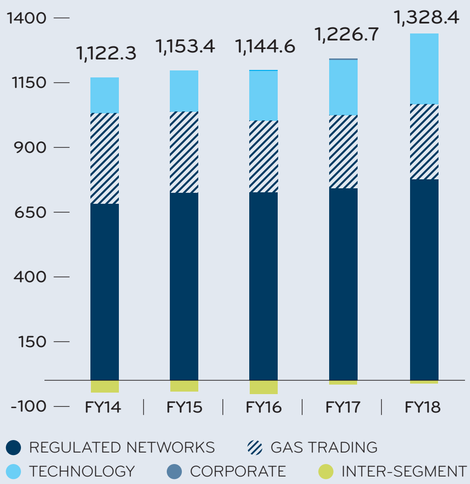
ADJUSTED EBITDA (CONTINUING OPERATIONS)
$ MILLION



TOTAL INCOME

(CONTINUING OPERATIONS)

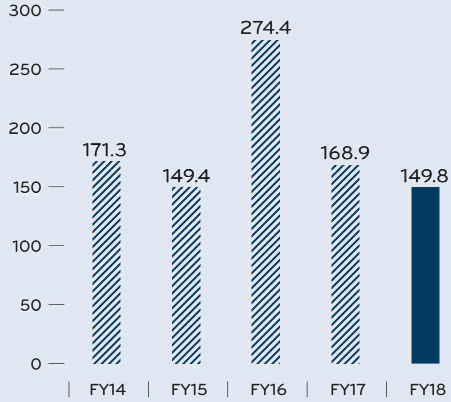
$ MILLION



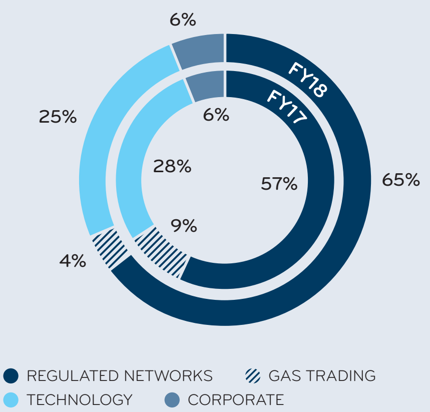
NET PROFIT

(INCLUDING DISCONTINUED OPERATIONS)

$ MILLION



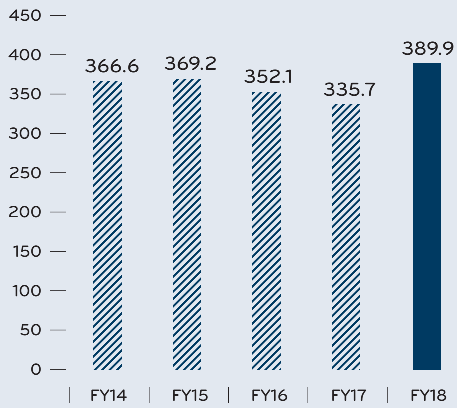
CAPITAL EXPENDITURE



OPERATING CASH FLOWS

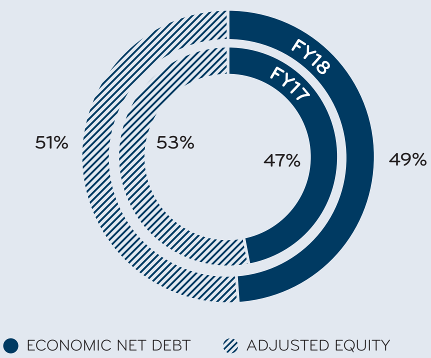
(INCLUDING DISCONTINUED OPERATIONS)

$ MILLION



SOURCE OF FUNDING – GEARING

As at 30 June



STANDARD & POOR'S RATING

BBB

/ STABLE

PERFORMANCE

04.

STATUTORY REPORT.

VECTOR.CO.NZ
EMPOWERING
YOU.

Financial Statements

2018 FINANCIAL STATEMENTS

These financial statements for the year ended 30 June 2018 are dated 23 August 2018, and signed for and on behalf of Vector Limited by:

Director 23 August 2018

Director 23 August 2018

And management of Vector Limited by:

Group Chief Executive 23 August 2018

Chief Financial Officer 23 August 2018

PROFIT OR LOSS
for the year ended 30 June

	NOTE	2018 $M	2017 $M
Revenue	5	1,328.4	1,226.7
Operating expenses	6	(786.8)	(690.0)
Depreciation and amortisation		(225.9)	(199.6)
Interest costs (net)	7	(130.7)	(137.3)
Fair value change on financial instruments	8	3.1	1.6
Associates (share of net profit/(loss))	12.2	(1.5)	1.6
Profit/(loss) before income tax		186.6	203.0
Tax benefit/(expense)	9	(36.8)	(34.1)
Net profit/(loss) for the period		149.8	168.9
Net profit/(loss) for the period attributable to			
Non-controlling interests		1.6	3.1
Owners of the parent		148.2	165.8
Basic and diluted earnings per share (cents)	22.3	14.8	16.7

OTHER COMPREHENSIVE INCOME
for the year ended 30 June

	NOTE	2018 $M	2017 $M
Net profit/(loss) for the period		149.8	168.9
Other comprehensive income net of tax			
Items that may be re-classified subsequently to profit or loss:			
Net change in fair value of hedge reserves	19.2	8.9	40.3
Translation of foreign operations		(0.3)	0.1
Items that will not be re-classified to profit or loss:			
Fair value change on financial asset	12	1.1	1.8
Other comprehensive income for the period net of tax		9.7	42.2
Total comprehensive income for the period net of tax		159.5	211.1
Total comprehensive income for the period attributable to			
Non-controlling interests		1.6	3.1
Owners of the parent		157.9	208.0

	NOTE	2018 $M	2017 $M
CURRENT ASSETS			
Cash and cash equivalents	21.3	27.9	14.9
Trade and other receivables	11	210.0	206.3
Derivatives	19	0.1	–
Inventories		11.6	11.3
Intangible assets		1.0	2.4
Income tax		84.7	51.1
Total current assets		335.3	286.0
NON-CURRENT ASSETS			
Receivables	11	0.1	–
Derivatives	19	56.5	38.0
Investment in associate	12.2	8.1	9.6
Other investments	12.4	15.0	6.2
Intangible assets	13	1,397.2	1,397.2
Property, plant and equipment (PPE)	14	3,995.7	3,837.5
Deferred tax	10	0.1	0.1
Total non-current assets		5,472.7	5,288.6
Total assets		5,808.0	5,574.6
CURRENT LIABILITIES			
Trade and other payables	16	258.5	250.0
Provisions	17	24.4	4.8
Borrowings	18	224.2	399.7
Derivatives	19	65.8	6.6
Income tax		0.7	0.5
Total current liabilities		573.6	661.6
NON-CURRENT LIABILITIES			
Payables	16	44.9	41.5
Provisions	17	22.6	20.4
Borrowings	18	2,171.1	1,770.7
Derivatives	19	51.2	156.5
Deferred tax	10	486.7	475.6
Total non-current liabilities		2,776.5	2,464.7
Total liabilities		3,350.1	3,126.3
EQUITY			
Equity attributable to owners of the parent		2,440.4	2,430.6
Non-controlling interests in subsidiaries		17.5	17.7
Total equity		2,457.9	2,448.3
Total equity and liabilities		5,808.0	5,574.6
Net tangible assets per share (cents)	22.3	104.2	103.5
Gearing ratio (%)	22.3	48.8	47.1

	NOTE	2018 $M	2017 $M
CASH FLOWS FROM OPERATING ACTIVITIES			
Receipts from customers		1,312.2	1,224.2
Interest received		2.0	9.0
Dividends received		0.5	2.0
Payments to suppliers and employees		(736.5)	(686.6)
Interest paid		(127.0)	(151.7)
Income tax refunded		–	0.9
Income tax paid		(61.3)	(62.1)
Net cash flows from/(used in) operating activities	21.1	389.9	335.7
CASH FLOWS FROM INVESTING ACTIVITIES			
Proceeds from sale of PPE and software intangibles		0.4	0.4
Proceeds from sale of investments	3	7.8	–
Purchase and construction of PPE and software intangibles		(386.8)	(354.3)
Acquisition of businesses	3	(1.7)	(91.0)
Post-completion payment for acquisition of businesses		(1.4)	–
Other investments	3	(14.0)	–
Net cash flows from/(used in) investing activities		(395.7)	(444.9)
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from borrowings	21.2	570.8	239.6
Repayment of borrowings	21.2	(400.0)	(273.2)
Dividends paid		(163.9)	(161.0)
Sale of treasury shares		14.0	–
Other financing cash flows	21.2	(2.1)	(2.7)
Net cash flows from/(used in) financing activities	21.2	18.8	(197.3)
Net increase/(decrease) in cash and cash equivalents		13.0	(306.5)
Cash and cash equivalents at beginning of the period		14.9	321.4
Cash and cash equivalents at end of the period		27.9	14.9
Cash and cash equivalents comprise:			
Bank balances and on-call deposits	21.3	19.6	7.0
Short-term deposits	21.3	8.3	7.9
		27.9	14.9

	NOTE	ISSUED SHARE CAPITAL $M	TREASURY SHARES $M	HEDGE RESERVES $M	OTHER RESERVES $M	RETAINED EARNINGS $M	NON-CONTROLLING INTERESTS $M	TOTAL EQUITY $M
Balance at 1 July 2016		875.0	(9.2)	(89.3)	(1.1)	1,606.5	16.3	2,398.2
Net profit/(loss) for the period		–	–	–	–	165.8	3.1	168.9
Other comprehensive income		–	–	40.3	1.9	–	–	42.2
Total comprehensive income		–	–	40.3	1.9	165.8	3.1	211.1
Dividends		–	–	–	–	(159.3)	(1.7)	(161.0)
Total transactions with owners		–	–	–	–	(159.3)	(1.7)	(161.0)
Balance at 30 June 2017		875.0	(9.2)	(49.0)	0.8	1,613.0	17.7	2,448.3
Net profit/(loss) for the period		–	–	–	–	148.2	1.6	149.8
Other comprehensive income		–	–	8.9	0.8	–	–	9.7
Total comprehensive income		–	–	8.9	0.8	148.2	1.6	159.5
Dividends	3	–	–	–	–	(162.1)	(1.8)	(163.9)
Sale of treasury shares	3	5.0	9.0	–	–	–	–	14.0
Total transactions with owners		5.0	9.0	–	–	(162.1)	(1.8)	(149.9)
Reclassification on sale of financial asset		–	–	–	(1.9)	1.9	–	–
Balance at 30 June 2018		880.0	(0.2)	(40.1)	(0.3)	1,601.0	17.5	2,457.9

01. Company information://

Reporting entity

Vector Limited is a company incorporated and domiciled in New Zealand, registered under the Companies Act 1993 and listed on the NZX Main Board (NZX). The company is an FMC reporting entity for the purposes of Part 7 of the Financial Markets Conduct Act 2013. The financial statements comply with this Act.

The financial statements presented are for Vector Limited Group ("Vector" or "the group") as at, and for the year ended 30 June 2018. The group comprises Vector Limited ("the parent"), its subsidiaries, and its investments in associates, financial assets and joint arrangements.

In accordance with the Financial Markets Conduct Act 2013, where a reporting entity prepares consolidated financial statements, parent company disclosures are not required.

Vector Limited is a 75.1% owned subsidiary of Entrust which is the ultimate parent entity for the group.

The primary operations of the group are electricity and gas distribution, natural gas and LPG sales, gas processing, metering, telecommunications and new energy solutions.

02. Summary of significant accounting policies://

Statement of compliance

The financial statements comply with New Zealand equivalents to International Financial Reporting Standards (NZ IFRS), and other applicable Financial Reporting Standards, as appropriate for Tier 1 for-profit entities. They also comply with International Financial Reporting Standards.

Basis of preparation

The financial statements have been prepared in accordance with New Zealand Generally Accepted Accounting Practice (NZ GAAP) as appropriate to Tier 1 for-profit entities.

They are prepared on the historical cost basis except for the following items, which are measured at fair value:

— the identifiable assets and liabilities acquired in a business combination; and
— certain financial instruments, as disclosed in the notes to the financial statements.

The presentation currency is New Zealand dollars ($). All financial information has been rounded to the nearest 100,000, unless otherwise stated.

The statements of profit or loss, other comprehensive income, cash flows and changes in equity are stated exclusive of GST. All items in the balance sheet are stated exclusive of GST except for trade receivables and trade payables, which include GST.

Significant accounting policies, estimates and judgements

Vector's management is required to make judgements, estimates, and apply assumptions that affect the amounts reported in the financial statements. They have based these on historical experience and other factors they believe to be reasonable. Actual results may differ from these estimates. Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised and in the future periods affected.

Accounting policies, and information about judgements, estimations and assumptions that have had a significant effect on the amounts recognised in the financial statements are disclosed in the relevant notes as follows:

— Revenue recognition (Note 5)
— Consolidation basis and classification and valuation of investments (Note 12)
— Impairment and valuation of goodwill (Note 13)
— Property, plant and equipment: valuation and classification of expenses (Note 14)
— Provisions (Note 17)
— Borrowings: measurement bases (Note 18)
— Valuation of derivatives (Note 19)
— Financial risk management – impairment of financial instruments (Note 20)
— Business combinations (Note 25)

02. Summary of significant accounting policies:// CONTINUED

New and amended accounting standards adopted

— ***Disclosure Initiative (Amendments to IAS 7)***

The group has adopted *Disclosure Initiative (Amendments to IAS 7)* in the current year. The impact of the amendment is limited to disclosures only, requiring a disclosure of changes in liabilities arising from financing activities. Refer to note 21.2.

03. Significant transactions and events://

Significant transactions and events that have occurred during the year ending 30 June 2018:

Commerce Commission settlement

On 7 July 2017, Vector and the Commerce Commission agreed the settlement of an over-recovery of electricity revenue by Vector during the regulatory years ended 31 March 2014 and 31 March 2015.

The agreement was to effect the settlement through future price adjustments for the regulatory years ending 31 March 2019 and 31 March 2020. Total value of the adjustments is approximately $13.9 million, including accumulated interest of $3.8 million. Financially the adjustments will impact the group's reported revenues and interest costs over three financial years, commencing in the current year ended 30 June 2018 (3 months), and subsequently in years ended 30 June 2019 (12 months) and 30 June 2020 (9 months).

Investments

mPrest Systems (2003) Limited

On 4 October 2017, Vector invested $14.0 million (US $10.0 million) into mPrest Systems (2003) Limited (mPrest). The investment is accounted for as a financial asset on the Balance Sheet. The mPrest technology allows utilities to better monitor, analyse, forecast and control energy networks and connect traditional infrastructure like electricity lines and substations with new technologies like solar and battery energy solutions. Vector is in the process of rolling out the mPrest technology across its Auckland network to improve its services to its customers. At 30 June 2018, Vector holds 7.8% of the issued capital in mPrest.

SolPho Limited

Vector Energy Solutions Limited acquired 100% of the shares in SolPho Limited for cash consideration of $0.7 million on 1 November 2017. SolPho Limited owns one of the largest solar arrays in New Zealand, and the power is sold via a long-term offtake agreement.

Aircon Direct Limited

E-Co Products Group Limited and its associated subsidiary acquired the business of Aircon Direct Limited for cash consideration of $1.0 million on 22 September 2017. Aircon Direct Limited is a provider of air conditioning and ventilation system services and represents a geographical expansion to E-Co Products Group's business.

Sale of investments

NZ Windfarms Limited

On 23 February 2018, the group executed the unconditional sale of its 22.11% shareholding in NZ Windfarms Limited, an NZX listed renewable power generation entity. The sale transaction settled on 27 February 2018 for a total consideration of $6.4 million, representing the fair value of the investment at the time of sale. No gains and losses arose from the sale.

Power Ledger Pty Limited

Vector purchased a 2.7% equity stake in Power Ledger Pty Limited ("PowerLedger") for $0.4m in the prior year and concurrently entered into a trial arrangement with the company to test its blockchain peer-to-peer technology on Vector's network. The equity stake was repurchased by PowerLedger from Vector in the current year for a consideration of $1.4 million, giving rise to a gain of $1.0 million. The trial arrangement between the two parties ended at the time of the repurchase.

03. Significant transactions and events://
CONTINUED

Sale of treasury shares	On 9 November 2017, the group sold 4,244,923 treasury shares to various investors for a total of $14.0 million, at $3.30 per share (a 2.9% discount to the closing price on 8 November 2017). This resulted in a gain of $5.0 million which has been recorded within issued share capital in equity.
Debt programme	On 25 October 2017, Vector issued a total of $415.8 million (US $300.0 million) of USD senior notes maturing on 25 October 2027 and 25 October 2029 respectively. On 26 October 2017, the group repaid $400.0 million of floating rate notes. On 2 February 2018, Vector entered four new senior credit facilities to replace three facilities maturing on 3 February 2018. The new facilities mature on 2 February 2021. On 25 June 2018, Vector issued a further $140.0 million of fixed rate wholesale bonds. The bonds have a fixed rate of 4.996% and mature on 14 March 2024.
Dividends	Vector Limited's final dividend for the year ended 30 June 2017 of 8.00 cents per share was paid on 15 September 2017, with a supplementary dividend of 1.41 cents per non-resident share. The total dividend paid was $79.6 million. Vector Limited's interim dividend for the year ended 30 June 2018 of 8.25 cents per share was paid on 11 April 2018, with a supplementary dividend of 1.46 cents per non-resident share. The total dividend paid was $82.5 million. Liquigas Limited, a subsidiary of the group, paid an interim dividend in December 2017 of $0.6 million and a final dividend in June 2018 of $1.2 million to the company's non-controlling interests.

04. Segment information://

Segments

Vector reports on three reportable segments in accordance with NZ IFRS 8 *Operating Segments*. These segments are reported internally to the group chief executive and the board of directors. This reporting is used to assess performance and make decisions about the allocation of resources.

The segments are unchanged from those reported in Vector's Annual Report for the year ended 30 June 2017. The segments are:

Regulated Networks	Auckland electricity and gas distribution services.
Gas Trading	Natural gas and LPG sales, storage and processing, and cogeneration.
Technology	Metering services, telecommunications and new energy solutions.

Segment information is prepared and reported in accordance with Vector's accounting policies.

Intersegment transactions included in the revenues and operating expenses for each segment are on an arms' length basis.

The Technology segment includes the financial performance of E-Co Products Group Limited, SolPho Limited, PowerSmart NZ Limited and Aircon Direct Limited from the dates of acquisition.

Segment profit

The measures of segment profit reported to the group chief executive and the board of directors are earnings before interest and tax and earnings before interest, tax, depreciation and amortisation (EBITDA).

Corporate activities

Corporate activities, comprising shared services and investments, earn revenues that are incidental to Vector's operations and do not meet the definition of an operating segment under NZ IFRS 8. The results for corporate activities are reported in the reconciliations of segment information to the group's financial statements.

Interest costs (net), fair value change on financial instruments and associates (share of net profit/(loss)) are reported as corporate activities and are not allocated to the segments.

Major customers

Vector engages with three major customers, each of which contribute greater than ten percent of the group's revenue. These customers are large energy retailers. For the year ended 30 June 2018, the customers contributed $223.6 million (2017: $228.2 million), $177.2 million (2017: $177.6 million) and $162.7 million (2017: $160.4 million) respectively, which is reported across all segments.

04. Segment information://
CONTINUED

2018	REGULATED NETWORKS $M	GAS TRADING $M	TECHNOLOGY $M	INTER-SEGMENT $M	TOTAL $M
External revenue:					
Sales	684.6	290.3	263.9	–	1,238.8
Third party contributions	70.2	–	1.3	–	71.5
Other	17.2	–	–	–	17.2
Intersegment revenue	4.2	–	8.4	(12.6)	–
Segment revenue	776.2	290.3	273.6	(12.6)	1,327.5
External expenses:					
Electricity transmission expenses	(220.6)	–	–	–	(220.6)
Gas purchases and production expenses	–	(187.1)	–	–	(187.1)
Technology cost of sales	–	–	(78.5)	–	(78.5)
Network and asset maintenance	(58.4)	(16.9)	(12.4)	–	(87.7)
Employee benefit expenses	(15.1)	(13.4)	(31.4)	–	(59.9)
Other expenses	(46.5)	(33.5)	(18.7)	–	(98.7)
Intersegment expenses	(6.8)	(5.0)	(0.8)	12.6	–
Segment operating expenses	(347.4)	(255.9)	(141.8)	12.6	(732.5)
Segment EBITDA	428.8	34.4	131.8	–	595.0
Depreciation and amortisation	(115.0)	(20.7)	(76.2)	–	(211.9)
Segment profit/(loss)	313.8	13.7	55.6	–	383.1
Segment capital expenditure	245.8	17.1	93.7	–	356.6

During the year, the Technology segment delivered technology related network projects for Regulated Networks at a margin of $0.7m. The assets are included in the segment capital expenditure for Regulated Networks. The $0.7m margin is included in the segment information presented for Technology and has been eliminated in the reconciliation below.

Reconciliation to revenue, profit/(loss) before income tax and capital expenditure reported in the financial statements: 2018	REVENUE $M	PROFIT/(LOSS) BEFORE INCOME TAX $M	CAPITAL EXPENDITURE $M
Reported in segment information	1,327.5	383.1	356.6
Amounts not allocated to segments (corporate activities):			
Revenue	0.9	0.9	–
Employee benefit expenses	–	(28.6)	–
Other operating expenses	–	(25.0)	–
Elimination of margin on inter-segment transaction	–	(0.7)	–
Depreciation and amortisation	–	(14.0)	–
Interest costs (net)	–	(130.7)	–
Fair value change on financial instruments	–	3.1	–
Associates (share of net profit/(loss))	–	(1.5)	–
Capital expenditure	–	–	24.6
Reported in the financial statements	1,328.4	186.6	381.2

04. Segment information://
CONTINUED

2017	REGULATED NETWORKS $M	GAS TRADING $M	TECHNOLOGY $M	INTER-SEGMENT $M	TOTAL $M
External revenue:					
Sales	674.8	281.8	202.9	–	1,159.5
Third party contributions	61.2	–	1.1	–	62.3
Intersegment revenue	5.9	–	10.0	(15.9)	–
Segment revenue	741.9	281.8	214.0	(15.9)	1,221.8
External expenses:					
Electricity transmission expenses	(212.6)	–	–	–	(212.6)
Gas purchases and production expenses	–	(181.7)	–	–	(181.7)
Technology cost of sales	–	–	(35.7)	–	(35.7)
Network and asset maintenance	(50.9)	(20.0)	(14.4)	–	(85.3)
Employee benefit expenses	(16.0)	(15.0)	(26.0)	–	(57.0)
Other expenses	(31.7)	(21.9)	(13.0)	–	(66.6)
Intersegment expenses	(8.3)	(6.3)	(1.3)	15.9	–
Segment operating expenses	(319.5)	(244.9)	(90.4)	15.9	(638.9)
Segment EBITDA	422.4	36.9	123.6	–	582.9
Depreciation and amortisation	(103.5)	(15.1)	(68.9)	–	(187.5)
Segment profit/(loss)	318.9	21.8	54.7	–	395.4
Segment capital expenditure	210.6	32.7	104.3	–	347.6

In March 2017, the Technology segment granted an indefeasible right of use ("IRU") to the Regulated Networks segment for the exclusive use of a network of fibre and fibre-associated telecommunications assets. The agreement is recognised as a finance lease and replaces the previous telecommunications services agreement between the two segments. The impact is a reduction in intersegment sales for the Technology segment and an equivalent reduction in intersegment expenses for the Regulated Networks segment.

During the year, the Technology segment procured and sold $1.4 million of technology related network assets to Regulated Networks at zero margin. The assets are included in the segment capital expenditure for Regulated Networks. The impact of the sale transaction is not reflected in the segment information presented for Technology.

Reconciliation to revenue, profit/(loss) before income tax and capital expenditure reported in the financial statements:

2017	REVENUE $M	PROFIT/(LOSS) BEFORE INCOME TAX $M	CAPITAL EXPENDITURE $M
Reported in segment information	1,221.8	395.4	347.6
Amounts not allocated to segments (corporate activities):			
Revenue	4.9	4.9	–
Employee benefit expenses	–	(25.8)	–
Other operating expenses	–	(25.3)	–
Depreciation and amortisation	–	(12.1)	–
Interest costs (net)	–	(137.3)	–
Fair value change on financial instruments	–	1.6	–
Associates (share of net profit/(loss))	–	1.6	–
Capital expenditure	–	–	19.8
Reported in the financial statements	1,226.7	203.0	367.4

05. Revenue://

	NOTE	2018 $M	2017 $M
Sales	4	1,238.8	1,159.5
Third party contributions	4	71.5	62.3
Other	4	18.1	4.9
Total		1,328.4	1,226.7

Policies

Revenue is measured at the fair value of consideration received, or receivable.

Revenue is recognised when:

- The amount of the revenue and the costs in respect of the transaction can be measured reliably; and
- It is probable that the economic benefits of the transaction will flow to Vector.

Sales of goods are recognised when the risks and rewards of the goods have been transferred to the buyer.

Sales of services are recognised as the services are delivered, or if applicable on a percentage of completion basis.

Third party contributions towards the construction of property, plant and equipment are recognised to reflect the percentage completion of the underlying construction activity.

Judgements

Management must apply judgement where:

- The timing of customer payments for services does not coincide with the timing of delivery of those services; and/or
- Multiple services are delivered under one contract.

New accounting standards not yet adopted

NZ IFRS 15 *Revenue from Contracts with Customers (including subsequent amendment)*

NZ IFRS 15 applies to contracts to deliver goods and services to customers. Guiding principles in the standard will affect when, how, and how much revenue is recognised in an entity's financial statements in any given reporting period. The standard and its subsequent amendment will replace all existing IFRS guidance for revenue recognition. The most relevant to Vector are: NZ IAS 18 *Revenue*, NZ IAS 11 *Construction Contracts*, and NZ IFRIC 18 *Transfers of Assets from Customers*.

We approached our assessment of the impact of NZ IFRS 15 by analysing the key revenue streams of each of the group's three segments. Our findings have indicated the adoption of NZ IFRS 15 will not have a material impact on the group financial statements.

Key considerations for each segment are as follows:

- **Regulated Networks:** timing and amount of third party contributions recognised each year.
- **Gas Trading:** pricing structures of gas contracts and determination of the appropriate transaction price for a contract.
- **Technology:** identifying the performance obligations promised in metering services contracts and determining the appropriate transaction price.

The group continues to assess the full impact of the standard, in anticipation of the standard becoming mandatory for the group in financial year ended 30 June 2019.

06. Operating expenses://

	NOTE	2018 $M	2017 $M
Electricity transmission	4	220.6	212.6
Gas purchases and production	4	187.1	181.7
Technology cost of sales	4	78.5	35.7
Network and asset maintenance	4	87.7	85.3
Other direct expenses		59.0	30.4
Employee benefit expenses	4	88.5	82.8
Administration expenses		20.0	16.1
Professional fees		15.0	14.4
IT expenses		15.0	14.4
Other indirect expenses		15.4	16.6
Total		786.8	690.0

Fees paid to auditors

Fees were paid to KPMG as follows:

- **audit or review of financial statements:** $506,000 (2017: $530,000);
- **regulatory assurance:** $366,000 (2017: $508,000);
- **other audit fees:** $50,000 (2017: $24,000)

Other audit fees include the audit of guaranteeing group financial statements, bond registers and agreed upon procedures required by certain contractual arrangements.

There were no other services provided by KPMG during the year ended 30 June 2018 (2017: $16,000).

07. Interest costs (net)://

	2018 $M	2017 $M
Interest expense	133.0	144.1
Capitalised interest	(4.4)	(4.8)
Interest income	(2.2)	(7.1)
Other	4.3	5.1
Total	130.7	137.3

Policies

Interest costs (net) include interest expense on borrowings and interest income on funds invested which are recognised using the effective interest rate method.

Capitalised interest

Vector has capitalised interest to PPE and software intangibles while under construction at an average rate of 5.8% per annum (2017: 6.5%).

08. Fair value change on financial instruments://

	2018 $M	2017 $M
Fair value movement on hedging instruments	32.2	(53.6)
Fair value movement on hedged items	(29.1)	56.3
Reclassification of investment in associate to financial asset	–	(1.1)
Total gains/(losses)	3.1	1.6

09. Income tax expense/(benefit)://

Reconciliation of income tax expense/(benefit)	2018 $M	2017 $M
Profit/(loss) before income tax	186.6	203.0
Tax at current rate of 28%	52.2	56.8
Current tax adjustments:		
Non-deductible expenses	3.3	2.0
Relating to prior periods – depreciation method	–	17.2
Relating to prior periods – tax dispute settlement	–	(12.6)
Relating to prior periods – others	1.9	(6.1)
Relating to MEL Network Limited removal	(16.7)	–
Other	(1.3)	(3.1)
Deferred tax adjustments:		
Relating to prior periods – depreciation method	–	(17.2)
Relating to prior periods – tax dispute settlement	–	(2.5)
Relating to prior periods – others	(2.6)	(0.4)
Income tax expense/(benefit)	36.8	34.1
Comprising:		
Current tax	28.1	43.2
Deferred tax	8.7	(9.1)

09. Income tax expense/(benefit)://
CONTINUED

Other adjustments

MEL Network Limited removal

MEL Network Limited (MEL), a wholly owned subsidiary of Vector, was removed from the Companies Office register on 27 March 2018. Following the removal, the related party advance between MEL and Vector Limited was written off, resulting in an income tax benefit of $16.7m to the group. A private binding ruling was obtained to confirm the tax benefit.

Prior period adjustments

Change in depreciation method

The group recognised a $17.2 million income tax expense and an equivalent deferred income tax credit in the prior year in relation to the group's decision to change the tax depreciation method used for property, plant and equipment from the diminishing value method to the straight-line method.

Tax dispute settlement

Vector recognised a $15.0 million income tax benefit as a prior period adjustment in the prior year. The adjustment was made following a judgment made by the Court of Appeal in respect of a tax dispute between Vector and the Inland Revenue. The dispute related to the tax treatment of monies received from Transpower for various rights including access to Vector's tunnel from Penrose to Hobson and the transmission corridor on the North Shore. The Court of Appeal found in favour of Vector.

Policies

Income tax expense/(benefit) comprises current and deferred tax and is calculated using rates enacted or substantively enacted at balance date.

Current and deferred tax is recognised in profit or loss unless the tax relates to items in other comprehensive income, in which case the tax is recognised as an adjustment in other comprehensive income against the item to which it relates.

Imputation credits

There are no imputation credits available for use as at 30 June 2018 (2017: nil), as the imputation account has a debit balance as of that date.

10. Deferred tax://

Deferred tax liability/(asset)

	NOTE	PPE AND INTANGIBLES $M	PROVISIONS AND ACCRUALS $M	HEDGE RESERVES $M	OTHER $M	TOTAL $M
Balance at 1 July 2016		493.2	(10.2)	(34.7)	8.2	456.5
Recognised in profit or loss		(13.2)	1.9	–	2.2	(9.1)
Recognised in other comprehensive income		–	–	15.7	–	15.7
Recognised from business combinations		12.4	–	–	–	12.4
Balance at 30 June 2017		492.4	(8.3)	(19.0)	10.4	475.5
Recognised in profit or loss		23.5	(11.3)	–	(3.5)	8.7
Recognised in other comprehensive income		–	–	3.5	–	3.5
Recognised from business combinations	25	(1.1)	–	–	–	(1.1)
Balance at 30 June 2018		514.8	(19.6)	(15.5)	6.9	486.6

10. Deferred tax://
CONTINUED

The group's deferred tax position is presented in the balance sheet as follows:

	2018 $M	2017 $M
Deferred tax asset	(0.1)	(0.1)
Deferred tax liability	486.7	475.6
Total	486.6	475.5

Policies

Deferred tax is:

- Recognised on temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes.
- Not recognised for the initial recognition of goodwill.
- Measured at tax rates that are expected to be applied to the temporary differences when they reverse.

11. Trade and other receivables://

	2018 $M	2017 $M
Current		
Trade receivables	71.6	77.4
Accrued revenues	105.5	101.9
Interest receivable	17.3	13.2
Prepayments	11.7	9.9
Other	3.9	3.9
Balance at 30 June	210.0	206.3
Non-current		
Other	0.1	–
Balance at 30 June	0.1	–

At 30 June, the exposure to credit risk for trade and other receivables by type of counterparty was as follows.

	2018 $M		2017 $M	
	NOT CREDIT IMPAIRED	CREDIT IMPAIRED	NOT CREDIT IMPAIRED	CREDIT IMPAIRED
Business customers	60.1	0.7	56.1	0.1
Mass market customers	4.4	–	11.2	0.1
Third party asset damages	0.4	3.9	2.1	2.9
Residential and other	5.2	–	7.7	0.3
Total gross carrying amount	70.1	4.6	77.1	3.4
Loss allowance	(0.1)	(3.0)	(0.2)	(2.9)
	70.0	1.6	76.9	0.5

11. Trade and other receivables://
CONTINUED

The following table provides information about the exposure to credit risk and expected credit losses for trade receivables as at 30 June.

	2018 $M		2017 $M	
	CARRYING AMOUNT	LOSS ALLOWANCE	CARRYING AMOUNT	LOSS ALLOWANCE
Not past due	56.5	–	60.8	0.2
Past due 1 – 30 days	7.2	–	6.0	–
Past due 31 – 120 days	4.1	0.1	3.6	0.3
Past due more than 120 days	3.8	3.0	7.0	2.6
Balance at 30 June	71.6	3.1	77.4	3.1

Policies

Receivables are initially recognised at fair value. They are subsequently adjusted for credit impairment losses.

Discounting is not applied to receivables where collection is expected to occur within the next twelve months.

Credit risk

In assessing credit losses for trade receivables, the group applies the simplified approach and records lifetime expected credit losses ("ECLs") on trade receivables.

Lifetime ECLs result from all possible default events over the expected life of a trade receivable. The group considers the probability of default upon initial recognition of the trade receivable, based on reasonable and available information on the group's customers and groups of customers. The group's trade receivables are monitored in two groups: business customers, and mass market residential customers.

In assessing ECLs on trade receivables the group considers both quantitative and qualitative inputs. Quantitative data includes past collection rates, industry statistics, ageing of receivables, and trading outlook. Qualitative inputs include past trading history with the group.

The group's customer acceptance process includes a check on credit history, profitability, and the customer's external credit rating if available. Different levels of sale limits are also imposed on customer accounts by nature.

12. Investments://

Judgements

Classifying investments as either subsidiaries, associates, financial assets or joint operations requires management to judge the degree of influence which the group holds over the investee.

These judgements impact upon the basis of consolidation accounting which is used to recognise the group's investments in the consolidated financial statements.

12.1 Investments in subsidiaries

Trading subsidiaries

Significant trading entities and holding companies in the group are listed below.

		PERCENTAGE HELD	
	PRINCIPAL ACTIVITY	2018	2017
Subsidiaries with 30 June balance date			
NGC Holdings Limited	Holding company	100%	100%
Vector Gas Trading Limited	Natural gas trading and processing	100%	100%
Vector Kapuni Limited	Joint operator – cogeneration plant	100%	100%
Liquigas Limited	Bulk LPG storage, distribution, and management	60%	60%
On Gas Limited	LPG sales and distribution	100%	100%
Vector Metering Data Services Limited	Holding company	100%	100%
Advanced Metering Assets Limited	Metering services	100%	100%
Advanced Metering Services Limited	Metering services	100%	100%
Vector Advanced Metering Services (Australia) Pty Limited	Metering services	100%	100%
Vector Advanced Metering Assets (Australia) Limited	Metering services	100%	100%
Arc Innovations Limited	Metering services	100%	100%
Vector Communications Limited	Telecommunications	100%	100%
Vector Energy Solutions Limited	Holding company	100%	100%
PowerSmart NZ Limited	Energy solutions services	100%	100%
Vector ESPS Trustee Limited	Trustee company	100%	100%
Vector Energy Solutions (Australia) Pty Limited	Energy solutions services	100%	100%
E-Co Products Group Limited	Holding company	100%	100%
Cristal Air International Limited	Ventilation systems assembler and brand franchisor	100%	100%
HRV Home Solutions Limited	Ventilation systems, water systems and parts sales	100%	100%
Ventilation Australia Pty Limited	Holding company	100%	100%
HRV Australia Pty Limited	Ventilation system and parts sales	100%	100%
Energy Efficient Solutions NZ (2016) Limited	Home heating solutions sales	100%	100%
HVAC Hero 2016 Limited	Wholesaler of systems and parts	100%	100%
SolPho Limited	Energy solutions services	100%	–

12. Investments://
CONTINUED

12.1 Investments in subsidiaries
CONTINUED

Policies

Subsidiaries are entities controlled directly or indirectly by the parent. Vector holds over 50% of the voting rights in all entities reported as subsidiaries. There are currently no indicators that Vector does not have control consistent with these voting rights.

The financial statements of subsidiaries are reported in the financial statements using the acquisition method of consolidation.

Intra-group balances and transactions between group companies are eliminated on consolidation.

Geography

All subsidiaries are incorporated in New Zealand, except for the following which are incorporated in Australia:

- Vector Advanced Metering Services (Australia) Pty Limited;
- Vector Energy Solutions (Australia) Pty Limited;
- Ventilation Australia Pty Limited;
- HRV Australia Pty Limited.

12.2 Investment in associate

				PERCENTAGE HELD	
ASSOCIATE	PRINCIPAL ACTIVITY	BALANCE DATE	COUNTRY OF INCORPORATION	2018	2017
Tree Scape Limited	Vegetation management	31 March	New Zealand	50%	50%

	2018 $M	2017 $M
Carrying amount of associates		
Balance at 1 July	9.6	15.6
Reclassification of investment in NZ Windfarms Limited to financial asset	–	(5.6)
Share of net profit/(loss) of associate	(1.5)	1.6
Dividends received	–	(2.0)
Balance at 30 June	8.1	9.6
Equity accounted earnings of associate		
Profit/(loss) before income tax	(2.1)	2.2
Income tax benefit/(expense)	0.6	(0.6)
Share of net profit/(loss) of associate	(1.5)	1.6
Total recognised revenues and expenses	(1.5)	1.6

Policies

Associates are entities in which Vector has significant influence, but not control or joint control, over the operating and financial policies. Vector holds over 20%, but not more than half, of the voting rights in all entities reported as associates, and has assessed that there are currently no indicators that Vector does not have significant influence consistent with these voting rights. Where Vector has 50% voting rights in an entity reported as an associate, we have determined that this does not constitute joint control as there is more than one combination of parties that can achieve majority voting rights and control through board voting.

Investments in associates are reported in the financial statements using the equity method.

12. Investments://
CONTINUED

12.3 Interest in joint operation

			INTEREST HELD	
JOINT OPERATION	PRINCIPAL ACTIVITY	BALANCE DATE	2018	2017
Kapuni Energy Joint Venture	Cogeneration plant operator	30 June	50%	50%

Policies

A joint operation is where Vector is a party to a joint arrangement, and has rights to the assets and obligations for the liabilities relating to the arrangement.

Vector has assessed that the contractual arrangement governing the Kapuni Energy Joint Venture, of which Vector Kapuni Limited is a party, meets the criteria of a joint arrangement, and that the rights and obligations conferred by that contract meet the classification of a joint operation.

The interest in the joint operation is reported in the financial statements using the proportionate method.

12.4 Other investments

mPrest Systems (2003) Limited

On 4 October 2017, Vector invested $14.0 million (US $10.0 million) into mPrest Systems (2003) Limited. The investment is accounted for as a financial asset at fair value through other comprehensive income ("OCI") on the Balance Sheet.

At 30 June 2018, Vector holds 7.8% of the issued shares in mPrest Systems (2003) Limited. The group has determined the fair value of the asset as $15.0 million at 30 June 2018, with the upward movement of $1.0 million recognised in OCI. There have been no purchases, disposals, issues or settlements made during the year.

For fair value measurement purposes, the financial asset is classified as level 3 on the fair value hierarchy (see Note 20 for explanations of various levels in the hierarchy). The table below provides information on how the fair value of the asset is determined.

DESCRIPTION	FAIR VALUE 2018 $M	VALUATION TECHNIQUE	SIGNIFICANT UNOBSERVABLE INPUT	RANGE	SENSITIVITY OF FAIR VALUE TO CHANGES IN INPUT
Offshore private equity investment	$15.0	Market comparable companies approach	Enterprise value / revenue multiple – a multiple inferred from financial information of comparable public companies operating in the same geography.	Enterprise value / revenue multiple (times) 3.2 - 4.0	A 10% change in the multiple used will result in a $1.6 million change in the fair value.

The group's team of valuation specialists is responsible for establishing the appropriate valuation techniques and inputs into the valuation models, including an assessment of any inputs obtained from third party or market sources.

The valuation team report to the chief financial officer, and any significant valuation issues are reported to the group's audit committee.

13. Intangible assets://

	NOTE	CUSTOMER INTANGIBLES $M	EASEMENTS $M	SOFTWARE $M	TRADE NAMES $M	GOODWILL $M	TOTAL $M
Carrying amount 1 July 2016		13.0	14.5	54.7	–	1,198.1	1,280.3
Cost		21.7	14.5	229.1	–	1,198.1	1,463.4
Accumulated amortisation		(8.7)	–	(174.4)	–	–	(183.1)
Transfers from PPE		–	1.8	24.9	–	–	26.7
Acquisition of business		28.2	–	2.1	16.8	67.9	115.0
Amortisation for the period		(2.8)	–	(21.8)	(0.2)	–	(24.8)
Carrying amount 30 June 2017		38.4	16.3	59.9	16.6	1,266.0	1,397.2
Cost		49.9	16.3	252.5	16.8	1,266.0	1,601.5
Accumulated amortisation		(11.5)	–	(192.6)	(0.2)	–	(204.3)
Transfers from PPE		–	0.5	24.4	–	–	24.9
Acquisition of business	25	–	–	–	–	3.6	3.6
Disposals		–	–	(0.1)	–	–	(0.1)
Amortisation for the period		(4.5)	–	(23.1)	(0.8)	–	(28.4)
Carrying amount 30 June 2018		33.9	16.8	61.1	15.8	1,269.6	1,397.2
Cost		49.9	16.8	276.6	16.8	1,269.6	1,629.7
Accumulated amortisation		(16.0)	–	(215.5)	(1.0)	–	(232.5)

13. Intangible assets://
CONTINUED

13.1 Goodwill

Goodwill by reportable segment	2018 $M	2017 $M
Regulated Networks	1,050.2	1,021.5
Gas Trading	156.8	156.8
Technology	62.6	87.7
Total	1,269.6	1,266.0

Policies

Goodwill represents the excess of the consideration transferred over the fair value of Vector's share of the net identifiable assets of an acquired subsidiary.

Goodwill is carried at cost less accumulated impairment losses.

Allocation

Goodwill is monitored internally at a group level. However, it is allocated to operating segments for impairment testing purposes as this is the highest level permissible under NZ IFRS.

During the year ended 30 June 2018, the group has allocated a total of $28.7 million of goodwill recognised through the acquisitions of E-Co Products Group Limited and PowerSmart NZ Limited to the electricity cash generating unit (CGU) within the Regulated Networks segment.

Impairment testing

Goodwill is tested at least annually for impairment against the recoverable amount of the operating segments to which it has been allocated.

For all segments the recoverable amount of each segment to which goodwill is allocated exceeds the net assets plus goodwill allocated. Therefore the group has determined that no impairment to goodwill has occurred during the period.

Judgements

To assess impairment, management must estimate the future cash flows of operating segments including the CGUs that make up those segments. This entails making judgements including:

— the expected rate of growth of revenues;

— margins expected to be achieved;

— the level of future maintenance expenditure required to support these outcomes; and

— the appropriate discount rate to apply when discounting future cash flows.

Assumptions

The recoverable amounts attributed to the electricity, gas distribution, metering, gas trading and communications CGUs are calculated on the basis of value-in-use using discounted cash flow models. Future cash flows are forecast based on actual results and business plans.

For the electricity, gas distribution and metering CGUs, a ten year period has been used due to the long-term nature of the group's capital investment in these businesses and the predictable nature of their cash flows. A five year period has been used for the gas trading and communications CGUs.

Terminal growth rates in a range of 1.0% to 2.0% (2017: 1.0% to 2.0%) and post-tax discount rates between 4.8% to 9.0% (2017: 4.8% and 7.6%) are applied. Rates vary for the specific segment being valued.

Projected cash flows for regulated businesses are sensitive to regulatory uncertainty. Estimated future regulated network revenues and the related supportable levels of capital expenditure are based on default price-quality path determinations issued by the Commerce Commission and are in line with estimates published in the asset management plans.

13. Intangible assets://
CONTINUED

13.2 Other intangible assets

Policies

Other intangible assets are initially measured at cost, and subsequently stated at cost less any accumulated amortisation and impairment losses.

Software, customer intangibles, and trade names have been assessed as having a finite life greater than 12 months, and are amortised from the date the asset is ready for use on a straight line basis over its estimated useful life. The estimated useful lives (years) are as follows:

Software	2 – 36
Customer intangibles	3 – 20
Trade names	20

Easements are not amortised, but are tested for impairment at least annually as part of the assessment of the carrying values of assets against the recoverable amounts of the operating segments to which they have been allocated.

14. Property, plant and equipment (PPE)://

	DISTRIBUTION SYSTEMS $M	ELECTRICITY AND GAS METERS $M	LAND, BUILDINGS AND IMPROVE-MENTS $M	COMPUTER AND TELCO EQUIPMENT $M	OTHER PLANT AND EQUIPMENT $M	CAPITAL WORK IN PROGRESS $M	TOTAL $M
Carrying amount 1 July 2016	2,752.1	419.5	167.2	101.7	114.6	115.1	3,670.2
Cost	3,609.9	684.3	195.2	196.8	200.7	115.1	5,002.0
Accumulated depreciation	(857.8)	(264.8)	(28.0)	(95.1)	(86.1)	–	(1,331.8)
Additions	–	–	–	–	2.5	367.4	369.9
Acquisition of business	–	–	0.8	0.2	1.9	–	2.9
Transfers – Intangible assets	–	–	–	–	–	(26.6)	(26.6)
Transfers – Other	221.9	73.0	8.4	17.3	24.0	(344.6)	–
Disposals	(4.0)	–	–	(0.1)	–	–	(4.1)
Depreciation for the period	(108.1)	(43.6)	(3.9)	(11.2)	(8.0)	–	(174.8)
Carrying amount 30 June 2017	2,861.9	448.9	172.5	107.9	135.0	111.3	3,837.5
Cost	3,818.4	756.0	204.7	208.9	229.0	111.3	5,328.3
Accumulated depreciation	(956.5)	(307.1)	(32.2)	(101.0)	(94.0)	–	(1,490.8)
Additions	–	–	–	–	2.5	381.2	383.7
Acquisition of business	0.6	–	–	–	–	–	0.6
Transfers – Intangible assets	–	–	–	–	–	(24.9)	(24.9)
Transfers – Other	223.8	73.8	1.9	6.3	34.1	(339.9)	–
Disposals	(3.7)	–	–	–	–	–	(3.7)
Depreciation for the period	(120.3)	(44.1)	(3.7)	(14.3)	(15.1)	–	(197.5)
Carrying amount 30 June 2018	2,962.3	478.6	170.7	99.9	156.5	127.7	3,995.7
Cost	4,028.1	829.2	206.6	206.6	265.6	127.7	5,663.8
Accumulated depreciation	(1,065.8)	(350.6)	(35.9)	(106.7)	(109.1)	–	(1,668.1)

14. Property, plant and equipment (PPE):// CONTINUED

Policies

PPE is initially measured at cost, and subsequently stated at cost less depreciation and any impairment losses. Cost may include:

— Consideration paid on acquisition
— Costs to bring the asset to working condition
— Materials used in construction
— Direct labour attributable to the item
— Interest costs attributable to the item
— A proportion of directly attributable overheads incurred
— If there is a future obligation to dismantle and/or remove the item, the costs of doing so

Capitalisation of costs stops when the asset is ready for use.

Subsequent expenditure that increases the economic benefits derived from the asset is capitalised.

Uninstalled assets are stated at the lower of cost and estimated recoverable amount.

Depreciation commences when an asset becomes available for use.

Depreciation of PPE, other than freehold land and capital work in progress, is calculated on a straight line basis and expensed over the useful life of the asset. Useful lives are reviewed regularly and adjusted as appropriate for the revised expectations.

Estimated useful lives (years) are as follows:

Buildings	40 – 100	Meters and meter inspections	2 – 40
Distribution systems	5 – 100	Other plant and equipment	3 – 55
Leasehold improvements	5 – 20		

Judgements

Management must apply judgement when evaluating:

— Whether costs relate to bringing the items to working condition
— The amount of overhead costs which can be reasonably directly attributed to the construction or acquisition of an asset
— Whether subsequent expenditure on the asset increases the future economic benefits to be obtained from that asset
— Whether any indicators of impairment have occurred which might require impairment testing of the current carrying values

Capital commitments

The estimated capital expenditure for PPE and software intangibles contracted for at balance date but not provided is $68.0 million for the group (2017: $52.6 million).

15. Operating leases://

	2018 $M	2017 $M
Aggregate minimum lease payments under non-cancellable operating leases where Vector is the lessee		
Within one year	9.1	8.9
One to five years	16.6	22.7
Beyond five years	14.5	16.5
Total	40.2	48.1

Policies

Payments made under operating leases, where the lessors effectively retain the risks and benefits of ownership, are recognised in profit or loss on a straight-line basis over the lease term.

Lease incentives received are recognised as an integral part of the total lease expense over the term of the lease.

Lease of premises

The majority of the operating lease commitments relate to the group's leases of premises. These, in the main, give the group the right to renew the lease at the end of the current lease term.

New accounting standards not yet adopted

NZ IFRS 16 *Leases*

NZ IFRS 16 will replace all existing guidance on leases. Under NZ IFRS 16, an entity's right to control the use of an asset (analogous to an operating lease under NZ IAS 17 *Leases*) meets the definition of, and is recognised as, an asset on the balance sheet. A lease liability reflecting future lease payments is also recognised. Vector is a lessee in predominantly property and land leases.

NZ IFRS 16 is mandatory for the group's financial year ended 30 June 2020 with early adoption permitted if NZ IFRS 15 is also adopted. The group has elected to early adopt NZ IFRS 16 for the financial year ended 30 June 2019.

NZ IFRS 16 will not have a material impact on the group's net profit before tax. However, NZ IFRS 16 will require that the group recognises additional depreciation and interest expense in respect of its leased assets and lease liabilities, with a corresponding decrease in operating expenses.

16. Trade and other payables://

	2018 $M	2017 $M
Current		
Trade payables	160.2	164.0
Deferred payables	8.5	10.4
Employee benefits	15.6	15.9
Deferred income	34.3	25.6
Finance leases	0.3	0.4
Interest payable	39.6	33.7
Balance at 30 June	258.5	250.0
Non-current		
Deferred income	8.9	10.6
Deferred payables	35.8	30.0
Finance leases	0.2	0.4
Other non-current payables	–	0.5
Balance at 30 June	44.9	41.5

Other payables

Vector accrues employee benefits which remain unused at balance date, and amounts expected to be paid under short-term cash bonus plans.

Deferred income includes third party contributions received in excess of those recognised in profit or loss.

Deferred payables include third party rebates payable in excess of those paid in cash.

17. Provisions://

	PROVISION FOR DISTRIBUTION TO CUSTOMERS	DECOMMISSIONING PROVISIONS $M	OTHER $M	TOTAL $M
Balance 1 July 2017	–	20.4	4.8	25.2
Additions	16.6	0.4	3.0	20.0
Unwinding of discount	–	1.8	–	1.8
Balance at 30 June 2018	16.6	22.6	7.8	47.0
Comprising:				
Current	16.6	–	7.8	24.4
Non-current	–	22.6	–	22.6

Policies

A provision is recognised where the likelihood of a resultant liability is more probable than not, and the amount required to settle the liability can be reliably estimated.

Decommissioning

The decommissioning provisions represent the present value of the future expected costs for dismantling the group's gas treatment and cogeneration plants situated at Kapuni and depot assets situated at various regions in New Zealand. Timing of economic outflows represents management's best estimate of the end of the useful life of the plant and associated assets.

Other provisions

These provisions comprise amounts that may be required to be utilised within one year or a longer period dependent on ongoing negotiations with third parties involved. There are currently no foreseeable uncertainties which would be reasonably expected to lead to material changes in the amounts provided.

18. Borrowings://

2018	CURRENCY	MATURITY DATE	FACE VALUE $M	UNAMORTISED COSTS $M	FAIR VALUE ADJUSTMENT ON HEDGED RISK $M	CARRYING VALUE $M	FAIR VALUE $M
Bank facilities – variable rate	NZD	Mar 2020 – Feb 2021	110.0	(1.1)	–	108.9	108.9
Capital bonds – 5.7% fixed rate	NZD	–	307.2	(1.3)	–	305.9	324.9
Wholesale bonds – 4.996% fixed rate	NZD	Mar 2024	240.0	4.4	–	244.4	244.1
Senior notes – fixed rate	USD	Sep 2019 – Sep 2029	1,112.9	(2.6)	52.6	1,162.9	1,150.7
Floating rate notes – variable rate	NZD	Oct 2020	350.0	(1.0)	–	349.0	342.4
Medium term notes – 7.625% fixed rate	GBP	Jan 2019	285.6	(0.3)	(61.1)	224.2	231.4
Balance at 30 June			2,405.7	(1.9)	(8.5)	2,395.3	2,402.4

2017	CURRENCY	MATURITY DATE	FACE VALUE $M	UNAMORTISED COSTS $M	FAIR VALUE ADJUSTMENT ON HEDGED RISK $M	CARRYING VALUE $M	FAIR VALUE $M
Bank facilities – variable rate	NZD	Feb 2018 – Mar 2020	95.0	(1.0)	–	94.0	94.1
Capital bonds – 5.7% fixed rate	NZD	–	307.2	(1.6)	–	305.6	319.3
Wholesale bonds – 4.996% fixed rate	NZD	Mar 2024	100.0	(0.3)	–	99.7	98.3
Senior notes – fixed rate	USD	Sep 2019 – Sep 2022	697.2	(1.4)	23.5	719.3	711.3
Floating rate notes – variable rate	NZD	Oct 2017 – Oct 2020	750.0	(1.6)	–	748.4	736.0
Medium term notes – 7.625% fixed rate	GBP	Jan 2019	285.6	(0.9)	(81.3)	203.4	222.7
Balance at 30 June			2,235.0	(6.8)	(57.8)	2,170.4	2,181.7

18. Borrowings://
CONTINUED

Policies	Borrowings are initially recorded at fair value, net of transaction costs. After initial recognition, borrowings are measured at amortised cost with any difference between the initial recognised amount and the redemption value being recognised in interest costs in profit or loss over the period of the borrowing using the effective interest rate method. The carrying value of borrowings includes the principal converted at contract rates (face value), unamortised costs and a fair value adjustment for the component of the risk that is hedged. The fair value is calculated by discounting the future contractual cash flows at current market interest rates that are available for similar financial instruments. The fair value of all borrowings, calculated for disclosure purposes, are classified as level 2 on the fair value hierarchy, explained further in Note 20.
Bank facilities	Four new floating rate bank facilities were added to replace the three facilities that matured in February 2018. The new facilities mature in February 2021.
Capital bonds	Capital bonds of $307.2 million are unsecured, subordinated bonds with the next election date set as 15 June 2022. The interest rate was fixed at 5.7% at the previous election date of 15 June 2017.
Wholesale bonds	In June 2018, Vector issued a further $140.0 million of fixed rate wholesale bonds to the existing $100.0 million wholesale bonds. The bonds have a fixed rate of 4.996% and mature in March 2024.
Senior notes	In October 2017, a total of $415.8 million (USD 300.0 million) of USD senior notes were issued. $277.2 million (USD 200.0 million) matures in October 2027 and $138.6 million (USD 100.0 million) matures in October 2029.
Floating rate notes	The $350.0 million floating rate notes are credit wrapped by MBIA Insurance Corporation. In October 2017, $400.0 million of floating rate notes were repaid and replaced by the October 2017 senior notes issue.
Medium term notes	The $285.6 million medium term notes are due to be repaid in January 2019. Vector has sufficient undrawn facilities to provide liquidity cover for the refinancing.
Covenants	All borrowings are unsecured and are subject to negative pledge arrangements and various lending covenants. These have all been met for the years ended 30 June 2018 and 30 June 2017.

19. Derivatives and hedge accounting://

	CASH FLOW HEDGES		FAIR VALUE HEDGES		COST OF HEDGING		TOTAL	
	2018 $M	2017 $M	2018 $M	2017 $M	2018 $M	2017 $M	2018 $M	2017 $M
Derivative assets								
Cross currency swaps	–	–	56.8	35.8	(1.7)	(3.7)	55.1	32.1
Interest rate swaps	1.4	5.9	–	–	–	–	1.4	5.9
Forward exchange contracts	0.1	–	–	–	–	–	0.1	–
Total	1.5	5.9	56.8	35.8	(1.7)	(3.7)	56.6	38.0
Derivative liabilities								
Cross currency swaps	(65.9)	(94.7)	(0.4)	(11.6)	0.5	1.2	(65.8)	(105.1)
Interest rate swaps	(51.0)	(57.7)	–	–	–	–	(51.0)	(57.7)
Forward exchange contracts	(0.2)	(0.3)	–	–	–	–	(0.2)	(0.3)
Total	(117.1)	(152.7)	(0.4)	(11.6)	0.5	1.2	(117.0)	(163.1)

Key observable market data for fair value measurement	2018	2017
Foreign currency exchange (FX) rates as at 30 June		
NZD-GBP FX rate	0.5123	0.5629
NZD-USD FX rate	0.6766	0.7334
Interest rate swap rates		
NZD	1.89% to 3.03%	1.85% to 3.36%
USD	2.09% to 2.97%	1.22% to 2.51%
GBP	0.50% to 1.64%	0.25% to 1.62%

Sensitivity to changes in market rates	2018 $M	2017 $M
Impact on comprehensive income:		
Sensitivity to change in interest rates		
-1% change in interest rates	(35.3)	(42.6)
+1% change in interest rates	33.9	39.0
Sensitivity to change in foreign exchange rates		
-10% change in foreign exchange rates	(8.0)	(2.4)
+10% change in foreign exchange rates	7.9	3.0
Impact on profit or loss:		
Sensitivity to change in interest rates		
-1% change in interest rates	(0.4)	(1.4)
+1% change in interest rates	0.3	1.2
Sensitivity to change in foreign exchange rates		
-10% change in foreign exchange rates	–	2.8
+10% change in foreign exchange rates	0.1	(1.5)

19. Derivatives and hedge accounting:// CONTINUED

Policies

Vector initially recognises derivatives at fair value on the date the derivative contract is entered into, and subsequently they are re-measured to their fair value at each balance date. All derivatives are classified as level 2 on the fair value hierarchy explained in Note 20.

Fair value is calculated as the present value of the estimated future cash flows based on observable interest yield curves and/or foreign exchange market prices. The carrying values of the financial instruments are the fair values excluding any interest receivable or payable, which is separately presented in the balance sheet in other receivables or other payables.

The resulting gain or loss on re-measurement is recognised in profit or loss immediately, unless the derivative is designated and effective as a hedging instrument, in which case the timing of recognition in profit or loss depends on the nature of the designated hedge relationship.

Vector designates certain derivatives as either:

— Fair value hedges (of the fair value of recognised assets or liabilities or firm commitments); or
— Cash flow hedges (of highly probable forecast transactions).

At inception each transaction is documented, detailing:

— The economic relationship and the hedge ratio between hedging instruments and hedged items;
— The risk management objectives and strategy for undertaking the hedge transaction; and
— The assessment (initially and on an ongoing basis) of whether the derivatives that are used in the hedging transaction are highly effective in offsetting changes in fair values or cash flows of hedged items.

The underlying risk of the derivative contracts is identical to the hedged risk component (i.e. the interest rate risk and the foreign exchange risk) therefore the group has established a one-to-one hedge ratio.

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

Fair value hedges

Vector has entered into cross currency interest rate swaps (the hedging instruments) to hedge the interest rate risk and foreign currency risk (the hedged risk) arising in relation to its USD senior notes (the hedged items). These transactions have been designated into fair value hedges.

The following are recognised in profit or loss:

— The change in fair value of the hedging instruments; and
— The change in fair value of the underlying hedged items attributable to the hedged risk.

Once hedging is discontinued, the fair value adjustment to the carrying amount of the hedged item arising from the hedged risk is amortised through profit or loss from that date through to maturity of the hedged item.

19. Derivatives and hedge accounting:// CONTINUED

Cash flow hedges

Vector has entered into interest rate swaps and cross currency interest rate swaps (the hedging instruments) to hedge the variability in cash flows arising from interest rate and foreign currency exchange rate movements in relation to its NZD floating rate notes, GBP medium term notes and USD senior notes.

The effective portion of changes in the fair value of the hedging instruments are recognised in other comprehensive income.

The following are recognised in profit or loss:

- any gain or loss relating to the ineffective portion of the hedging instrument; and
- fair value changes in the hedging instrument previously accumulated in other comprehensive income, in the periods when the hedged item is recognised in profit or loss.

Once hedging is discontinued, any cumulative gain or loss previously recognised in other comprehensive income is recognised in profit or loss either:

- at the same time as the forecast transaction; or
- immediately if the transaction is no longer expected to occur.

Market rate sensitivity

All derivatives are measured at fair value. A change in the market data used to determine fair value will have an impact on Vector's financial statements.

The table on the previous page shows the sensitivity of the financial statements to a range of possible changes in the market data at balance date.

Rights to offset

Vector enters into derivative transactions under International Swaps and Derivatives Association (ISDA) master agreements. The ISDA agreements do not meet the criteria for offsetting in the balance sheet for accounting purposes. This is because Vector does not have any currently legally enforceable right to offset recognised amounts. Under the ISDA agreements the right to offset is enforceable only on the occurrence of future events such as a default on the bank loans or other credit events. The potential net impact of this offsetting is disclosed in column 'amount after applying rights of offset under ISDA agreements.' Vector does not hold and is not required to post collateral against its derivative positions.

	2018 $M		2017 $M	
	DERIVATIVES POSITION AS PER BALANCE SHEET	AMOUNT AFTER APPLYING RIGHTS OF OFFSET UNDER ISDA AGREEMENTS	DERIVATIVES POSITION AS PER BALANCE SHEET	AMOUNT AFTER APPLYING RIGHTS OF OFFSET UNDER ISDA AGREEMENTS
Derivative assets	56.6	10.6	38.0	–
Derivative liabilities	(117.0)	(71.0)	(163.1)	(125.1)
Net amount	(60.4)	(60.4)	(125.1)	(125.1)

19. Derivatives and hedge accounting:// CONTINUED

19.1 Effects of hedge accounting on the financial position and performance

The tables below demonstrate the impact of hedged items and the hedging instruments designated in hedging relationships:

Cash flow hedges 2018	FACE VALUE $M	WEIGHTED AVERAGE RATE	CARRYING AMOUNT ASSETS/ (LIABILITIES) $M	CHANGE IN FAIR VALUE USED FOR MEASURING INEFFECTIVE-NESS $M	HEDGING (GAIN) OR LOSS RECOGNISED IN CASH FLOW HEDGE RESERVE $M	HEDGE INEFFECTIVE-NESS RECOGNISED IN PROFIT OR LOSS $M	(GAIN) OR LOSS RECOGNISED IN COST OF HEDGING $M
Interest risk							
Hedged item: NZD floating rate exposure on borrowings	(790.0)			(49.0)			
Hedging instrument: Interest rate swaps	(1,100.0)	4.2%	(49.6)	(49.6)	49.6	–	–
Interest and exchange risk							
Hedged item: GBP fixed rate exposure on borrowings	(285.6)			(66.2)			
Hedging instrument: Cross currency swaps	(285.6)	10.8%	(65.6)	(65.9)	4.8	–	(0.3)
					Total	–	

Cash flow hedges 2017	FACE VALUE $M	WEIGHTED AVERAGE RATE	CARRYING AMOUNT ASSETS/ (LIABILITIES) $M	CHANGE IN FAIR VALUE USED FOR MEASURING INEFFECTIVE-NESS $M	HEDGING (GAIN) OR LOSS RECOGNISED IN CASH FLOW HEDGE RESERVE $M	HEDGE INEFFECTIVE-NESS RECOGNISED IN PROFIT OR LOSS $M	(GAIN) OR LOSS RECOGNISED IN COST OF HEDGING $M
Interest risk							
Hedged item: NZD floating rate exposure on borrowings	(1,000.0)			(52.8)			
Hedging instrument: Interest rate swaps	(1,420.0)	5.0%	(51.9)	(51.9)	51.9	–	–
Interest and exchange risk							
Hedged item: GBP fixed rate exposure on borrowings	(285.6)			(96.3)			
Hedging instrument: Cross currency swaps	(285.6)	10.8%	(94.0)	(94.7)	13.4	–	(0.7)
					Total	–	

The NZD floating rate exposure includes $350.0 million from the floating rate notes (2017: $750.0 million) and $440.0 million arising from hedging the USD senior bonds (2017: $250.0 million), as allowable under NZ IFRS 9.

The interest rate swaps include $310.0 million of forward starting swaps (2017: $420.0 million).

19. Derivatives and hedge accounting:// CONTINUED

19.1 Effects of hedge accounting on the financial position and performance CONTINUED

Fair value hedges 2018	FACE VALUE $M	WEIGHTED AVERAGE RATE $M	ACCUMULATED FAIR VALUE HEDGE ADJUSTMENTS $M	CARRYING AMOUNT ASSETS/ (LIABILITIES) $M	CHANGE IN FAIR VALUE OF THE HEDGED ITEM $M	CHANGE IN FAIR VALUE OF THE HEDGING INSTRUMENT $M	CHANGE IN VALUE IN COST OF HEDGING $M
Interest and exchange risk							
Hedged item: USD fixed rate exposure on borrowings	(1,112.9)		(52.6)	(1,162.9)	(29.1)		
Hedging instrument: Cross currency swaps	(1,112.9)	floating		55.0		32.2	1.8
				Total	(29.1)	32.2	

Fair value hedges 2017	FACE VALUE $M	WEIGHTED AVERAGE RATE $M	ACCUMULATED FAIR VALUE HEDGE ADJUSTMENTS $M	CARRYING AMOUNT ASSETS/ (LIABILITIES) $M	CHANGE IN FAIR VALUE OF THE HEDGED ITEM $M	CHANGE IN FAIR VALUE OF THE HEDGING INSTRUMENT $M	CHANGE IN VALUE IN COST OF HEDGING $M
Interest and exchange risk							
Hedged item: USD fixed rate exposure on borrowings	(697.1)		(23.5)	(719.3)	56.3		
Hedging instrument: Cross currency swaps	(697.1)	floating		21.0		(53.6)	(1.0)
				Total	56.3	(53.6)	

Hedging instruments and hedged items are included in the line items "Derivatives" and "Borrowings" respectively in the balance sheet. Ineffectiveness is the sum of the change in fair value of the hedged item and the change in fair value of the hedging instrument. The source of ineffectiveness is largely due to counterparty credit risk on the derivative instruments. Hedge ineffectiveness is included in the "Fair value change on financial instruments" in the profit or loss.

19. Derivatives and hedge accounting:// CONTINUED

19.2 Reconciliation of changes in hedge reserves

Hedge reserves 2018	CASHFLOW HEDGE RESERVE $M	COST OF HEDGING $M	TOTAL $M
Opening balance	47.2	1.8	49.0
Hedging gains or losses recognised in OCI	33.2	(1.4)	31.8
Transferred to profit or loss	(44.4)	–	(44.4)
Recognised as basis adjustment to non-financial assets	0.2	–	0.2
Deferred tax on change in reserves	3.1	0.4	3.5
Closing balance	39.3	0.8	40.1

Hedge reserves 2017	CASHFLOW HEDGE RESERVE $M	COST OF HEDGING $M	TOTAL $M
Opening balance	89.0	0.4	89.4
Hedging gains or losses recognised in OCI	1.6	2.0	3.6
Transferred to profit or loss	(59.5)	–	(59.5)
Recognised as basis adjustment to non-financial assets	(0.1)	–	(0.1)
Deferred tax on change in reserves	16.2	(0.6)	15.6
Closing balance	47.2	1.8	49.0

20. Financial risk management://

Policies

Fair value measurement hierarchy

Financial instruments measured at fair value are classified according to the following levels:

Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities; or

Level 2: Inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (prices) or indirectly (derived from prices); or

Level 3: Inputs for the asset or liability that are not based on observable market data (unobservable inputs).

Risk management framework

Vector has a comprehensive treasury policy, approved by the board of directors, to manage financial risks arising from business activity. The policy outlines the objectives and approach that the group applies to manage:

— Interest rate risk;
— Credit risk;
— Liquidity risk;
— Foreign exchange risk; and
— Funding risk.

For each risk type, any position outside the policy limits requires the prior approval of the board of directors. Each risk is monitored on a regular basis and reported to the board.

20. Financial risk management:// CONTINUED

20.1 Interest rate risk

Interest rate exposure 2018	< 1 YEAR $M	1 – 2 YEARS $M	2 – 5 YEARS $M	> 5 YEARS $M	TOTAL $M
Interest rate exposure: borrowings	745.6	296.6	707.7	655.8	2,405.7
Derivative contracts:					
Interest rate swaps	(1,070.0)	(30.0)	790.0	310.0	–
Cross currency swaps	1,112.9	(296.6)	(400.5)	(415.8)	–
Net interest rate exposure	788.5	(30.0)	1,097.2	550.0	2,405.7

Interest rate exposure 2017	< 1 YEAR $M	1 – 2 YEARS $M	2 – 5 YEARS $M	> 5 YEARS $M	TOTAL $M
Interest rate exposure: borrowings	845.0	285.6	753.8	350.5	2,234.9
Derivative contracts:					
Interest rate swaps	(790.0)	(230.0)	600.0	420.0	–
Cross currency swaps	697.1	–	(446.6)	(250.5)	–
Net interest rate exposure	752.1	55.6	907.2	520.0	2,234.9

Policies

Vector is exposed to interest rate risk through its borrowing activities.

Interest rate exposures are managed primarily by entering into derivative contracts. The main objectives are to minimise the cost of total borrowings, control variations in the interest expense of the borrowings from year to year, and where practicable to match the interest rate risk profile of the borrowings with the risk profile of the group's assets.

The board of directors has set and actively monitors maximum and minimum limits for the net interest rate exposure profile.

20.2 Credit risk

Policies

Credit risk represents the risk of cash flow losses arising from counterparty defaults. Vector is exposed to credit risk in the normal course of business from:

- Trade receivable transactions with business and mass market residential customers; and
- Financial instruments transactions with financial institutions.

The carrying amounts of financial assets represent the group's maximum exposure to credit risk.

The group has credit policies in place to minimise the impact of exposure to credit risk and associated financial losses:

- The board of directors must approve placement of cash, short-term cash deposits or derivatives with financial institutions whose credit rating is less than A+. As at 30 June 2018, all financial instruments are held with financial institutions with credit rating above A+;
- The board of directors sets limits and monitors exposure to financial institutions; and
- Exposure is spread across a range of financial institutions. Where we deem there is credit exposure to energy retailers and customers, the group minimises its risk by performing credit evaluations and/or requiring a bond or other form of security.

20. Financial risk management:// CONTINUED

20.3 Liquidity risk

Contractual cash flows maturity profile 2018	PAYABLE <1 YEAR $M	PAYABLE 1 – 2 YEARS $M	PAYABLE 2 – 5 YEARS $M	PAYABLE >5 YEARS $M	TOTAL CONTRACTUAL CASH FLOWS $M
Non-derivative financial liabilities					
Trade payables	168.7	10.7	22.4	2.7	204.5
Borrowings: interest	109.1	82.6	161.8	91.2	444.7
Borrowings: principal	334.5	288.2	1,118.3	683.4	2,424.4
Derivative financial (assets)/liabilities					
Cross currency swaps: inflow	(291.7)	(330.0)	(546.2)	(524.3)	(1,692.2)
Cross currency swaps: outflow	349.7	332.2	498.3	530.9	1,711.1
Forward exchange contracts: inflow	(8.4)	–	–	–	(8.4)
Forward exchange contracts: outflow	8.5	–	–	–	8.5
Net settled derivatives					
Interest rate swaps	21.0	22.1	13.3	(0.8)	55.6
Group contractual cash flows	691.4	405.8	1,267.9	783.1	3,148.2

Contractual cash flows maturity profile 2017	PAYABLE <1 YEAR $M	PAYABLE 1 – 2 YEARS $M	PAYABLE 2 – 5 YEARS $M	PAYABLE >5 YEARS $M	TOTAL CONTRACTUAL CASH FLOWS $M
Non-derivative financial liabilities					
Trade payables	174.4	8.0	21.9	0.1	204.4
Borrowings: interest	87.7	84.0	142.1	15.3	329.1
Borrowings: principal	400.0	204.3	1,195.4	348.2	2,147.9
Derivative financial (assets)/liabilities					
Cross currency swaps: inflow	(47.4)	(251.7)	(497.4)	(253.4)	(1,049.9)
Cross currency swaps: outflow	55.5	336.8	508.1	257.9	1,158.3
Forward exchange contracts: inflow	(23.5)	–	–	–	(23.5)
Forward exchange contracts: outflow	23.8	–	–	–	23.8
Net settled derivatives					
Interest rate swaps	29.2	17.5	17.8	(3.4)	61.1
Group contractual cash flows	699.7	398.9	1,387.9	364.7	2,851.2

The above table shows the timing of non-discounted cash flows for all financial instrument liabilities and derivatives.

The cash flows for capital bonds, included in borrowings, are disclosed as payable within 2 – 5 years as the next election date set for the capital bonds is 15 June 2022 and the bonds have no contractual maturity date.

Policies

Vector is exposed to liquidity risk where there is a risk that the group may encounter difficulty in meeting its day to day obligations due to the timing of cash receipts and payments.

The objective is to ensure that adequate liquid assets and funding sources are available at all times to meet both short term and long term commitments. The board has set a minimum headroom requirement for committed facilities over Vector's anticipated 18 month peak borrowing requirement.

At balance date, in addition to short-term deposits, Vector has access to undrawn funds of $545.0 million (2017: $530.0 million).

20. Financial risk management:// CONTINUED

20.4 Foreign exchange risk

Policies

Vector is exposed to foreign exchange risk through its borrowing activities, foreign currency denominated expenditure, and through our Australian subsidiaries.

Foreign exchange exposure is primarily managed through entering into derivative contracts. The board of directors requires that all significant foreign currency borrowings and expenditure are hedged into NZD at the time of commitment to drawdown or when the exposure is highly probable. Hence, at balance date there is no significant exposure to foreign currency risk.

20.5 Funding risk

Policies

Funding risk is the risk that Vector will have difficulty refinancing or raising new debt on comparable terms to existing facilities. The objective is to spread the concentration of risk so that if an event occurs the overall cost of funding is not unnecessarily increased. Details of borrowings are shown in Note 18.

The board of directors has set the maximum amount of debt that may mature in any one financial year.

21. Cash flows://

21.1 Reconciliation of net profit/(loss) to net cash flows from/(used in) operating activities

Reconciliation of net profit/(loss) to net cash flows from/(used in) operating activities	NOTE	2018 $M	2017 $M
Net profit/(loss) for the period		149.8	168.9
Items classified as investing activities			
Net loss/(gain) on disposal of PPE and software intangibles		2.4	4.3
Net loss/(gain) on sale of investments		(1.1)	–
		1.3	4.3
Non-cash items			
Depreciation and amortisation		225.9	199.6
Non-cash portion of interest costs (net)		1.7	(3.8)
Fair value change on financial instruments	8	(3.1)	(1.6)
Associates (share of net (profit)/loss)	12.2	1.5	(1.6)
Increase/(decrease) in deferred tax		8.6	(9.1)
Increase/(decrease) in provisions		21.4	(1.3)
Other non-cash items		0.4	–
		256.4	182.2
Cash items not impacting net profit/(loss)			
Dividend received from associate	12.2	–	2.0
Changes in assets and liabilities			
Trade and other payables		35.0	8.2
Inventories		(1.2)	(2.0)
Trade and other receivables		(18.2)	(11.2)
Income tax		(33.2)	(16.7)
		(17.6)	(21.7)
Net cash flows from/(used in) operating activities		389.9	335.7

21. Cash flows://
CONTINUED

21.2 Reconciliation of movement of liabilities to cash flows arising from financing activities

Reconciliation of movement of liabilities to cash flows arising from financing activities	FINANCE LEASES	BORROWINGS	DERIVATIVES	TOTAL
As at 1 July 2017	0.8	2,170.4	125.1	2,296.3
Net draw downs	–	170.8	–	170.8
Other financing cash flows	(0.4)	(1.7)	–	(2.1)
Financing cash flows	(0.4)	169.1	–	168.7
Fair value changes	–	49.3	(64.7)	(15.4)
Premium received		5.1		5.1
Borrowing fees paid	–	(3.7)	–	(3.7)
Amortisation of debt raising costs	–	5.1	–	5.1
New finance leases	0.1	–	–	0.1
As at 30 June 2018	0.5	2,395.3	60.4	2,456.2

New accounting standard adopted

The group has adopted the disclosure requirements in *Disclosure Initiative (Amendments to IAS 7)*. The table above provides an explanation of changes in the group's liabilities for which cash flows have been classified as financing activities in the cash flow statement.

21.3 Cash and cash equivalents

Policies

Cash and cash equivalents are carried at amortised cost less an allowance for expected credit losses.

Cash and cash equivalents includes deposits that are on call.

22. Equity://

22.1 Share Capital

Shares

The total number of authorised and issued shares is 1,000,000,000 (2017: 1,000,000,000).

All ordinary issued shares are fully paid, have no par value and carry equal voting rights and equal rights to a surplus on winding up of the parent.

At balance date 86,148 shares (2017: 109,090) are allocated to the employee share purchase scheme.

22.2 Capital Management

Policies

Vector's objectives in managing capital are:

- To safeguard the ability of entities within the group to continue as a going concern;
- To provide an adequate return to shareholders by pricing products and services commensurate with the level of risk; and
- Maintain an investment grade credit rating.

Vector manages and may adjust its capital structure in light of changes in economic conditions and for the risk characteristics of the underlying assets. To achieve this Vector may:

- Adjust its dividend policy;
- Return capital to shareholders;
- Issue new shares; or
- Sell assets to reduce debt.

Vector primarily monitors capital on the basis of the gearing ratio.

22. Equity://
CONTINUED

22.3 Financial ratios

Earnings per share	2018 $M 12 MONTHS	2017 $M 12 MONTHS
Net profit attributable to owners of the parent	148.2	65.8
Weighted average ordinary shares outstanding during the period (number of shares)	998,370,185	995,651,036
Total earnings per share	14.8 cents	16.7 cents

Net tangible assets per share	2018 $M	2017 $M
Net assets attributable to owners of the parent	2,440.4	2,430.6
Less total intangible assets	(1,398.2)	(1,399.6)
Total net tangible assets	1,042.2	1,031.0
Ordinary shares outstanding (number of shares)	999,913,852	995,645,987
	104.2 cents	103.5 cents

Economic net debt to economic net debt plus adjusted equity ratio ("gearing ratio")	2018 $M	2017 $M
Face value of borrowings	2,405.7	2,235.0
Less cash and cash equivalents	(27.9)	(14.9)
Economic net debt	2,377.8	2,220.1
Total equity	2,457.9	2,448.3
Adjusted for hedge reserves	40.1	49.0
Adjusted equity	2,498.0	2,497.3
Economic net debt plus adjusted equity	4,875.8	4,717.4
	48.8%	47.1%

22.4 Reserves

Hedge reserves

Hedge reserves comprise the cash flow hedge reserve and cost of hedging.

The cash flow hedge reserve records the effective portion of changes in the fair value of derivatives that are designated as cash flow hedges.

The gain or loss relating to the ineffective portion is recorded in profit or loss within interest costs (net).

During the year, $44.4 million (2017: $59.5 million) was transferred from the cash flow hedge reserve to interest expense.

Cost of hedging records the change in the fair value of the cost to convert foreign currency into New Zealand dollars as required under NZ IFRS 9.

Other reserves

Other reserves comprise:

- A share-based payment reserve relating to the employee share purchase scheme. When shares are vested to the employee, the reserve is offset with a reduction in treasury shares.
- A foreign currency translation reserve to record exchange differences arising from the translation of the group's foreign operations.
- A reserve recording the group's share of its associates other comprehensive income.
- A reserve to record the fair value movements in the group's investments in financial assets.

23. Related party transactions://

	2018 $M	2017 $M
Transactions with Entrust		
Dividends paid	122.0	120.2

	2018 $M	2017 $M
Transactions with associates and joint operations		
Purchases of electricity and steam from KEJV	8.9	7.8
Sale of gas to KEJV	9.4	8.3
Sales of operations and maintenance services to KEJV	1.7	1.9
Sales of administration and other services to KEJV	0.1	0.1
Purchase of vegetation management services from Tree Scape Limited	7.4	6.8
Dividends received from Tree Scape Limited	–	2.0
Directors' fees received from Tree Scape Limited	0.1	0.1
Transactions with key management personnel		
Salary and other short-term employee benefits	5.4	5.5
Directors' fees	0.9	0.9

Related parties

Related parties of the group include the associates and joint operations disclosed in Note 12, the ultimate parent entity (Entrust) and key management personnel (directors and the executive team).

Other

The group may transact on an arms' length basis with companies in which directors have a disclosed interest.

Receivables/ (Payables)

	2018 $M	2017 $M
Tree Scape Limited	–	(0.7)
KEJV	0.3	0.5

24. Contingent liabilities://

Disclosures

The directors are aware of claims that have been made against entities of the group and, where appropriate, have recognised provisions for these within Note 17 of these financial statements.

No material contingent liabilities have been identified.

25. Business combinations://

In the prior year, Vector Energy Solutions Limited and its subsidiary, Vector Contracting Services Limited acquired 100% of the voting shares in E-Co Products Group Limited ("E-Co Products") and the business and net assets of PowerSmart NZ Limited ("PowerSmart") respectively.

In the prior year, goodwill was recognised based on provisional fair values of the assets and liabilities acquired at the time of acquisition. On the date of acquisition, Vector repaid $15.4 million of E-Co Products' liabilities. The repayment was treated as a separate transaction.

The table below sets out the final fair values of assets and liabilities acquired. The measurement period ended on 31 March 2018, 12 months after acquisition date.

	2018 $M	2017 $M
Fair value of net assets acquired at acquisition date		
Net working capital	(0.4)	0.9
Property, plant and equipment (including software)	5.0	5.0
Identifiable intangible assets	45.0	45.0
Deferred tax liability	(11.3)	(12.4)
Bank debt and other liabilities	(17.9)	(15.4)
Goodwill	70.7	67.9
Net assets and liabilities acquired	91.1	91.0
Cash paid 31 March 2017	92.0	92.0
Post-acquisition adjustment	(0.9)	(1.0)
Total consideration	91.1	91.0

26. Events after balance date://

Approval

The financial statements were approved by the board of directors on 23 August 2018.

Final dividend

On 23 August 2018, the board declared a final and fully imputed dividend for the year ended 30 June 2018 of 8.0 cents per share.

No adjustment is required to these financial statements in respect of this event.

KPMG

Combined Independent Auditor's and Assurance Report

General

Our assurance procedures consisted of the audit of the consolidated financial statements of Vector Limited and limited assurance procedures on Greenhouse Gas Baseline Totals presented in Vector Limited's annual report for the period ending 30 June 2018.

Independent Auditor's Report

To the shareholders of Vector Limited

Report on the consolidated financial statements

Opinion

In our opinion, the accompanying consolidated financial statements of Vector Limited and its subsidiaries (the "Group") on pages 65 to 107:

i. present fairly in all material respects the Group's financial position as at 30 June 2018

ii. its financial performance and cash flows for the year ended on that date; and

iii. comply with New Zealand equivalents to International Financial Reporting Standards (NZ IFRS) and International Financial Reporting Standards.

We have audited the accompanying consolidated financial statements which comprise:

- the consolidated balance sheet as at 30 June 2018;
- the consolidated profit or loss and statement of other comprehensive income, statement of changes in equity, and statement of cash flows for the year then ended; and
- notes, including a summary of significant accounting policies and other explanatory information.

Basis for opinion

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

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

Our responsibilities under International Standards on Auditing (New Zealand) are further described in the Auditor's Responsibilities for the audit of the consolidated financial statements section of our report.

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

KPMG

Materiality

The scope of our audit was influenced by our application of materiality. Materiality helped us to determine the nature, timing and extent of our audit procedures and to evaluate the effect of misstatements, both individually and on the consolidated financial statements as a whole. The materiality for the consolidated financial statements as a whole was set at $9 million. This was determined with reference to a benchmark of Group profit before income tax. We chose profit before income tax as the benchmark as the Group is a profit oriented business and in our view, this is a key measure of the of the Group's performance.

Key Audit Matters

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

The key audit matter	How the matter was addressed in our audit
1. Capitalisation and asset lives (Property, plant and equipment of $3,996 million, with additions during the year of $384 million). Refer to Note 14 of the financial statements.	
Capitalisation of costs and useful lives assigned to these assets are a key audit matter due to the significance of property, plant and equipment to the Group's business, and due to the judgement involved in determining the carrying value of these assets, principally: — the decision to capitalise or expense costs relating to the electricity and gas distribution networks. This decision depends on whether the expenditure is considered to enhance the network (and therefore capital), or to maintain the current operating capability of the network (and therefore an expense); and — the estimation of the useful life of the asset once the costs are capitalised. Estimated lives range between 2 and 100 years, resulting from the diversity of property, plant and equipment across a portfolio of businesses. There is also judgment when estimating asset lives due to the uncertainty of the impact of technological change.	Our audit procedures in this area included, among others: — examining the operating effectiveness of controls related to the approval of capital projects; — assessing the nature of capitalised costs by checking a sample of costs to invoice to determine whether the description of the expenditure met the capitalisation criteria in the relevant accounting standards; — assessing the useful economic lives stated in the accounting policies of the Group by comparing to industry benchmarks and our knowledge of the business and its operations; and — assessing whether the useful economic lives of each individual asset capitalised in the current period was within the stated policies. We found no material errors in the amounts capitalised in the period and that the estimated useful lives of assets were within an acceptable range when compared to those used in the industry.

KPMG

The key audit matter	How the matter was addressed in our audit
2. Impairment assessment of a) the Gas Trading and b) the Regulated Networks cash generating units (inclusive of $1,207 million of goodwill). Refer to Note 13 of the financial statements	
We considered the impairment assessment of the Gas Trading cash generating unit (CGU), including $157m of goodwill, to be a key audit matter due to the continued low margin trading environment and also in the context of the impairment of $64 million recorded in 30 June 2016 period. We also considered the impairment assessment of the Regulated Networks CGUs to be a key audit matter due to the significance of goodwill of $1,050 million to the financial position of the Group and the significant judgment used to estimate future pricing of the regulated revenue streams beyond the timeframe of the current Commerce Commission regulatory price paths.	The procedures we performed to evaluate the impairment assessments included: — assessing whether the methodology adopted in the discounted cash flow models was consistent with accepted valuation approaches within the energy industry; — evaluating the significant future cash flow assumptions by comparing to historical trends, customer contracts and supplier agreements, Asset Management Plans, regulatory pricing models and budgets; — comparing the discount rates applied to the estimated future cash flows and the terminal growth rates to relevant benchmarks using our own valuation specialists; — challenging the above assumptions and judgements by performing sensitivity analysis, considering a range of likely outcomes based on various scenarios; and — comparing the Group's total net assets as at 30 June 2018 of $2,458 million to its market capitalisation of $3,390 million at 30 June 2018 which implied total headroom of $932 million. For each CGU we found the methodology to be consistent with industry norms. We found: — the discount and terminal growth rates were in an acceptable industry range; — future cash flow assumptions to be supportable by comparison to the sources we considered above; and — the overall comparison of the Group's net assets to market capitalisation did not indicate an impairment.
3. Valuation of investments in new energy technologies and markets as part of the Group's strategy to 'Create a New Energy Future'	
During the 18 months ending 30 June 2018 the Group has invested circa $210 million in new energy technologies and markets as part of its strategy to 'Create a New Energy Future', including but not limited to: — acquisitions of E-Co Products Group Limited and PowerSmart NZ Limited (refer Note 25 of the financial statements); — investment in mPrest Systems (2003) Limited in October 2017; and	The procedures we performed to conclude on the valuation assessments included: — understanding the sale and purchase agreement for the acquisitions, critically assessing the approach and assumption used to identify and value the respective intangible assets and understanding the intrinsic value that is represented by the resulting goodwill; — evaluating the performance of the Australian metering business, in particular understanding the status and critically challenging the expected future outlook of the Group's bids for meter data and deployment contracts with Australian energy retailers

KPMG

The key audit matter	How the matter was addressed in our audit
— continued investment in developing a presence in the Australian electricity metering market to coincide with changes to the market regulation and structure. We consider the valuation of investments in new energy technologies and markets to be a key audit matter because of the judgement involved whether through; — valuing intangible assets and goodwill acquired in a business or asset purchase; — assessing the fair value of investments, when carried at fair value, in absence of a listed-market reference; or — considering impairment in markets where the future outcomes are more uncertain than in the Group's established businesses.	relating to the "Power of Choice" regime that came into effect from 1 December 2017; — assessing whether there are indicators of impairment in respect of any of these investments; and — assessing the fair value of mPrest. We did not identify any material errors in the valuations attributed to the investments in the new non-regulated activities outlined opposite.

Use of this Independent Auditor's Report

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

Responsibilities of the Directors for the consolidated financial statements

The Directors, on behalf of Vector Limited, are responsible for:

— the preparation and fair presentation of the consolidated financial statements in accordance with generally accepted accounting practice in New Zealand (being NZ IFRS) and International Financial Reporting Standards;

— implementing necessary internal control to enable the preparation of consolidated financial statements that are fairly presented and free from material misstatement, whether due to fraud or error; and

— assessing the ability to continue as a going concern. This includes disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless they either intend to liquidate or to cease operations, or have no realistic alternative but to do so.

KPMG

Auditor's Responsibilities for the Audit of the consolidated financial statements

Our objective is:

- 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 International Standards on Auditing (New Zealand) will always detect a material misstatement when it exists.

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

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

https://www.xrb.govt.nz/Site/Auditing_Assurance_Standards/Current_Standards/Page1.aspx

This description forms part of our Independent Auditor's Report.

Independent Limited Assurance Report

To the Directors of Vector Limited

Report on the Greenhouse Gas Baseline Totals

Conclusion

Based on our limited assurance engagement, which is not a reasonable assurance engagement or an audit, we have not become aware of any matter that would lead us to believe that the Greenhouse Gas Baseline Totals ("GHG Baseline") presented in Vector's Limited's Greenhouse Gas Statement ("GHG Statement") has not, in all material respects, been prepared in accordance with the Greenhouse Gas Protocol ("the Protocol") for the period of 1 July 2017 to 30 June 2018.

Information subject to assurance

We have performed an engagement to provide limited assurance in relation to Vector Limited ("Vector") Greenhouse Gas Baseline Totals ("GHG Baseline"), presented in Vector's Limited's Greenhouse Gas Statement ("GHG Statement") that Vector has prepared, in all material respects, in accordance with the Greenhouse Gas Protocol ("the Protocol") for the period of 1 July 2017 to 30 June 2018 ("the reporting period").

Criteria

The scope of our limited assurance services was Vector's GHG Baseline, prepared in accordance with the Protocol and presented in the GHG Statement for the period 1 July 2017 to 30 June 2018.

The operations included in the scope were those deemed by Vector to be within their current operational control boundary. The scope of our services excluded greenhouse gas emissions outside of the reporting period and outside of Vector's designated control boundary.

KPMG

Standards we followed

We conducted our limited assurance engagement in accordance with International Standard on Assurance Engagements (New Zealand) 3410 *Assurance Engagements on Greenhouse Gas Statements* ("ISAE (NZ) 3410").

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion. In accordance with this standard we have:

- used our professional judgement to plan and perform the engagement to obtain limited assurance that the information subject to assurance is free from material misstatement, whether due to fraud or error
- considered relevant internal controls when designing our assurance procedures, however we do not express a conclusion on the effectiveness of these controls; and
- ensured that the engagement team possess the appropriate knowledge, skills and professional competencies.

The 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.

Restriction of distribution and use

Our report should not be regarded as suitable to be used or relied on by any party s other than Vector for any purpose or in any context. Any party other than Vector who obtains access to our report or a copy thereof and chooses to rely on our report (or any part thereof) will do so at its own risk.

To the fullest extent permitted by law, we accept or assume no responsibility and deny any liability to any party other than Vector for our work, for this independent limited assurance report, or for the conclusions we have reached.

Our report is released to Vector on the basis that it shall not be copied, referred to or disclosed, in whole (save for Vector's own internal purposes) or in part, without our prior written consent.

Directors' responsibility for the GHG Baseline Totals and GHG Statement

The Directors of Vector are responsible for the preparation and fair presentation of the GHG Baseline presented in Vector's GHG Statement in accordance with the Protocol. This responsibility includes such internal control as the Directors determine is necessary to enable the preparation of the GHG Statement that is free from material misstatement whether due to fraud or error.

Our responsibility

Our responsibility is to express a conclusion to the Directors on the preparation and presentation of the GHG Baseline presented in Vector's GHG Statement in accordance with the Protocol.

Our independence and quality control

We have complied with the independence and other ethical requirements of Professional and Ethical Standard 1 (Revised) issued by the New Zealand Auditing and Assurance Standards Board, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

The firm applies Professional and Ethical Standard 3 (Amended) and accordingly 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.

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

KPMG

Other Information

The Directors, on behalf of the Group, are responsible for the other information included in the entity's Annual Report. Other information may include the Chairman and Chief Executive reports, the financial performance trends and disclosures relating to corporate governance and statutory information. Our opinion on the consolidated financial statements does not cover any other information and we do not express any form of assurance conclusion thereon.

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

KPMG

Malcolm Downes – Audit Partner
David Sutton – Assurance Partner

For and on behalf of

KPMG
Auckland
23 August 2018

Interests register

Each company in the group is required to maintain an interests register in which the particulars of certain transactions and matters involving the directors must be recorded. The interests registers for Vector Limited and its subsidiaries are available for inspection at their registered offices.

Particulars of entries in the interests registers made during the year ended 30 June 2018 are set out in this Statutory Information section.

Information used by directors

During the financial year there were no notices from directors of Vector Limited, or any subsidiary, requesting to use information received in their capacity as a director which would not otherwise have been available to them.

Indemnification and insurance of directors and officers

As permitted by the constitution and the Companies Act 1993, Vector Limited has indemnified its directors, and those directors who are directors of subsidiaries against potential liabilities and costs they may incur for acts or omissions in their capacity as directors. In addition, Vector Limited has indemnified certain senior employees against potential liabilities and costs they may incur for acts or omissions in their capacity as employees of Vector Limited, or directors of Vector subsidiaries.

During the financial year, Vector Limited paid insurance premiums in respect of directors and certain senior employees' liability insurance which covers risks normally covered by such policies arising out of acts or omissions of directors and employees in their capacity as such. Insurance is not provided for criminal liability or liability or costs in respect of which an indemnity is prohibited by law.

Donations

Vector Limited made donations of $6,850 during the year ended 30 June 2018. Subsidiaries of Vector Limited made donations of $10,390 during the year ended 30 June 2018.

Credit rating

At 30 June 2018 Vector Limited had a Standard & Poor's credit rating of BBB/stable, and a Moody's credit rating of Baa1/stable.

NZX regulation waivers and rulings

Vector Limited has been granted waivers from the requirements of various listing rules to allow the constitution to contain certain provisions which are not ordinarily contained in the constitution of a company listed on the NZX Main Board, including, in particular, provisions giving certain rights to Entrust. Vector has been given a non-standard designation by NZX due to the inclusion of these provisions in its constitution.

Exercise of NZX powers

NZX did not exercise any of its powers set out in Listing Rule 5.4.2 (relating to powers to cancel, suspend or censure an issuer) with respect to Vector Limited.

Trustees of Entrust

During the year ended 30 June 2018, Vector Limited made payments to J Carmichael and K Sherry, trustees of Entrust (Vector Limited's majority shareholder) totalling $201,300 in respect of their roles as directors on the Vector Limited board.

Subsidiaries and associates

A list of each of the Company's subsidiaries and associates is contained on pages 116 and 117. Other than Solpho Limited, which was acquired on 01 November 2017 and MEL Network Limited, which was removed from the Companies Office register on 27 March 2018, the Company has not gained or lost control of any entity during the year ended 30 June 2018.

Directors

The following directors of Vector Limited and current group companies held office as at 30 June 2018 or resigned (R) as a director during the year ended 30 June 2018. Directors marked (A) were appointed during the year.

PARENT	DIRECTORS
Vector Limited	J Carmichael, H Fletcher (R), J Mason, A Paterson, K Sherry, M Stiassny, R Thomson, D Bartholomew (A), S Krieger (A)

All of the above directors in office at 30 June 2018 are independent directors, except for J Carmichael and K Sherry who are trustees of Entrust (Vector Limited's majority shareholder).

SUBSIDIARIES	DIRECTORS
Advanced Metering Assets Limited	J Carmichael, H Fletcher (R), J Mason, A Paterson, K Sherry, M Stiassny, R Thomson
Advanced Metering Services Limited	J Carmichael, H Fletcher (R), J Mason, A Paterson, K Sherry, M Stiassny, R Thomson
Arc Innovations Limited	J Carmichael, H Fletcher (R), J Mason, A Paterson, K Sherry, M Stiassny, R Thomson
Auckland Generation Limited	S Mackenzie, D Molloy
Cristal Air International Limited	J Carmichael (R), B Gordon (R), S Mackenzie
E-Co Products Group Limited	J Carmichael (R), B Gordon (R), S Mackenzie
Energy Efficient Solutions NZ (2016) Limited	J Carmichael (R), B Gordon (R), S Mackenzie
HRV Australia Pty Limited	J Carmichael (R), B Gordon (R), S Mackenzie, J Sheridan
HRV Clean Water	J Carmichael (R), B Gordon (R), S Mackenzie
HRV Filters Limited	J Carmichael (R), B Gordon (R), S Mackenzie
HRV Home Solutions Limited	J Carmichael (R), B Gordon (R), S Mackenzie
HRV Marketing Limited	J Carmichael (R), B Gordon (R), S Mackenzie
HVAC Hero 2016 Limited	J Carmichael (R), B Gordon (R), S Mackenzie
Liquigas Limited	T Barstead (R), A Gilbert, D Molloy, G O'Brien, T Palmer (R), J Seymour, R Sharp, A Smith (R), B Talacek, C Thompson (R), M Trigg, B Boswell (A), L Glover (A)
NGC Limited	S Mackenzie, D Molloy
NGC Holdings Limited	J Carmichael, H Fletcher (R), J Mason, A Paterson, K Sherry, M Stiassny, R Thomson
On Gas Limited	J Carmichael, H Fletcher (R), J Mason, A Paterson, K Sherry, M Stiassny, R Thomson
PowerSmart NZ Limited	J Carmichael (R), B Gordon (R), S Mackenzie
Safe Filters Limited	J Carmichael (R), B Gordon (R), S Mackenzie
Safe Windows Limited	J Carmichael (R), B Gordon (R), S Mackenzie
SolPho Limited	K Fagan (R), J Mowat (R), S Mackenzie (A), M Bassett-Smith (A) (R), S Robinson (R), B Gordon (A) (R)
UnitedNetworks Limited	S Mackenzie, D Molloy
Vector Advanced Metering Assets (Australia) Limited	J Carmichael, H Fletcher (R), J Mason, A Paterson, K Sherry, M Stiassny, R Thomson
Vector Advanced Metering Services (Australia) Pty Limited	S Mackenzie, J Sheridan
Vector Communications Limited	J Carmichael, H Fletcher (R), J Mason, A Paterson, K Sherry, M Stiassny, R Thomson
Vector ESPS Trustee Limited	S Mackenzie, D Molloy
Vector Gas Trading Limited	J Carmichael, H Fletcher (R), J Mason, A Paterson, K Sherry, M Stiassny, R Thomson
Vector Gas Investments Limited	S Mackenzie, D Molloy
Vector Kapuni Limited	S Mackenzie, D Molloy
Vector Management Services Limited	S Mackenzie, D Molloy
Vector Metering Data Services Limited	J Carmichael, H Fletcher (R), J Mason, A Paterson, K Sherry, M Stiassny, R Thomson
Vector Energy Solutions (Australia) Pty Limited	J Carmichael (R), B Gordon (R), S Mackenzie, J Sheridan
Vector Energy Solutions Limited	J Carmichael (R), B Gordon (R), S Mackenzie
Ventilation Australia Pty Limited	J Carmichael (R), B Gordon (R), S Mackenzie, J Sheridan

Directors
CONTINUED

ASSOCIATES	DIRECTORS
Tree Scape Limited	A Botha, E Chignell, S Mackenzie, D Molloy, K Smith, B Whiddett

Directors' remuneration and value of other benefits received from Vector Limited and current group companies for the year ended 30 June 2018:

DIRECTORS OF VECTOR LIMITED	PAID BY PARENT $	PAID BY SUBSIDIARIES $
H Fletcher (R)	25,163	–
J Carmichael	100,650	–
J Mason	100,650	–
A Paterson	100,650	–
K Sherry	100,650	–
M Stiassny	201,300	–
R Thomson	100,650	–
D Bartholomew (A)	33,987	–
S Krieger (A)	16,821	–
	780,521	–

DIRECTORS OF SUBSIDIARIES	PAID BY PARENT $	PAID BY SUBSIDIARIES $
T Barstead (R)	–	6,015
D Molloy	–	5,000*
G O'Brien	–	6,250
J Seymour	–	5,000
R Sharp	–	5,000*
J Sheridan	–	17,029
B Talacek	–	5,000*
A Smith (R)	–	2,928
C Thompson (R)	–	3,743
L Glover (A)	–	1,257
B Boswell (A)	–	235
M Trigg	–	42,808
	–	100,265

* Directors' fees relating to any Vector Limited employee are paid to the company.

Directors
CONTINUED

Directors of Vector Limited
Entries in the interests register of Vector Limited during the year to 30 June 2018 that are not set out elsewhere in this annual report:

DIRECTOR	ENTITY	POSITION
J Carmichael	Aku Investments Limited	Director
	Energy Trusts of New Zealand	Executive member
	Entrust	Trustee
	Projectmax Limited	Director
	UniServices	Advisor
J Mason	Air New Zealand Limited	Director
	Beloit College, Wisconsin, USA	Trustee
	New Zealand Assets Management Limited	Director
	University of Auckland	Trustee and Adjunct Professor of Management
	Westpac New Zealand Limited	Director
	Zespri Group Limited	Director
A Paterson	AM Paterson Trust	Trustee
	BJ Paterson Trust	Trustee
	Donny Charitable Trust	Trustee
	Forestry Industry Safety Council	Chair
	Health Quality & Safety Commission	Member
	Kiwi Wealth Group	Chair
	NZ Markets Disciplinary Tribunal	Member
	Te Aupouri Commercial Development Limited	Chair
	Te Aupouri Fisheries Management Limited	Chair
K Sherry	Bell-Booth Sherry Limited	Director and shareholder
	Energy Efficiency and Conservation Authority (EECA)	Director
	Energy Trusts of New Zealand	Chair
	Entrust	Trustee
	Sasha & Otto Limited	Director and shareholder

Directors
CONTINUED

Directors of Vector Limited
Entries in the interests register of Vector Limited during the year to 30 June 2018 that are not set out elsewhere in this annual report:
CONTINUED

DIRECTOR	ENTITY	POSITION
M Stiassny	Auckland Hebrew Congregation Trust Board	Chairman
	Bengadol Corporation Limited	Director and shareholder
	Emerald Group Limited	Director
	Gadol Corporation Limited	Director and shareholder
	Ngati Whatua Orakei Whai Rawa Limited	Chairman
	NZ Transport Agency	Chairman
	Plan B Limited	Director
	Stride Investment Management Limited	Director
	Stride Property Limited	Director
	Tower Insurance Limited	Director
	Tower Limited	Chairman
R Thomson	Calnan Holdings Limited	Director and shareholder
	Energy Trusts of New Zealand	Consultant
	R & M Thomson Holdings Limited	Director and shareholder
D Bartholomew	Endeavour Energy, NSW, Australia	Non-executive Director
	Northern Territory Power & Water Corporation	Non-executive Director
	Dussur	Non-executive Director
	The Helmsman Project	Non-executive Director
S Krieger	Xenith IP Group Limited	Non-executive Chair and shareholder
	MyState Limited	Non-executive Director and shareholder
	Australian Energy Market Operator Limited	Non-executive Director
	Vesale Pty Limited	Non-executive Director, Company Secretary and shareholder

The entities listed above against each director may transact with Vector Limited and its subsidiaries in the normal course of business. Auckland based directors (J Carmichael, J Mason, A Paterson, K Sherry and M Stiassny) are Vector Limited residential electricity customers.

Directors of subsidiaries
There are no entries in the interests register of subsidiaries up to 30 June 2018 that are not set out elsewhere in this annual report.

Employees

The number of current employees of the company and the group receiving remuneration and benefits above $100,000 in the year ended 30 June 2018 are set out in the table below:

CURRENT EMPLOYEES	GROUP	COMPANY
$100,001 – $110,000	53	42
$110,001 – $120,000	61	52
$120,001 – $130,000	63	52
$130,001 – $140,000	43	32
$140,001 – $150,000	46	33
$150,001 – $160,000	21	17
$160,001 – $170,000	20	17
$170,001 – $180,000	20	17
$180,001 – $190,000	15	12
$190,001 – $200,000	10	10
$200,001 – $210,000	14	13
$210,001 – $220,000	11	10
$220,001 – $230,000	6	3
$230,001 – $240,000	12	8
$240,001 – $250,000	1	1
$250,001 – $260,000	4	1
$260,001 – $270,000	4	4
$270,001 – $280,000	3	2
$280,001 – $290,000	3	1
$290,001 – $300,000	5	4
$310,001 – $320,000	1	1
$320,001 – $330,000	3	2
$330,001 – $340,000	2	1
$340,001 – $350,000	2	–
$350,001 – $360,000	2	2
$360,001 – $370,000	2	2
$370,001 – $380,000	1	1
$380,001 – $390,000	2	2
$440,001 – $450,000	1	1
$460,001 – $470,000	1	–
$490,001 – $500,000	2	2
$540,001 – $550,000	2	1
$560,001 – $570,000	1	1
$750,001 – $760,000	1	1
$790,001 – $800,000	1	1
$850,001 – $860,000	1	1
$1,690,001 – $1,700,000	1	1
	441	351

Employees

CONTINUED

The number of former employees of the company and the group receiving remuneration and benefits above $100,000 in the year ended 30 June 2018 are set out in the table below:

FORMER EMPLOYEES (INCLUDING ANY TERMINATION PAYMENTS)	Group	Company
$100,001 – $110,000	2	2
$110,001 – $120,000	4	2
$120,001 – $130,000	8	7
$130,001 – $140,000	5	2
$140,001 – $130,000	6	4
$170,001 – $180,000	1	1
$190,001 – $200,000	2	1
$200,001 – $210,000	1	1
$210,001 – $220,000	1	1
$220,001 – $230,000	1	1
$270,001 – $280,000	1	1
$280,001 – $290,000	1	1
$290,001 – $300,000	2	2
$360,001 – $370,000	1	1
$490,000 – $500,000	1	–
	37	27

No employee of the group appointed as a director of a subsidiary or associate company receives or retains any remuneration or benefits as a director. The remuneration and benefits of such employees, received as employees, are included in the relevant bandings disclosed above, where the annual remuneration and benefits exceed $100,000.

Bondholder statistics

NZDX debt securities distribution as at 30 June 2018:

5.70% capital bonds

RANGE	NUMBER OF BONDHOLDERS	PERCENTAGE OF BONDHOLDERS	NUMBER OF SECURITIES HELD	PERCENTAGE OF SECURITIES HELD
5,000 – 9,999	658	16.19%	3,552,300	1.16%
10,000 – 49,999	2,560	62.99%	51,539,700	16.78%
50,000 – 99,999	523	12.87%	29,886,000	9.73%
100,000 – 499,999	291	7.16%	44,430,000	14.46%
500,000 – 999,999	12	0.30%	6,801,000	2.21%
1,000,000 plus	20	0.49%	170,996,000	55.66%
	4,064	100.00%	307,205,000	100.00%

The following current directors of the parent are holders (either beneficially or non-beneficially) of Vector Limited capital bonds as at 30 June 2018:

DIRECTOR	NUMBER OF BONDS
M Stiassny	150,000

Shareholder statistics

Twenty largest registered shareholders as at 30 June 2018:

SHAREHOLDER	ORDINARY SHARES HELD	PERCENTAGE OF ORDINARY SHARES HELD
Entrust	751,000,000	75.10%
New Zealand Central Securities Depository Limited*	58,392,518	5.84%
Custodial Services Limited <A/C 3>	13,465,628	1.35%
FNZ Custodians Limited	9,799,725	0.98%
Custodial Services Limited <A/C 4>	8,816,324	0.88%
Custodial Services Limited <A/C 2>	7,506,616	0.75%
Investment Custodial Services Limited <A/C C>	4,793,350	0.48%
Custodial Services Limited <A/C 18>	4,310,252	0.43%
JBWERE (NZ) Nominees Limited <NZ Resident A/C>	4,035,104	0.40%
New Zealand Depository Nominee Limited <A/C 1 CASH ACCOUNT>	2,591,835	0.26%
Forsyth Barr Custodians Limited <1-CUSTODY>	2,479,964	0.25%
Custodial Services Limited <A/C 1>	2,426,128	0.24%
Custodial Services Limited <A/C 16>	1,619,520	0.16%
PT (Booster Investments) Nominees Limited	1,048,823	0.11%
FNZ Custodians Limited <DTZ Non Resident A/C>	872,254	0.09%
Investment Custodial Services Limited <A/C R>	621,812	0.06%
Anthony Ian Gibbs + Valerie Jane Gibbs + Joseph Michael Windmeyer <Ruby Cove Legacy A/C>	552,460	0.06%
Custodial Services Limited <A/C 6>	533,304	0.05%
Kershaw Investments Limited	475,000	0.05%
Rui Zhang	441,118	0.04%
	875,781,735	87.58%

* New Zealand Central Securities Depository Limited (NZCSD) provides a depository system which allows electronic trading of Securities for its members. As at 30 June 2018, the 10 largest shareholdings in Vector Limited held through NZCSD were:

SHAREHOLDER	ORDINARY SHARES HELD	PERCENTAGE OF ORDINARY SHARES HELD
Citibank Nominees (New Zealand) Limited	12,973,657	1.30%
Accident Compensation Corporation	8,572,833	0.86%
HSBC Nominees (New Zealand) Limited A/C State Street	6,874,413	0.69%
HSBC Nominees (New Zealand) Limited	6,698,055	0.67%
HSBC Nominees A/C NZ Superannuation Fund Nominees Limited	3,917,676	0.39%
ANZ Custodial Services New Zealand Limited	3,432,606	0.34%
BNP Paribas Nominees (NZ) Limited	3,395,987	0.34%
National Nominees New Zealand	3,330,659	0.33%
BNP Paribas Nominees (NZ) Limited	2,008,029	0.20%
JP Morgan Chase Bank NA NZ Branch-Segregated Clients Acct	1,304,180	0.13%

Shareholder statistics

CONTINUED

Substantial product holders as at 30 June 2018:

SHAREHOLDER	NUMBER OF RELEVANT INTEREST VOTING PRODUCTS HELD	PERCENTAGE OF VOTING PRODUCTS HELD
Entrust	751,000,000	75.10%

Michael Buczkowski, James Carmichael, William Cairns, Paul Hutchison and Karen Sherry are the registered holders of the shares held by Entrust.

As at 30 June 2018, voting products issued by Vector Limited totalled 1,000,000,000 ordinary shares. Of these shares, 4,244,923 were sold by Vector Ltd to various investors on 09 November 2017.

Ordinary shares distribution as at 30 June 2018:

RANGE	NUMBER OF SHAREHOLDERS	PERCENTAGE OF SHAREHOLDERS	NUMBER OF SHARES HELD	PERCENTAGE OF SHARES HELD
1 – 499	6,461	20.39%	2,025,029	0.20%
500 – 999	3,296	10.40%	2,576,652	0.26%
1,000 – 4,999	16,222	51.22%	29,521,344	2.96%
5,000 – 9,999	2,838	8.96%	19,101,304	1.91%
10,000 – 49,999	2,593	8.18%	46,318,704	4.63%
50,000 – 99,999	166	0.52%	10,626,784	1.06%
100,000 plus	105	0.33%	889,830,183	88.98%
	31,681	100.00%	1,000,000,000	100.00%

Analysis of shareholders as at 30 June 2018:

SHAREHOLDER TYPE	NUMBER OF SHAREHOLDERS	PERCENTAGE OF SHAREHOLDERS	NUMBER OF SHARES HELD	PERCENTAGE OF SHARES HELD
Entrust	1	0.00%	751,000,000	75.10%
Companies	966	3.05%	10,481,313	1.05%
Individual Holders	16,864	53.23%	56,455,406	5.65%
Joint	9,423	29.74%	43,840,758	4.38%
Nominee Companies	576	1.82%	131,881,851	13.19%
Other	3,851	12.16%	6,340,672	0.63%
	31,681	100.00%	1,000,000,000	100.00%

Shareholder statistics

CONTINUED

The following current directors of the parent are holders (either beneficially or non-beneficially) of Vector Limited ordinary shares as at 30 June 2018:

DIRECTOR	NUMBER OF SHARES
J Carmichael	1,322
J Mason (as a trustee of the Trumbull Trust)	18,500
A Paterson (as trustee of the A M Paterson Trust)	10,000
A Paterson (as trustee of the B J Paterson Trust)	10,700
K Sherry	840
M Stiassny	65,793
R Thomson	45,000

Michael Buczkowski, James Carmichael, William Cairns, Paul Hutchison and Karen Sherry are the registered holders of the 751,000,000 ordinary shares held by Entrust. James Carmichael and Karen Sherry are directors of Vector Limited.

The following disclosures are made pursuant to section 148 of the Companies Act 1993, in relation to dealings during the year ended 30 June 2018 by directors of Vector Limited in the ordinary shares of Vector Limited.

There were no acquisitions or disposals of relevant interests.

RISK MANAGEMENT

Creating value by driving sustainable growth
Protecting value by increasing business resilience

RISK MANAGEMENT //

At Vector, we recognise that rigorous risk and opportunity management is essential for corporate stability and performance, and supports Vector in its pursuit to create a new energy future. To drive sustainable growth and ensure business resilience, we must anticipate risks to our operations while capitalising on opportunities as they arise.

Vector's enterprise risk management (ERM) framework provides a flexible and purpose-built approach to the application of risk management across Vector and is consistent with the Australian / New Zealand Risk Management Standard "AS/NZS ISO 31000:2009 Risk management – Principles and Guideline". Our risk management processes and tools are embedded within our business operations to drive consistent, effective and accountable decision making.

In line with the Three Lines of Defence principle, all Vector People are responsible for applying Vector's ERM framework within their individual roles and are encouraged to proactively identify, analyse, escalate and treat risks. This risk mindset has been implemented through:

- Acknowledgement of risk management's value at Executive and Board level;
- Relatable and easily applied risk management policies, processes and tools;
- Integration of risk champions throughout the business; and
- Continuous training and education, both formal and informal.

To further promote accountability and transparency, key business areas formally present their material risks to the Board Risk and Assurance Committee (BRAC) on an annual basis. These material risks are assessed against a group-wide set of criteria covering both consequence and likelihood, as defined in Vector's Group Risk Assessment Matrix.

To support the identification of emerging risks and opportunities, Group Risk monitors the changing business landscape, assessing the influence of macro-economic trends on Vector's operating environment. These perspectives, along with the material risks from the individual business unit risk profiles, inform the development of the Group Key Risk Profile which provides both the Board and Executive team with a consolidated view of:

1. The strategically-focused risks which could have a significant impact on the long-term value and sustainability of Vector's business; and
2. The material operational risks facing Vector as part of its business-as-usual activities which require significant oversight and control.

Vector's Group Internal Audit function provides independent and objective assurance on the effectiveness of governance, risk management and internal controls across all business operations. The team follows a co-sourced model, drawing on both in-house and external expertise, and has unrestricted access to all Vector staff, records and third parties (as deemed necessary). The team liaises closely with KPMG, as Vector's external auditor, to share the outcomes of the internal audit programme to the extent that they are relevant to the financial statements.

Areas of Focus

We continue to focus on maturing and developing our risk management practices to deliver tangible benefits to the business and address emerging risk areas.

Over the past year, enhancements have included:

- A refresh of Vector's risk appetite, as expressed through the Group Risk Assessment Matrix, to capture broader reputational aspects and encompass sustainability considerations.
- The establishment of a formal supplier risk management approach to identify, manage and mitigate risks arising from across our supply network (in conjunction with Group Procurement).
- A review of Vector's risk management software Active Risks Manager (ARM) to improve its ability to support and drive data analysis, risk reporting and control assurance activities.
- The introduction of a new risk leadership measure for internal audit engagements, designed to influence positive change in management's philosophy and operating style in relation to audits and fostering greater ownership of findings and actions.
- The creation of an Information Governance Council to provide strategic direction on data governance reflecting the heightened focus on how organisations access, manage, utilise, protect and create value from data.
- Ongoing improvements to our crisis management and business continuity practices through training, support tool development, and industry benchmarking.
- The formation of a cross-functional project team and corporate partnerships to consider the impacts and benefits of AI, automation and robotics on Vector's future workforce.

In addition, deep dives into targeted risk areas have been undertaken and presented at governance forums to promote awareness and discussion. Most notably, EY were commissioned to undertake an in-depth look at the (i) potential physical impacts of climate change on Vector's network (refer Case Study: Battling the elements on page 39), and (ii) likely implications of a transition to a net zero emissions economy.

Cyber Security

With increasing evidence of targeted attacks on the energy sector, coupled with Vector being at the forefront of deploying new technologies (such as DERMs) to improve management of the network and provide innovative energy solutions to our customers, the threat of a significant cyber security breach remains a key risk for the business.

Vector obviously takes this threat extremely seriously and in 2017 increased its investment in technology solutions and resources in the form of a dedicated team of security experts. Over the course of the year, our key areas of focus included:

- improving our threat intelligence capability to detect and respond to potential security events
- user education and awareness
- new tools to help detect and prevent potential attacks on the core control systems that manage the distribution network and improve the security of our network perimeter (refer Case Study: Protecting the crown jewels – on page 39)
- partnering with a recognised global security firm for security testing and design
- improving incident response capabilities and processes

The threat to the broader energy sector has also seen us work more closely with industry peers through our membership of the Control Systems Security Information Exchange (CSSIE). CSSIE is managed by the National Cyber Security Centre (NCSC). Through CSSIE we have helped facilitate the development of frameworks to improve collaboration and sharing of information relating to threats and security incidents, and updated industry security standards.

Despite this work, we must remain vigilant to the ever-growing threat. In April 2018 the Vector Outage App was hacked by an unknown person, accessing the contact details of some users of the app. Vector took immediate steps to contain the incident, protect the app and customer data, contact impacted customers, inform privacy authorities, remediate and re-test our cyber controls and recover the customer data.

The incident and changing threat landscape are constant reminders of the need to continue to invest in improving our cyber security resilience to ensure we are able to respond quickly to threats, and minimise any potential damage and disruption. ■

KEY AND EMERGING RISKS

	RISK AREAS	CONTEXT
STRATEGIC RISK	● Business evolution and adaptation	Vector's business must continue to evolve to adapt to changing customer requirements and expectations, and balance regulated and non-regulated revenues effectively.
	● Rapid digitalisation and technology changes	Vector must innovate and keep pace with technological advancements as they emerge to remain relevant; however, to prevent operational vulnerabilities, this rapid uptake of technology must be adopted appropriately.
	● Product/service commercialisation	As Vector expands into new services and products, the commercial, environmental and social benefits must be assessed and balanced to deliver long-term stakeholder value.
	● Australian investment	Vector must carefully manage our continued expansion into the Australian energy market, particularly within the metering industry, to ensure delivery of acceptable investment returns.
	● Political and regulatory uncertainty	Changes in the New Zealand and Australian political and regulatory landscape and the ability of the regulatory environment to keep pace with technological and operational change remain key influencers on Vector and its operations.
	● Labour market dynamics	The ability for Vector and our key service providers to recruit and retain the necessary workforce is challenged by skills shortages and Auckland affordability.
OPERATIONAL RISKS	● Cyber security	The potential threat of a compromise to Vector's IT/OT environment resulting in disruption to critical services or confidential information being released, modified or deleted remains of heightened concern.
	● Significant HSE incident	Because of the nature of our business, Safety Always is fundamental to the way Vector operates in order to protect our people, our contractors and the wider public.
	● Core business operational failure	As a major lifeline utility within Auckland, Vector maintains strong business continuity practices to minimise disruption stemming from the unlikely event of a significant operational incident at a critical site.
	● Reputational damage	The use, speed and hyper-transparency of social media, coupled with our increasing engagement with customers, requires careful and appropriate management to protect Vector's reputation in the marketplace.
EMERGING RISKS	● Accelerated climate change adaptation	Climate change has multiple ramifications for Vector; our network assets are exposed to potential changes in weather trends and increased severe weather events, while a transition to a net zero emissions economy presents both risks and opportunities for the business.
	● Trust and ethical conduct perceptions	The heightened focus and public perception on organisational trust, transparency and conduct reinforces the importance of continuing to operate in a manner that reflects the values, ethics and expectations of our stakeholders and the wider community.

- ● Environmental risks
- ● Technological risks
- ● Economic risks
- ● Societal risks
- ● Operational risks

GUIDING PRINCIPLES

Vector's Board is committed to maintaining high standards of corporate governance, ensuring transparency and fairness, and recognising the interests of our shareholders and other stakeholders.

Vector strives to maintain a framework of corporate governance that reflects this commitment.

This section provides an overview of Vector's main corporate governance policies, practices and processes which have been adopted and are followed by Vector's Board. More information can be found at: www.vector.co.nz/investors/governance.

Vector's ordinary shares are quoted on the NZX Limited's Main Board and our capital bonds are quoted on the NZX Debt Market. Consequently, Vector's governance practices are informed by the listing rules, principles, guidelines and recommendations of NZX Limited's Main Board Listing Rules and the October 2017 Edition of the NZX Corporate Governance Code.

During the financial year ended 30 June 2018, the October 2017 Edition of the NZX Corporate Governance Code commenced for Vector. Vector has recently reviewed its corporate governance practices in light of the Code. Further changes are expected to apply from 1 July 2019 as a result of an NZX review of the listing rules.

As at the date of the Annual Report, Vector believes that the governance practices it has opted to follow generally align with these principles, guidelines and recommendations with one material exception. The NZX Corporate Governance Code recommends that protocols be established for dealing with takeovers. Given the Entrust's Trust Deed, it is not practically possible for a takeover offer to be made in respect of Vector otherwise than by Entrust, so Vector has not adopted takeover protocols.

PROMOTION OF ETHICAL AND RESPONSIBLE DECISION-MAKING

Vector expects our directors and employees to act legally, ethically, responsibly and with integrity in a manner consistent with Vector's policies, procedures and values.

The following policies have been put in place to assist with this.

- Code of Conduct and Ethics

  Sets out the ethical standards expected from Vector's directors, employees and anyone acting on Vector's behalf. The Code of Conduct and Ethics is made available to all employees. Vector monitors compliance with the Code through our normal performance management processes and our Whistleblower Policy.

- Continuous Disclosure Policy

  Affirms Vector's commitment to provide accurate, timely, orderly and consistent disclosure and compliance with our continuous disclosure obligations.

- Director and Executive Remuneration Policy

  Sets out Vector's policy on director and executive remuneration.

- Directors' Code of Practice

  Sets out additional standards expected from Vector's directors when carrying out their duties as directors of Vector.

- Diversity and Inclusion Policy

  Recognises Vector's commitment to diversity and inclusion and sets out measurable objectives in relation to diversity and inclusion.

- Environmental Policy

  Sets out Vector's overarching commitment for managing the environmental aspects of our businesses.

- Fraud Control Policy

  Sets out Vector's commitment to achieving effective fraud control supporting an honest and ethical culture.

- Health and Safety Policy

  Sets out Vector's overarching commitments and requirements for health, safety and well-being.

- Insider Trading Policy

  Details Vector's policy on, and rules for, dealing in Vector's or our subsidiaries' quoted financial products (including ordinary shares and bonds).

- Reporting Non-GAAP Profit Measures Policy

  Sets out Vector's position in relation to reporting profit measures to the market other than those calculated in accordance with GAAP.

- Risk Management Policy

  Provides a framework for maximising opportunities and managing risk (creating and protecting organisational value) by supporting effective decision-making and robust commercial outcomes.

- Shareholder Relations Policy

  Recognises the rights of Vector's shareholders as the owners of the company, and encourages their ongoing active interest in the company's affairs.

- Stakeholder Relations Policy

  Recognises the interests of stakeholders, and demonstrates Vector's commitment to treat all stakeholders fairly and with respect.

- Sustainability Policy

  Sets out Vector's overarching commitment to sustainability.

- Interests Register

  Vector maintains an interests register in which relevant transactions and matters involving the directors are recorded. See the 'Statutory Information' section of this Annual Report for details of directors' interests.

- Whistleblower Policy

  Recognises Vector's commitment to the principles of whistleblower protection, demonstrates Vector's commitment to encouraging our people to speak up about serious misconduct or serious wrongdoing and details the protection offered if this occurs.

PROMOTING A COMPANY CULTURE WHICH EMBRACES DIVERSITY AND INCLUSION

Vector is committed to:

- Adding to, nurturing and developing the collective relevant skills, and diverse experience and attributes of Vector people
- Ensuring that Vector's culture and management systems are aligned with and promote the attainment of diversity and inclusion
- Providing an environment in which all people are treated with fairness and respect, and have equal opportunities available at work
- Being recognised as an organisation that exemplifies diversity and inclusion in action.

LAYING SOLID FOUNDATIONS FOR MANAGEMENT

Vector's governance practices are designed to:

- Enable the board to provide strategic guidance for the company and effective oversight of management
- Clarify the roles and responsibilities of Vector's directors and senior executives in order to facilitate board and management accountability to both the company and our shareholders
- Ensure a balance of authority so that no single individual has unfettered powers.

Each director has a duty to act in the best interests of the company and the directors are aware of their collective and individual responsibilities to stakeholders for the manner in which Vector's affairs are managed, controlled and operated.

The Board's primary objective is to protect and enhance the value of the company while acting in the interests of the company and our shareholders and, in that context, to have due regard to the interests of other stakeholders. The Board exercises this obligation through the approval of appropriate corporate strategies, practices and processes. These include the approval of transactions and commitments not within the authorities delegated by the Board to management and the review of company performance against strategic objectives.

Vector achieves board and management accountability through its board charter, which sets out (amongst other things) matters reserved for the board and responsibilities delegated to the Group Chief Executive, and a formal delegation of authority framework. The effect of this framework is that, whilst the board has statutory responsibility for the activities of the company, this is exercised through the delegation to the Group Chief Executive, who is responsible for the day-to-day leadership and management of the company. The framework also reserves certain matters for the decision of the Board. The board charter also sets out the expectation that all directors continuously educate themselves to ensure that they may appropriately and effectively perform their duties.

STRUCTURING THE BOARD TO ADD VALUE

Vector's Board is composed of a minimum of three and a maximum of nine directors, with at least two being ordinarily resident in New Zealand. As at 30 June 2018, the Board comprised eight directors, all of whom are non-executive directors. Information on the skills, experience and expertise of each director and their independence status is set out in the 'Board of Directors' section on page 52.

The Board considers all directors to be independent with the exception of James Carmichael and Karen Sherry who are not independent directors as they are also trustees of Entrust, Vector's majority shareholder. Only independent directors are eligible to be the Board Chairman. Directors are required to inform the Board of all relevant information which may affect their independence.

The Board has a formal board charter detailing the board's purpose, responsibilities, composition and operation, which is published on Vector's website. A committee or individual director may engage separate independent professional advice in certain situations, at the expense of the company, with the approval of the Chairman of the Board.

PREPARATION OF ANNUAL REPORT

The Board takes an active role in preparing the Annual Report, including the financial statements that comply with generally accepted accounting practice. The Board contributes to and reviews all aspects of the Annual Report.

The Audit Committee is responsible for financial reporting integrity, which includes reviewing financial statements, reviewing external financial reporting, assessing the fairness of financial statements, submitting group financial statements to the board for approval, and considering and approving the Chairman's and Group Chief Executive's reports for the Annual Report.

The Board approves the Annual Report, including the financial statements, following the recommendation to do so from the Audit Committee.

AUDITORS

Vector's external auditors for the year ending 30 June 2018 were KPMG. The Board, after considering the recommendations of the Audit Committee, consider and review the appointment of external auditors. The Board requires the rotation of the audit partner for the statutory audit after no more than five years.

The Audit Committee provides a formal forum for communication between the Board and the external auditors, ensures the independence of the external auditors, has oversight of audit planning, reviews and recommends audit fees, considers audit opinions and evaluates the performance of the external auditors. No issues concerning the external auditors' independence have been identified.

BOARD COMMITTEES

There are currently six board committees, to assist the Board with specific responsibilities. Each committee reports its proceedings back to the Board.

The committees are:

Audit Committee

Assists the Board in fulfilling its corporate governance responsibilities to safeguard the integrity of Vector's financial reporting. It independently meets external auditors at least twice a year without company employees present.

A full description of the Audit Committee's composition and duties is contained in the Audit Committee Charter, which is published on Vector's website. The committee's members as at 30 June 2018 were: Jonathan Mason (Chairman), James Carmichael, Alison Paterson, Karen Sherry, Michael Stiassny and Bob Thomson.

Regulatory Committee

Assists the Board in fulfilling its responsibilities to protect the interests of Vector, our shareholders and stakeholders given the regulatory environment in which Vector operates. A full description of the Regulatory Committee's composition and duties is contained in the Regulatory Committee Charter, which is published on Vector's website. The committee's members as at 30 June 2018 were: James Carmichael (Chairman), Jonathan Mason, Karen Sherry, Michael Stiassny and Bob Thomson.

Risk and Assurance Committee

Assists the Board in fulfilling its responsibilities to protect the interests of shareholders, customers, employees and the communities in which Vector operates through establishing a sound risk management framework and rigorous processes for internal control. A full description of the Risk and Assurance Committee's composition and duties is contained in the Risk and Assurance Committee charter, which is published on Vector's website. Risk and Assurance Committee members as at 30 June 2018 were: Karen Sherry (Chair), James Carmichael, Jonathan Mason, Alison Paterson, Michael Stiassny and Bob Thomson.

Nominations Committee

Assists the Board in fulfilling its responsibilities to have an efficient mechanism for examination of the selection and appointment practices of the company. For as long as Entrust holds at least 50.01% of Vector's shares, this committee undertakes non-binding consultation with Entrust prior to finalising any board recommendation regarding a director nomination or appointment. A full description of the Nominations Committee's composition and duties is contained in the Nominations Committee Charter, which is published on Vector's website. The Nominations Committee considered and recommended the appointment of David Bartholomew and Sibylle Krieger before their recent appointments. Members of the Nominations Committee as at 30 June 2018 were: Michael Stiassny (Chairman), James Carmichael, Jonathan Mason, Alison Paterson, Karen Sherry and Bob Thomson.

Remuneration Committee

Assists the Board in overseeing the appointment, performance and remuneration of the Group Chief Executive and members of the executive team (including succession planning), reviewing Vector's Remuneration Policy and

TABLE OF ATTENDANCE

Attendance records of Board and committee meetings for the year ended 30 June 2018 are provided in the table below.

	FULL BOARD	AUDIT COMMITTEE	RISK AND ASSURANCE COMMITTEE	REMUNERATION COMMITTEE	REGULATORY COMMITTEE	NOMINATIONS COMMITTEE	SUSTAINABILITY COMMITTEE	AGM
TOTAL MEETINGS	**14**	**7**	**4**	**4**	**3**	**2**	**3**	**1**
M Stiassny (Chair)	14	7	4	4	3	1	3	1
D Bartholomew ~	7	2†	2†	2†	1†	–	1†	–
J Carmichael	14	7	4	4	3	2	3	1
H Fletcher *	3	3	–	2	1	–	1	1
S Krieger ^	5	1†	1†	1†	–	–	–	–
J Mason	13	7	3	4†	3	2	3	1
A Paterson	14	7	4	4	3	2	3	1
K Sherry	13	7	4	4	3	1	3	1
B Thomson	14	7	3	4	3	1	3	1

† Director attending the committee meeting who is not a member of the committee.
* Hugh Fletcher ceased to be a director on 26 September 2017.
^ Appointed on 1 May 2018
~ Appointed on 28 February 2018

reviewing and monitoring Vector's Diversity and Inclusion Policy. The Remuneration Committee evaluates the performance of the Group Chief Executive and provides input into the process and review by the Group Chief Executive of the performance of senior management.

The evaluations are based on criteria that include the performance of Vector and the accomplishment of strategic objectives. During the year ended 30 June 2018, performance evaluations of the Group Chief Executive and executives were conducted in accordance with this process. A full description of the Remuneration Committee's composition and duties is contained in the Remuneration Committee Charter, which is published on Vector's website. Members of the Remuneration Committee as at 30 June 2018 were: James Carmichael (Chairman), Alison Paterson, Karen Sherry, Michael Stiassny and Bob Thomson.

Sustainability Committee

Assists the Board in fulfilling its responsibilities and objectives in matters related to implementing sustainable business practices and Vector's role as a responsible corporate citizen; this includes but is not limited to environmental performance and opportunities, community engagement and investment, diversity and inclusion, ethical business practices and human rights and sustainable supply chain practices. The Sustainability Committee Charter is available on Vector's website. Members of the Sustainability Committee as at 30 June 2018 were: Karen Sherry (Chair), James Carmichael, Jonathan Mason, Alison Paterson, Michael Stiassny and Bob Thomson.

REMUNERATING FAIRLY AND RESPONSIBLY

The directors' remuneration, and certain employee remuneration information, is set out in the 'Statutory Information' section of this Annual Report. Vector's Director and Executive Remuneration Policy is published on Vector's website. Vector's directors do not participate in an executive remuneration or share scheme. Directors do not receive any options, bonus payments or incentive-based remuneration. The company does not have a scheme for retirement benefits to be given to directors.

RESPECTING THE RIGHTS OF SHAREHOLDERS

Vector recognises the rights of shareholders as the owners of the company and encourages their ongoing active interest in the company's affairs by:

- Communicating with them effectively
- Ensuring they have full access to information about the company, including through the Vector website
- Conducting shareholder meetings in locations and at times convenient to the majority of shareholders
- Providing shareholders with adequate opportunity to ask questions about, and comment upon, relevant matters, and to question directly the external auditors at shareholder meetings
- Enabling shareholders to receive communications from, and send communications to, Vector and our security registry electronically
- Inviting shareholders to contact the company to ask questions, or express views, about matters affecting the company. To facilitate this, Vector has a dedicated email address for shareholder/investor queries, which is: investor@vector.co.nz.

Vector's Shareholder Relations Policy is published on Vector's website.

Vector's Constitution includes provisions relating to our majority shareholder, Entrust. In addition, Vector and Entrust are parties to a Deed Recording Essential Operating Requirements, which includes certain policy, consultation, pricing reporting and the energy solutions programme obligations.

RECOGNISING THE LEGITIMATE INTERESTS OF VECTOR'S STAKEHOLDERS

Vector's commitments to our various stakeholders are part of our board charter and the company's Code of Conduct and Ethics. Vector's Stakeholder Relations Policy is published on Vector's website.

MAKING TIMELY AND BALANCED DISCLOSURE

Vector has in place a Continuous Disclosure Policy designed to ensure that we comply with NZX Limited's Main Board Listing Rules.

Vector ensures that public information about the company is readily accessible to all stakeholders. The company maintains an up-to-date website containing a comprehensive range of information. Vector issues quarterly reports on our operational performance and conducts detailed market briefings in conjunction with the release of our annual and interim financial results.

Information presented at these briefings, and public announcements made at other times, are published on the NZX website. In addition, they are made available on Vector's website following their NZX release.

Vector's interim and annual company reports are now viewed primarily online, but shareholders are entitled to have hard copies of both documents, and can request them by contacting the company. If you have any questions or would like to request a copy of the Annual or Interim Report, please email investor@vector.co.nz or phone +64 9 978 7788.

REMUNERATION FRAMEWORK

Vector's remuneration framework is designed to attract and retain high performing individuals, to support the delivery of the company's strategy and vision, and reward them appropriately and competitively. The Board regularly reviews our remuneration strategy.

All employees have fixed remuneration, targeted at the market median, and most have the potential to earn a Short-Term Incentive (STI). STI is a variable element of remuneration and is only paid if both company and individual performance goals have been met.

Fixed Remuneration

Fixed remuneration is reviewed each year based on data from independent remuneration specialists. Employees' fixed remuneration is based on a matrix of their own performance and their current position when compared to our internal role bands and the market.

Short term incentive

STI values are set as a percentage of fixed remuneration, from 5% to 50% based on the complexity of the role. The Group Chief Executive has an STI as a percentage of fixed remuneration as set out later in this report. STI payments are determined following a review of Company and individual performance and paid out at a multiplier of between 0x and 1.0x for the Group Chief Executive, executive leadership team, and all eligible employees.

This model is based on clear goals, differentiating performance, and rewarding delivery.

Company performance goals are set and reviewed annually by the Board to align with shareholder value. If company goals are not met, including preliminary "gateway" goals, no STI is payable. In the year ended 30 June 2018, the company goals were:

- 40% Disciplined growth and cost efficiency (EBITDA performance against budget);
- 40% Customer and regulatory outcomes;
- 20% Sustainability.

Individual performance goals for all employees are tailored to their role, with 50% of the goals based on 'what' they achieve and 50% based on 'how' they perform their role, which includes a health and safety component for all employees.

As an example of how STI is calculated, an employee with fixed remuneration of $80,000 and an STI element of 10% may receive between $0 and $8,000 (0x to 1.0x their STI percentage) depending on the level of company performance and their individual performance.

The Group Chief Executive remuneration

The Group Chief Executive's remuneration consists of fixed remuneration and an STI. There is no Long-Term Incentive (LTI) or share options. This is reviewed annually by the Board after reviewing company performance, the Group Chief Executive's individual performance and advice from external remuneration specialists.

GROUP CHIEF EXECUTIVE REMUNERATION FOR PERFORMANCE PERIODS ENDING 30 JUNE 2018 AND 30 JUNE 2017

	FIXED REMUNERATION			PAY FOR PERFORMANCE		TOTAL REMUNERATION
	SALARY[1]	NON-TAXABLE BENEFITS[2]	SUBTOTAL	STI	SUBTOTAL	
FY18	1,206,422	–	1,206,422	[3]		
FY17	1,176,997	–	1,176,997	499,047[4]	499,047	1,676,044

FIVE YEAR REMUNERATION SUMMARY

	TOTAL REMUNERATION	% STI AWARDED AGAINST MAXIMUM
FY18	[5]	
FY17	1,676,044	84.80%
FY16	1,575,454	74.40%
FY15	1,533,947	73.85%
FY14	1,501,316	74.73%
FY13	1,484,427	79.76%

1. Salary indicates fixed remuneration, inclusive of holiday pay as per New Zealand legislation.
2. No additional benefits.
3. STI for FY18 performance period has not been calculated (scheduled for review in October 2018).
4. STI for FY17 performance period (paid FY18).
5. Total Remuneration and STI data not available at this time.

DESCRIPTION OF THE GROUP CHIEF EXECUTIVE STI, SCHEME FOR PERFORMANCE PERIOD ENDING 30 JUNE 2018

SCHEME	DESCRIPTION	PERFORMANCE MEASURES	PERCENTAGE OF MAXIMUM AWARDED
STI	Set to a maximum of 50% of fixed remuneration for FY18 on-plan performance where the highest levels of both company and individual performance measures are achieved.	Company performance measures: • 40% Disciplined growth and cost efficiency. • 40% Customer and regulatory outcomes. • 20% Sustainability. Individual performance measures: • 25% Growth options. • 25% Policy and regulatory compliance. • 25% Sustainability and communications. • 25% Health and Safety.	If met, payment will be October 2018.

FINANCIAL CALENDAR

2018	
Final dividend paid	14 September
Annual meeting	29 October
2019	
First quarter operational statistics	October
Second quarter operational statistics	January
Half year result and report	February
Interim dividend*	April
Third quarter operational statistics	April
Fourth quarter operational statistics	July
Full year result and annual report	August
Final dividend*	September

* Dividends are subject to board determination.

INVESTOR INFORMATION

Ordinary shares in Vector Limited are listed and quoted on the New Zealand Stock Market (NZSX) under the company code VCT. Vector also has capital bonds listed and quoted on the New Zealand Debt Market (NZDX). Current information about Vector's trading performance for its shares and bonds can be obtained on the NZX website at **www.nzx.com**. Further information about Vector is available on our website **www.vector.co.nz**.

DIRECTORY

REGISTERED OFFICE

Vector Limited
101 Carlton Gore Road
Newmarket
Auckland 1023

New Zealand
Telephone 64-9-978 7788
Facsimile 64-9-978 7799
www.vector.co.nz

POSTAL ADDRESS

PO Box 99882
Newmarket
Auckland 1149
New Zealand

INVESTOR ENQUIRIES

Telephone 64-9-213 5179
Email: investor@vector.co.nz

This Annual Report is dated 23 August 2018 and signed on behalf of the board by:

Michael Stiassny
Chairman

Jonathan Mason
Director

VECTOR.CO.NZ