

Affordability of services over the nbn[®] network

Released February 2023



Commissioned by



Research by



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01

Executive Summary



How

affordable

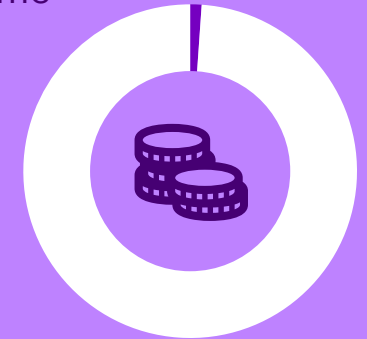
are services over the nbn network?



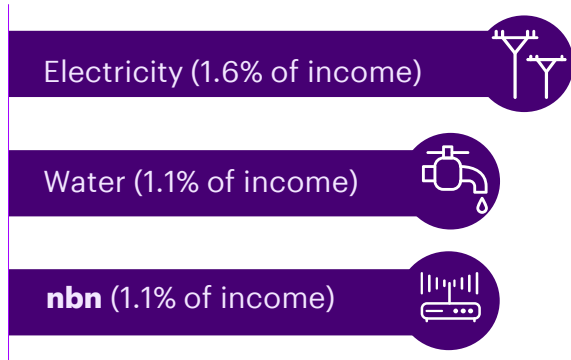
Weekly spend on services over the **nbn** network by the average Australian household

1.1%

Cost of services over the **nbn** network as a proportion of the average Australian household income

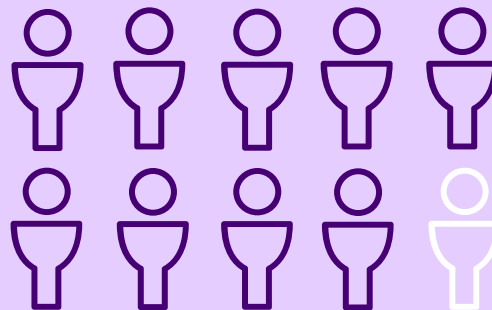


Australians spend less on services over the **nbn** network than on electricity, and the same as water



9 in 10

nbn users surveyed reported no concerns with the affordability of services over the **nbn** network



9 of 10

Small business owners who work from home reported **no concerns** with the affordability of their service over the **nbn** network



6th

Most affordable broadband amongst 13 OECD countries

Executive Summary

Introduction

The rising cost of living is squeezing household budgets across Australia. While prices of goods and services are rising, wages are not keeping up. As a result, services over the **nbn** network are more important than ever, as households turn to online activities to save money.

In this context, it is important to understand **whether services over the nbn network continue to be affordable.**¹

This report builds on findings from last year's report *Consumer affordability of nbn services* to answer this question. It draws on insights from a range of data sources, including information on services over the **nbn** network, international broadband prices, Australian household characteristics and the results from a bespoke consumer survey.

What does affordability really mean?






A product or service is affordable if a given consumer has sufficient money to purchase it.

Affordability is challenging to assess; it varies from one person to the next and views of affordability will vary with time in line with changes in price, an individual's financial situation and society's expectations of reasonable costs. To capture this complexity, this report brings together the results of these different affordability approaches.

Key Results

This report assesses the affordability of services over the **nbn** network against seven key metrics. Table 1 below summarises these seven assessment approaches and the headline results.

Table 1: Summary of affordability metrics and key results

	2022	Change from 2021
 What does the average Australian household pay for services over the nbn network?	\$16.90/week	Largely stable (\$16.80/week in 2021)
What is this cost as a proportion of average household income?	1.1%	Unchanged (1.1% in 2021)
What percentage of nbn users are on high speed tiers?	19%	Higher (16% in 2021)
How does spending on services over the nbn network compare to other household essentials, as a proportion of average household income?	Australians spend less on the nbn services than on electricity (1.6%) and around the same on water (1.1%).	Largely stable
 Are Australians concerned about the affordability of services over the nbn network relative to other utilities?	9 in 10 are unconcerned	Largely stable (88% in 2021)
Is the price of services over the nbn network reliable, compared to other utilities?	61% experience stable prices (rarely experience bill shock), higher than most utilities	[New metric]
Are work-from-home small business owners concerned about the affordability of services over the nbn network relative to other utilities?	9 in 10 are unconcerned	[New metric]
 Is Australian broadband affordable compared to other countries?	6 th most-affordable compared to 13 other OECD countries	Unchanged (6 th in 2021)



Notes: 1. **nbn** is the wholesale provider of **nbn** services and does not set retail prices. The prices paid by consumers for access to services over the **nbn** network are determined by Retail Service Providers (RSPs). Unless specified otherwise, reference to the *affordability of services over the nbn network* refers to the affordability of retail prices. Note that all currency figures are \$AUD unless stated otherwise.

02

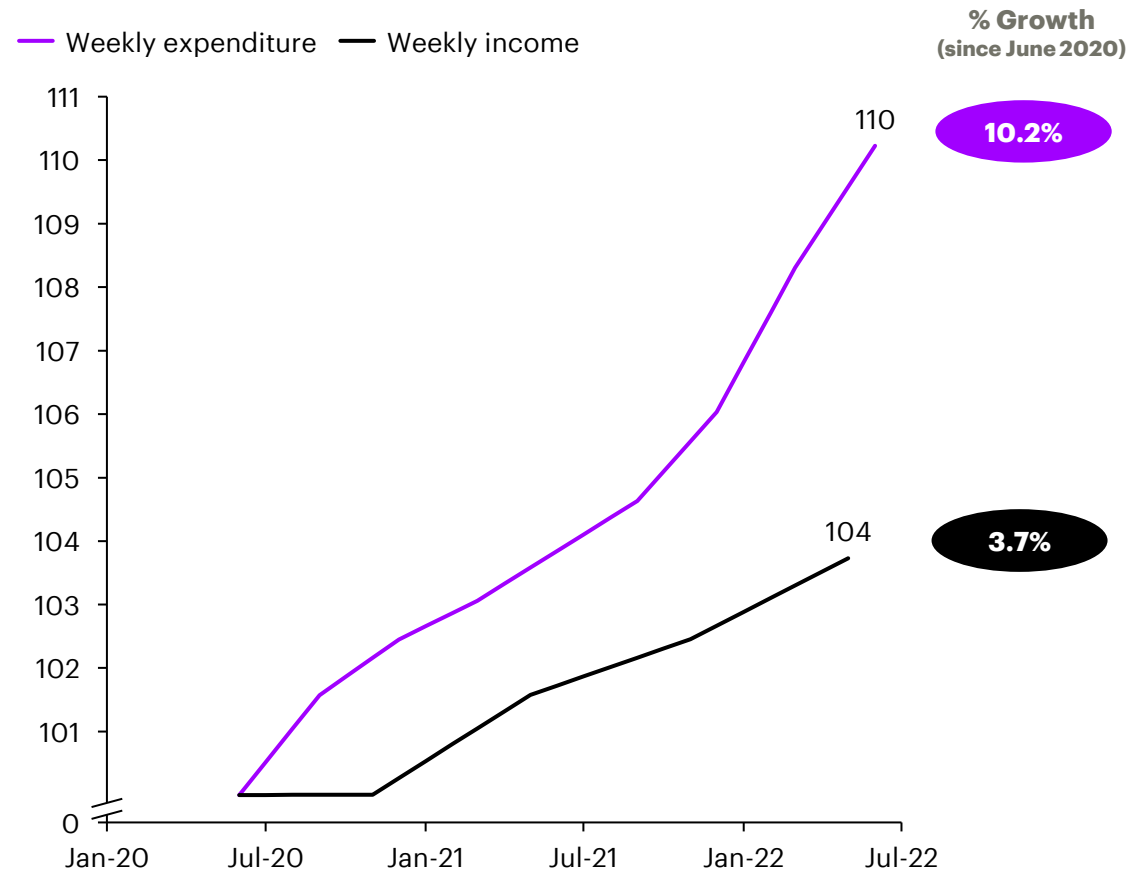
The cost of services over the nbn network continues to be affordable and compares favourably to other household essentials



Facing rising living costs, over half of nbn users are turning to online activities as a way to save money

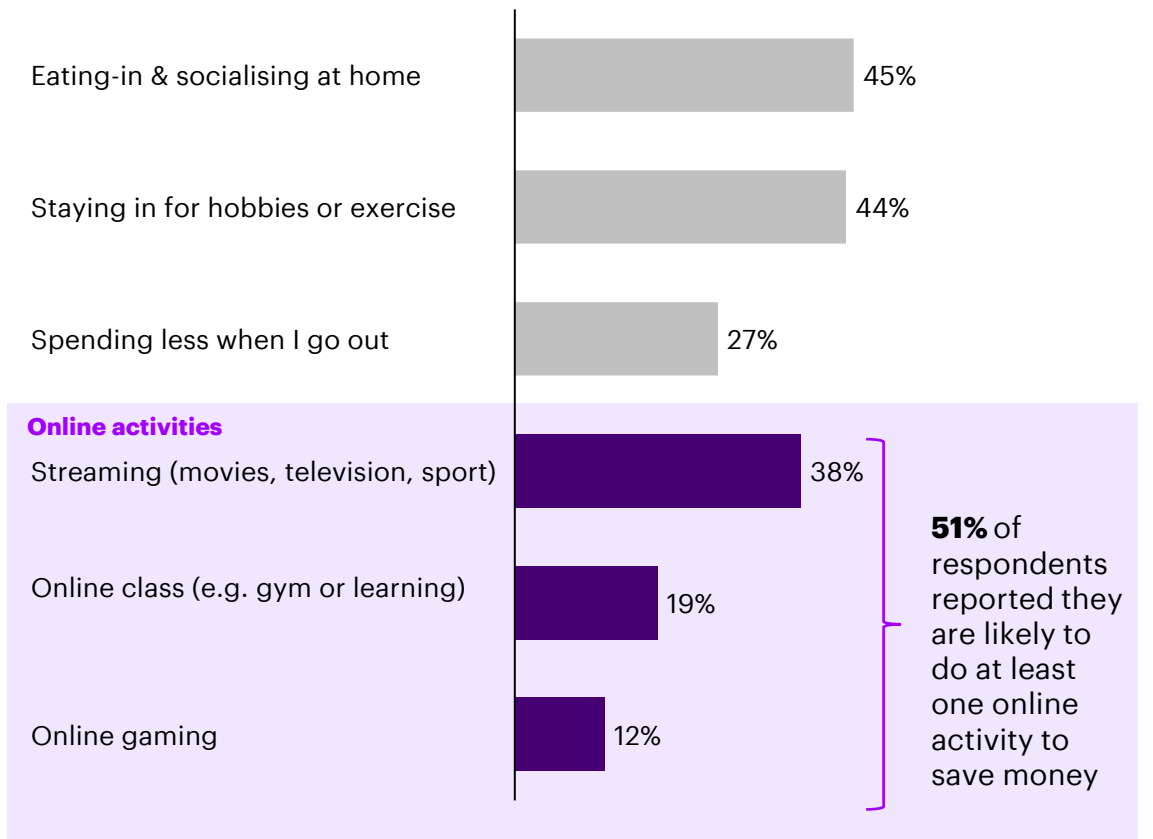
As household expenses are rising faster than income...

Indexed average household weekly expenditure and income,¹ June 2020 = 100



...51% of nbn users are turning to online activities to save money

Response to: What actions are you likely to take to maintain your quality of life while saving money? % survey respondents²



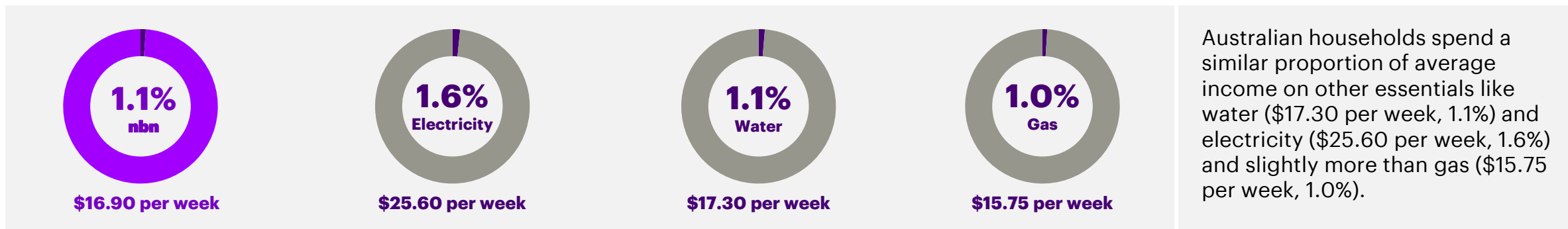
Notes: 1. Household weekly expenditure adjusts latest data (2016-17) by CPI; Household weekly income adjusts latest data (2019-20) by proportional increase in individual weekly income. 2. Multiple response question so totals do not sum to 100%. Sources: ABS Household Income and Wealth, Average Weekly Earnings, Household Expenditure Survey and CPI; Accenture/nbn consumer survey n=2,001; Accenture analysis.

Today the average Australian household spends less than \$17 a week on services over the nbn network, which represents only 1.1% of income

The average Australian household pays \$16.90 per week or 1.1% of income spent on nbn services



This is less than on electricity (1.6% of income) and about the same as on water (1.1%)

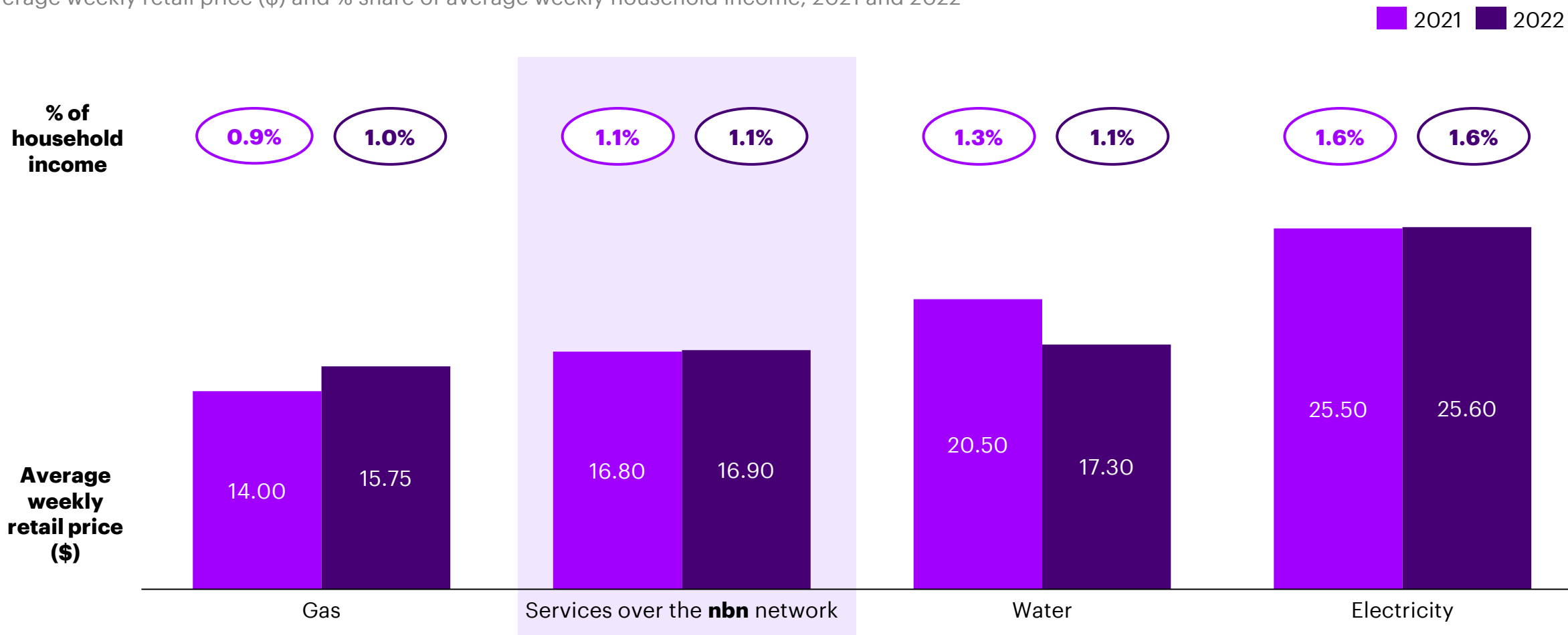


Notes: 1. nbn is the wholesale provider of services over the nbn network and does not set retail prices. The prices paid by consumers for services over the nbn network are determined by Retail Service Providers (RSPs). Unless specified otherwise, reference to the affordability of nbn services in this report refers to the affordability of retail prices of services over the nbn network; 2. The average monthly cost of services over the nbn network is \$16.9 * 4.34 weeks = \$73.4; 3. Weekly average household income is rounded to the nearest 50.; 4. Weekly income is post tax and calculated using the five AU income tax bracket rates across the ABS income quintile groups; 5. Only non-bundled fixed line services on the nbn network plans are used to calculate the average price of plans. Sources: ABS Household Financial Resources 2020, ABS Consumer Price Index 2022, Canstar Blue 2021, AEMC Residential Electricity Price Reports November 2021, nbn internal data, Accenture analysis.

For the average Australian household, the price of services over the nbn network is ~\$17 a week or 1.1% of income and has remained stable since 2021

The cost of services over the nbn network has broadly remained stable since last year






Average weekly retail price (\$) and % share of average weekly household income, 2021 and 2022



For low-income households, services over the nbn network cost between 1% and 2.3%, depending on the chosen speed tier

For low-income households, services over the nbn network represents up to 2.3% of income

Share of average weekly household income (%), percentage points (pp) change since 2021

		Very low income (~\$750 p.w.)	Low income (~\$1,250 p.w.)	Medium income (~\$1,400 p.w.)	High income (~\$1,850 p.w.)	Very high income (~\$2,750 p.w.)
Entry level services over the nbn network costs up to 1.2% of income for low income households and 2.0% for very low income households, representing no increase since 2021	 nbn12	1.62% ↓0.18pp	1.00% ↓0.1pp	0.87% ↓0.03pp	0.66% ↓0.04pp	0.45% ↓0.05pp
	 nbn25	1.97% ↓0.04pp	1.18% ↓0.12pp	1.05% ↓0.05pp	0.80% ↓0.10pp	0.54% ↓0.04pp
	 nbn50	2.23% ↓0.07pp	1.34% ↓0.17pp	1.20% -	0.90% ↓0.10pp	0.61% ↓0.01pp
Faster services over the nbn network costs up to 2.3% of income for low income households, and up to 3.8% for very low income households	 nbn100	2.80% ↓0.3pp	1.68% ↓0.18pp	1.50% ↓0.3pp	1.13% ↓0.13pp	0.76% ↓0.16pp
	 nbn250+¹	3.78%	2.34%	2.05%	1.56%	1.05%

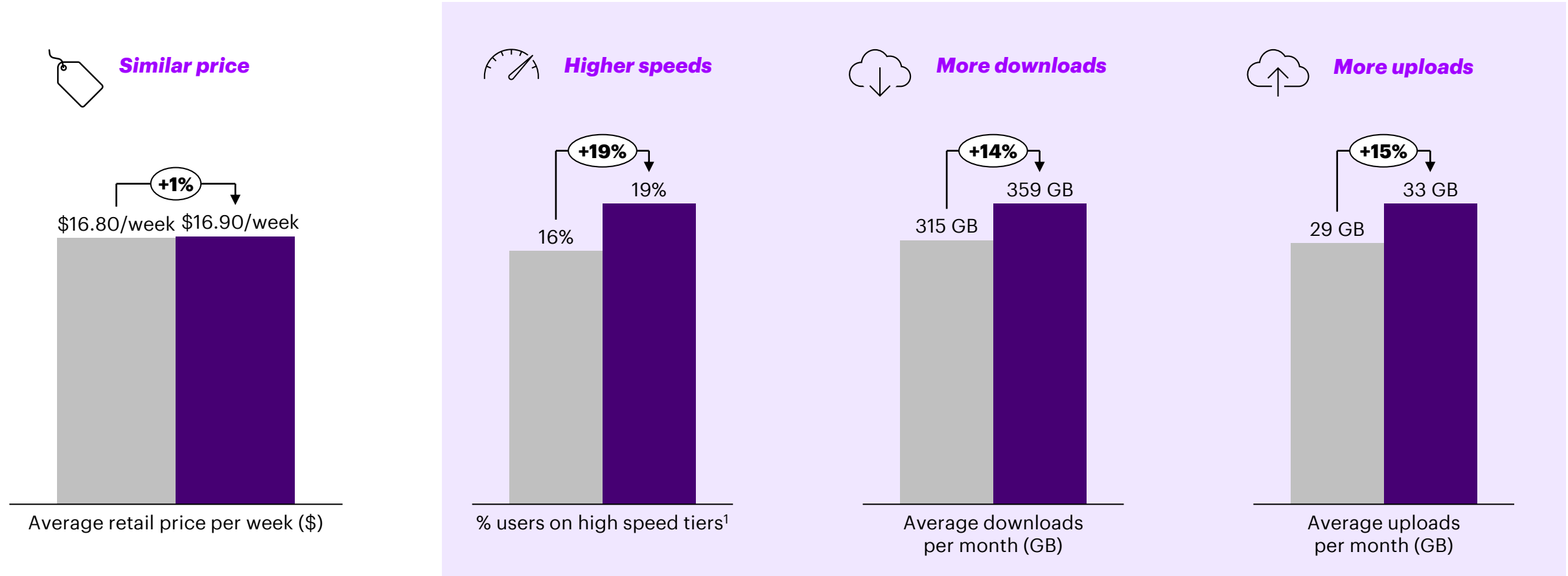
Notes: 1. nbn250+ plans are newly analysed for 2022 and was not included in last year's report due to data availability issues. 2. Weekly average household income is rounded to nearest 50; 3. Weekly income is post tax and calculated using the five AU income tax bracket rates across the ABS income quintile groups; 4 nbn is the wholesale provider of services over the nbn network and does not set retail prices. The prices paid by consumers for access to the nbn network are determined by Retail Service Providers (RSPs). Unless specified otherwise, reference to the affordability of nbn in this report refers to the affordability of prices of services over the nbn network. Only non-bundled plans are used to calculate the average price of plans. Sources: ABS Household Financial Resources 2020; nbn internal data; Accenture analysis.

nbn users received more value for money in 2022; higher speeds and more data for a similar price compared to 2021

nbn users are enjoying higher speeds and more downloads and uploads for the same price

Average retail price per week (\$), % users on high speed tiers (%), average downloads per month (GB)

■ 2021 ■ 2022



Notes: 1. Defined as nbn100+ and includes nbn100, nbn250, nbn500, nbn1000 wholesale speed tiers. Note that Retail Service Providers can choose to shape and market nbn plans different to the underlying wholesale speed tiers. Sources: nbn internal data, ABS Household Financial Resources 2020, Accenture analysis.

03

**The majority of
Australians are not
concerned about the
relative affordability
of services over the
nbn network**



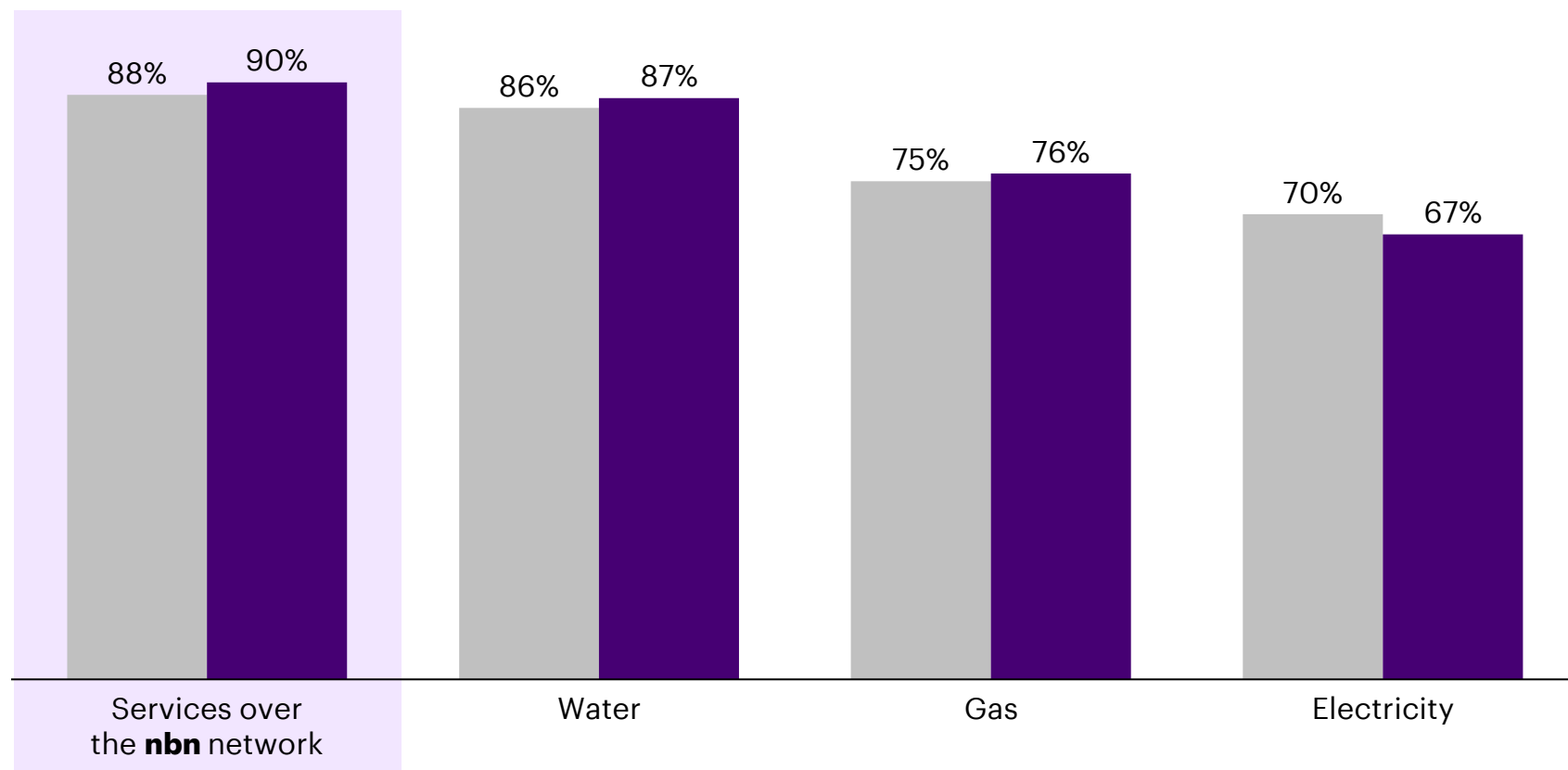
Despite rising costs of living, 9 in 10 nbn users are unconcerned about the affordability of services over the nbn network

nbn users consider services over the nbn network to be more affordable than other household utilities

% survey respondents; Survey question: How would you rate the following in terms of affordability?

A: 'Highly affordable', 'Affordable' or 'Unsure/neutral'

■ 2021 ■ 2022



Despite rising costs of living and the squeeze on household budgets, the vast majority of **nbn** users continue to be unconcerned about the affordability of services over the **nbn** network.

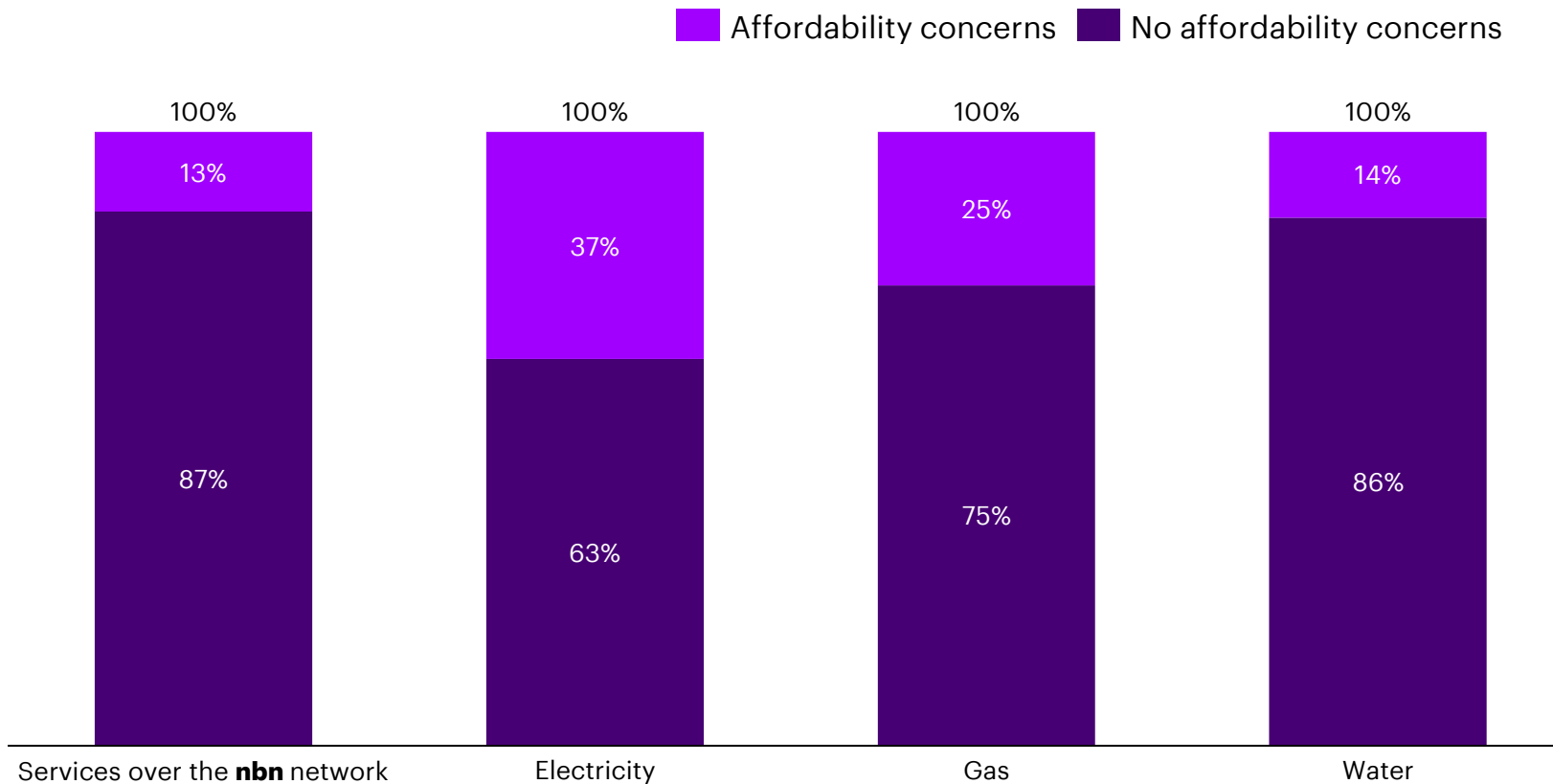
In 2022, 9 in 10 of **nbn** users were unconcerned with the price of services over the **nbn** network – a 2pp improvement from 2021.

Fewer users find the cost of water, gas and electricity to be affordable. Notably, only 67% of users find electricity to be affordable.

Low-income households are more likely to be concerned about the affordability of other critical utilities

Low-income households consider services over the nbn network to be more affordable than other utilities

% low-income survey respondents; Survey question: How would you rate the following in terms of affordability? A: 'Highly affordable', 'affordable' or 'unsure/neutral'



Generally, low income households seem more concerned about the affordability of household utilities than middle and high income households.

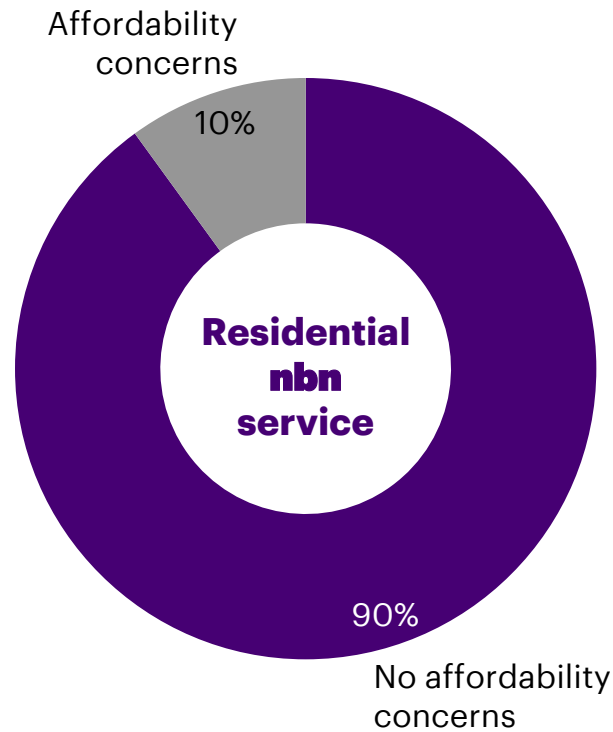
However, a large majority of low-income¹ households are unconcerned about the affordability of services over the nbn network – 87% have no concerns.

For middle income² households, this number increases to 88%. And for high income³ households, it increases once more to 95%.

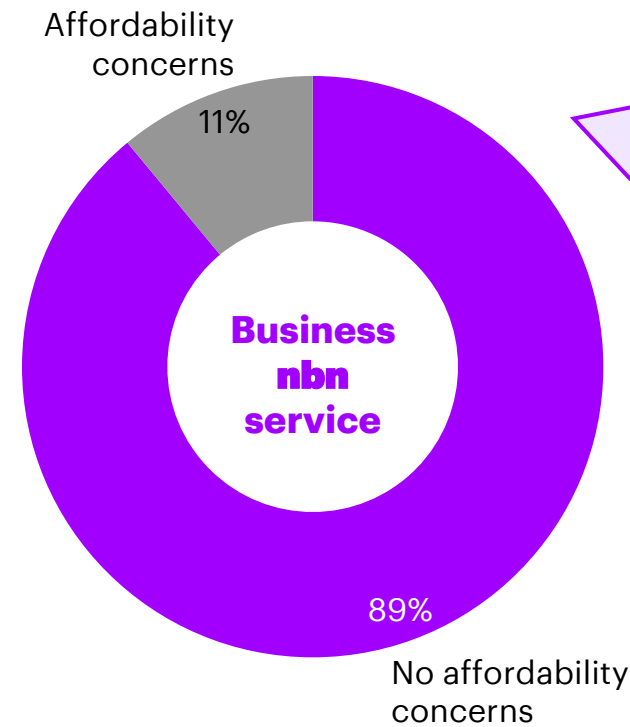


The cost of services over the **nbn** network is not a concern for 9 in 10 small business owners who work from home

90% of small business owners who work from home have no concerns with the cost of services over the **nbn** network



89% of small business owners on a business service over the **nbn** network are also unconcerned



While business services over the **nbn** network are more expensive than residential services over the **nbn** network, the vast majority of these users have no affordability concerns.

04

**Australia has the 6th
most affordable
broadband across 13
OECD countries**



Across the four key speed tiers, the affordability of Australia's broadband ranks in the top half of 13 OECD countries

Australia ranks in the top half of OECD countries in terms of affordability when taking into account relative purchasing power and income levels. Affordability has been assessed separately across download speed category (12, 25, 50 and 100 Mbps).⁴

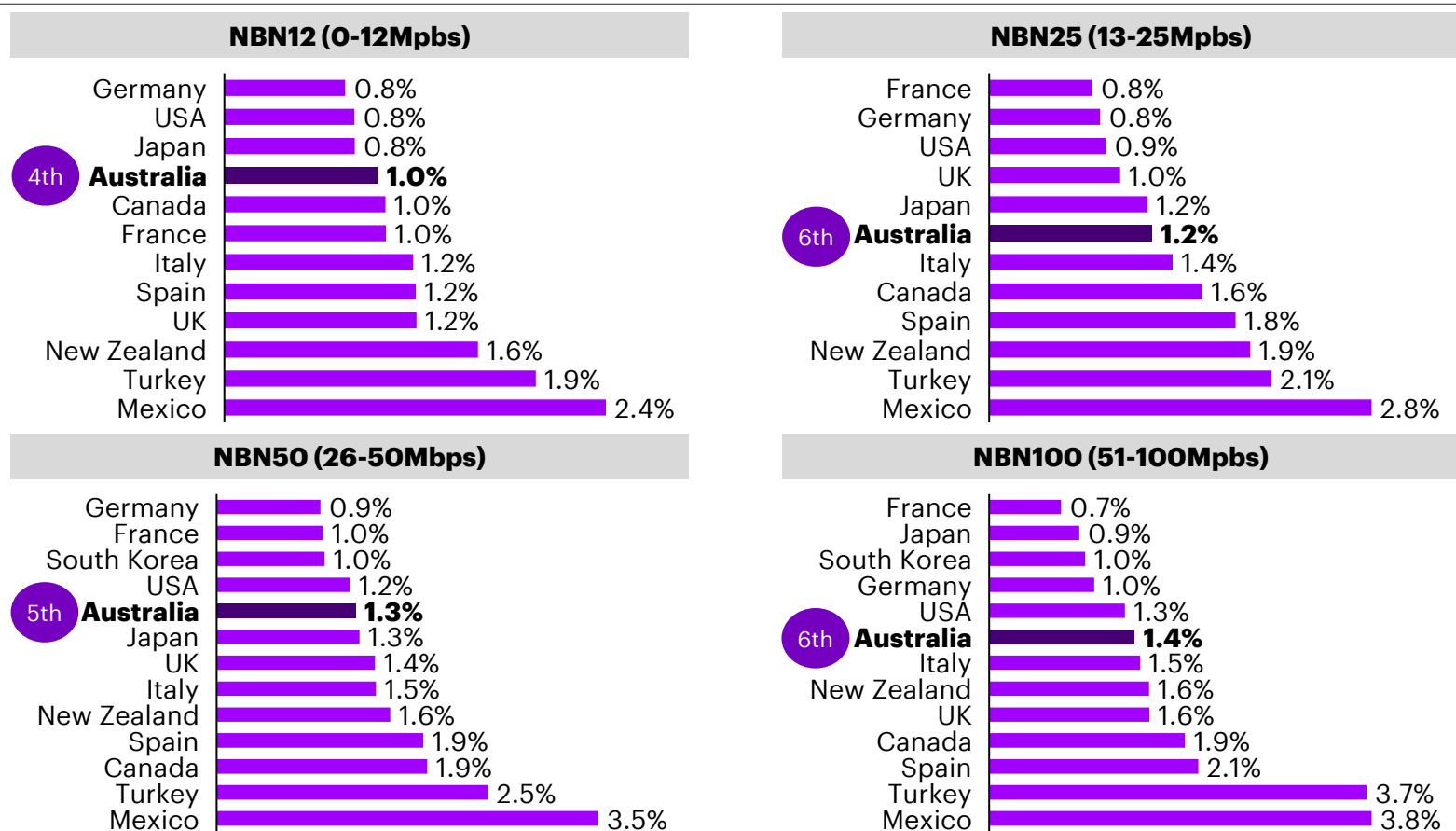
Australia ranks 5th highest in the NBN50 speed tier which represents its largest customer base (60%).

Affordability appears to be consistent across various speed tiers with Australia consistently placing between 4th and 6th amongst its OECD peers.

It is also interesting to note that New Zealand, which represents a similar geographic, cultural and economic comparison, consistently ranks behind Australia.

Broadband affordability (measured as a share of income) across speed tiers for 13 OECD countries^{1,2,3}

Median broadband price (excluding bundles & inclusions) as a share of per capita income, %



Notes: 1. The OMDIA dataset includes information for Data for 20 OECD countries. Eight countries have been excluded due to data limitations (such as insufficient data) or data that can not be compared with Australia due to differences in speed tiers or broadband offerings. The excluded countries are Brazil, China, India, Indonesia, Nigeria, Russia, Saudi Arabia and South Africa. The countries included are consistent with the previous report. New Zealand broadband plans are from 2018 Q1, 2021 Q1 and are not sourced from the OMDIA dataset. 2. Countries that have less than 5 broadband plans within a speed tier are excluded from the rankings for that tier 3. The latest available data from 2016 to 2021 is used for each country from the OMDIA dataset. For Australia, the OMDIA dataset includes a mix of nbn and non-nbn plans and does not contain any plans from 2016. 4. The analysis does not include NBN250+ as for Australia only a small percentage of connections are on these speed tiers, and the dataset only has 2 plans in this speed tier in 2021; METHOD: More detail on the methodology can be found in the Appendix. Sources: OMDIA Broadband Pricing Interactive Tracker; World Bank; Accenture analysis; NZ broadband plans data - broadbandcompare.co.nz, Wayback Machine (Internet Archive), Desktop Research.

Overall, Australia has the 6th most affordable broadband of 13 OECD countries

Australia's broadband has stayed consistent at 6th most affordable of the 13 OECD countries

Ranking based on broadband price as a share of per capita income

	Country	Average rank 2022	Average rank 2021	Change (2021-22)
1	Germany	1	1	=
2	France	2	2	=
3	South Korea	3	3	=
4	USA	4	5	↑ 1
5	Japan	5	4	↓ 1
6	Australia	6	6	=
7	UK	=8	=8	=
8	Italy	=8	=8	=
9	Canada	9	9	=
10	New Zealand ¹	10	11	↑ 1
11	Spain	11	10	↓ 1
12	Turkey	12	12	=
13	Mexico	13	13	=

After equating the cost of broadband across each country using Purchasing Power Parity and taking into account each country's relative capacity to pay for broadband, Australia ranks 6th amongst 13 comparable OECD countries.

This overall rank is based on the average rank across the four key speed tiers. Measures of affordability are consistent across four speed tiers, ranking between 4th and 6th.

New Zealand, a similar country in terms of geography, culture and economy ranks 11th out of these 13 OECD countries.

Notes: 1. The OMDIA dataset includes information for Data for 20 OECD countries. Eight countries have been excluded due to data limitations (such as insufficient data) or data that can not be compared with Australia due to differences in speed tiers or broadband offerings. The excluded countries are Brazil, China, India, Indonesia, Nigeria, Russia, Saudi Arabia and South Africa. Data for New Zealand broadband plans are from 2018 Q1, 2021 Q1 and Q3 2022 and are not sourced from the OMDIA dataset 2. Countries that have less than 5 broadband plans within a speed tier are excluded from the rankings for that tier 3. The latest available data from 2016 to 2021 is used for each country from the OMDIA dataset. 4. For Australia, the OMDIA dataset includes a mix of nbn™ and non-nbn™ plans and does not contain any plans from 2016; METHOD: Used a multivariate regression model to calculate the 'naked' price of broadband by subtracting the value of inclusions like TV channels, mobile data etc. The 'naked' price is then converted to \$US using PPP, and then divided by the GNI per capita, PPP (\$US) for each country. Overall ranking calculated by averaging ranks across speed tier categories. Sources: OMDIA Broadband Pricing Interactive Tracker; World Bank; Accenture analysis; NZ broadband plans data - broadbandcompare.co.nz, Wayback Machine (Internet Archive).



05 Appendix



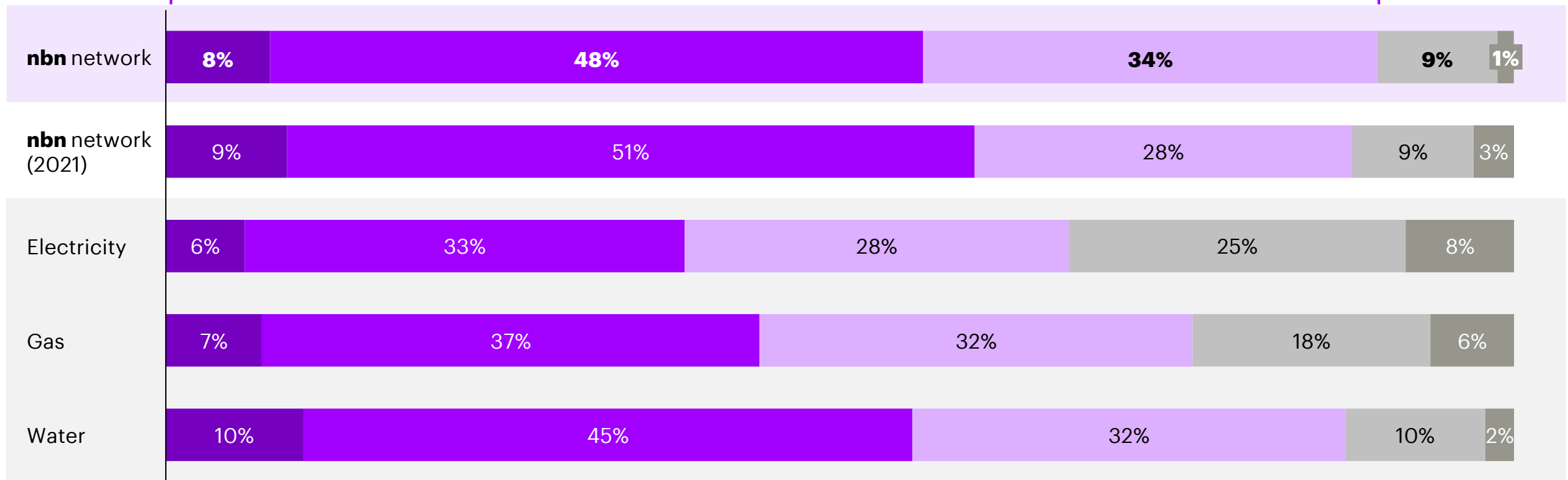
nbn user perceptions of the affordability of household utilities

nbn users consider services over the nbn network to be more affordable than other household utilities

% of respondents; Survey question: How would you rate the following in terms of affordability?

■ Highly affordable
 ■ Affordable
 ■ Unsure/Neutral
 ■ Unaffordable
 ■ Highly unaffordable

90% have no concerns with the affordability of the nbn network, compared to 88% last year



06

Sources and methodology



Methodology: Data sources used for this report

Note: Analysis for this report was conducted in late-2022. Data used was the latest available at the time, and where relevant the date has been noted against each source below.




Source	OMDIA International Broadband Price Tracker	nbn	Consumer survey	Public data sources and reports
Information	<p>Information:</p> <ul style="list-style-type: none"> Features and price of broadband plans over time across different countries, from December 2012 to December 2021, OMDIA International Broadband Price Tracker, as at December 2021. Note: NZ broadband plans were sourced separately using secondary research (see 'secondary research' section to the right). Sample size: 12 countries, 2,841 broadband plans (excl. NZ) 	<p>Information:</p> <ul style="list-style-type: none"> nbn customer share and retail prices across different speed tiers, includes 394 plans across 33 RSPs, nbn RSP Price Tracker, June 2022 Download and uploads activity on the nbn network by service, nbn Activity Data January 2020 to July 2022 	<p>Information:</p> <ul style="list-style-type: none"> Consumer sentiment towards affordability of services over the nbn network (Accenture/nbn consumer survey, September 2022) Representative sample of Australian population The survey has the following components: <ul style="list-style-type: none"> Survey of nbn users (n=2,001). This includes small business owners who work from home using services over the nbn network (n=197) Survey of the 'unconnected', i.e. no-nbn connection at home (n=305) Total survey size: 2,306 	<p>Information:</p> <ul style="list-style-type: none"> General population data <ul style="list-style-type: none"> Australian population: ABS Census, 2021 Household income and expenditure: ABS Household Financial Resources, June 2020; ABS Household Income and Wealth, 2019-20, ABS Household Expenditure Survey, June 2016 Wage-price index: ABS Wage Price Index, June 2022 Inflation: ABS CPI, June 2022 Average expenditure on essential utilities <ul style="list-style-type: none"> Electricity: Australian Energy Market Commission, November 2021 Water: CANSTAR Blue Research, August 2021 Gas: CANSTAR Blue Research, November 2021 Essential utilities value for money: productreview.com.au data, as at September 2022 Public information about nbn: <ul style="list-style-type: none"> Market share of RSPs: ACCC's nbn Wholesale Market Indicators Report, June 2022 Distribution of broadband connections across speed tiers and market share: nbn Services in Record Keeping Rules disclosures to ACCC, June 2022 NZ broadband plan data: broadbandcompare.co.nz data from September 2022. To ensure consistency, NZ Data was collected in a manner closely aligned to data collection methodology used for the OMDIA data. A larger sample of NZ plans was used (-550) to reduce sampling bias and the mix of plans was reviewed to ensure it was broadly representative of the NZ broadband market. Images from Pexels and Unsplash.


Methodology: Overview of the affordability assessment approaches used in this report

The value of multiple approaches

Affordability is challenging to define because it depends on price, consumers' financial situations and society's expectation and perceptions of 'reasonable' costs. To account for this, price comparisons have considered household income, expenditure and 'purchasing power' (which captures the relative prices of goods and services in Australia), and qualified using survey data to capture consumer sentiment. Additionally, prices have been compared to peer OECD countries. The combination of these methods enables a broad assessment of affordability.

Table 2: Summary of affordability metrics methodologies














	 What does the average Australian pay for the nbn?	 What are Australians' perceptions on the affordability of services over the nbn?	 Is Australian broadband affordable when compared to broadband prices in other countries?		
Approach	What is the cost of services over the nbn network as a proportion of average household income?	How does this cost compare to other household essentials like electricity, gas and water?	Are Australians concerned about the affordability of services over the nbn network relative to other utilities?	Do consumers consider services over the nbn network to be value for money?	
Method	<p>The most common method of assessing affordability is to consider price relative to income.</p> <p>Retail prices of currently sold services over the nbn network have been collected and compared to income data across quintiles, sourced from the ABS.</p> <p>To find the average cost, we weight the unbundled price of services over the nbn network by the market share of RSPs and by the number of connections per speed tier on the nbn network. For this analysis, we considered only services over the nbn network that are fixed line and excluded fixed wireless and satellite services, due to low data availability and for consistency with previous reports.</p>	<p>Another affordability lens is to compare the cost of services over the nbn network to other household utilities.</p> <p>The cost of services over the nbn network as a percentage of income has been compared to the average cost of electricity, gas and water as a percentage of income.</p> <p>From CANSTAR and the Australian Energy Market Commission, we take the average price of utilities on a per-state basis, then weight this by distribution of the Australian population using ABS Census data.</p>	<p>An important means of determining affordability is to measure consumer sentiment directly.</p> <p>A survey of 2,306 people was undertaken, asking various questions about perceived affordability.</p> <p>We surveyed both nbn users and the 'unconnected' about affordability. We also surveyed small business owners who work from home at least one day (i.e. seven or more hours) a week.</p> <p>Respondents were selected from a cross section of Australian households; demographics and were reviewed to ensure sufficient representation.</p>	<p>To validate results, we also considered external sources of consumer sentiment of affordability using ProductReview.com</p> <p>Analysis of more than 45,000 reviews of broadband plans on Product Review was used. We looked at the average rating for 'Value for money' and 'Rates and fees' on ProductReview.com to determine, from a score of five, how many people on average found the product to be 'Value for money'.</p> <p>For this analysis, we considered the nbn network to include fixed line, fixed wireless and Sky Muster, and non-nbn broadband to include non-nbn fibre, cable, ADSL and Starlink.</p>	<p>Affordability was assessed by comparing broadband prices to those in comparable OECD countries, relative to incomes in those countries.</p> <p>We considered broadband data from over 2,800¹ plans in the OMDIA Broadband Pricing Tracker. To accurately compare plans, we adjusted the quoted price by removing the value of additional features and inclusions and isolating the value of broadband through a regression technique. Naked prices were compared across countries, allowing for varying purchasing power and incomes.</p>

 Notes: 1. Data for New Zealand broadband plans was not sourced from the OMDIA dataset. Around 500 NZ broadband plans were sourced from the following - broadbandcompare.co.nz, Wayback Machine (Internet Archive), Desktop Research

Methodology: International comparison – the affordability of Australian broadband has been compared to 12 OECD countries

Australian broadband affordability was compared to 12 other OECD countries

OECD countries in the OMDIA Broadband Pricing Tracker⁷

OECD country	Average income per capita (\$USD) ¹	Connections per 100 people ²	Major providers of broadband ³	Top 2 Technologies ⁴ (used for comparison)		
				Fibre	DSL	Cable
 USA	62,800	33	AT&T, Comcast, Verizon, Time Warner	✓		✓
 Germany	55,900	40	Vodafone, Deutsche Telecom, Unity		✓	✓
 Australia	50,300	32	Telstra, Optus, TPG, iiNet	✓	✓	
 Canada	48,900	38	Rogers, Shaw, Telus, BCE Canada	✓		✓
 France	48,200	44	Orange, Free, Numericable/SFR	✓	✓	
 UK	46,000	39	Virgin, BT, BSkyB, Sky	✓	✓	
 New Zealand	43,900	34	Vodafone, Spark, Orcon, 2degrees	✓	✓	
 Japan	43,700	32	NTT (East & West), JCOM, KDDI	✓	✓	
 Italy	43,000	27	Telecom Italia, Wind/Infostrada, Fastweb	✓	✓	
 South Korea	42,500	41	SK Broadband, LG U+, Korea Telecom	✓		
 Spain	41,200	31	Orange, Telefonica, Vodafone	✓	✓	
 Turkey	27,500	15	TTNet, Turksat, Superonline	✓		✓
 Mexico	19,500	14	Telmax, Axtel, Cablemas	✓	✓	

Australia's broadband prices were compared with a selection of peer countries with similar broadband products and average incomes per capita. This approach was informed by the OMDIA Broadband Pricing Tracker, which captures broadband prices across countries and over time. The dataset^{5,6,7} includes around 2,800 plans across 13 OECD countries.

Several important adjustments were made to further ensure fair comparisons across countries:

- The quoted prices were adjusted by extracting the value of additional features and inclusions and isolating the value of the broadband alone (i.e. the 'naked' broadband price) using a regression model.
- To fairly compare naked prices and factor in capacity to pay across countries, prices are converted to a single currency (\$USD), adjusted for purchasing power ('Purchasing Power Parity') and divided by average income per capita.

Notes: 1 Measured as 'Gross National Income' per capita, World Bank; 2: Fixed broadband subscriptions (per 100 people), 2021, World Bank; 3 This is not an exhaustive list and order is not reflective of market share. 4 Indicative only, showing the major two technologies in the OMDIA dataset. 'Fibre' includes: FTTB, FTTH, FTTx; 'DSL' includes DSL, ADSL, xDSL, VDSL. 5. The latest available data from 2016 to 2021 is used for each country from the OMDIA dataset; 6. For Australia, the OMDIA dataset includes a mix of **nbn** and non-**nbn** retail plans and does not contain any plans from 2016. 7. The OMDIA dataset does not include data for New Zealand. NZ broadband plans were sourced using broadbandcompare.co.nz, Wayback Machine (Internet Archive), Desktop Research.

Methodology: Comparing affordability of Australian broadband to other countries



Method overview

- Train multivariate regression model using OMDIA broadband plan data.**
The model considers features including download speed, data caps, mobile data included, etc to predict the price of broadband plans.
- Calculate the 'naked' broadband price** by subtracting the value of additional plan inclusions (e.g TV channels included, mobile data included etc) from the quoted price.
- Convert** local currency, 'naked' broadband prices **into an 'affordability' metric** in two steps –
 - Convert into \$USD using PPP (purchasing power parity)
 - Divide by Gross National Income per capita (available in PPP, \$US) for each country.
- Compare the median 'naked' prices as a share of income for each country across different download speed tiers.**
- Obtain **final rankings** for affordability for each country by aggregating the speed-tier specific rankings.

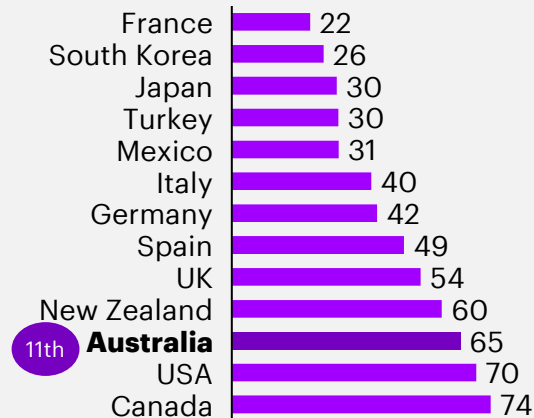
The fairest approach to compare affordability of broadband across countries is measuring price as a share of income

International comparisons across different metrics for NBN100 (51-100Mbps) broadband plans; as an example

Price comparison

\$US converted at market exchange rates

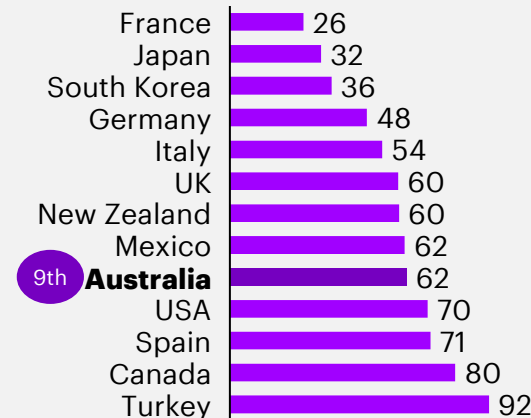
- The simplest option to compare broadband prices across countries is to convert all of them into a single currency such as \$US.
- However the problem with this approach is that it leads to the trivial conclusion that the price of broadband is higher in richer countries (Balassa-Samuelson effect).



Purchasing power comparison

\$US converted at purchasing power parity

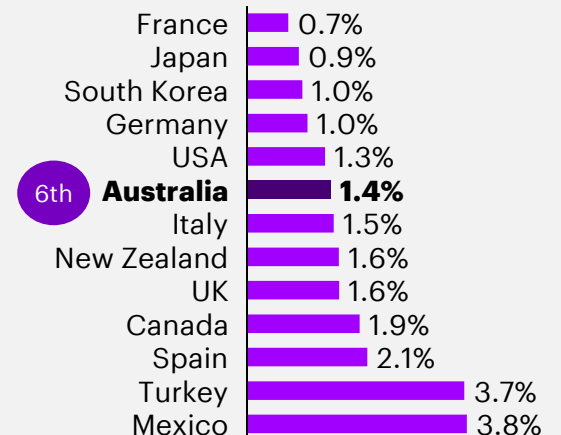
- An alternate approach is to convert prices into \$US at purchasing power parity (PPP). Comparing broadband in PPP terms effectively compares the ratio of broadband prices in each country with the price of other goods and services.
- While PPP is useful in comparing prices across countries, it doesn't shed light on how 'affordable' goods & services are, since it does not factor in the capacity to pay across countries.



Affordability comparison

Prices as share of income

- Our approach is to compare prices in each country relative to the average income in that country (e.g. in Australia the median broadband price for NBN100 (51-100 Mbps) plans is 1.4% of income per capita, while in Canada it is 1.9%)
- This approach accounts for differences in income across countries and presents a true measure of affordability.



Notes: 1. Data for New Zealand broadband plans is from 2018 Q1, 2021 Q1 and is not sourced from the OMDIA dataset (see below) 2. Countries that have less than 5 broadband plans within a speed tier are excluded from the rankings for that tier 3. The latest available data from 2016 to 2021 is used for each country from the OMDIA dataset. SOURCES: OMDIA Broadband Pricing Interactive Tracker, World Bank, Accenture analysis; NZ broadband plans data - broadbandcompare.co.nz, Wayback Machine (Internet Archive), Desktop Research.

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