

Champions Trophy

Case Competition 2015



Case 2: Vector

29 January 2015

Case prepared by Matthew Fouhy under the supervision of Sunny Gu. This case has been prepared solely for the Champions Trophy Case Competition. All data in this case has been obtained from publically available sources and Vector. This case is not intended to serve as an endorsement, a source of primary data, or an illustration of effective or ineffective management.

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**THE UNIVERSITY
OF AUCKLAND**

BUSINESS SCHOOL



From: David Dollar
Sent: 29 January 2015
To: Vector Project Teams
CC: Benjamin Banker; Peter Partner; Byron Boss; Warren Wallstreet
Subject: Vector strategy presentation

Good Morning,

Our client, Vector, is one of New Zealand's largest listed companies. It is the country's largest distributor of electricity and gas, servicing more than 700,000 customers across the country. Vector's vision is to be New Zealanders' first choice for integrated energy infrastructure solutions to help build a better, brighter future.

Vector's electricity networks span the Auckland region, with the company owning more than one million metres of electricity lines. The company distributes natural gas to more than 40 towns and cities in the North Island, and is also leading a revolution in infrastructure management technology. Related technology products and services, as well as gas intermediary operations generated nearly 40 percent of the company's revenue in 2014.

However Vector recognises that the balance of power is shifting from utility providers to consumers. In the so-called "utility death spiral", a growing number of high-value utility customers are switching to distributed technologies and efficiency measures that will cause the demand for power from traditional utilities to plummet. Consumers now have greater choice than ever before, and understanding and taking into account customers' current and future perspectives will be critical for Vector's success.

In the context of Vector's overall vision and goal, the company would like us to consider how Vector can become more relevant to its customers, in a world where energy utilities are facing significant change. Vector is particularly interested in ways it can leverage technology to address the "utility death spiral".

The Electricity Industry Reform Act prevents the ownership of both energy and lines functions. This means a generation company cannot own or have an interest in a distribution company, and a distribution company is generally restricted from retailing electricity or dealing in electricity hedges. However, there is no barrier to vertical integration from generation to retail. These legal restrictions are significant, as they restrict the extent to which Vector can take an ownership interest in any other parts of the supply chain. For the purposes of this case, you should not consider vertical integration in any regard.

Simon Mackenzie, CEO of Vector, has asked us to analyse the company and provide recommendations on a strategic level. You will have ten minutes to give a presentation to Mr Mackenzie and the board of directors, which will be followed by a ten-minute question and answer session. Please find the information prepared by our research team attached.

Regards,

David Dollar

Senior Vice President
SYG Consulting Group

1.0 Introduction to Vector

Vector is a multi-network energy infrastructure company that owns and operates a range of energy and technology businesses and assets. Employing more than 850 staff and more than 1000 contractors, Vector operates in the country's largest metropolitan area, Auckland, as well as many high-growth centres across New Zealand. The company supplies energy and services to many of New Zealand's largest industrial and commercial businesses.

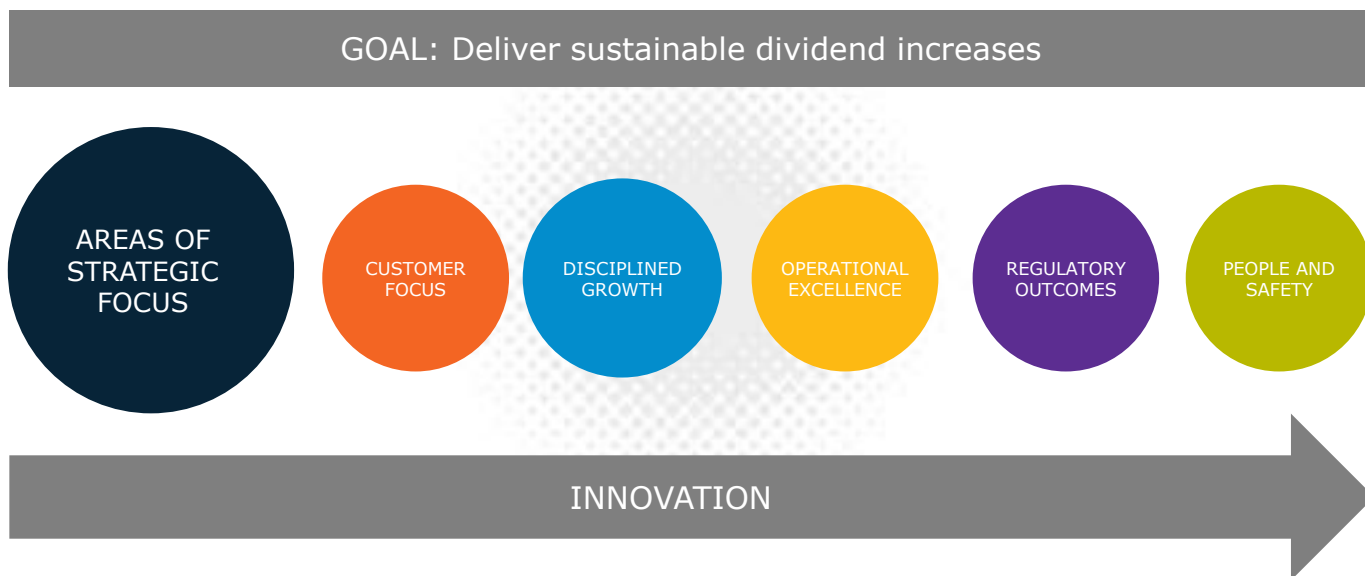
Vector listed on the New Zealand Stock Exchange in 2005 when the Auckland Energy Consumer Trust (AECT) sold 24.9 percent of Vector through an initial public offering. Prior to the

initial public offering, the AECT owned 100 percent of Vector. Following a share buyback in 2009, the AECT's current shareholding is 75.4 percent of the shares on issue.

Vector's goal is to deliver sustainable increases in dividends to its shareholders. In 2014, the company paid a total dividend of 15.25 cents a share, up 0.25 cents per share on the previous year. This is the eighth consecutive year that the dividend has increased. Alongside this, Vector's vision is to be New Zealanders' first choice for integrated energy infrastructure solutions to help build a better, brighter future.

2.0 Strategic focus

To achieve its vision and goal, Vector focuses on five strategic areas:



Customer focus: Understanding and taking into account its customers' current and future perspectives in everything it does.

Disciplined growth: Investing where it can achieve the best commercial outcome for the business.

Operational excellence: Always looking at how Vector can do things better. This includes delivering high standards of reliability and constantly working to improve network performance.

Regulatory outcomes: Seeking a certain and fair regulatory scheme that allows the company to earn a return on its assets.

People and safety: Employing great people and keeping them healthy and safe.



3.0 Auckland Energy Consumer Trust

The Auckland Energy Consumer Trust (AECT) is a consumer trust that owns a 75.4 percent shareholding in Vector for its beneficiaries. Generally speaking, the AECT does four things:

- Receives dividends from its shareholding in Vector and distributes them to its beneficiaries
- Manages its majority ownership of Vector on the behalf of beneficiaries
- Deals with government bodies on regulatory issues
- Provides strategic input to Vector at board level

Its 75.4 percent stake in Vector is the only shareholding held by the AECT. In this way, the sole purpose of the trust is to represent beneficiaries, both by representing their interests in what Vector does, but also returning the dividend distributed by Vector.

For consumers to qualify as beneficiaries, they must be paying Vector line charges as part of their power bill, and be part of the Trust District. The Trust District covers 58 percent of Auckland's power consumers, and is illustrated below:



This effectively makes consumers in the Trust District indirect shareholders of Vector. In 2014, the trust returned a dividend of \$335 per AECT beneficiary, up from \$330 in 2013. The dividend paid is based on the dividend paid by Vector to the AECT. The dividend paid by Vector is based on profit from all areas of company operations.

In 2006 the New Zealand Institute of Economic Research (NZIER) compared Trust ownership of Vector with four alternatives:

- Local council ownership
- Management by a professional trust company
- Handing shares over to beneficiaries, local councils and the Auckland Regional Council
- Transfer of shares to a new regional infrastructure body

On every measure, including efficiency and what was best for energy consumers in the Trust District, the NZIER concluded that the current set-up is the best option. A summary of this report can be found in Appendix A.

4.0 Company operations

Vector's operations can be divided into four main areas:

- Electricity distribution
- Gas transportation
- Gas wholesale
- Technology

4.1 Electricity distribution

Overview

Vector owns and operates the electricity distribution network in the greater Auckland region. The company's 18,021 kilometres of electricity lines and cables deliver power to more than 543,000 homes and businesses on behalf of electricity retailers. The diagram below illustrates Vector's position in the supply chain of electricity. Electricity distribution generated \$631.3m of revenue in 2014.



Innovation

Vector is making use of geographic information systems and combining these with other data such as call-outs and fault reports to identify fault "hot spots" or areas on the network that are more prone to instability. In 2014, Vector introduced new technology that allows technicians to listen to the sound of electricity passing through the network to identify maintenance issues. The traditional method of visually inspecting lines meant technicians could not pick up faults that would only be obvious from looking down on the wires. Technicians now drive slowly around the network with a specialised boom microphone and amplifier listening for the distinct pops and clicks different from the usual faint purr that characterise healthy power lines. This results in more effective maintenance and less downtime.

New network contracts

Vector is seeking to deliver a more streamlined and efficient service for the benefit of its customers, with the introduction of new use-of-network service agreements with the major electricity retailers. The changes include bringing billing arrangements and service standards into alignment across Vector's northern and southern networks. The new agreements will centralise fault call-outs throughout the region. All residential customers will be offered three free non-network fault call-outs per year. Meanwhile, those customers in Auckland's southern region will no longer require a contract with Vector, with responsibility for making the arrangements passing over to retailers.

The diagram below provides a quantitative snapshot of electricity operations in 2014:





4.2 Gas transportation

Overview

Vector's gas distribution network is over 9,300 kilometres long, and delivers gas, on behalf of gas retailers, to more than 150,000 customers across the North Island. Vector also provides Liquid Petroleum Gas (LPG) to customers nationwide. Gas transportation generated \$187 million in revenue in 2014.

Natural gas is transported from treatment plants, like Vector's plant in Kapuni, through Vector's 2,300 kilometre transmission pipeline system which stretches across the North Island. When the gas reaches the communities, industrial plants or gas-powered power stations where it will be used, the gas is delivered to a gate station, which lowers the pressure of the gas so that it can be transported in Vector's local gas "mains" network pipes.

Vector's gas mains network is over 7,000 kilometres long. Smaller pipes, called "services", connect to the mains and go directly to homes or buildings where the gas is used by households and businesses. A gas meter on a home or business measures how much gas is being used.

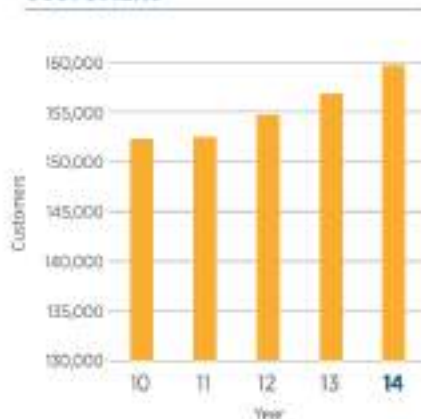
Vector's gas transportation network is illustrated on the following page.

Vector also provides operations and maintenance services to some of New Zealand's largest oil and gas companies, taking advantage of expertise in managing and maintaining the country's gas transmission systems. Vector maintains a North Island-wide team to manage its gas assets, which include the high-pressure gas transmission system and a number of third-party pipelines. In many places third-party pipelines lie alongside Vector assets. This co-operation allows for cost savings for both Vector and other asset owners and can help to ensure the integrity of these vital assets.

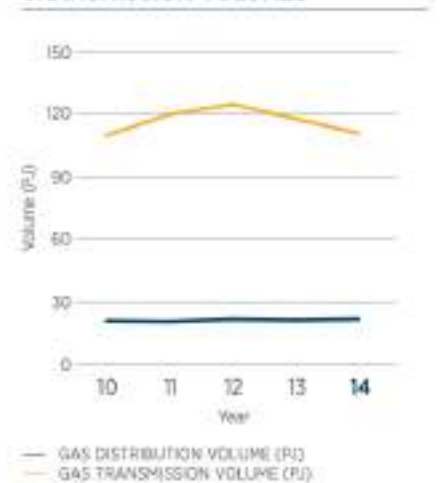
The diagram below provides a quantitative snapshot of gas distribution operations in 2014:



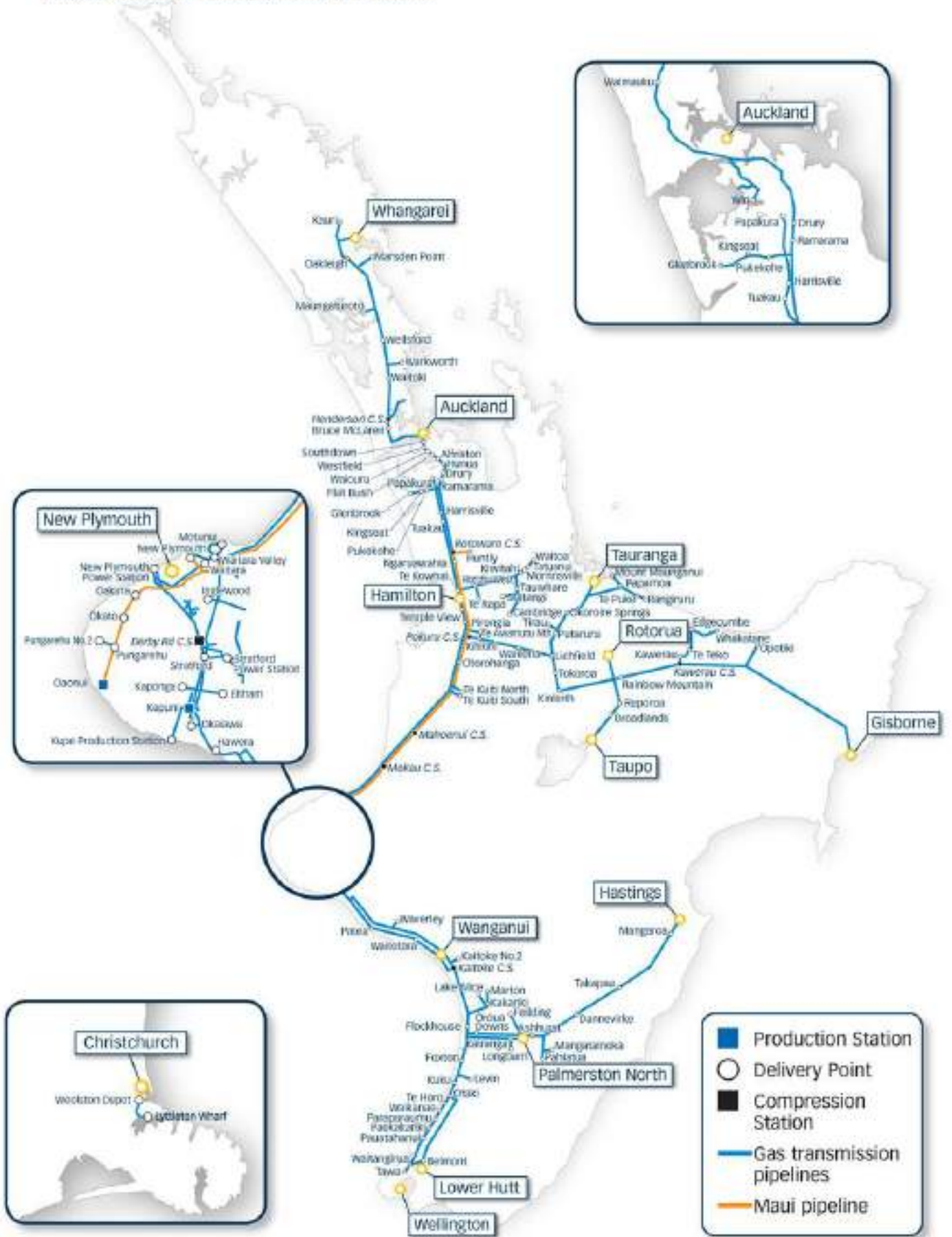
GAS DISTRIBUTION CUSTOMERS



GAS DISTRIBUTION AND TRANSMISSION VOLUMES



High pressure transmission pipelines



Map as at August 2010



4.3 Gas wholesale

Overview

Vector holds long-term entitlements to gas from New Zealand's major fields and sells natural gas to gas retailers, electricity generators, and other large commercial and industrial customers. Vector's gas brand, OnGas, promotes both piped and bottled gas supply to customers throughout New Zealand. Through its LPG businesses, Vector handles over 200,000 tonnes of LPG annually. Gas wholesale generated \$349.8m of revenue in 2014.

OnGas bottle swaps

In 2011, Vector acquired a small business, Kwik-Swap, which allowed consumers to swap empty LPG bottles, rather than filling their own bottles at a service station. Kwik-Swap was then rebranded under Vector's brand, OnGas. The swapping service now has around 800 outlets ranging from fuel retailers to building merchants and convenience stores, doubling its coverage in under three years.

Vector has been recognised by retailers for responding to customer demands. In 2013, OnGas was nominated for an award from The New Zealand Association of Convenience Stores. In 2014, oil giant BP awarded the OnGas bottle swap business its Supreme Supplier Award for excellence in safety.

Key contracts

In 2014, Vector won the contract to supply fuel for Fonterra's forklifts. Fonterra is New Zealand's major dairy co-operative, and the contract is one of the top three LPG supply contracts in New Zealand for forklift fleets. The contract covers about 2,200 bottles at sites from Invercargill through to Whangarei.

The diagram below provides a quantitative overview of gas wholesale operations in 2014:

178,510

LPG TOLLING VOLUMES (TONNES)

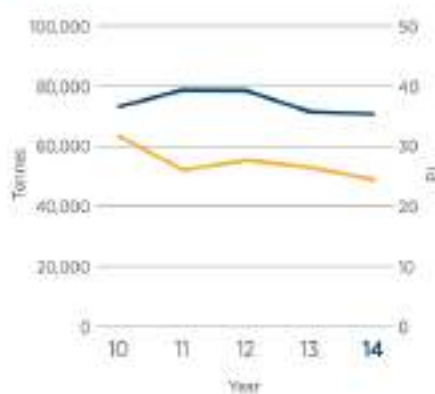
24.5 PJ

NATURAL GAS SALES VOLUMES

39.0 TJ/day

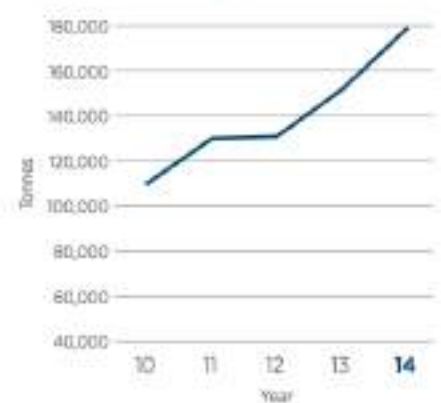
KAPUNI PRODUCTION (AVERAGE)

GAS WHOLESALE SALES



— GAS LIQUIDS SALES (TONNES)
— NATURAL GAS SALES (PJ)

LIQUIGAS LPG TOLLING (TONNES)



4.4 Technology

Overview

Vector is completing a nationwide rollout of advanced “smart” meters in one of New Zealand’s largest door-to-door infrastructure projects and one of the company’s most ambitious investment programmes. The ten-year smart meter project is a key to providing customers with smart energy networks and smart network solutions. It has seen Vector install more than 675,000 meters. These operations generated \$137m of revenue in 2014.

New contracts with Contact Energy and the SmartCo consortium of electricity distribution businesses will lift the number of meters contracted to Vector to 889,000, up from 764,000 in 2013. Vector installed around 170,000 smart meters during 2014, an average of more than 14,000 meters per month.

The project demonstrates Vector’s commitment to delivering essential energy services. The focus of the metering business in 2014 was on delivering to existing contracts and developing an enterprise-scale meter data management platform, enhancing the company’s ability to service a range of meter types and communications technologies and meet new regulatory standards.

Approximately 845,000 legacy meters remain across New Zealand, and they will most likely be replaced with smart meters over the next three to five years.

New products

In 2014, Vector rolled out a suite of new products across its metering network, taking advantage of the streams of data provided by the new meters and delivering real benefits to customers. Customers who have installed solar panels or other forms of home generation can now export power back to the grid thanks to technology that allows customers to track imports of power as well as exports to the grid. Also, customers can now control their energy consumption with the introduction of technology that allows users to pay for specified amounts of power ahead of use.

Partnerships

Advanced Metering Services – Vector’s smart metering business – partners with other nationwide distribution companies to deliver smart meter services. Vector provides SmartCo, a venture between several electricity distribution companies, with a range of services including meter data management, asset management, deployment, logistics management, integration and development services.

Australian expansion

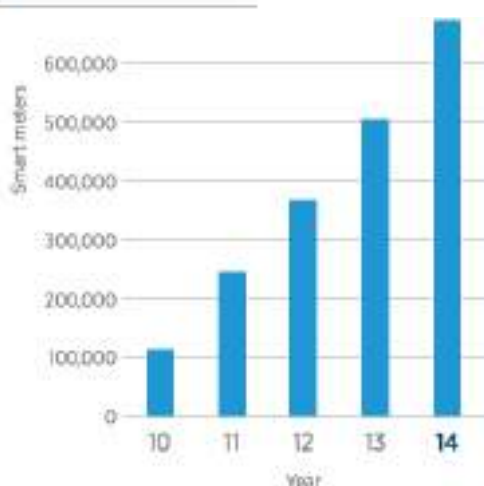
Vector expects the Australian market for smart metering to develop in a similar way to the New Zealand market. The new territory represents a significant opportunity for Vector’s metering services. The company is holding discussions with various agencies of Australian state and federal governments and retailers as potential customers. Vector is also investigating the certification requirements to operate in the Australian market as a meter and data services provider.

Vector Communications

Vector Communications operates a high-speed data network for New Zealand businesses. It continues to expand its footprint, as it gets closer to both its reseller and direct customers. The network now reaches more than 10,000 Auckland business addresses. Enhancements to product and service capabilities, coupled with improved online quoting, reporting and notification tools, have better equipped Vector to leverage its own third-party telecommunications infrastructure and provide a higher level of support to customers. Closer relationships with customers, including the embedding of Vector’s own account managers within reseller sales teams, are ensuring the company not only meets market demand, but does so at a competitive price.

The diagram below provides a quantitative overview of technology operations in 2014.

ELECTRICITY SMART METERS



675,555

SMART METERS

14,000

AVERAGE METER INSTALLATIONS PER MONTH

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5.0 Recent innovations

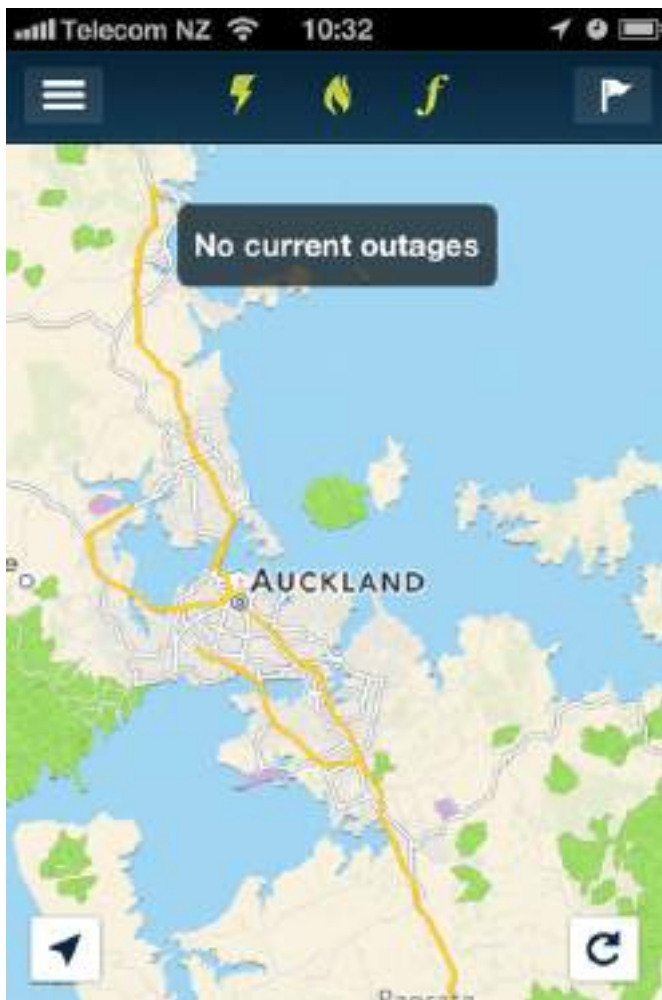
5.1 Smartphone application

Vector has launched an innovative, customer-focused smartphone app.

Designed and developed in New Zealand, the Vector “Outage Manager” app is available to download for free from the App Store and GooglePlay.

Customers can bookmark important locations, such as work, home and school, and get push notifications for outage updates as they happen in real time. Vector describes the app as a “world first” and says “no utility company has anything like the level of reporting and visual impact that our homegrown system has”.

Below is a screenshot from the mobile app:



Key features

- Interactive outage map
- Ability to report a fault to the correct retailer
- Ability to bookmark important locations and receive push notifications when outages occur
- Turns the smartphone into a flashlight
- Important phone numbers
- Essential safety information
- Outage information is updated every three minutes
- Interactive outage map is featured on Vector’s website homepage, and posts outage notifications on the Vector website and Twitter.

5.2 SunGenie pilot programme

Vector is exploring a variety of solar solutions and plans continue to evolve its exploration as it learns more about customers, and customers become more aware of the technology. In the 2014 financial year, Vector installed close to 200 of its solar units across Auckland in a trial of its SunGenie solar technology.

Under the trial programme, Vector installed just over 250 of the SunGenie mini-power stations on roofs across Auckland. Vector retains ownership of the solar stations that homeowners lease. Vector is also responsible for maintenance and repair.

The homeowner pays \$2,000 installation costs for the three-kilowatt system, which includes a fridge-sized battery cabinet, and then a \$70 monthly lease payment. Installation takes just a few hours and requires no council planning consent. It can go on either steel or tile rooves, and its low-elevation barely changes the profile of a building.

5.3 New Zealand's first net zero energy commercial building

The installation of 48 solar panels on the roof of the 1 Scotland Street building (home of a retail shop and a PR company) in Freeman's Bay, Auckland, created New Zealand's first net zero energy commercial building.

The building will run entirely on solar power from the highly efficient solar panels, designed to generate over 17,500 kWh a year, which is expected to be enough to power the entire building and all of its electricity requirements.

The solar system allows solar power to be intelligently integrated into Vector's electricity network. By combining solar panels with battery storage and a smart control system, the energy produced from the solar panels can be stored and used both when it is needed in the building and during times of peak network demand.

The batteries are a Lithium-ion battery pack, the same technology used in the car industry to power hybrid electric vehicles. The batteries also provide a measure of resilience with some back-up in the unlikely event of a grid outage.



6.0 Valued partnerships

Vector is involved in a number of partnerships and ventures that complement its core network businesses and strengthen its capabilities in the energy services field.

Kapuni energy joint venture

Vector has a 50 percent 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.

Liquigas

Vector holds a 60.25 percent shareholding in Liquigas, New Zealand's leading company for tolling, storage and distribution of bulk LPG. Liquigas has staff and depots in Auckland, New Plymouth, Christchurch and Dunedin.

7.0 Vector's customers

Despite often supplying energy through retailers or intermediaries, Vector defines its customer as the end user of the energy. This includes both retail consumers and commercial customers.

Retail customers

Vector's main group of customers is domestic electricity consumers in the Auckland region. However, retail customers also include natural gas consumers, users of Vector's smart electricity meters, as well as OnGas bottle swap customers.

Commercial customers

Vector delivers power to critical infrastructure across the Auckland region from hospitals to water treatment plants, fire stations and schools. In the 2014 financial year, Vector completed an upgrade of an Auckland hospital's power supply, installing two 11kV feeder cables, both of which are capable of powering all of the hospital's operations should the other fail.

Treescape

Vector has a 50 percent shareholding in Treescape, one of Australasia's largest specialist tree and vegetation management companies, with divisions throughout New Zealand, Queensland and New South Wales. Treescape employs close to 500 trained staff and customers include councils, utilities, government agencies, construction companies and developers. Treescape's planned vegetation management programme plays a major role in minimising the impact of severe weather on Vector's electricity network.

NZ Windfarms

Vector holds a cornerstone 22.11 percent shareholding in NZ Windfarms, a wind-power electricity generation company that sells sustainably generated electricity.

Other parts of the companies operations, such a gas wholesale and distribution, also serve commercial and industrial customers throughout the North Island.

According to Vector, customers want:

- Value
- Efficiency
- Reliability
- Choice and flexibility
- Minimal disruption

Vector remains among the lowest-cost energy infrastructure providers in the country, while still more than meeting service quality requirements. Measures such as the average operating expenditure per customer, for instance show Vector's electricity networks are among the best performers in the country.

8.0 Future opportunities

The customer is the central focus of all of Vector's operations. As a result, Vector is actively seeking ways in which it can become more relevant to its customers. Vector is open to new products, new partnerships, or even new business processes, and is considering these on an ongoing basis.

In leading a revolution in energy infrastructure technology, CEO Simon MacKenzie sees an opportunity for Vector to provide new solutions on an international scale, to both other utilities companies and other industries. The company is particularly interested in solutions that make Vector more relevant to its customers by leveraging information technology, and the potential value it may be able to capture by securing the intellectual property of these ideas.

As a result, thought must be given to the execution of new ideas. They need to be sufficiently scalable, and Vector must be able to secure the intellectual property of these innovations. Technology will no doubt play a vital role in the company becoming more relevant to its customers.



Industry information



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9.0 The energy distribution industry

The electricity industry supply chain

Getting electricity to the end user involves several steps. Electricity is first generated from a variety of sources, before being transmitted across the national transmission grid, distributed down the power lines, and finally delivered to a customer's premises. A more detailed breakdown of the industry can be found in Appendix B.

A number of the local distribution businesses offer complementary activities including:

- Contracting
- Ultra-fast fibre broadband
- Renewable generation
- Electrical equipment manufacturing
- Smart metering services

Key facts and figures

- Collectively, 29 local distribution businesses supply more than 30,700 GWh of electricity to New Zealand consumers. A breakdown of distributors can be found in Appendix C.
- The combined value of New Zealand's electricity network businesses was \$9.25 billion in 2012.
- Between 2012 and 2017, the industry expects to invest \$3 billion across their networks through capital expenditure.
- It will cost about \$927m to run the networks between 2012 and 2017.
- The networks are made up of 151,000km of cables and lines. This includes 110,000 overhead lines and 41,000 underground cables – more than enough to go around New Zealand's coast line ten times.
- There are more than two million individual connection points across all 29 networks.

Additional information on electricity consumption can be found in Appendix D.

The gas industry supply chain

The natural gas industry supply chain follows a similar structure to the electricity industry. Natural gas is currently produced in the Taranaki region, and then distributed along 2,300km of high-pressure gas transmission pipelines throughout the North Island. A distributor then reticulates gas through piping networks in urban areas. The provision of network services is known as "line function services". There are four main companies that distribute natural gas through the North Island. There is no distribution of reticulated gas in the South Island.

Gas consumption comes from the following main sectors:

- Electricity generation (including cogeneration)
- The industrial sector (such as dairy)
- As a feedstock (ie, non-energy use) in the petrochemical sector
- The residential sector
- The commercial sector (including transport)
- CNG is supplied to the automotive market through some North Island service stations. The CNG market has decreased markedly since government subsidies were removed in 1987.

Additional information on gas consumption can be found in Appendix E.

10.0 Regulation

Electricity distribution

Suppliers of electricity lines services are subject to regulatory provisions under the Commerce Act 1986.

Regulations are enforced by the Commerce Commission, New Zealand's competition enforcement and regulatory agency.

As suppliers of electricity lines services, electricity distribution businesses (EDBs) operate in a market where there is little or no competition, and little prospect of future competition.

The Commerce Commission uses "price-quality regulation" to ensure that EDBs have similar incentives and pressures to suppliers operating in competitive markets to innovate, invest and improve their efficiency. It also aims to limit the ability of suppliers to earn excessive profits, while also ensuring that consumer demands on service quality are met.

Price-quality regulation has several main features:

- Price-quality paths for all suppliers are set by the commission in a relatively low-cost way
- A "default path" applies to all regulated suppliers for a regulatory period between four and five years
- Individual suppliers have the opportunity during the regulatory period to apply to the commission for an alternative or "customised" price-quality path to better meet the particular circumstances of the individual supplier
- EDBs may incur penalties for breaches of price-quality paths

Price-quality paths include:

- The maximum prices/revenues that are allowed at the start of the regulatory period (ie, starting prices)
- The annual rate at which all EDBs' maximum allowed prices can increase (ie, rate of change) - prices are restricted from increasing each year by more than the rate of inflation less a certain number of percentage points
- The minimum service quality standards that must be met

Gas distribution

The companies that supply gas pipelines services are also subject to information disclosure and price-quality regulation, under the Commerce Act 1986. Regulation of this industry is identical to the electricity distribution industry, with price-quality paths set for the distribution of natural gas. Again, this is to promote innovation and efficiency and prevent excess profits being made.

General regulation

Under the Commerce Act 1986 it is illegal for a business to enter into a contract or arrangement that is likely to have the effect of substantially lessening competition in a market. Given that energy distribution companies are often natural monopolies, the Commerce Commission pays particular attention to any acquisitions or agreements made vertically or horizontally within the energy industry. This is to protect the interests of consumers, who often have little or no choice in who distributes energy to them. However, this is not to say that the Commerce Commission will prevent all cases of vertical integration. Vector was allowed to acquire a smart metering business in 2014. More details on this can be found in Appendix F.








11.0 Changing industry dynamics

The balance of power is shifting from utility service providers to consumers as they now have greater choice than ever before. Energy distribution technology – largely unchanged for decades – now allows customers to switch suppliers, switch energy solutions and switch from the grid. Customers are more technologically savvy and more aware of alternatives. They are looking for utility providers that are committed to the highest standards of service and those that can provide choice and do both at a low cost.

Meanwhile, customers say spending on utilities is a significant area of concern and they are targeting this as an area for saving money and actively managing their energy needs.

The diagram below summarises the so-called “utility death spiral”, outlining the key areas of the energy industry that are undergoing significant change:

 Impact of the new energy customer	<ul style="list-style-type: none">• Consumer preferences are changing to control energy supply, usage, service standards and costs• Customers are becoming more mobile and socially and digitally interconnected• Customers are increasingly interested in utility service levels and prices• Data analytics and agile strategy will become core competencies
 Changing tasks and roles of regulators	<ul style="list-style-type: none">• Policy-makers have the difficult task of balancing supply availability, affordability, proximity and environmental impact• Wide-ranging reforms to market design/planning/governance framework• Changing approach to economic regulation and revenue setting
 Transformation of the electricity sector	<ul style="list-style-type: none">• Decentralised power, technological changes and a different customer outlook are leading to a changing electricity environment• Electricity utility companies need to adapt their business models to stay profitable and to succeed in the future• New services will emerge and new players will enter the existing value chain• Reduced demand in many developed economies
 Disruptions to electricity supply channels	<ul style="list-style-type: none">• Distributed generation and disconnections from the grid via self-generation may encroach on the electricity utility business model• These technologies will present challenges to the centralised utility model but depend on technological developments and cost decreases• Changing fuel price relativities are altering utility company behaviour
 Influence of technologies on the energy supply chain	<ul style="list-style-type: none">• Energy efficiency, demand-side management, smart grid technology, solar PV, electric vehicles and battery storage head the list of technological developments• New technologies have the potential to compare with utility-provided services and impact centralised power generation and networks

Source: PwC Analysis

Financial information



The financials for the past two years are provided here, as well as in Excel format on the USB you have been provided.

● PROFIT OR LOSS

FOR THE YEAR ENDED 30 JUNE

	NOTE	GROUP		PARENT	
		2014 \$000	2013 \$000	2014 \$000	2013 \$000
Revenue	4	1,258,864	1,279,150	725,900	727,116
Operating expenses	5	(678,224)	(648,684)	(359,531)	(335,439)
Depreciation and amortisation		(183,756)	(174,078)	(107,023)	(104,000)
Interest costs (net)	6	(168,877)	(164,352)	(171,519)	(166,529)
Fair value change on financial instruments	7	5,993	62	5,993	62
Associates (share of net profit/(loss))	11	1,727	1,291	-	-
Impairment of investment in associate	11	(1,241)	(3,570)	(4,405)	(3,570)
Profit/(loss) before income tax		234,486	289,819	89,615	117,640
Tax benefit/(expense)	8	(63,195)	(83,568)	(27,122)	(35,029)
Net profit/(loss) for the period		171,291	206,231	62,493	82,611
Net profit/(loss) for the period attributable to					
Non-controlling interests		2,789	2,890	-	-
Owners of the parent		168,502	203,341	62,493	82,611

	NOTE	GROUP	
		2014	2013
Basic and diluted earnings per share (cents)	21	16.9	20.4

● OTHER COMPREHENSIVE INCOME

FOR THE YEAR ENDED 30 JUNE

	NOTE	GROUP		PARENT	
		2014 \$000	2013 \$000	2014 \$000	2013 \$000
Net profit/(loss) for the period		171,291	206,231	62,493	82,611
Other comprehensive income net of tax					
Items that may be re-classified subsequently to profit or loss:					
Net change in fair value of cash flow hedges		35,900	52,215	35,900	52,215
Share of other comprehensive income of associates	11	(1,194)	(20)	-	-
Translation of foreign operations		(23)	(30)	-	-
Other comprehensive income for the period net of tax		34,683	52,165	35,900	52,215
Total comprehensive income for the period net of tax		205,974	258,396	98,393	134,826
Total comprehensive income for the period attributable to					
Non-controlling interests		2,789	2,890	-	-
Owners of the parent		203,185	255,506	98,393	134,826

BALANCE SHEET

AS AT 30 JUNE

	NOTE	GROUP		PARENT	
		2014 \$000	2013 \$000	2014 \$000	2013 \$000
CURRENT ASSETS					
Cash and cash equivalents		8,284	56,164	871	43,973
Trade and other receivables	10	169,163	170,452	102,583	107,171
Derivatives	18	598	344	598	344
Inventories		4,350	5,513	-	-
Income tax		11,366	3,811	11,366	2,955
Advances to subsidiaries	22	-	-	84,279	20,588
Total current assets		193,761	236,284	199,697	175,031
NON-CURRENT ASSETS					
Receivables	10	1,851	2,134	1,359	1,396
Derivatives	18	-	10,664	-	10,664
Deferred tax	9	-	1,646	-	-
Investments in subsidiaries	11	-	-	1,407,346	1,407,346
Investments in associates	11	11,481	13,589	6,069	10,474
Intangible assets	12	1,632,430	1,633,369	557,796	557,759
Property, plant and equipment (PPE)	13	3,999,577	3,849,391	2,821,725	2,735,133
Total non-current assets		5,645,339	5,510,793	4,794,295	4,722,772
Total assets		5,839,100	5,747,077	4,993,992	4,897,803
CURRENT LIABILITIES					
Trade and other payables	15	217,830	273,187	161,211	147,440
Provisions	16	9,554	11,676	-	-
Borrowings	17	200,314	-	200,314	-
Derivatives	18	169	2,065	169	2,065
Income tax		702	586	-	-
Advances from subsidiaries	22	-	-	465,906	419,061
Total current liabilities		428,569	287,514	827,600	568,566
NON-CURRENT LIABILITIES					
Payables	15	19,544	20,136	2,890	2,241
Provisions	16	17,628	8,690	-	-
Borrowings	17	2,268,674	2,420,430	2,268,674	2,420,430
Derivatives	18	244,961	226,331	244,961	226,331
Deferred tax	9	551,937	525,514	411,134	388,070
Total non-current liabilities		3,102,744	3,201,101	2,927,659	3,037,072
Total liabilities		3,531,313	3,488,615	3,755,259	3,605,638
EQUITY					
Equity attributable to owners of the parent		2,291,672	2,240,326	1,238,733	1,292,165
Non-controlling interests in subsidiaries		16,115	18,136	-	-
Total equity		2,307,787	2,258,462	1,238,733	1,292,165
Total equity and liabilities		5,839,100	5,747,077	4,993,992	4,897,803

	NOTE	GROUP	
		2014	2013
Net tangible assets per share (cents)	21	66.2	60.9
Net debt to net debt plus equity ratio	21	51.6%	51.1%



CASH FLOWS

FOR THE YEAR ENDED 30 JUNE

	NOTE	GROUP		PARENT	
		2014 \$000	2013 \$000	2014 \$000	2013 \$000
CASH FLOWS FROM OPERATING ACTIVITIES					
Receipts from customers		1,204,414	1,292,704	707,580	694,210
Interest received		1,483	4,486	876	4,012
Income tax refunds		1,505	-	624	-
Dividends received from associates		1,400	200	1,400	200
Payments to suppliers and employees		(689,618)	(643,065)	(398,827)	(357,462)
Interest paid		(173,926)	(170,739)	(173,602)	(170,525)
Income tax paid		(58,635)	(57,403)	(55,813)	(54,802)
Net cash flows from/(used in) operating activities	20	366,623	426,183	82,238	115,632
CASH FLOWS FROM INVESTING ACTIVITIES					
Advances from/repaid by subsidiaries	22	-	-	308,097	346,937
Proceeds from sale of PPE and software intangibles		1,772	884	360	688
Advances to/repaid to subsidiaries	22	-	-	(218,367)	(156,465)
Purchase and construction of PPE and software intangibles		(327,428)	(283,383)	(192,098)	(164,586)
Proceeds from liquidation of associate		45	2,757	-	-
Acquisition of businesses	24	(60,060)	-	-	-
Net cash flows from/(used in) investing activities		(385,671)	(279,742)	(102,008)	26,574
CASH FLOWS FROM FINANCING ACTIVITIES					
Proceeds from borrowings		149,000	-	149,000	-
Repayment of borrowings		(20,000)	(22,817)	(20,000)	(22,817)
Dividends paid		(156,663)	(148,265)	(151,853)	(146,874)
Other financing cash flows		(1,169)	(788)	(479)	(269)
Net cash flows from/(used in) financing activities		(28,832)	(171,870)	(23,332)	(169,960)
Net increase/(decrease) in cash and cash equivalents		(47,880)	(25,429)	(43,102)	(27,754)
Cash and cash equivalents at beginning of the period		56,164	81,593	43,973	71,727
Cash and cash equivalents at end of the period		8,284	56,164	871	43,973
Cash and cash equivalents comprise:					
Bank balances and on-call deposits		3,684	13,890	871	10,973
Short term deposits maturing within three months		4,600	42,274	-	33,000
		8,284	56,164	871	43,973

CHANGES IN EQUITY
FOR THE YEAR ENDED 30 JUNE

GROUP

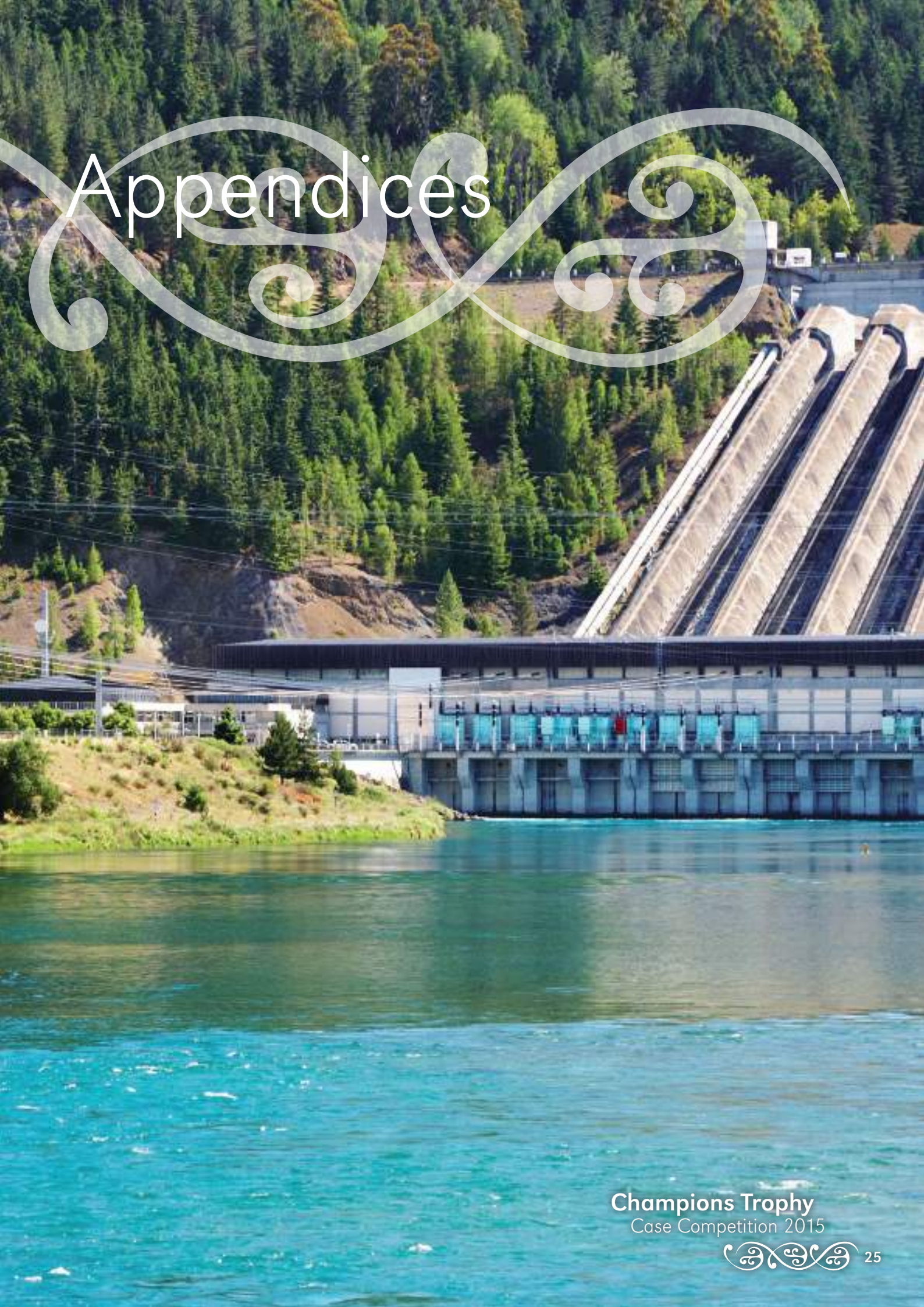
	NOTE	ISSUED SHARE CAPITAL \$000	TREASURY SHARES \$000	HEDGE RESERVE \$000	OTHER RESERVES \$000	RETAINED EARNINGS \$000	NON- CONTROLLING INTERESTS \$000	TOTAL EQUITY \$000
Balance at 1 July 2012		874,979	(9,240)	(158,701)	171	1,424,296	16,637	2,148,342
Net profit/(loss) for the period		-	-	-	-	203,341	2,890	206,231
Other comprehensive income		-	-	52,215	(30)	(20)	-	52,165
Total comprehensive income		-	-	52,215	(30)	203,321	2,890	258,396
Dividends	21	-	-	-	-	(146,874)	(1,391)	(148,265)
Employee share purchase scheme transactions		-	(39)	-	28	-	-	(11)
Total transactions with owners		-	(39)	-	28	(146,874)	(1,391)	(148,276)
Balance at 30 June 2013		874,979	(9,279)	(106,486)	369	1,480,743	18,136	2,258,462
Net profit/(loss) for the period		-	-	-	-	168,502	2,789	171,291
Other comprehensive income		-	-	35,900	(1,217)	-	-	34,683
Total comprehensive income		-	-	35,900	(1,217)	168,502	2,789	205,974
Dividends	21	-	-	-	-	(151,853)	(4,810)	(156,663)
Employee share purchase scheme transactions		-	(14)	-	28	-	-	14
Total transactions with owners		-	(14)	-	28	(151,853)	(4,810)	(156,649)
Balance at 30 June 2014		874,979	(9,293)	(70,586)	(820)	1,497,392	16,115	2,307,787



Segment information

	GROUP 2014					
	ELECTRICITY \$000	GAS TRANS- PORTATION \$000	GAS WHOLESALE \$000	TECHNOLOGY \$000	INTER- SEGMENT \$000	TOTAL \$000
External revenue:						
Sales	597,950	152,597	343,316	120,655	-	1,214,518
Third party contributions	31,559	6,206	-	5,961	-	43,726
Intersegment revenue	1,818	28,171	6,489	10,347	(46,825)	-
Segment revenue	631,327	186,974	349,805	136,963	(46,825)	1,258,244
External expenses:						
Electricity transmission expenses	(188,246)	-	-	-	-	(188,246)
Gas purchases and production expenses	-	-	(224,389)	-	-	(224,389)
Asset maintenance expenses	(50,363)	(18,158)	(19,826)	(4,923)	-	(93,270)
Employee benefit expenses	(13,497)	(2,743)	(17,099)	(10,616)	-	(43,955)
Other expenses	(24,385)	(26,140)	(7,958)	(19,636)	-	(78,119)
Intersegment expenses	(8,878)	(6,516)	(29,615)	(1,816)	46,825	-
Segment operating expenses	(285,369)	(53,557)	(298,987)	(36,991)	46,825	(627,979)
Segment EBITDA	345,958	133,417	50,918	99,972	-	630,265
Depreciation and amortisation	(83,064)	(22,770)	(15,431)	(46,466)	-	(167,731)
Segment profit	262,894	110,647	35,487	53,506	-	462,534
Segment capital expenditure	152,324	47,623	10,061	104,982	-	324,990

	GROUP 2013					
	ELECTRICITY \$000	GAS TRANS- PORTATION \$000	GAS WHOLESALE \$000	TECHNOLOGY \$000	INTER- SEGMENT \$000	TOTAL \$000
External revenue:						
Sales	605,490	177,770	365,637	97,044	-	1,245,941
Third party contributions	25,424	3,855	-	3,586	-	32,865
Intersegment revenue	1,960	38,210	6,610	8,437	(55,217)	-
Segment revenue	632,874	219,635	372,247	109,067	(55,217)	1,278,606
External expenses:						
Electricity transmission expenses	(176,120)	-	-	-	-	(176,120)
Gas purchases and production expenses	-	-	(228,535)	-	-	(228,535)
Asset maintenance expenses	(42,661)	(17,206)	(18,383)	(4,520)	-	(82,770)
Employee benefit expenses	(12,396)	(4,229)	(16,260)	(9,230)	-	(42,095)
Other expenses	(21,523)	(21,167)	(9,686)	(17,125)	-	(69,501)
Intersegment expenses	(7,637)	(6,641)	(38,979)	(1,960)	55,217	-
Segment operating expenses	(260,337)	(49,243)	(311,843)	(32,835)	55,217	(599,021)
Segment EBITDA	372,537	170,392	60,404	76,252	-	679,585
Depreciation and amortisation	(80,814)	(23,915)	(16,252)	(38,854)	-	(159,835)
Segment profit	291,723	146,477	44,152	37,398	-	519,750
Segment capital expenditure	150,164	37,515	8,325	88,872	-	284,876



Appendices



Appendix A: Summary of the NZIER report on Vector's ownership structure

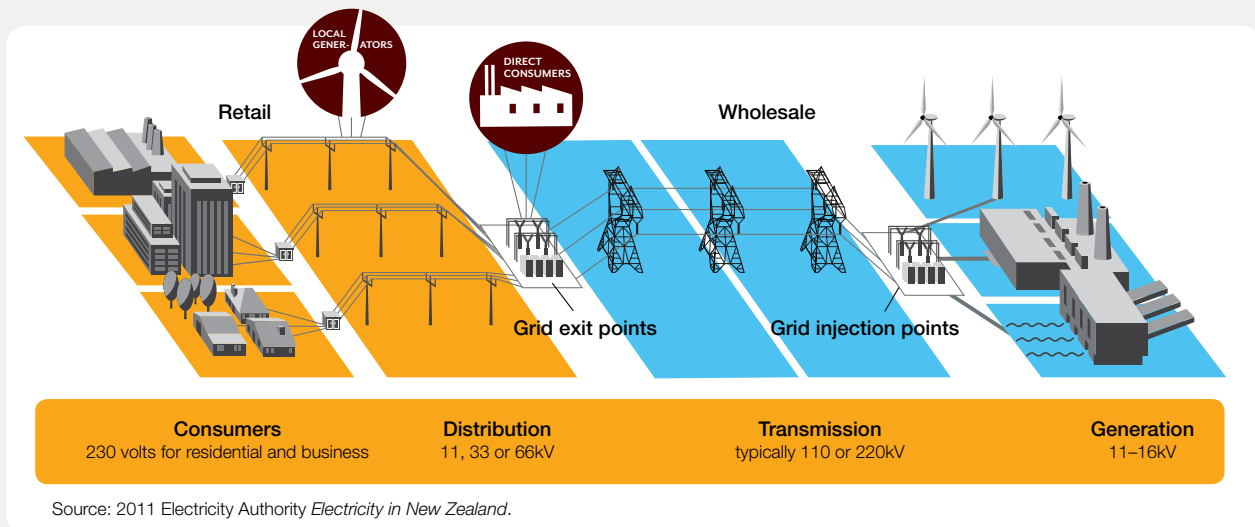
7. Evaluation of options against criteria

	Retain AECT structure	Council ownership	Professional trustees	Distributed ownership (1/3 x 3)	Special purpose body funding Auckland's infrastructural development
Promote the interests of consumers	Yes	No	To a more limited degree than the directly elected Trust	No	No
Promote productive efficiency	Compatible	Compatible	Compatible	Compatible	Compatible
Promote allocative efficiency	Compatible except ownership interests of income beneficiaries not being tradable	May lead to inadequate maintenance	Compatible except ownership interests of income beneficiaries not being tradable	Compatible	May lead to inadequate maintenance
Promote dynamic efficiency	Compatible	Likely to lead to under investment in Vector	Could lead to under or over investment in Vector. Under investment due to the conservatism of the trustee and over investment if capital beneficiaries threaten trustee	In short-term, the emphasis to be place on growth and income will be a matter of tension between shareholders. Will depend in the end on attitude of majority shareholder	Likely to lead to under investment in Vector and over-investment in other infrastructure
Fairness	Fair. Does not expropriate current property rights of income beneficiaries	Unfair as expropriates current income beneficiaries property rights	Fair. Does not expropriate current property rights of income beneficiaries, but gives them less direct say and influence than the current arrangement	Unfair as expropriates two-thirds of current income beneficiaries property rights and removes their effective decision making rights relating to Vector	Unfair as expropriates all current income beneficiaries property and decision making rights
Economic Sustainability	Sustainable	Highly unstable as an ownership structure as councils will disagree on policies	Sustainable unless gets to very critical state warranting legal action against professional trustee. Legal action more likely from capital beneficiaries than income beneficiary	Highly unstable until investor gains majority control and then remaining minorities may be vulnerable to opportunistic behaviour by dominant party	Unstable. Pressures on special purpose body will lead to on-going tensions between needs of Vector and other needs. Likely to result in eventual disposal of asset by special purpose body

Appendix B: The electricity supply chain in New Zealand

The exact amount charged by retailers to supply electricity to a household varies depending on the retailer and type of consumer account, but electricity bills generally reflect the costs incurred by participants across the electricity industry. This fact sheet describes the industry structure and is the first in a series outlining how the costs¹ are made up and how they compare to prices paid by other consumers such as business customers.

The electricity supply chain in New Zealand



Most electricity is produced by generators located well away from where it is eventually used. This is often because of the geographical location of energy sources, for example, rivers used for hydro-generation, geothermal fields, or the location of good wind generation sites. There are also other factors to consider when placing large generation close to consumers and communities.

Around 90 percent of the total electricity New Zealanders use passes through the high voltage transmission system that spans the country and is known as the national grid. The transmission system delivers electricity at high voltage to substations in each area. Large cities may have several substations serving them and in a few cases electricity is supplied directly to large industrial consumers such as the Tiwai Point aluminium smelter. Local distribution systems take the power delivered to each substation and deliver it at lower voltages to homes and businesses. The remaining 10 percent of electricity that doesn't pass through the transmission system is generated by plant that is directly connected to the local distribution system or, in the case of some large industrial consumers, by their own on-site generation.

90 percent of the total electricity New Zealanders use passes through the high voltage transmission system

1. The term 'cost' in this paper includes the costs associated with producing electricity, including any profits.



Distribution companies

1. Top Energy
2. Northpower
3. Vector
4. Counties Power
5. WEL Networks
6. Powerco
7. Waipa Networks
8. The Lines Company
9. Unison Networks
10. Horizon Energy Distribution
11. Eastland Network
12. Centralines
13. Scanpower
14. Electra
15. Wellington Electricity
16. Nelson Electricity
17. Marlborough Lines
18. Network Tasman
19. Buller Electricity
20. Mainpower New Zealand
21. Westpower
22. Orion New Zealand
23. Electricity Ashburton
24. Alpine Energy
25. Network Waitaki
26. Aurora Energy
27. OtagoNet Joint Venture
28. The Power Company
29. Electricity Invercargill

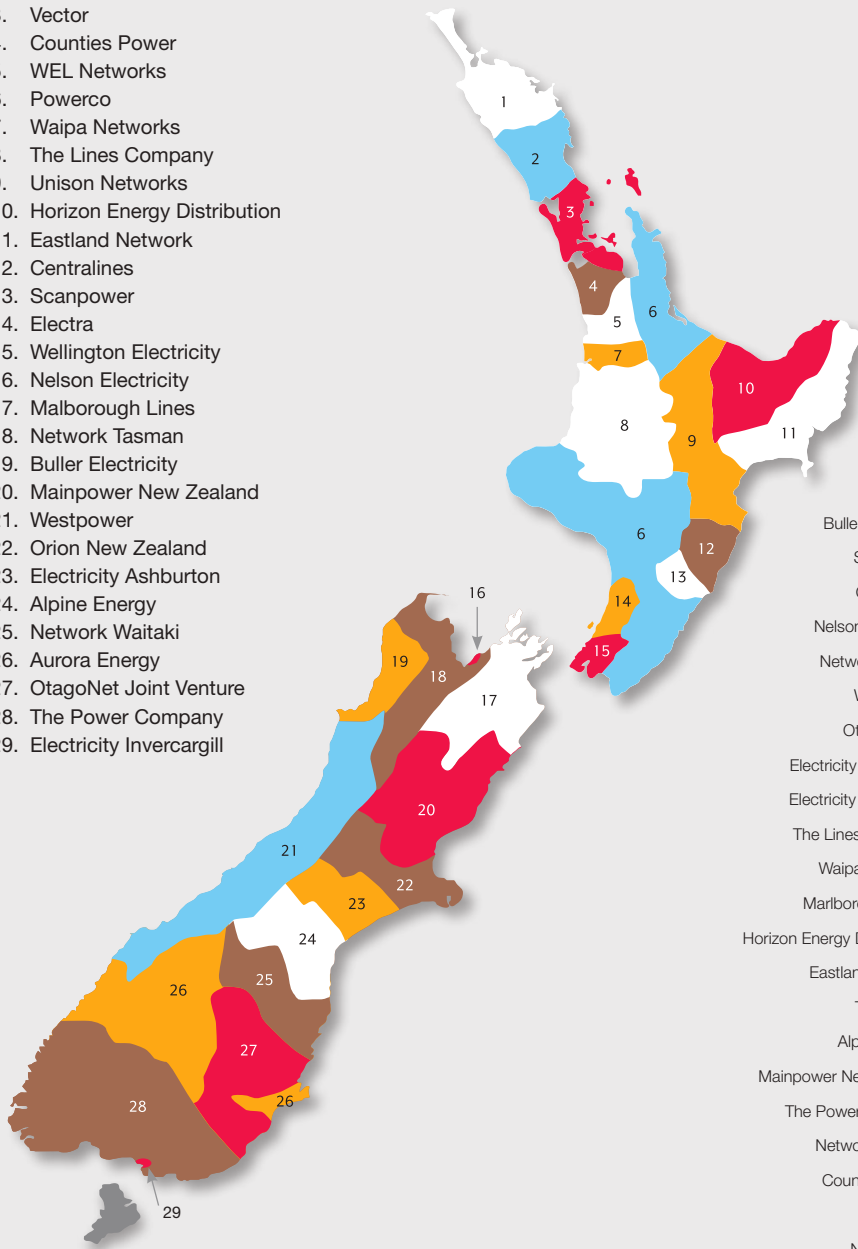
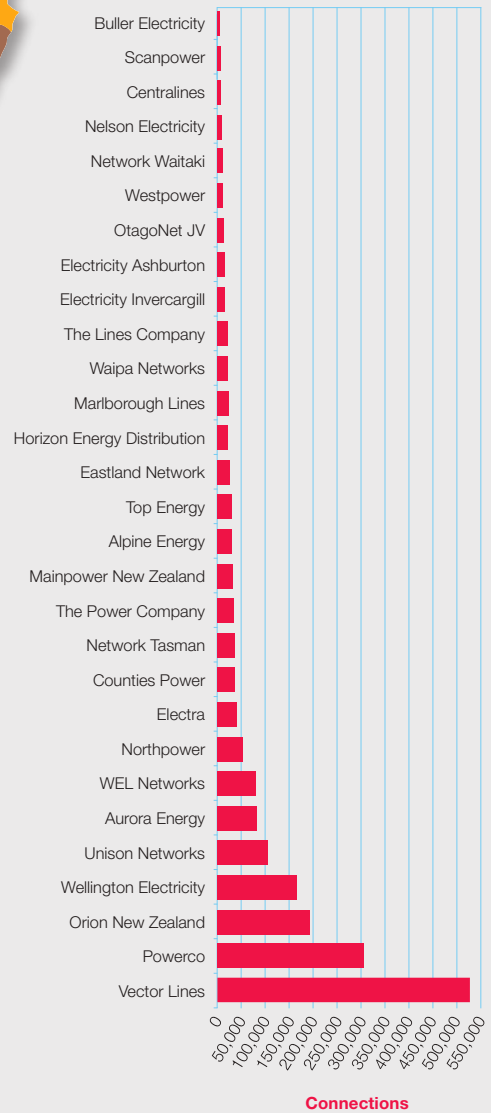


Figure 13 Number of connections by distribution company



Appendix D: Electricity consumption by sector for the year 2013

Sector	Share of electricity consumption
Residential	32.0%
Commercial (including transport)	24.7%
Basic metals	16.4%
Other industrial	7.7%
Wood pulp, paper and printing	7.4%
Agriculture/forestry/fishing	6.2%
Food processing	5.6%

Appendix E: Gas consumption by sector for the year 2013

Sector	Share of gas consumption
Electricity generation	40.8%
Industrial	27.9%
Non-energy use	22.8%
Commercial	4.4%
Residential	3.3%
Agriculture/forestry/fishing	0.9%



Appendix F: Extract from the Commerce Commission's determination of the Vector acquisition of Arc Innovations

The proposed acquisition

1. On 5 September 2014, the Commerce Commission received an application from Vector Limited (Vector) seeking clearance to acquire all of the shares of Arc Innovations Limited (Arc) from Meridian Energy Limited (Meridian).

2. The proposed acquisition would result in the aggregation of Vector's and Arc's respective advanced electricity metering businesses.

The decision – clearance granted

3. The Commission gives clearance to the proposed merger as it is satisfied that it will not have, or would not be likely to have, the effect of substantially lessening competition in a market in New Zealand.

Our framework

4. Our approach to analysing the competition effects of the proposed acquisition is based on the principles set out in our Mergers and Acquisitions Guidelines.

The substantial lessening of competition test

5. As required by the Commerce Act 1986, we assess mergers using the substantial lessening of competition test.

6. We determine whether a merger is likely to substantially lessen competition in a market by comparing the likely state of competition if the merger proceeds (the scenario with the merger, often referred to as the factual), with the likely state of competition if the merger does not proceed (the scenario without the merger, often referred to as the counterfactual)

7. A lessening of competition is generally the same as an increase in market power. Market power is the ability to raise price above the price that would exist in a competitive market (the 'competitive price'), or reduce non-price factors such as quality or service below competitive levels.

8. Determining the scope of the relevant market or markets can be an important tool in determining whether a substantial lessening of competition is likely.

9. We define markets in the way that we consider best isolates the key competition issues that arise from the merger. In many cases this may not require us to precisely define the boundaries of a market. A relevant market is ultimately determined, in the words of the Act, as a matter of fact and commercial common sense.

10. Only a lessening of competition that is substantial is prohibited. A lessening of competition will be substantial if it is real, of substance, or more than nominal. Some courts have used the word 'material' to describe a lessening of competition that is substantial.

11. Consequently, there is no bright line that separates a lessening of competition that is substantial from one that is not. What is substantial is a matter of judgment and depends on the facts of each case. Ultimately, we assess whether competition will be substantially lessened by asking whether consumers in the relevant market(s) are likely to be adversely affected in a material way.



Relevant press releases



Infrastructure report: Change is coming swiftly

www.nzherald.co.nz, By Fran O'Sullivan, August 19 2014

Think Auckland's future energy development. Think power stations and networks of lines and cables criss-crossing the city to deliver electricity to a rapidly growing city.

Think again, urges Vector chief executive Simon MacKenzie, as he talks about what the future entails in a world where rapidly changing technologies will put the customer – or consumer – at the heart of technological choice.

"The biggest mistake we could make in Auckland is doing these traditional-type developments," says Mackenzie. "We're heavily engaged with developers to broaden options and thinking."

He points to the convergence (a "puzzle") of three major platforms. There's the world of existing traditional networks – that's the power lines and substations; then there are the new hardware solutions – solar power and increasing battery storage capabilities that are already providing consumers with distributed power options; and finally the new software solutions which allow those same consumers to manage control.

"We see a world where all of a sudden the traditional providers are competing with the hardware solution providers and the disrupters in the control space."

It's a world where for a major network company like Vector getting the wrong emphasis could result in stranded assets in four to five years time, if customers move ahead of strategy, and, on the consumer side the potential for social issues if people cannot afford new hardware like solar panels or whizz-bang apps. Hence, Mackenzie – and Vector – are engaged in all three components.

There's an element of commercial sensitivity to some of the work Mackenzie has under way, supporting small companies to innovate in New Zealand and thinking through how that can be leveraged with international partners in the US, for instance, to create whole new industries in the weightless economy space based from here.

Here's the thing. The company's San Francisco partner recognises New Zealand has a pool of skilled people who have experience in a world where globally there is a shortage of emergent technology capability.

"They look at New Zealand and see we are very pioneering in this space," says Mackenzie. "They recognise there is a real talent pool here and from our perspective we have been utilising this pool."

"We should be looked at as the innovation and creative centre of the world. They are thinking of setting up down here to take advantage of the tech pool we have."

One factor driving this is US pay scales. Graduates with three years' experience in computing technology can crack

US\$250,000 a year within three years of graduation.

Mackenzie reckons there are plenty of opportunities for NZ firms to be pathfinders.

For instance, Nest – a US company ("two guys out of Apple") – has developed customer focused energy management solutions which are as simple as a thermostat control with smart technology embedded in it. "We've been developing similar technology with local people here. But in the US you can access capital and a market more easily."

"There's a whole lot of talented people in the space if they could be facilitated into a bigger market."

Already in Germany, 75 per cent of energy is produced by either customer-owned or community-owned solutions through solar and wind.

In Queensland, there is now 20 per cent penetration of solar power in the market.

The big question is whether solar can be built on a scale that will meet the bulk of the world's electricity needs.

Mackenzie instances other technological sectors like computing, the internet and telecommunications. All three were dominated by huge, centralised technologies. But all three industries have been turned upside down by new "distributed", or hand-held devices.

"The same thing will happen in electricity".

Electric vehicles are part of the major disruptive changes that lie ahead in New Zealand. Mackenzie points to a situation where batteries will initially be used in cars then moved to provide home storage systems after 8-10 years of driving use. Driving an electric car will save an average driver more than \$2000 per year on petrol costs.

Batteries are forecast to drop from \$1000 per kWh today to as low as \$200 per kWh in the next five years (or sooner as massive manufacturing plants are being constructed).

The point is, the future is already here.

"We are going from big centralised power plants to decentralised generation, to decentralised storage, and to decentralised distribution," says MacKenzie.

"It is just a matter of policymakers understanding this and making regulations appropriately."

Auckland energy trust sends cheques out

www.stuff.co.nz, By Richard Meadows, 25 September 2014

More than 316,000 Auckland households, schools, and businesses will get a pleasant surprise in their mailboxes this morning - a cheque for \$335.

The Auckland Energy Consumer Trust, which is the majority owner of energy company Vector, pays out a dividend each year to power users who fall within its zone.

That includes Vector customers in Auckland, Manukau and the northern part of Papakura, who stand to gain a collective \$105 million.

This year the number of eligible beneficiaries has increased by around 2500, to 316,320 in total.

Trust chairman William Cairns said the trustees were pleased to increase the dividend by \$5 to \$335, and knew the payment made a difference in many households.

Based on the average Auckland power bill of \$1940 last year, the payout is a rebate of roughly 17 per cent.

Payments are made by direct credit, a cheque written in the name of the person on the electricity bill, or by crediting the customer's electricity account.

The trust was formed in 1993, and has paid more than \$1.1 billion worth of dividends over the past 20 years.

Cairns said Vector was now worth roughly \$2b, and was "an asset that all of Auckland can be proud of".



Sun shines on Vector roll-out

www.stuff.co.nz, By Rob Stock, 9 February 2014

Vector is building power stations all over Auckland - they're tiny ones on people's roofs in a scheme proving popular with homeowners.

They are a new generation of mini-solar power plants complete with batteries. The sun-generated electricity can be stored during the day when homeowners are out at work and then used when they return in the evening.

That differs from solar hot water systems which were damned late last year in officials' reports as poor value because they have no battery to store power.

Under the Vector deal, it retains ownership of the solar stations that homeowners lease. The lines company is responsible for maintenance and repair.

In less than a year, Vector has installed just over 250 of the Sun-Genie mini-power stations on roofs across Auckland, including one on the North Shore home of its chief executive Simon Mackenzie. He was among the first to sign up because he wanted to experience just how they work before they were rolled out.

They've proved so popular that there's now a lengthy waiting list, Mackenzie said.

The roofs have to be north-facing and not shaded to be suitable.

The homeowner pays \$2000 installation costs for the 3 kilowatt system, which includes a fridge-sized battery cabinet, and then a \$70 monthly lease payment. Installation takes just a few hours and requires no council planning consent. It can go on either steel rooves or tile, and its low-elevation barely changes the profile of a building.

Most homeowners, including Mackenzie, don't end up selling power back to a retailer though some providers like Contact Energy and Meridian are in the market to buy any that is unwanted. Typically, homeowners use up what is generated to power their lifestyles.

Over the year, half of the power required by an average Auckland home can be provided by the solar stations.

One early adopter was Reece Warren, because he wanted to reduce his carbon footprint. He sells his spare power to Contact Energy, and is about to receive his first cheque for around \$170.

Warren says he's a low power user but the solar system has slashed his bills, so that in many of the months since installation, his only power cost has been the \$70 lease fee to Vector.

"It's fantastic," he said. "I could not be a bigger advocate for this system."

Vector estimates average homeowners save around \$350 a year on power costs, although savings dip in winter.

During our interview Mackenzie whips out his smartphone and calls up the app which monitors his savings and the current state of his home generation. Given the blazing sun and blue sky outside the battery is rapidly filling and already 87 per cent charged.

The \$350-a-year estimated savings may seem small change for a chief executive, but Mackenzie takes a wide approach to cutting his power bills. He's also converted his house to low-power, low-burn-out LED light bulbs.

And Vector's research shows power costs are such a drag on household budgets that 80 per cent of homeowners are actively engaged in one or more of the "three switching behaviours" to save money.

Those behaviours include; switching power provider, switching off appliances, or switching the way they generate their power.

Some may be wary about solar following Government reports last year which revealed many of the solar hot water heating systems people paid to install are effectively white elephants which lack smart control and monitoring systems, and which will either never produce net savings for owners or only just break even.

But with the installation cost of the Vector scheme being lower than the solar water heating systems, the company paying for maintenance, and the smart monitoring technology (Vector also monitors performance remotely), some of the big disincentives for solar are effectively removed.

Just how big can the scheme get?

Mackenzie expects the current 250 installations over the past ten months to grow substantially with much of that coming from the 30,000 or so new homes due to be built in Auckland each year.

Home redevelopments, such as the one being done by Remuera homeowner Darrell Sveistrup, will also drive uptake.

He's having a SunGenie installed and hopes to generate power surplus to what he needs.

As well as potentially earning extra income, he will be protected from power cuts or loss of power in a natural disaster.

Vector expects take-up to follow the traditional hump-back curve technology adoption usually follows - slow at the start by early adopters and then ramping up as the technology becomes more widely known.

"The economics of putting this technology in versus the retail price is pretty close," Mackenzie said. "In the next 18 months to two years, that will quite likely cross over."

It probably won't be just the savings on offer which will sway people to opt for the scheme.

Having a new toy to play with as well as the bragging rights that come with reducing your carbon footprint are both influencing take-up, Mackenzie says.

And it's not just homeowners installing the new generation of solar. Businesses like EcoStore and Hubbards have adopted solar too.

Vector cleared to buy Meridian's Arc metering business

www.nbr.co.nz, By Paul McBeth, 26 November 2014

Vector [NZX: VCT], the Auckland electricity and telecommunications lines company, has been cleared to buy Meridian Energy's [NZX:MELCA] Arc Innovations metering business.

The Commerce Commission yesterday gave the green light to the acquisition, which gives Vector advanced electricity meters and related metering services to energy retailers, it said in a statement. Arc missed out on winning any contracts with the major retailers, who have either concluded or are in the process of wrapping up long-term supply contracts, with Vector and MightyRiverPower subsidiary Metrix the successful bidders.

"We consider that if the acquisition proceeds, as the next bidding round, Vector and Metrix are unlikely to have any significant competitive advantage over other parties willing to bid," commission chair Mark Berry said. "This is because the commission expects that there will be changes in meter technology in the meantime, which may induce other parties to submit bids when the current contracts expire."

Vector will take over 135,000 customer connections, mainly in Canterbury and Hawkes Bay as well as Meridian's contracts to provide smart metering services to all major retailers.

Shares of Vector rose 1.8 percent to \$2.85 yesterday, and have gained 11 percent this year.

Meridian said the exit means it can "focus on its core strategy of improving customer experience as a nationwide retailer of electricity."

The company's installment receipts were unchanged at \$1.69 yesterday, and have climbed 66 percent this year.



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