



Chorus Limited- Debt Investor Presentation

August 2022

CHORUS

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Presenters



Andrew Hopkinson
Treasurer

Andrew joined Chorus after 17 years with Telecom Corporation of New Zealand (TCNZ) where he held a number of roles in finance, before being appointed Treasurer in 2005

Andrew worked on the debt management aspects of the TCNZ / Chorus demerger

Prior to joining TCNZ, Andrew worked at the Reserve Bank of New Zealand in the financial markets group



Brett Jackson
IR Manager

Brett has run Chorus' investor relations programme since the demerger from Telecom Corporation of New Zealand (TCNZ) in late 2011

Brett joined Chorus when it was first established as an operationally separate business unit within TCNZ in 2008 and was involved in marketing communications, industry consultation and network bid projects

Introducing Chorus

New Zealand's largest fixed line communications infrastructure business

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Key Credit Highlights

New Zealand's largest fixed line communications infrastructure business

Regulated utility-like framework applied to Chorus from January 2022

Fibre partnership with NZ Government; pre-committed, low cost, long term funding

Growing demand for fibre broadband, accelerated by COVID-19 and ongoing premises growth

Strong operating cash flows and financial performance

Financial flexibility via \$350m bank facility, multi-currency EMTN and NZ dollar retail bond programmes

Proven commitment to maintaining a BBB credit rating (S&P or equivalent)

An Overview Of Chorus

> New Zealand's largest fixed line communications infrastructure business

- Listed on NZX and ASX: CNU, since 2011
- ~\$3.6 billion market capitalisation (as at 22/08/22)
- ~800 employees, supported by service company contractors and subcontractors
- Earnings expected to be predictable and stable following the introduction of utility-like "building block" regulatory framework from 1 January 2022

> A nationwide copper and growing fibre (FTTH) network

- Wholesale network operator with ~100 retail service providers
- ~1.3m connections, including ~1.2m broadband
- 98% of way through fibre to premises rollout with 69% fibre uptake
- Working from home, streaming video services and gaming driving significant data consumption

Agency	Rating	Outlook
S&P	BBB	Stable
Moody's	Baa2	Stable



The Ultra-fast Broadband Initiative

> Ultra-fast broadband (UFB): a Government objective

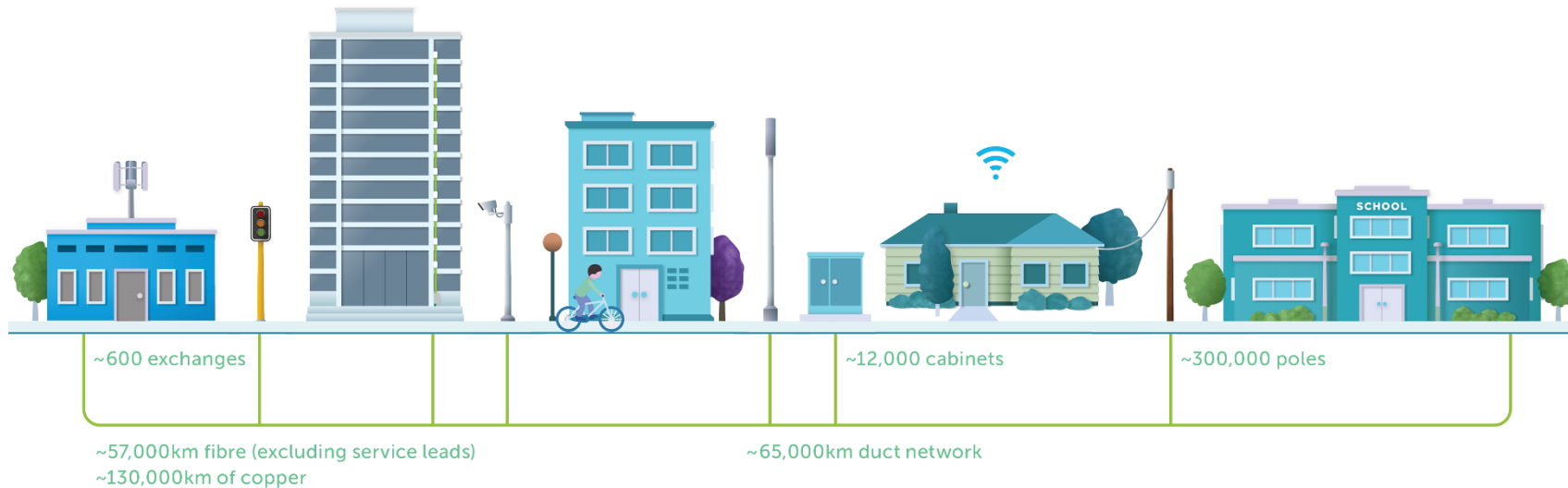
- Original objective (UFB1): fibre to premises covering **75%** of population by 2020
- Subsequent agreements (UFB2 and UFB2+) extended coverage goal to **87% of population by the end of 2022**

> Chorus was awarded ~75% of the fibre rollout

- Requirement that Chorus split from Telecom NZ to participate: demerger in December 2011
- Government partnerships with four fibre companies: Chorus, Enable, Northpower, Ultrafast Fibre (WEL Networks)



Our network infrastructure



We're a wholesale only, fixed line telecommunications network operator. Our network infrastructure enables 100 retail service providers to connect homes and businesses nationwide.



At 30 June 2022 we had 1,304,000 fixed line connections on our network (voice only: 103,000; broadband: 1,189,000; other: 12,000). Our network carried 7,140 petabytes of data in FY22, up from 5,823 petabytes in FY21.



We have about 800 permanent and fixed term employees and 120 independent contractors for our core operations. Our main corporate office locations are in Auckland, Hamilton, Wellington and Christchurch. Thousands of service company workers and subcontractors undertake activity on our behalf.



80% of our broadband connections are on fibre, enabling rapid growth in broadband speeds and data demand. Most connections are on 300Mbps plans, and almost a quarter on 1Gbps plans. Hyperfibre services of 2, 4 and 8Gbps are also available.

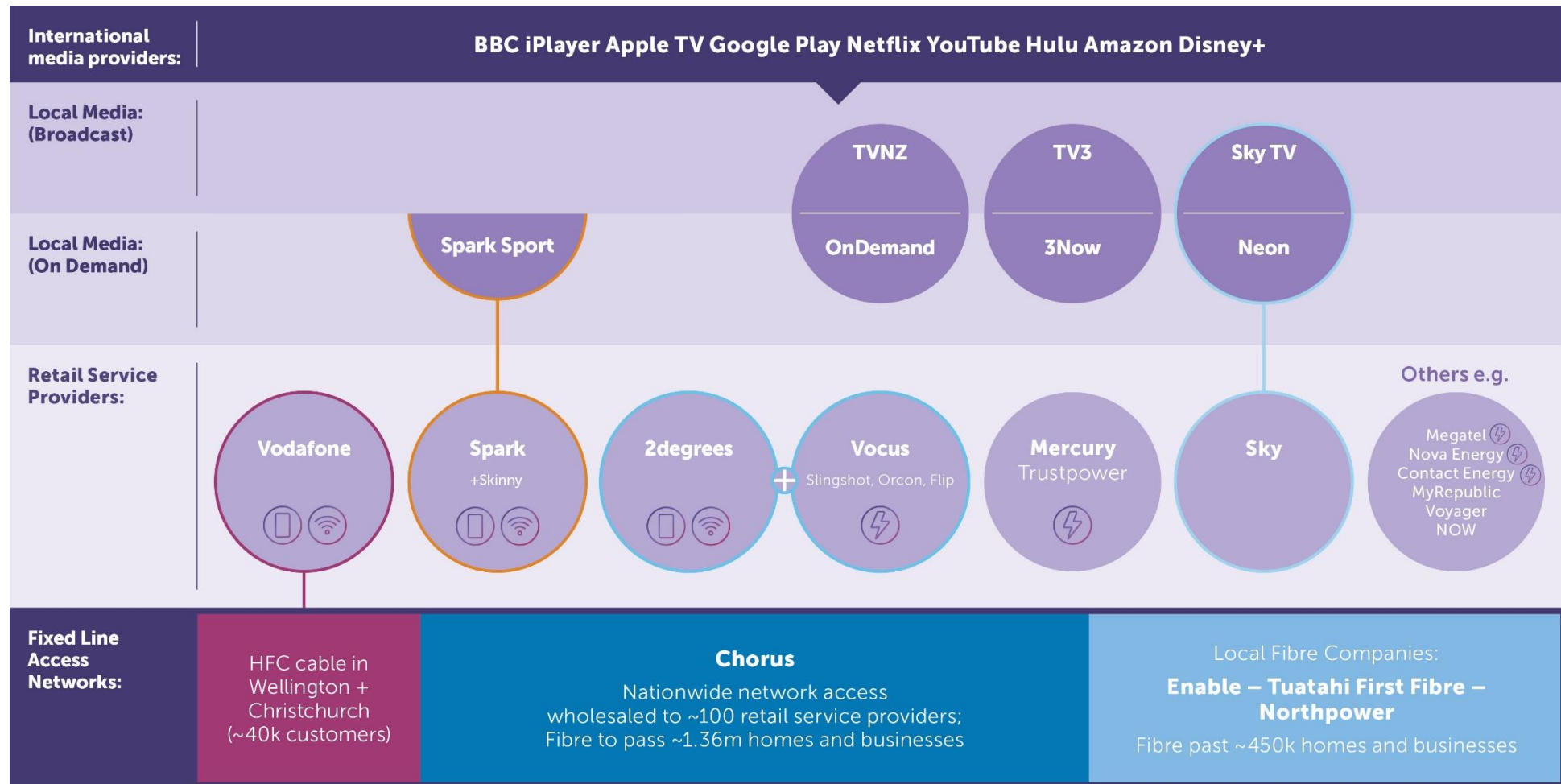


Gigabit broadband and our fibre backhaul is underpinning the development of sustainable communities through connections to devices and other network connectivity.



A 2021 study confirmed the carbon emissions profile of our fibre network stays low regardless of speed, suggesting that fibre will continue to be energy efficient as data demand grows¹.

New Zealand fixed line market



Mobile network



Wireless Broadband



Power + Broadband

Note: Fibre to the premises will cover ~87% of NZ population by the end of 2022

Strategy and focus



Fibre powers Aotearoa's digital future, enabling a growing business

Connecting
Aotearoa so
that we can all
live, learn, work
and play

CURIOUS

COURAGEOUS

COLLABORATIVE

AUTHENTIC

C H ● R U S

Thriving
environment

Sustainable
digital futures

WIN IN CORE FIBRE

Maximise fibre
market share
Leading customer
experience
Thrive in
new regulatory
framework

Safe, resilient and
efficient assets

Stronger future
partnerships

OPTIMISE NON-FIBRE ASSET BASE

Refine rural strategy
Progress UFB copper
withdrawal
Optimise property
assets

Thriving people

Diverse, inclusive and
adaptive Chorus

GROW NEW REVENUES

Incubate new fibre
products (e.g. Hyperfibre)
Monetise close adjacent
opportunities (e.g. Edge)
Ongoing growth
roadmap and strategy

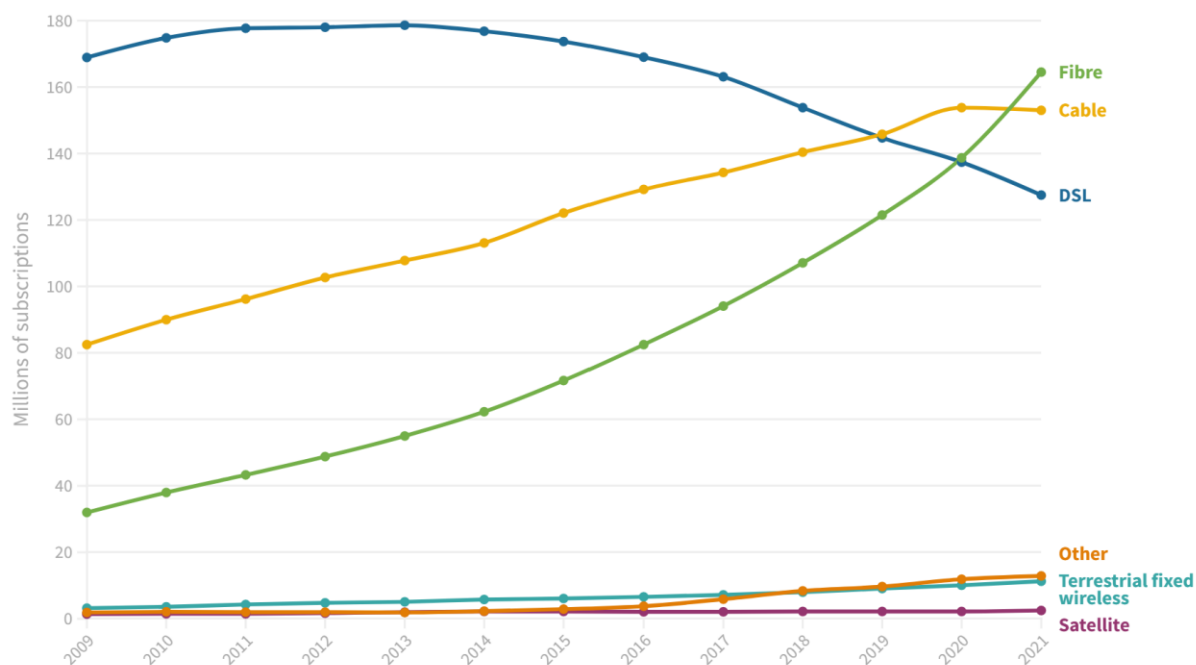


Global rush to future-proofed fibre

- Fibre has overtaken cable as the primary fixed broadband technology in the OECD
- Passive fibre network is most economic and sustainable technology for future needs
- USA government prefers fibre for subsidised projects because it *"...can easily scale speeds over time to...meet the evolving connectivity needs of households and businesses."* (National Telecommunications & Information Administration)

Progression in fixed broadband subscriptions by technology

OECD countries, 2009-2021



Source: <http://oe.cd/broadband> • July 2022



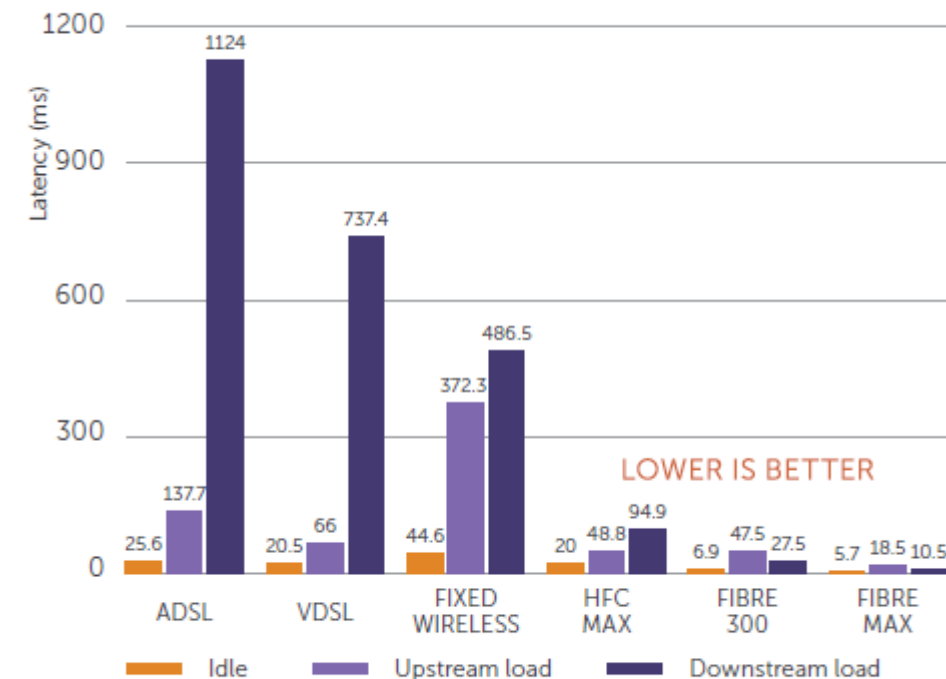
Ookla Speedtest Global Index, Fixed Broadband, July 2022

#	Country	Mbps
1	- Chile	212.98
2	- Singapore	211.36
3	+1 Thailand	189.14
4	-1 China	176.93
5	- Hong Kong (SAR)	176.59
6	+1 Macau (SAR)	160.32
7	+1 United States	159.31
8	-2 Denmark	150.52
9	- Japan	131.49
10	+2 New Zealand	127.88

Consumer data needs don't stand still

- Commerce Commission monitoring highlights low latency benefits of fibre
- 15% of fibre connections already consuming 1,000GB+ a month
- We forecast monthly average of 1,000GB in 2025 and 4,000GB by 2033
- Proliferation of in-home devices and higher spec content (4k, 8k, online gaming) drives need for 'burst' capacity (e.g. Hyperfibre for schools)
- Wi-Fi technology/spectrum advances will help remove in-home constraints

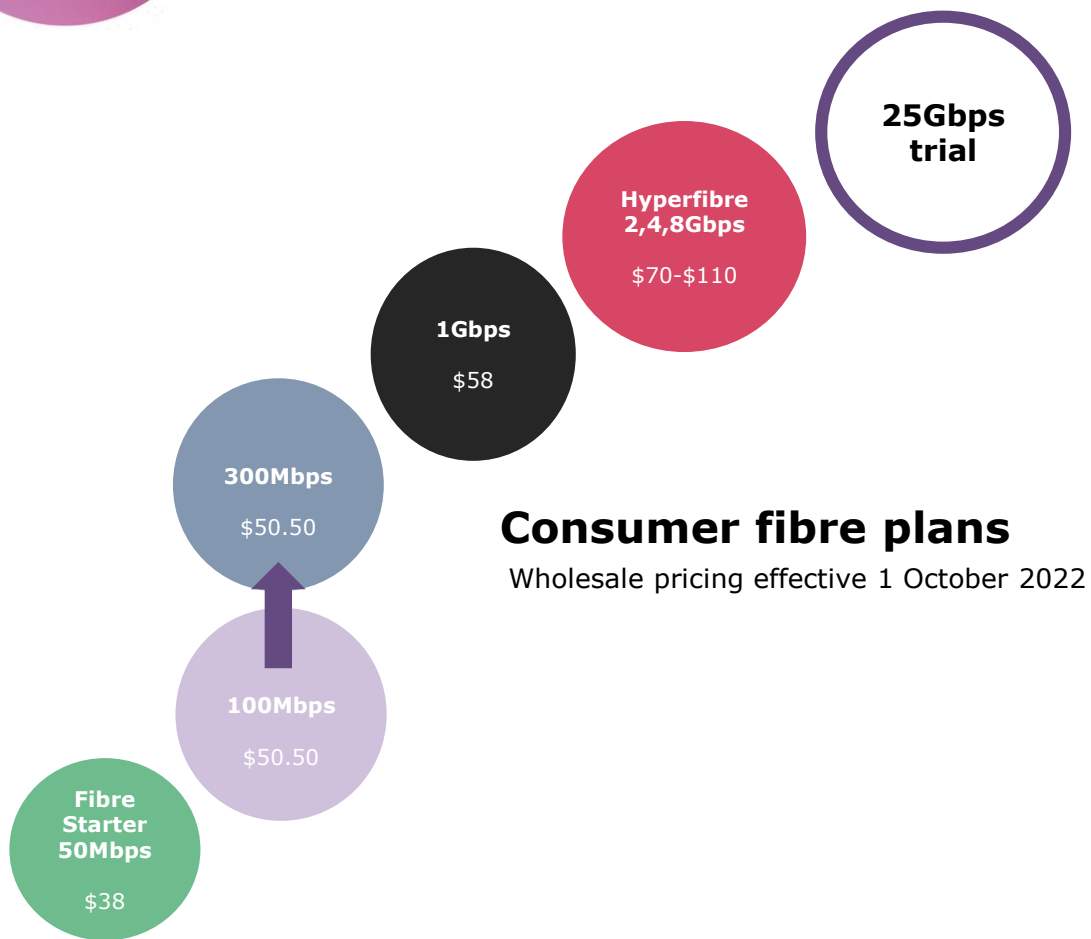
Average latency under load to test servers by plan



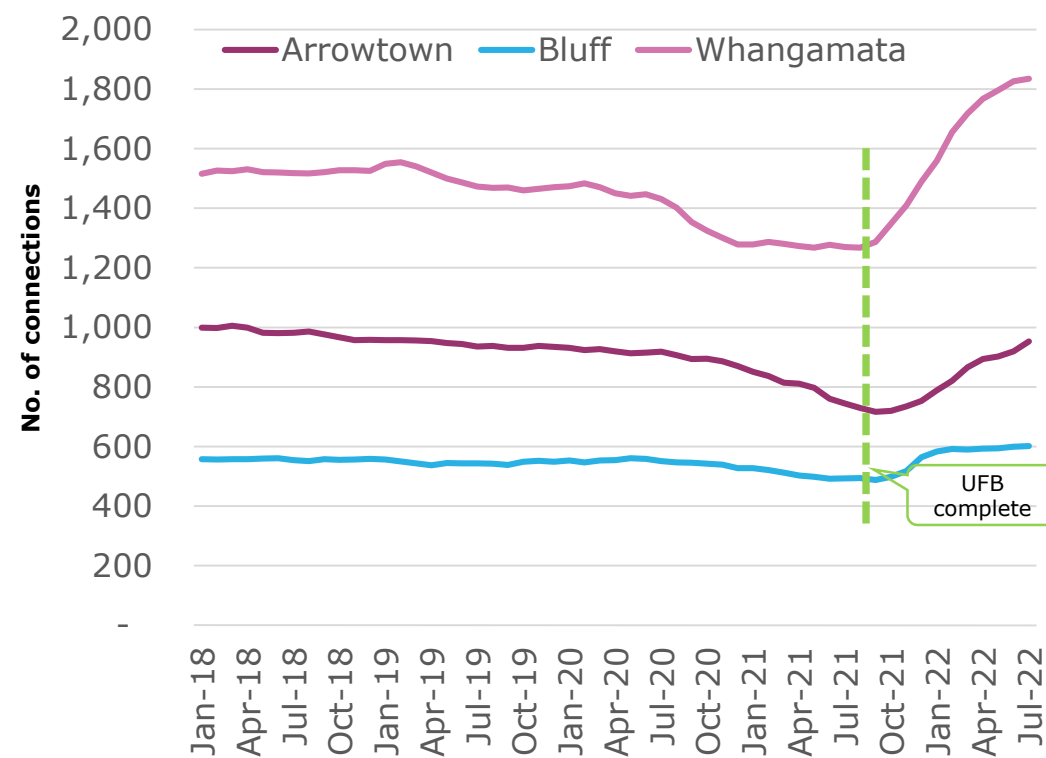
Source: Commerce Commission data, Measuring Broadband New Zealand, Autumn Report, June 2022, Figure 10. Averages of monthly household averages.

WIN
IN CORE
FIBRE

Enhancing our fibre product line-up

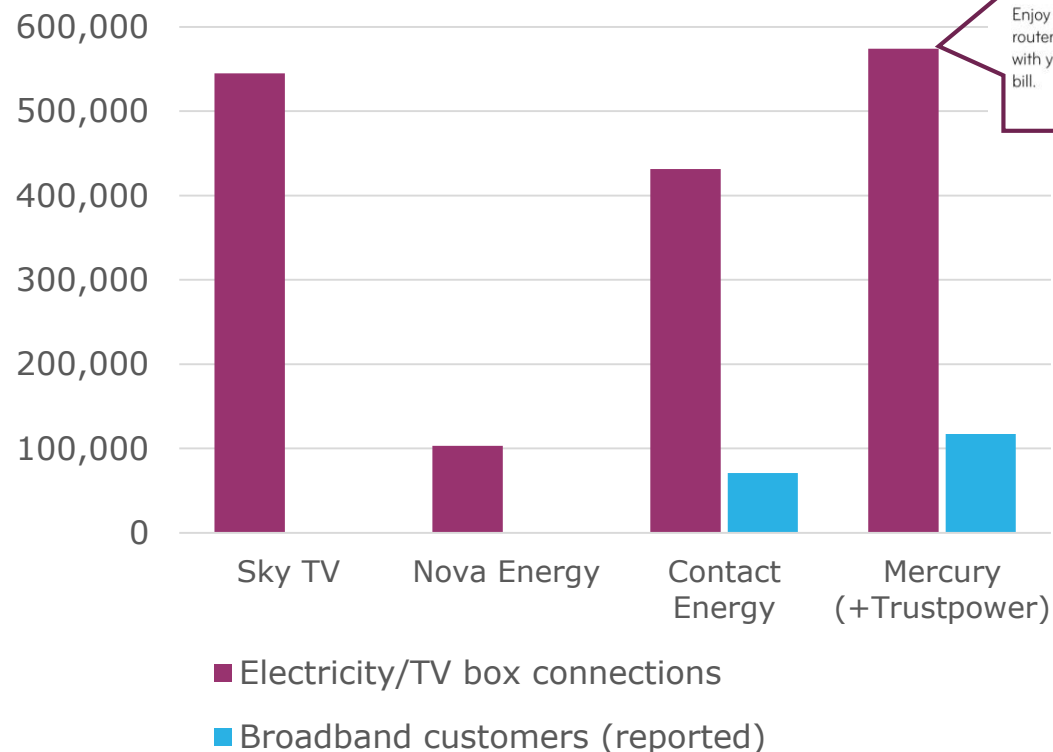
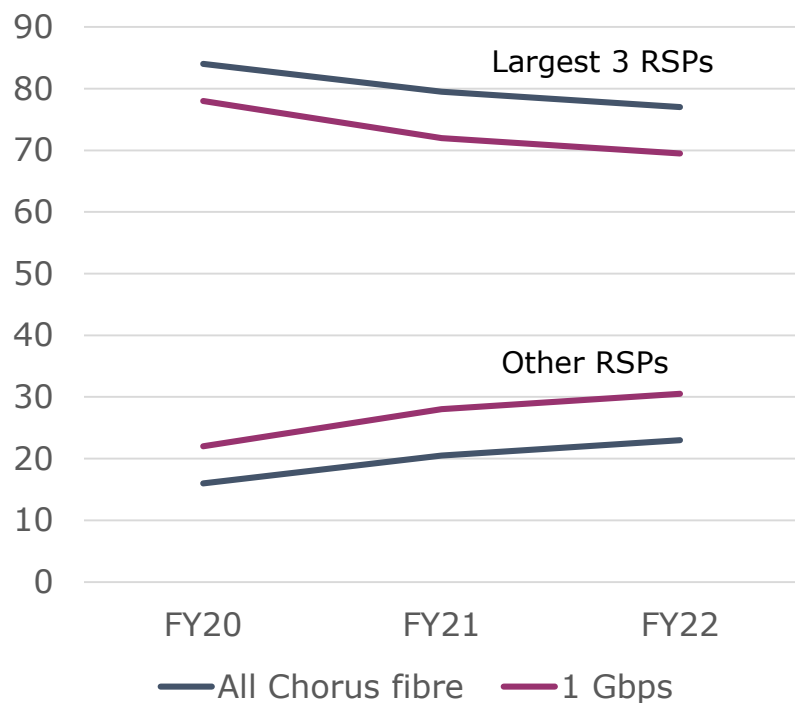


Chorus broadband connections – UFB2 areas



Retail market: non-telco bundlers growing

Chorus fibre: RSP share



New entrant...

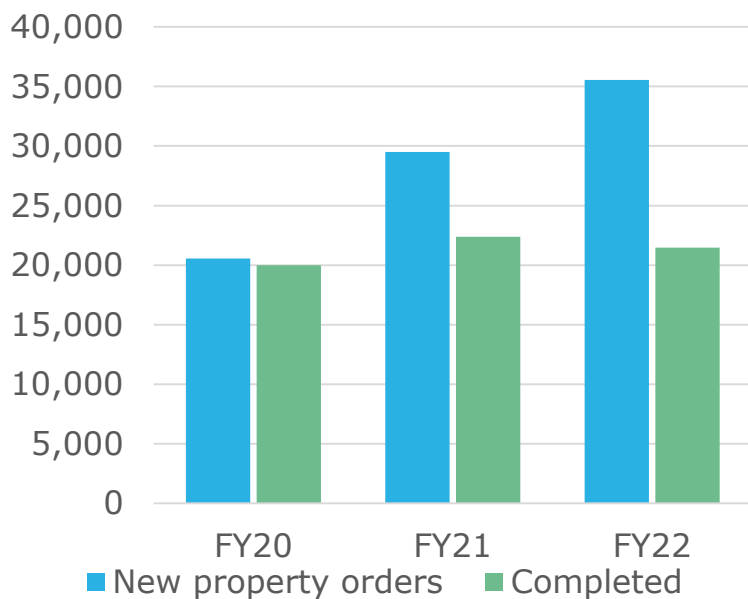
**MERCURY
BROADBAND HAS
LANDED!**

Enjoy unlimited Fibre broadband, great routers and fantastic support all bundled with your energy into one easy to manage bill.

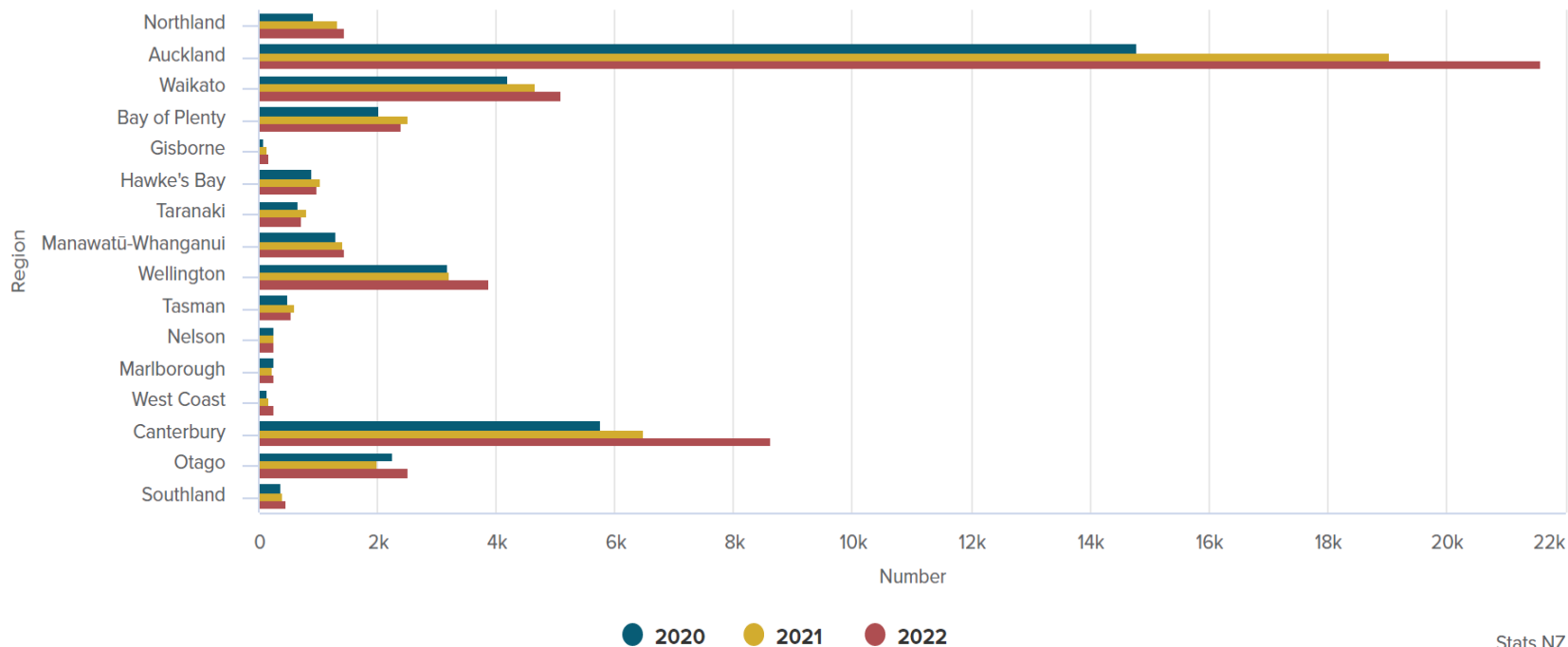


Strong pipeline of new property orders

Chorus new property pipeline



New dwellings consented, by region, year ended, June 2020–2022



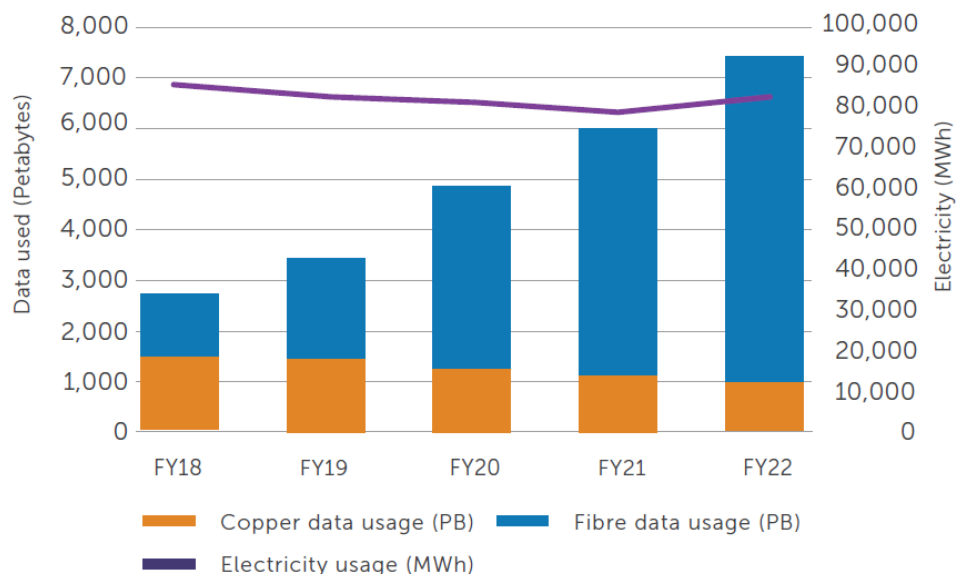
Stats NZ

Fibre underpins new sustainability target

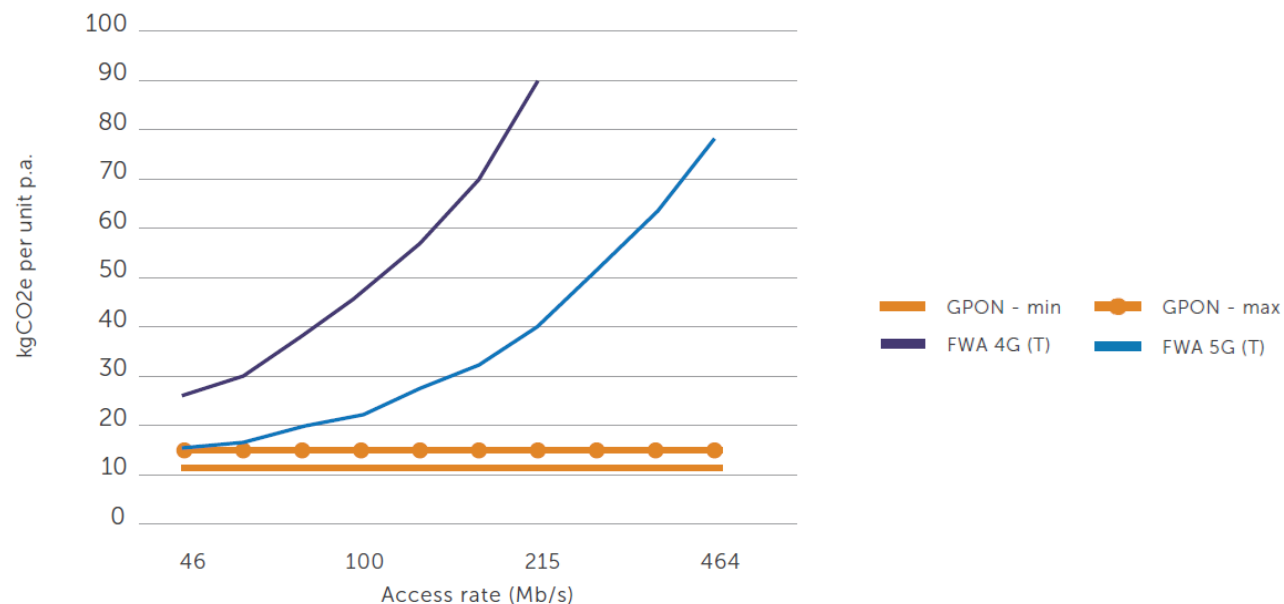
> New commitment to Science Based Target initiative

- Targeting 62% reduction in Scope 1 and 2 emissions by 2030, from 2020 base year
- Goal of 25% electricity consumption reduction by 2030 as copper equipment is withdrawn and fibre enables more efficient data usage
- New carbon zero certified electricity supplier; exploring renewable energy capability (e.g. solar)

Data vs Network Electricity Usage FY18 – FY22



Emissions in GPON and FWA 4G/5G networks for average access rates between 50 and 500 Mbps



Identifying opportunities close to our core

- > **Hyperfibre:** 1,000 connections despite limited retail channels; revised pricing from 1 October to accelerate growth
- > **Business fibre:** fibre connections grew 12%; ~75% of business market on fibre (excluding small/home offices)
- > **EdgeCentre:** COVID slowed site expansion; market trends support continued focus on opportunity
- > **PowerSense:** leveraging fibre capability in a new way

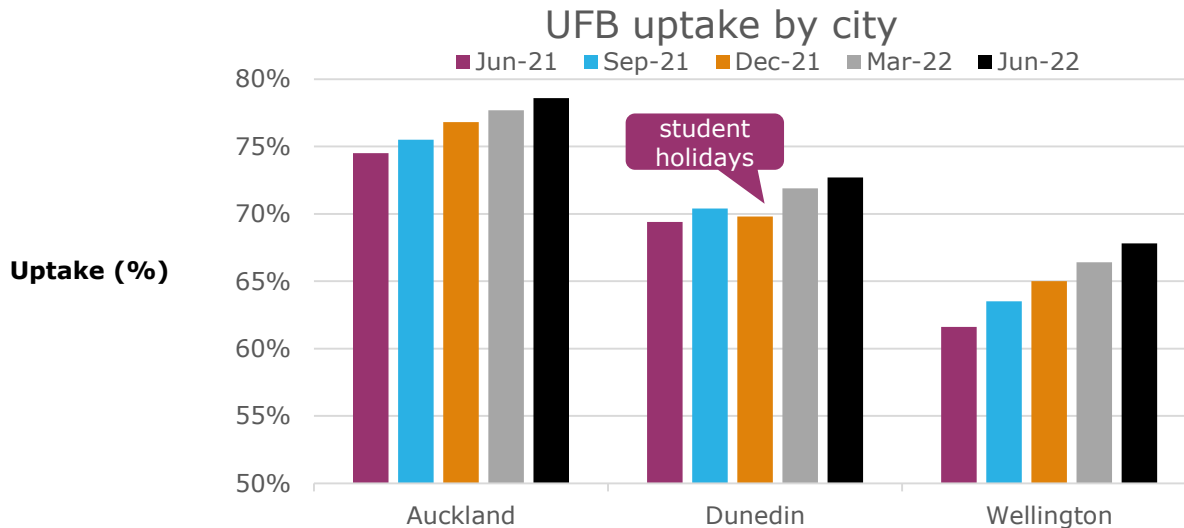


Operating update

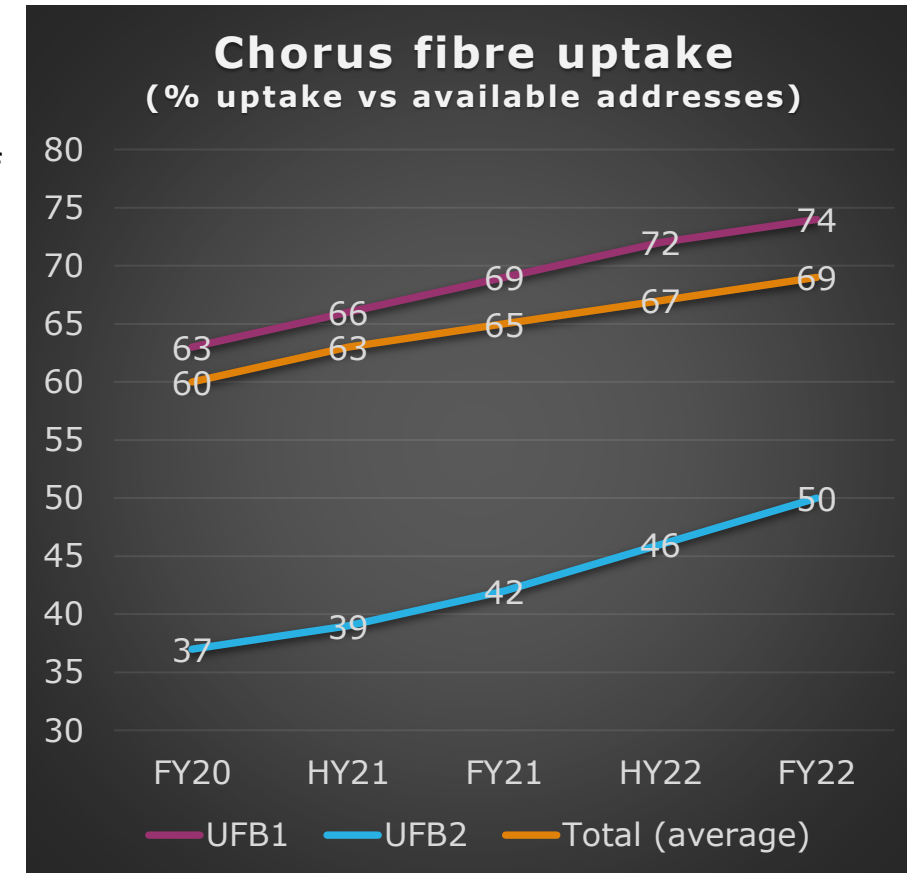
69% uptake across UFB footprint (+4%)

> On track for 1 million connections by December, despite COVID challenges

- **959,000** total fibre connections (GPON + P2P); 88,000 added in FY22
- 919,000 connections (including business premium) in UFB areas out of 1,324,000 customers able to connect (FY21: 837,000/1,282,000)
- Rollout 98% complete; ~17,000 premises to pass by end 2022
- Auckland nearing 80% uptake; strong growth in Wellington

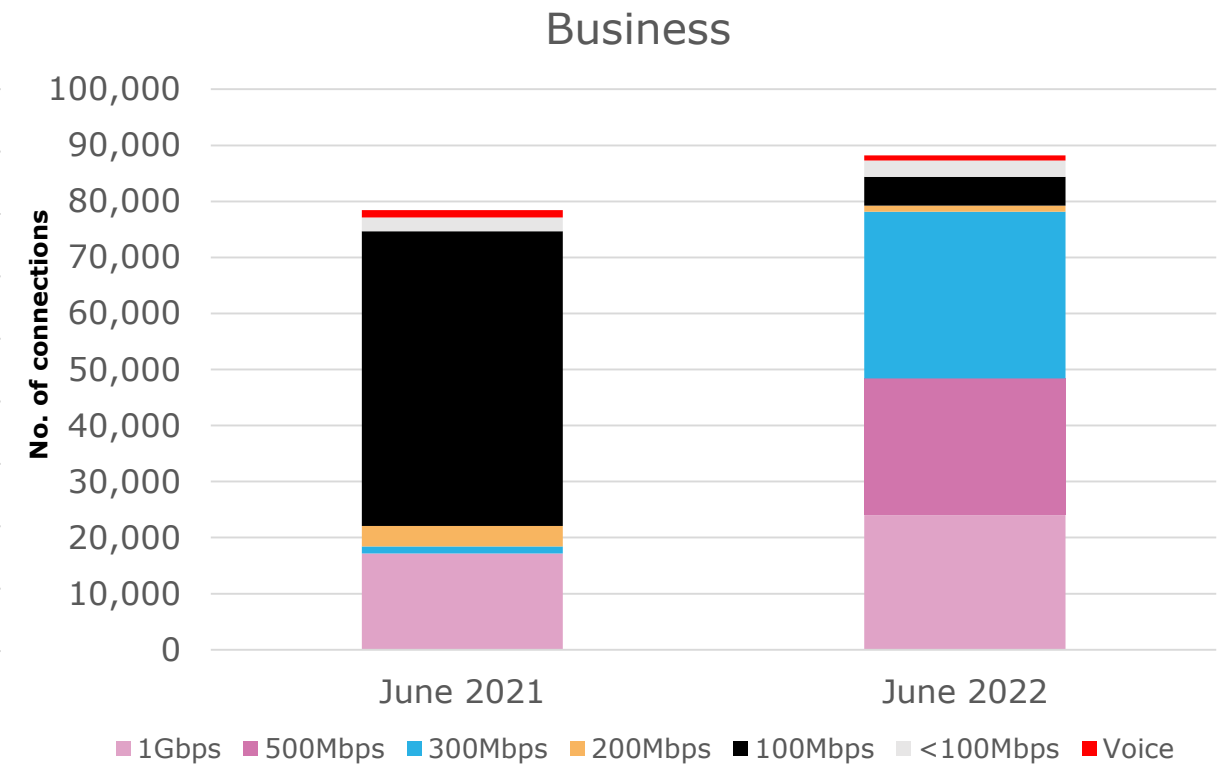
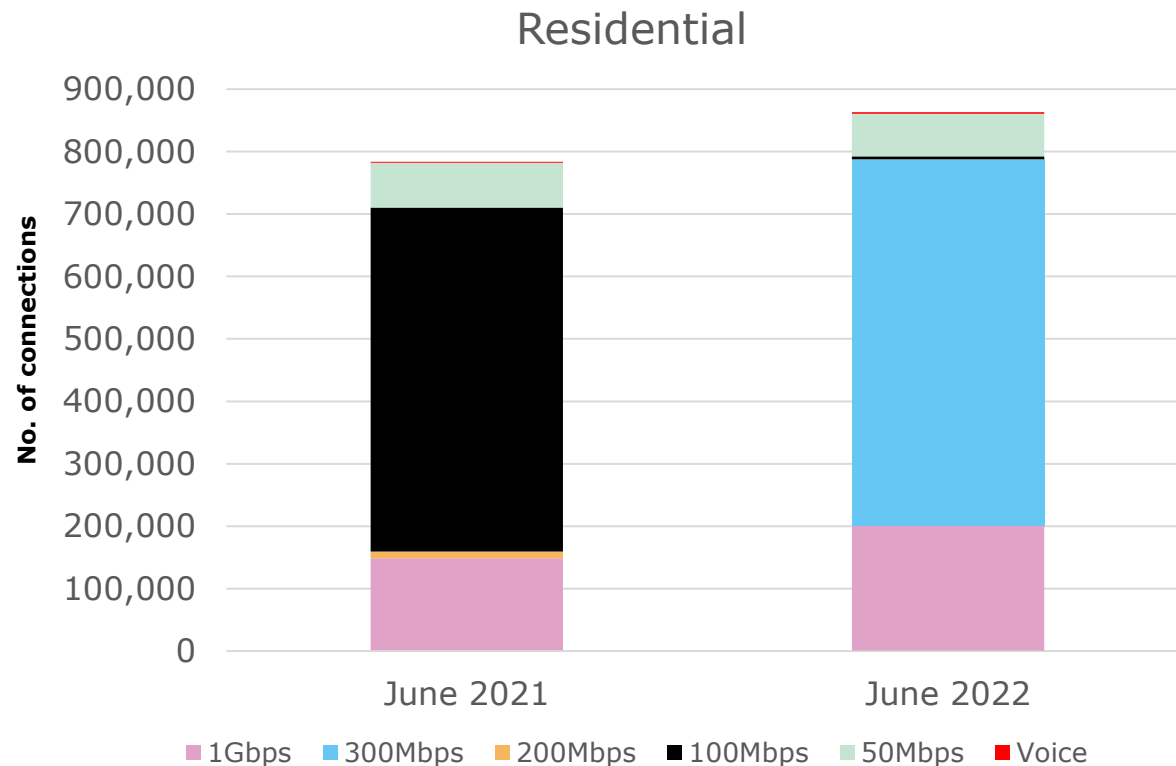


- Auckland, Wellington and Dunedin cover >70% of UFB1 homes and businesses able to connect



>90% of mass market connections on 300Mbps+

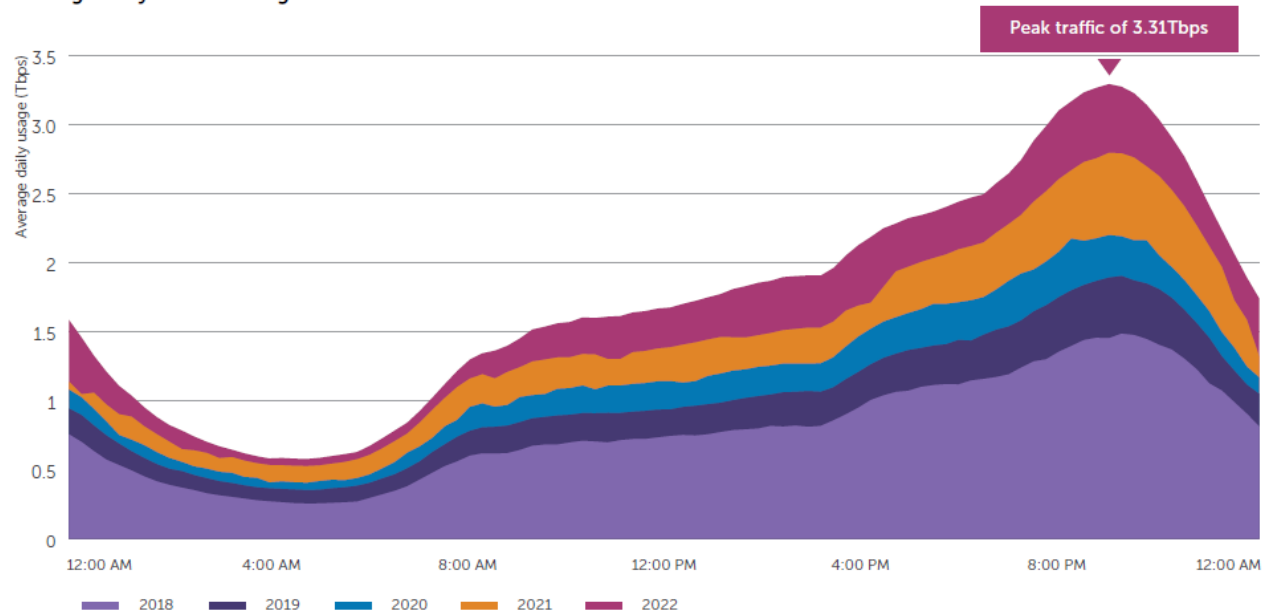
- Fibre boost in December 2021 has seen 68% of residential connections graduate to 300Mbps plans
- 1Gbps uptake grew from 19% to 23% of residential connections, continues to make up ~30% of new adds
- Hyperfibre 2/4/8Gbps connections now ~1k



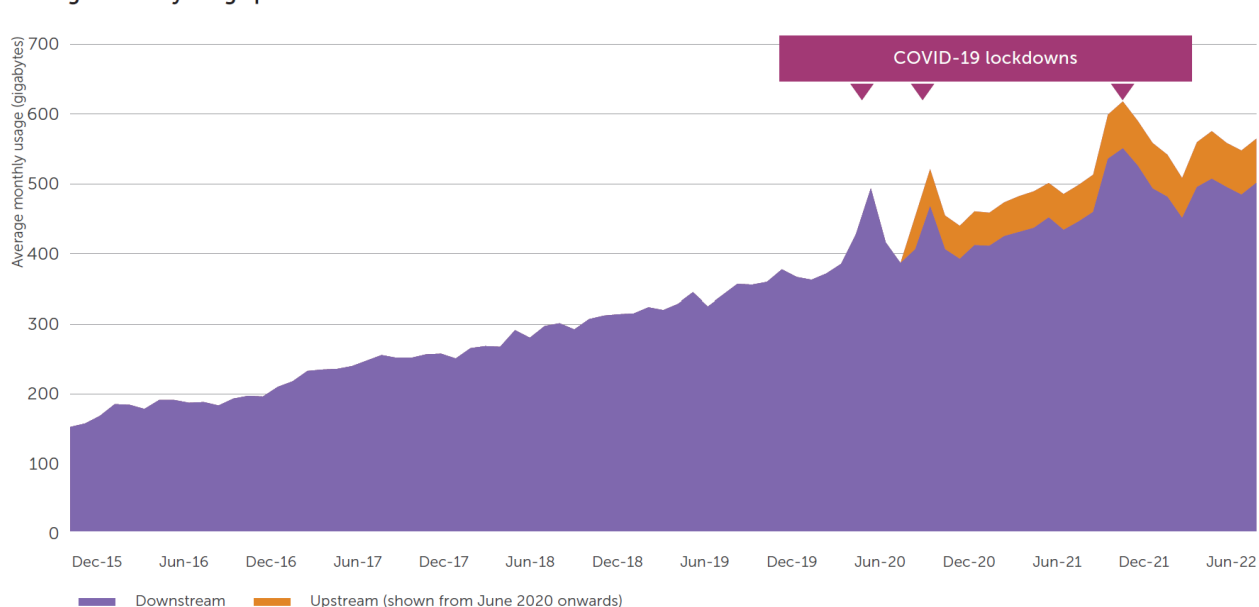
Total network traffic grew 23% in FY22

- Peak time average grew to 3.3Tbps; *Fortnite* drove record 4.2Tbps in March
- Total traffic grew 1.3 billion gigabytes to 7,140 petabytes
- Fibre users averaged 567GB in June, up from 500GB in June 2021

Average daily internet usage across the Chorus network 2018 – 2022



Average monthly usage per connection on our fibre network



Regulatory framework and financial highlights



New regulatory framework for fibre from January 2022

Areas where fibre is available (~87% of population)

Regulated asset base for fibre access services with revenue cap set by the Commerce Commission

- first regulatory period 2022-2024
- price caps on 'anchor' or declared services
- unbundled fibre available in UFB1 areas
- Commission can review the revenue cap model (subject to statutory criteria) from 2025.

- Chorus can choose to withdraw copper service with six months' notice to consumers

Areas where fibre is **not** available (~13% of population)

- Telecommunications Service Obligation applies to residential addresses existing in 2001
- copper pricing subject to annual inflation adjustment
- Commission required to review copper regulatory settings no later than 2025

Regulatory outlook

> Awaiting confirmation of final RAB

- Chorus calculated starting RAB \$5.346 billion vs \$5.425 billion draft starting RAB
- This excludes submission of \$67m in shared exchange space

> Next regulatory period (RP2) settings will be calculated from mid-2024 and should reflect:

- Future risk-free rate (e.g. 2.75% used for gas network regulatory cost of capital, 31 May)
- Tax building block commences from ~FY27 and grows to ~\$90m
- ~\$250m (current value) of existing shared assets that should be eligible to enter the RAB over time
- 2025 repayment of Crown financing (regulator only allows ~2% return on funded assets)
- Cost allocations will need to be addressed in RP2, or reflected in policy framework for copper Telecommunications Service Obligations

WACC parameter	RP1 ¹ WACC (1 July 2021)	ID ² WACC (1 Feb 2022)
Risk-free rate	0.51%	1.96%
Average debt premium	1.70%	1.62%
Cost of debt	2.54%	3.91%
Cost of equity	5.62%	6.66%
Mid-point vanilla WACC	4.72%	5.86%
Mid-point post-tax WACC	4.52%	5.54%

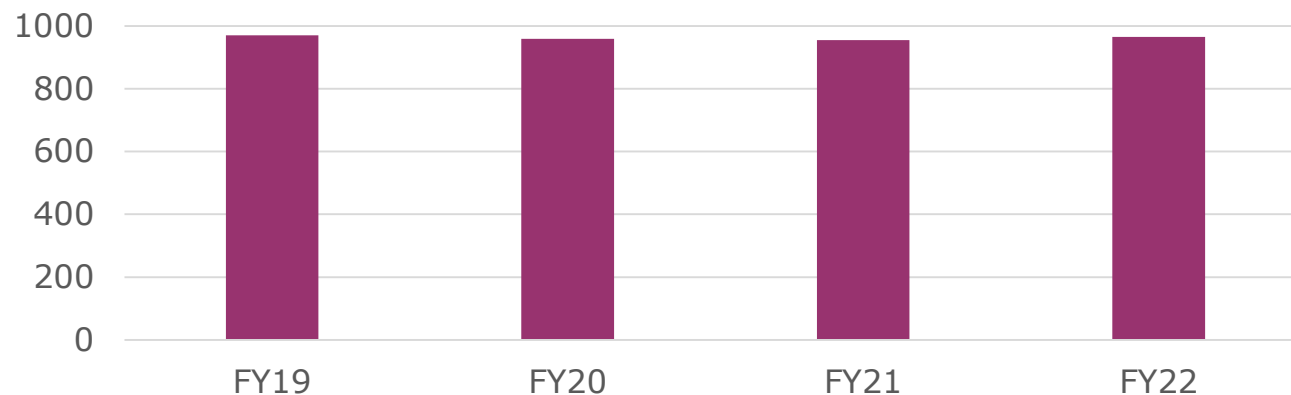
Source: Commerce Commission

1. RP1: Regulatory Period 1 from 2022-2024

2. ID: Information Disclosure. Latest calculated WACC is used for reporting purposes only.

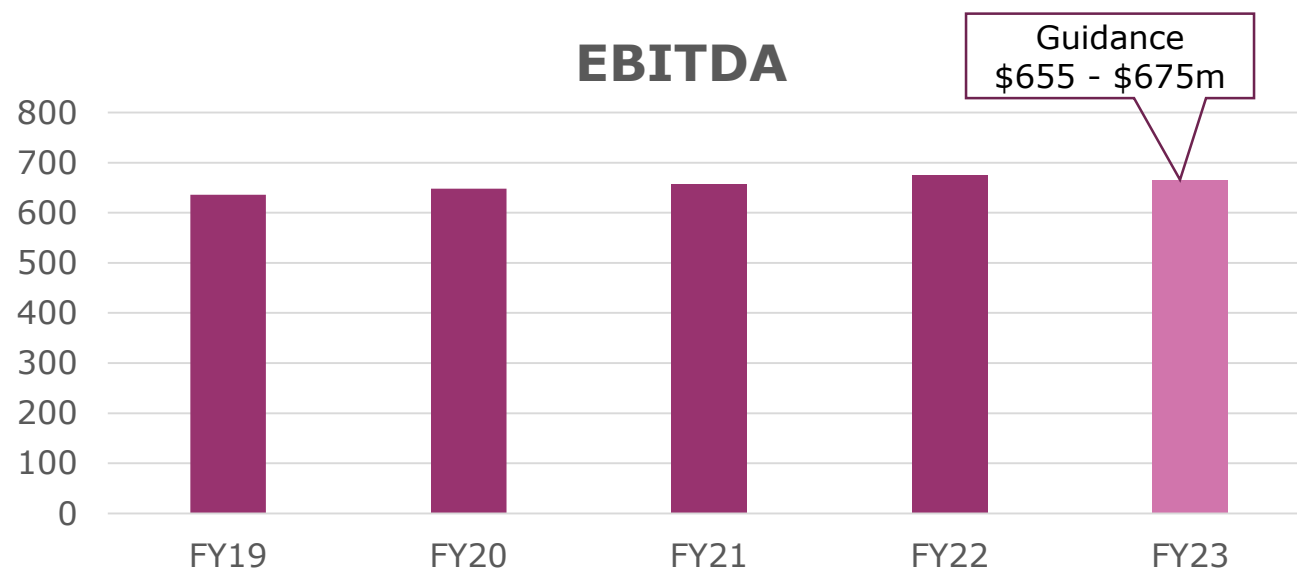
Financial snapshot

Revenue



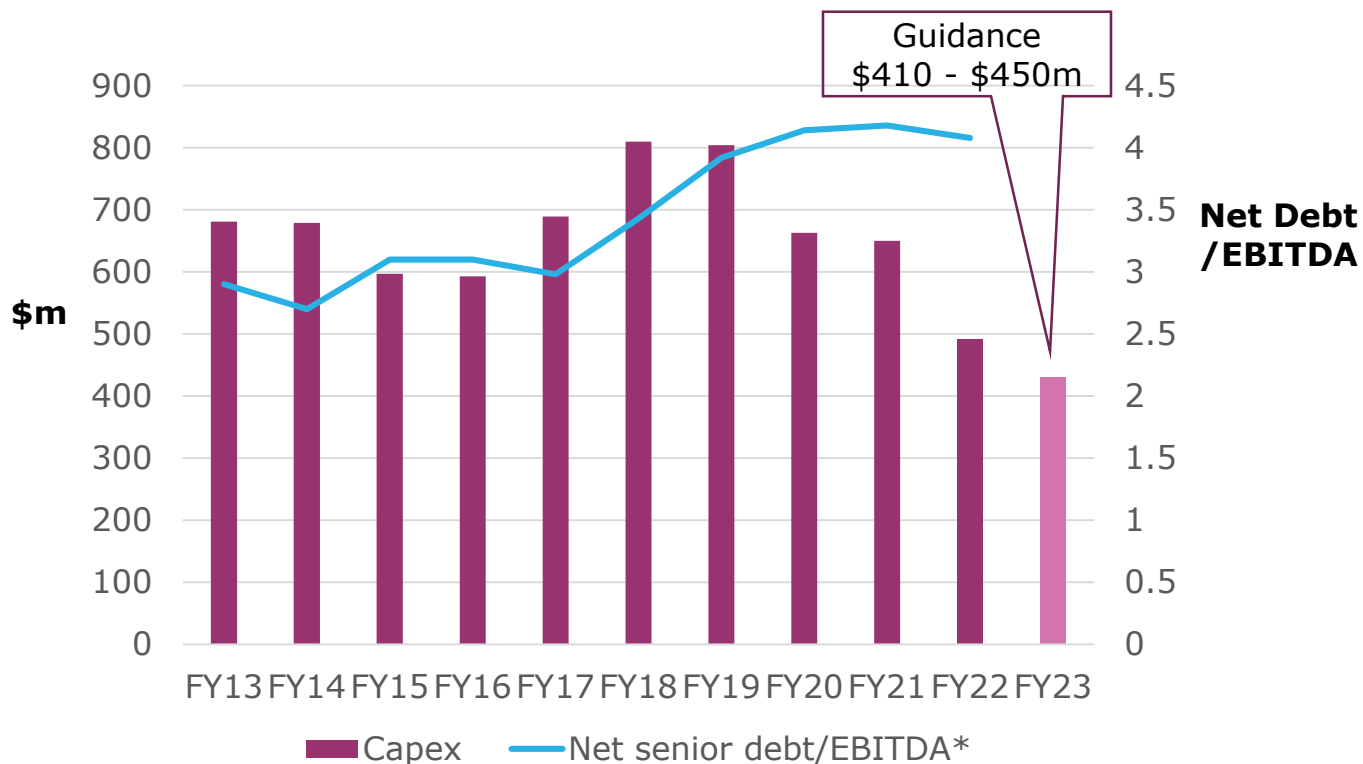
- > FY22 Revenue of \$965m (FY21: \$955m)
 - Growing consumer fibre uptake and ARPU
 - Strong greenfield demand

EBITDA



- > Objective of modest EBITDA growth

Capex and leverage



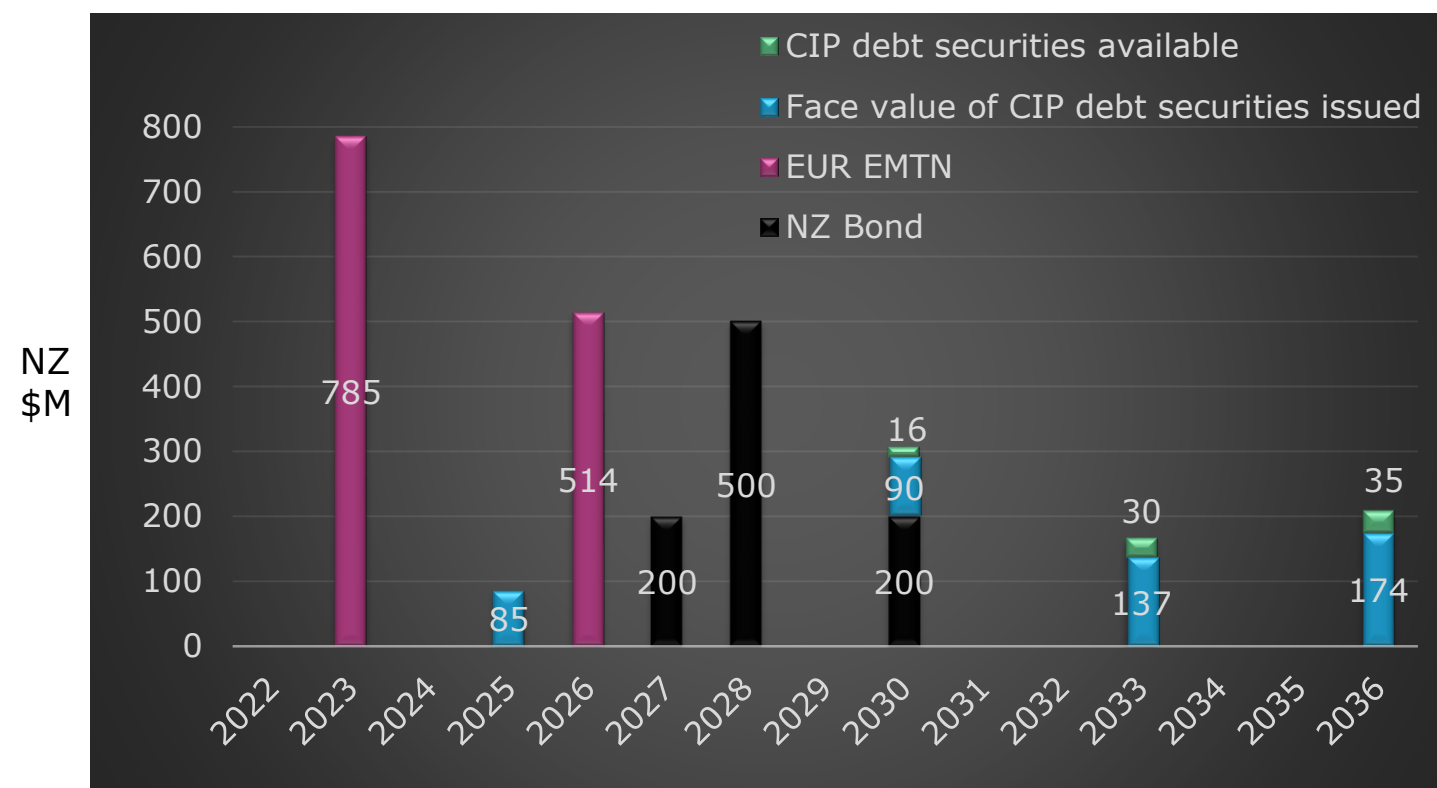
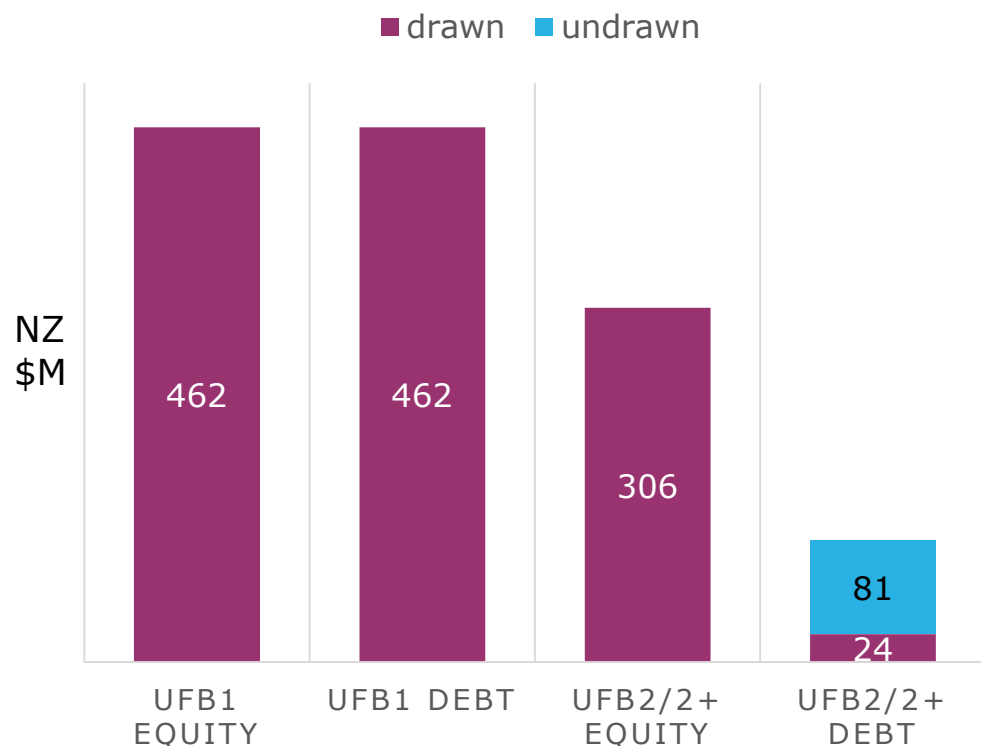
*based on S&P and bank covenant methodologies

- > Chorus' Board considers that a '**BBB**' credit rating or equivalent credit rating is appropriate for a company such as Chorus.
 - 4.08x ND/EBITDA at 30 June
 - total net debt \$2,713m at 30 June
- > Ratings agencies expected to review current thresholds to reflect new regulatory regime and growth in free cashflow
 - **S&P: 5.00x** ND/EBITDA on a sustained basis
 - **Moody's: 5.25x** ND/EBITDA on a sustained basis
- > Is an intention that in normal circumstances the ratio of net debt to EBITDA will not materially exceed **4.75 times**
- > **Financial covenants** require senior debt ratio to be no greater than **5.50 times**

Crown financing and debt profile

- > Up to \$1.33 billion CIP financing available by 2023 (57:43 equity/debt)
- > \$1,254m drawn at 30 June 2022

- > At 30 June, debt of \$2,389m comprised:
 - Long term bank facilities of \$350m (\$190m drawn)
 - NZ bonds: \$400m and \$500m
 - Euro Medium Term Notes \$1,299m (NZ\$ equivalent at hedged rates)



Summary Terms - New Issue and Tender Offer

New Issue

Issuer:	Chorus Limited
Guarantor:	Chorus New Zealand Limited
Programme:	The Information Memorandum of the Issuer's Euro Medium Term Note Programme dated 29 June 2022
Issuer Ratings:	Moody's: Baa2 (Stable) / S&P: BBB (Stable)
Expected Issue Ratings:	Moody's: Baa2 / Standard & Poor's: BBB
Tenor:	[7] year
Size:	EUR Benchmark
Coupon:	Fixed, Annual, Actual/Actual
Format:	Senior unsecured, Reg S, Category 2, Bearer (TEFRA D)
Coupon Step on Ratings Change:	Applicable, subject to Step-up Rating Change (below BBB-/Baa3, either agency) of 1.25 per cent. per annum, or Step Down Rating Change (up to BBB-/Baa3, both Rating Agencies) back to the Initial Rate of Interest as described in the Pricing Supplement
Make-Whole Call:	[DBR 0.00% Aug 2029] + [●] bps as outlined in the Pricing Supplement
Early Redemption for Tax:	Applicable. See Condition 11(b) in the Information Memorandum
Cross Default:	Applicable. See Condition 14 in the Information Memorandum
Negative Pledge:	Applicable. See Condition 6 in the Information Memorandum
Denominations:	EUR100,000 x EUR1,000
Redemption Amount:	100%
Listing/ Governing Law:	EMTN / Australian Securities Exchange (ASX) / English Law
Settlement:	Euroclear, Clearstream
Selling Restrictions:	As directed in the Information Memorandum and applicable Pricing Supplement
Target Market:	EU MiFID II and UK MiFIR product governance / Professional investors and ECPs only target market. Manufacturer target market (EU MiFID II and UK MiFIR product governance) is eligible counterparties and professional clients only (all distribution channels). No EU PRIIPs or UK PRIIPs key information document ("KID") has been prepared as not available to retail in the European Economic Area ("EEA") or the United Kingdom ("UK").

Tender Offer - Description

Offeror:	Chorus Limited
Description of the Notes	€500,000,000 1.125 per cent. guaranteed notes due 2023
ISIN/Common Code	XS1505890530 / 150589053
Outstanding Principal Amount	€500,000,000 ⁽¹⁾
Maturity Date	18 October 2023
Reference Benchmark	Interpolated Mid-Swap Rate
Fixed Purchase Spread	-5 basis points
Hypothetical Purchase Price	99.671 per cent. ⁽²⁾
Amount Subject to the Tender Offer	Any and all

Tender Offer – Indicative Timetable

Event	<i>All dates/ times are London (BST)</i>
Mandate Announcement & Launch of the Tender Offer	25 August 2022
Expiration Deadline	4pm on 5 September 2022
Pricing Date & Pricing Time	At or around 10am on 6 September 2022
Announcement of the conditional results of the Tender Offer	As soon as reasonably practicable after the Pricing Time
Settlement Date	On or around 8 September 2022
Financing Condition	Yes, whether the Offeror will accept for purchase Notes validly tendered in the Tender Offer is subject to the settlement and issuance of the New Notes by the Offeror
Priority Allocation in the New Notes	Qualifying Holders may, at the sole discretion of the Offeror, receive priority in the allocation of the New Notes up to the aggregate principal amount of the Notes validly tendered or firmly indicated to be tendered by that Qualifying Holder.

(1) As at the date of the Tender Offer Memorandum.

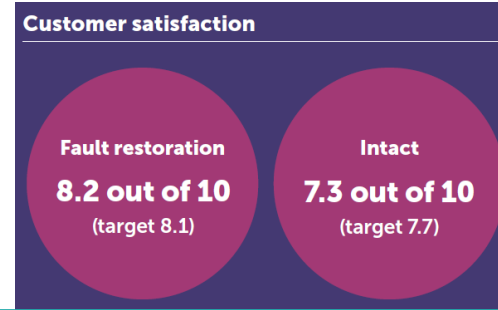
(2) For illustrative purposes only, a hypothetical Purchase Price for the Notes is set out in the table above, based upon a hypothetical Pricing Time at or around 10.00 a.m. (London time) on 24 August 2022, where the hypothetical Interpolated Mid-Swap Rate was 1.475 per cent., and assuming a Settlement Date of 8 September 2022. Holders of the Notes should note that the actual Purchase Price for the Notes determined in the manner described in the Tender Offer Memorandum could differ significantly from the hypothetical Purchase Price set out in the table above.

Appendix 1: Key Terms

Term	Description
ADSL	Asymmetric digital subscriber line – a communication technology allowing high-speed data transfer over copper-based access networks in the local loop
ARPU	Average revenue per user
CIP	Crown Infrastructure Partners
FTTH	Fibre to the home
GBs	Gigabits per second. A measure of data consumption
HFC	Hybrid fibre copper
GPON	Gigabit Passive Optical Network
IoT	Internet of things – network of physical devices, vehicles, home appliances and other items embedded with electronics, software, sensors, actuators, and network connectivity which enables these objects to be connected and exchange data.
LFC	Local fibre company – the companies responsible for the roll out, provisioning and maintenance of the UFB network
Mbps	Megabits per second. A measure of network speed
ONT	Optical network terminal. General term for a specialised piece of network equipment that terminates a single dark fibre and is located at the End User premises
PON	Passive optical network. A line consisting of optical fibres spliced end- to- end possibly via a splitter
RAB	Regulated asset base
VDSL	Very high bit rate digital subscriber line - the highest speed variant of ADSL technology
WACC	Weighted average cost of capital

Appendix 2: Sustainability

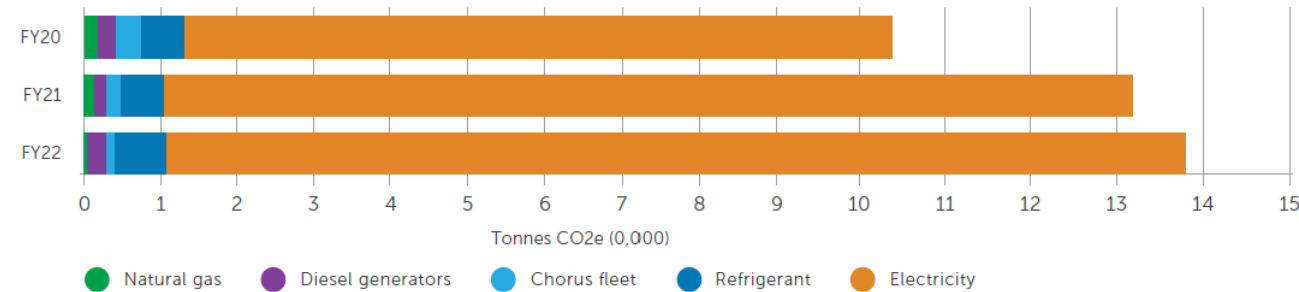
See also <https://company.chorus.co.nz/sustainability>



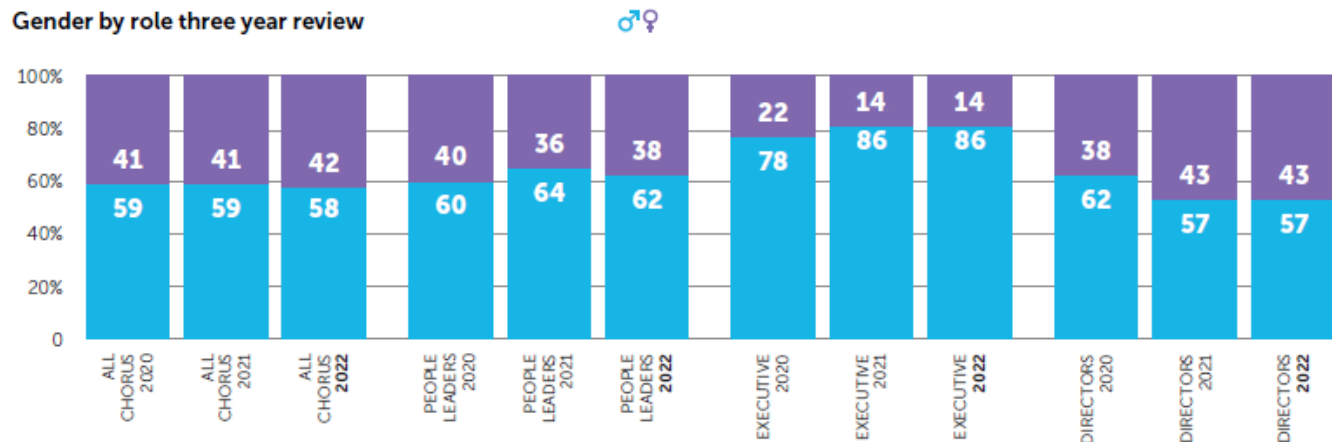
Our targets

- 1 Commitment made to the Science Based Target initiative: To reduce 62% of scope 1 and 2 emissions by 2030, from a base year of 2020.
- 2 15% electricity consumption reduction by 2025. 25% electricity consumption reduction from 2020 by 2030.
- 3 Corporate fleet reduced 25% from 2020 by FY23. Move to 100% Hybrid or EV by FY27.
- 4 Focus on renewables – new electricity provider and commitment to extend solar trial on our exchanges.

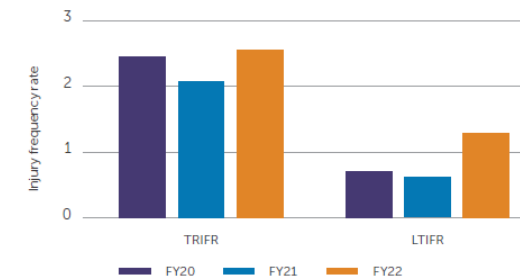
Scope 1 (direct) and 2 (electricity) emissions FY20 - FY22



Gender by role three year review

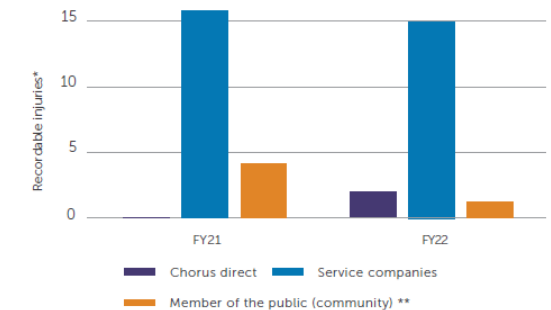


Injury frequency rates FY20 – FY22



LTIFR: number of lost time injuries + medical treatment injuries + restricted work injuries per million hours worked.

Actual recordable injuries* FY21 - FY22



* Recordable injuries are medical treatment, lost time or restricted work injuries
** Member of the public (community) injuries reflect those sustained by slips and trips on Chorus infrastructure e.g. manhole covers, which are remediated as quickly as possible.

Appendix 3: Regulatory building block model for fibre

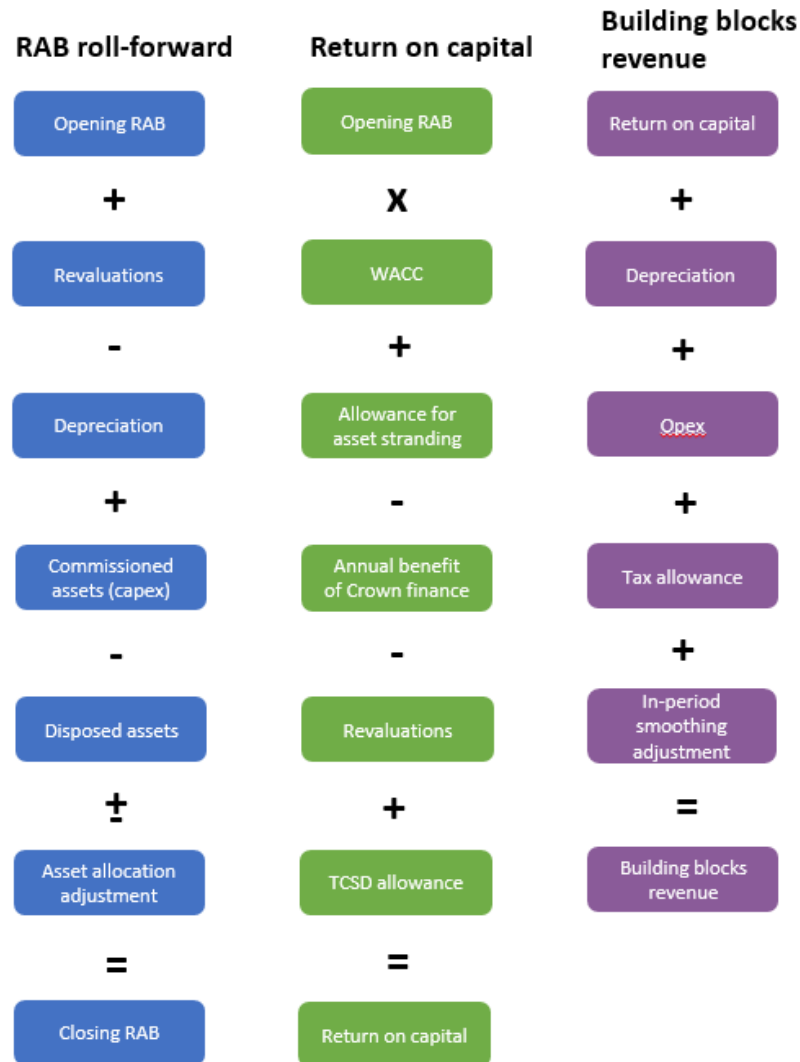


Table X3 Final building blocks revenue components (\$m, nominal)

Component	2022	2023	2024
Total return on capital	\$122.9	\$99.0	\$100.6
Return on assets (RAB x WACC)	\$260.8	\$260.7	\$258.8
Revaluations	-\$95.5	-\$117.7	-\$113.7
Ex-ante stranding allowance	\$5.4	\$5.5	\$5.4
Benefit of Crown finance	-\$49.8	-\$51.3	-\$51.7
TCSD allowance	\$1.9	\$1.9	\$1.9
Opex allowance	\$160.4	\$158.2	\$156.0
Total depreciation	\$464.6	\$456.3	\$458.9
Core fibre assets	\$261.4	\$274.2	\$296.6
Financial loss asset	\$203.2	\$182.1	\$162.3
Tax allowance	\$0	\$0	\$0
In-period smoothing	-\$71.9	\$19.4	\$58.5
Total	\$676.1	\$732.9	\$774.0

Source: Commerce Commission: Chorus' price-quality path from 1 January 2022 – Final decision, Reasons paper, 16 December 2021

Appendix 4: Regulatory revenue: FY22 FFLAS (indicative)

- > **Indicative* FFLAS revenue of \$638m or 66% of FY22 revenue**
 - FFLAS total excludes estimated \$44m allocation of fibre-related capital contributions to be netted off fibre RAB assets
- > **MAR for 2022 (calendar) is \$692 million**
 - Includes pass through costs of about \$16m
 - Chorus forecasts regulated fibre revenue of approximately \$657 million

*Amounts are subject to change once transitional RAB values and cost allocations are finalised

FFLAS = Fibre Fixed Line Access Services

MAR = maximum allowable revenue

	Non-regulated \$m	Regulated FFLAS \$m	TOTAL FY22 \$m
Fibre broadband (GPON)	2	546	548
Fibre premium (P2P)	12	54	66
Copper based broadband	153	-	153
Copper based voice	52	-	52
Data services copper	6	-	6
Field services	54	17	71
Value added network services	16	11	27
Infrastructure	20	10	30
Other	12	-	12
Total	327	638	965

Appendix 5: Crown financing summary

■ CIP equity securities

- Unique class of security with no right to vote at shareholder meetings, but entitle the holder to a right to repayment preference on liquidation
- An increasing portion of the securities will attract dividend payments from 30 June 2025 onwards
- The dividend rate is based on 180 day NZ bank bill rate, plus 6% p.a. margin
- May be redeemed at any time by cash payment of total issue price or the issue of Chorus shares (at a 5% discount to the 20-day VWAP for Chorus shares)

Equity securities subject to paying dividends (cumulative)	30 June 2025	30 June 2030	30 June 2033	30 June 2036	TOTAL
UFB1 & 2	\$85.3m	\$197.1m	\$377.7m	\$766.4m	\$766.4m

■ CIP debt securities

- Unsecured, non-interest bearing and carry no voting rights at shareholder meetings
- Chorus is required to redeem the securities in tranches from 30 June 2025 to 2036 by repaying the issue price to the holder

Debt securities maturity profile	30 June 2025	30 June 2030	30 June 2033	30 June 2036	TOTAL
UFB1 & 2	\$85.3m	\$104.7m	\$166.7m	\$210.2m	\$566.9m

Thank you