

Cost of Living Report

December 2019

Issue
26

Utilities Costs in the
Northern Territory





Northern Territory Council of Social Service

About NTCOSS

The Northern Territory Council of Social Service (NTCOSS) is a peak body for the Social and Community Sector in the NT and an advocate for social justice on behalf of people and communities in the NT, who may be affected by poverty and disadvantage.

NTCOSS is a member of the nationwide Councils of Social Service (COSS) network, made up of each of the state and territory Councils and the national body, the Australian Council of Social Service (ACOSS). The membership of NTCOSS includes community based, not for profit service providers in the social welfare area such as consumer groups, Indigenous and mainstream organisations and interested individuals.

NTCOSS' vision is for

“A fair, inclusive and sustainable Northern Territory where all individuals and communities can participate in and benefit from all aspects of social, cultural and economic life.”

NTCOSS' mission is

“To promote an awareness and understanding of social issues throughout the NT community and to strive towards the development of an equitable and just society.”

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INTRODUCTION

This report examines changes in the cost of living over recent years in the Northern Territory in relation to the household expenditure area of utilities with a particular focus on cost of living pressures for low-income, vulnerable and disadvantaged Territorians.

The report focuses on expenditure and price changes for utilities, examining data in relation to electricity, gas and other household fuels, as well as water and sewerage.

The report draws on Darwin, regional, NT wide and national figures from the Australian Bureau of Statistics (ABS) Household Expenditure Survey (HES) data and Consumer Price Index (CPI) data and Centrelink data, as well as a range of other sources including the Power and Water Corporation, Jacana Energy, the Australian Energy Market Commission, Poly Water Solutions for Life, and the Climate Council.

The report examines trends in expenditure and price changes for utilities for Territory Households over recent years. In particular NTCOSS is concerned about how low-income households are managing with their utilities' expenditure. The report also examines data to assess how well the NT Concessions Scheme is faring in terms of assisting low income households to manage cost of living rises.

Utilities are a critical expenditure area for virtually all Territorians and this report makes some policy recommendations to address cost of living concerns for low-income Territorians who may be experiencing financial hardship due to the impact of high utilities expenditure.

REPORT SUMMARY: SNAPSHOT OF KEY FINDINGS

Household Expenditure on Utilities in the Northern Territory

- Expenditure on Utilities constitutes 3.9% of total household expenditure in the NT.
- Utilities data for the NT casts some positive light on overall affordability for an average NT household (*excluding very remote areas/Indigenous communities*). This is despite high average expenditure on electricity and water; and overall price increases in the past decade.
- Low to moderate tariff charges, within the national context, for electricity and water have assisted with the overall affordability (*with tariff rates set under the true costs*).

Average Utilities Expenditure and as a Proportion of Household Disposable Income

- The most recent (2017) Household Expenditure Survey showed the NT had the highest level of average weekly household expenditure in the country on 'Utilities' (\$64.53), \$10 above the national average (figures based on 2015/16 period).
- However, as a proportion of weekly mean disposable household income, NT expenditure is equal 3rd lowest in the country, due to high ave. disposable incomes. And this is despite the NT having the second highest rate of growth in expenditure on utilities (in real terms) between the 2009/10 and 2015/16 HES periods.

CPI Changes for Utilities over the past Ten Years (Darwin CPI representative of NT)

Electricity CPI Darwin

- CPI for 'Electricity' for Darwin had the 2nd lowest rise in the country since Sept 2009
- This is despite large price rises at times, e.g. 17.7% in March 2013 quarter.
- However, since Dec 2015, the CPI for 'Electricity' decreased by 3.4% - against the national trend which saw CPI for 'Electricity' rise by 16.3%.

'Gas and other household fuels' ('Gas') CPI Darwin

- CPI for 'Gas' for Darwin also had the 2nd lowest rise in the country since Sept 2009
- Since Dec 2015, CPI for 'Gas' decreased by 0.6%, against the national trend which saw CPI for 'Gas' rise by 17.2 %.

'Water and sewerage' CPI Darwin

- CPI for 'Water and sewerage' for Darwin had the highest rise in the country (93%) since Sept 2009 - almost double the national rise (50%)
- Since Dec 2015, the growth in CPI for 'Water and sewerage' has slowed, rising only 3.0%, which is under the 5.0% increase nationally over the same period.
- Recent CPI movement for 'Electricity' and 'Gas' means average household expenditure on these utilities will likely have decreased since Dec 2015, assuming consumption patterns haven't changed – bringing some cost of living relief to NT Households (*Expenditure figures will also have been impacted by factors like the uptake of rooftop PV solar in the last decade and some households reducing usage*).

REPORT SUMMARY: SNAPSHOT OF KEY FINDINGS

Averages can hide what is happening for Low Income Household Groups in the NT

- Averages can hide what is happening for sub categories of household types, or for households in particular geographical areas – e.g. in remote communities.
- This is a real issue in the NT given that households “defined as very remote or Indigenous communities” in the NT are not included in HES figures.
- Lowest income households (bottom 20%) spend a far greater proportion (6.3%) of disposable income on ‘Domestic fuel and power’* than the highest income households (top 20%) who use only 1.6% of their disposable income.
- Specific vulnerable lower income groups in the NT that are currently spending a greater proportion of their disposable income on ‘Domestic fuel and power’* than the national average include:
 - Single people over 65;
 - Single people under 35;
 - One parent family with dependent children;
 - Couple family with dependent children;
 - Public Housing Renters (National Figures).

Smart Meters and Involuntary ‘Self-Disconnections’ in urban areas of the NT

- 62% of all of the households in urban areas of the NT who now have smart electricity meters experienced at least one involuntary ‘self-disconnection’ in the last financial year.
- Involuntary ‘self-disconnections’ are inconvenient and costly:
 - Lack of continuous electricity impacts on a range of household activities – such as: heating and cooling houses; storing and cooking food; bathing; washing clothes; and charging electrical equipment.
 - *All of these factors impact on a household’s ability to interact with the outside world*

**Note: ‘Domestic fuel and power’ refers to Electricity, Gas, heating, oil and wood’*

REPORT SUMMARY: SNAPSHOT OF KEY FINDINGS

Utilities Concessions Working Well for Households that are Eligible

- The Utilities Concessions (Electricity, Water and Sewerage) provided under the NT Concession scheme are substantial
- For households who own their own home and are using around the NT consumption average levels (or under) for electricity and water, the combined utilities concessions overall are keeping up with cost of living increases that have occurred over the past 5 years (even though water and sewerage bills may have risen a bit more than the concessions for these).
- For households who only receive the electricity concession only (e.g. renter households) and are using around the NT consumption average levels (or under) the electricity concession has more than kept up with cost of living increases over the past five years.

Vulnerable groups still missing out on Concessions

- For low-income groups ineligible for concessions, utilities costs cause significant financial strain.
- Recipients of Newstart and Youth Allowance are ineligible for the NT Concession Scheme, despite their incomes being far lower than other eligible groups.

Climate Change impacting Vulnerable Households

- 55 days over 40 degrees in Alice Springs in the last financial year has made life uncomfortable for all households in the region; but,
- Poor housing quality impacts greatly on internal house temperatures, and particularly affects low income and disadvantaged households.
- There is a need for more rooftop PV solar and more energy efficiency measures for low-income households, especially in public and community housing where renters are more likely to be in lower income brackets
- There is a need for more incentives for landlords to install rooftop PV solar and increase energy efficiency.

NTCOSS recommends that the Northern Territory Government:

Household Infrastructure and Equipment

1. Ensure power is accessible, constant and affordable for all NT households – e.g.
 - Work with energy providers and community organisations to ensure all customers who would meet eligibility criteria have access to NT Concessions whether pre-paid or account customers.
 - Extend electricity concessions, under the NT Concession Scheme, to all Centrelink Health Care Card Holders and other low-income groups currently missing out.
 - Develop initiative to increase access to renewable energy, including solar power, to reduce electricity costs for lower income households – e.g. incentives for landlords; investment in a pilot of rooftop PV solar installation for public and community housing dwellings.
2. Develop initiatives for low income households to increase access to energy efficient and reliable appliances (e.g. fridges; microwave ovens). This should include strategies to increase and improve access for residents of remote communities to no-interest loan schemes (NILS).

Improvements in Data Collection

3. Develop mechanisms for the provision of timely data on usage patterns of electricity for smart meter users, to enable households to track electricity usage over time.
4. Require Jacana Energy (and all other energy retailers operating in the NT) to regularly report on (as a minimum):
 - The Number of electricity payment vouchers it applies, and total value of those vouchers,
 - The Number of payment plans struck,
 - The Number of payment plans adhered to,
 - The Number of disconnections.

(And for this data to be provided in term of both regional and NT wide data).
5. Provide resources to relevant agencies (Community, Jacana, Government agencies) to enable data collection in relation to:
 - The rate of access to electricity vouchers (emergency relief) for groups who don't qualify for the NT electricity concessions
 - The link between Smart Meters and households who receive a concession and the rate of Involuntary 'self-disconnections'

NTCOSS recommends that the Northern Territory Government (continued):

Need for a comprehensive NT Energy Efficiency Strategy

6. Introduce a comprehensive NT Energy Efficiency Strategy including:
 - Energy Efficiency Stimulus Program: Small grants for householders/businesses to retrofit existing dwellings/premises to improve energy efficiency i.e. building related, energy efficient appliances
 - Mandatory disclosure of energy ratings for all dwellings in the NT
 - Plan for an increase in the minimum energy rating requirements
 - A commitment to ensuring all social, public and community housing in the NT meets the maximum required energy ratings.

NTCOSS recommends that the Commonwealth Government:

Inadequacy of Income Support Payments

1. Increase the base rate of allowance payments, e.g. Newstart, Youth Allowance by a minimum of \$75 per week. In addition, these payments must be indexed to wage and price movements.

Improvements in Data Collection

2. Allocate additional resources to the Household Expenditure Survey (HES) process to cover very remote areas, to improve data collection which can assist in planning and policy responses.

IMPACT OF UTILITIES COSTS ON NT HOUSEHOLDS

The Importance of Utilities Expenditure

Having access to affordable utilities like electricity, gas, water and sewerage are critical to health and wellbeing and are a necessity and a basic right of people living in a modern society. Lack of access to these services can impact on people's ability to live healthy lives and fully engage in society. Utilities bills can lead to financial hardship for some households, as for a large majority, they are not a regular weekly expenditure item (generally billed quarterly) and when bills arrive, they can create a sense of "bill shock" because the bills can be large, and up until recent years in the NT, prices had risen considerably. Large periodic bills can be difficult to fit into a household budget, especially for low income households.

For most households who have a standard electricity meter, and/or a gas or water account, bills are usually "issued in arrears of the consumption taking place...[which] means there can be a significant delay in customers receiving feedback as to how much energy they are using, with no opportunity to adjust their behaviour if their usage is higher than expected" ... making it difficult to budget (Energy and Water Ombudsman NSW, 2014, p.2). In addition, it is possible for customers to forget about the extent of their electricity or water consumption earlier in a year where there may have been extremes of hot or cold, by the time their bill arrives (Energy and Water Ombudsman NSW, 2014, p.2).

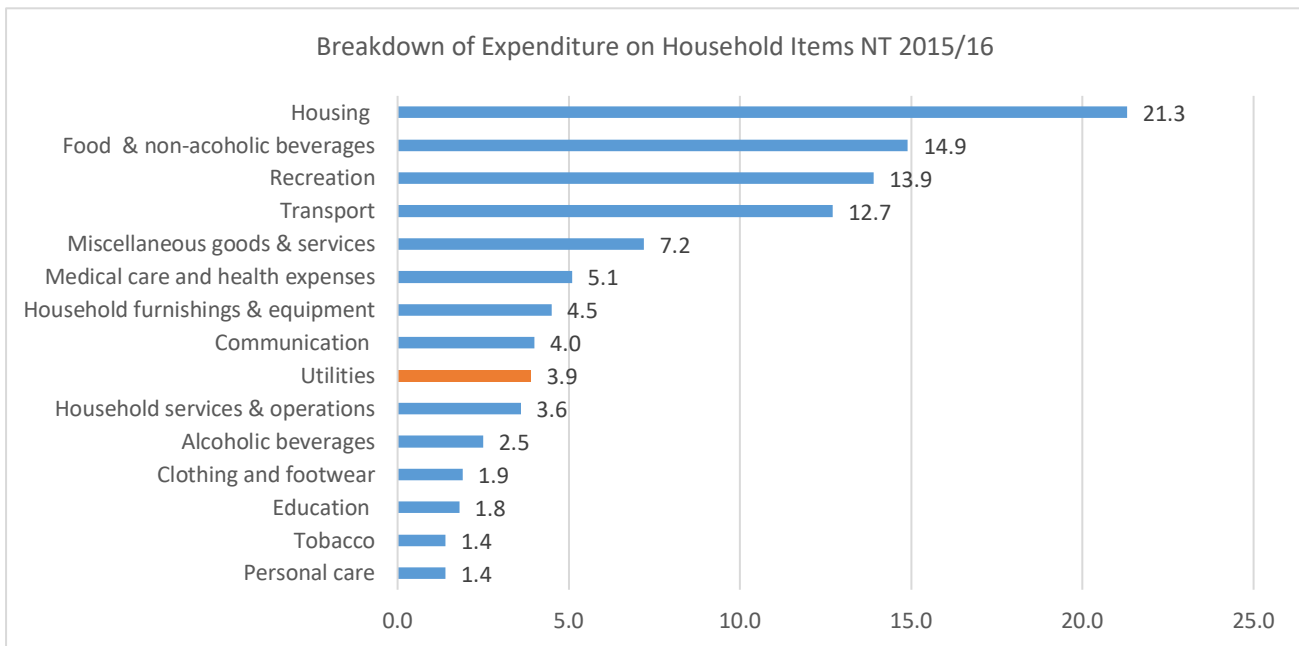
Additionally, there are many households in the Northern Territory – in remote areas, Town Camps, and for some urban public housing tenants, who use a prepayment electricity system – for whom expenditure on electricity can be a weekly item (or sometimes even more frequent) given the need to continually top up, to try to maintain a constant supply of electricity. The lack of a continuous electricity supply can impact on a large number of vital household activities – such as heating and cooling a house, storing food, cooking food, bathing, washing clothes, charging electrical equipment such as mobile phones and computers – which, for example, can impact on the ability of students to complete study requirements, or for household members to communicate with the outside world.

The most recent ABS Household Expenditure Survey (HES) released in 2017 demonstrates the relative importance of each household expenditure area (reflected in proportion of total household expenditure). Expenditure on 'Utilities' for NT households constitutes 3.9% of total household expenditure, on average (see Figure 1). While this may not seem a very large proportion of expenditure – it is only marginally below the expenditure on 'Communication' which is considered a very significant expenditure area, given increasing reliance on mobile phones and other communication technology.

It is also interesting to note that figures on indicators of household stress, show that regardless of the number of indicators a household experiences (zero, one, two three or four or more), household expenditure on "Electricity' and 'Gas, heating oil and wood' is almost identical at around \$40 per week, with the number of indicators of financial stress rising as incomes get smaller. What this suggests is that financial stress caused by energy bills is not due to over use or wasteful use, but is quite clearly related to a lack of income. The issues of price, expenditure patterns and income levels and the interactions between them all need to be examined to determine the most appropriate policy responses required.

Household Expenditure Survey (HES) Figures for Utilities in the NT

Figure 1 All Expenditure groups as a Proportion of Total Household Expenditure (%) in the NT,



ABS 2017a, Table 13.9A

Note: Calculation of utilities expenditure for these figure combines the domestic fuel and power figure (electricity, gas, heating oil and wood) and 'Water and sewerage rates and charges' (which sit within housing expenditure).

A significant limitation of HES data is that "households in collection districts defined as very remote or Indigenous communities" are excluded (ABS 2017, Summary). Across the Australian population these exclusions have only a minor impact on aggregate estimates, but in the NT "such households account for about 22% of the population" excluding a very significant proportion of the NT population. With incomes in remote communities on average very low and the price of items like food more expensive, it means NT wide HES data does not represent affordability issues for remote areas. [NTCOSS](#) urges the Federal Government to commit more resources to the HES data collection process to cover very remote areas.

Table 1: Average Household Utilities Expenditure (HES) 2015/16 States & Territories

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aust
Electricity	\$30.55	\$27.34	\$31.51	\$31.18	\$27.63	\$36.82	\$44.72	\$25.20	\$29.81
Gas, heating oil & wood	\$8.29	\$17.82	\$2.60	\$12.38	\$12.11	\$5.49	\$2.41	\$21.26	\$10.39
Water & Sewerage	\$12.77	\$16.56	\$10.27	\$16.83	\$16.52	\$11.30	\$17.40	\$15.22	\$13.99
Total	\$51.61	\$61.72	\$44.38	\$60.39	\$56.26	\$53.61	\$64.53	\$61.68	\$54.19
Electricity and Gas combined	\$38.84	\$45.16	\$34.11	\$45.36	\$39.74	\$42.31	\$47.13	\$46.46	\$40.20

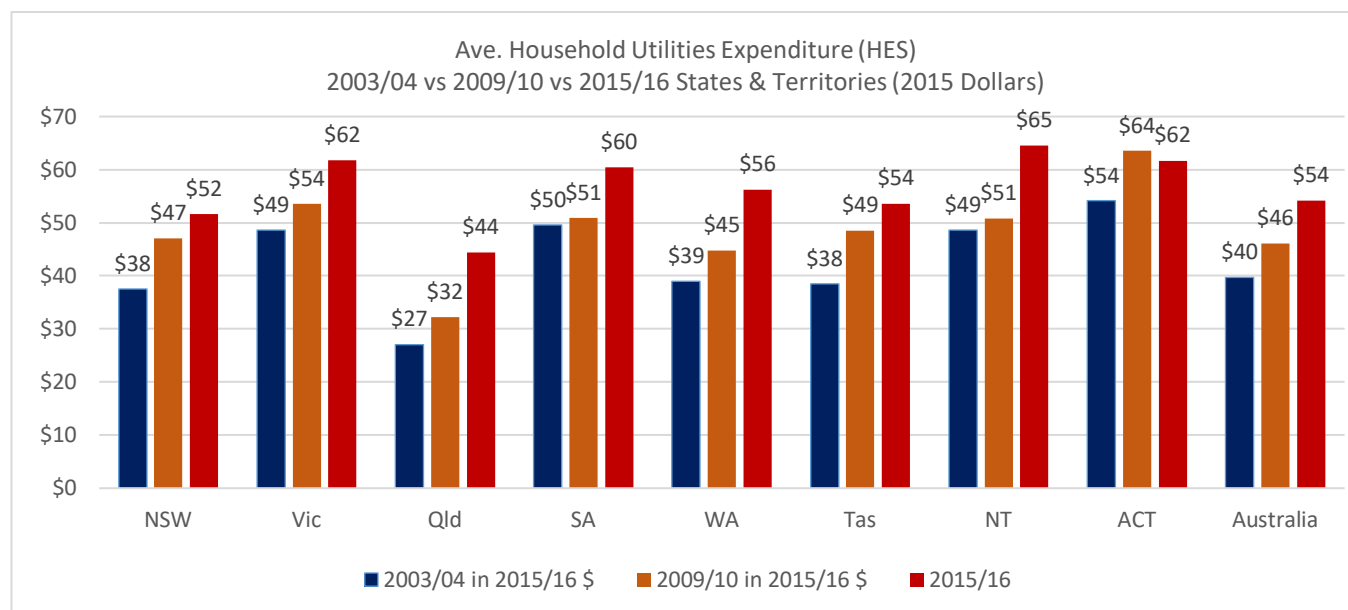
ABS 2017a, Table 13.9A (Note: The Domestic fuel and power' figure combines Electricity with Gas, heating oil & wood).

Table 1 shows average currently weekly expenditure on utilities in the NT, compared with the other jurisdictions. Households in some jurisdictions are more reliant on gas than in others (e.g. ACT and Victoria especially), so combined 'Electricity and 'Gas, heating, oil and wood' figures are also used in this comparison to reflect total energy costs for households to enable meaningful comparisons between all of the states and territories.

Note: HES data allows for an expenditure comparison between jurisdictions, but not a price comparison

Table 1 above shows that NT households on average spend a greater amount on utilities per week than all other states/territories, and significantly above the national average (over \$500 per year more, ABS 2017, 13.8)). Between the two most recent HES periods 'Utilities' expenditure increased in all jurisdictions, but particularly in the NT, with the increased expenditure moving the NT from the having the equal third highest expenditure in 2009/10, to having the highest expenditure by 2015/16.

Figure 2: Average Weekly Household Expenditure on All Utilities over the last three HES Periods, 2003/04, 2009/10 and 2015/16 – expressed in 2015/16 Dollars



ABS 2006, Table 5; ABS 2011 Table 27A; ABS 2017a, Table 13.9A; ABS 2019b.

Table 2: Percentage Change in Ave. Weekly Household Utilities Expenditure b/w 2009/10 vs 2015/16 States & Territories – with 2009/10 figures expressed in 2015/16 Dollars

Period	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Dec 2009 - Dec 2015	9.8%	15.3%	37.3%	18.7%	22.9%	10.4%	27.2%	-2.9%	-4.0%

ABS 2011 Table 27A; ABS 2017a, Table 13.9A; ABS 2019b.

The NT saw the second greatest percentage increase in expenditure between the last two HES periods in real terms (i.e. comparing 2009/10 figures expressed as 2015/16 dollars), and has the highest actual expenditure on utilities in the country (\$10 above national average). However, due to the overall higher average disposable incomes (which are the highest in the country and around \$300 per week above the national average), as a proportion of weekly disposable household income NT households spend below the national average for 'Electricity' and 'Gas'; on par with the national average for 'Water and sewerage'; and below the national average for 'Utilities' overall (ABS 2017, Table 13.8).

Table 3: Weekly Utilities Expenditure as % of Mean Disposable Income, State & Territories 2015/16

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Electricity & Gas*	2.1%	2.7%	2.1%	3.0%	2.2%	3.2%	2.3%	2.4%	2.4%
Water & Sewerage	0.7%	1.0%	0.6%	1.1%	0.9%	0.9%	0.8%	0.8%	0.8%
	2.8%	3.7%	2.7%	4.1%	3.1%	4.1%	3.1%	3.2%	3.2%

ABS 2017a, Table 13.8, 13.9A.

In comparison with the other states and Territories, **in terms of proportion of disposable income**

- The NT ranks 4th lowest in expenditure on 'Electricity' and 'Gas, heating oil and wood'.
- The NT ranks equal 3rd lowest in expenditure on 'Water and sewerage rates and charges'.
- The NT ranks equal 3rd lowest expenditure on 'Utilities' overall.

How do Darwin HES figures compare with the overall NT figures?

Reference throughout this report will be to NT wide HES figures, rather than Darwin HES figures, however it is interesting to note that average weekly expenditure on utilities is slightly higher in Darwin (\$67.02 vs NT wide average of \$64.53). In addition, expenditure as a proportion of weekly household disposable income is slightly higher in Darwin (3.3% vs 3.1% for the NT) (ABS 2017a, Tables 13.2, 13.3A).

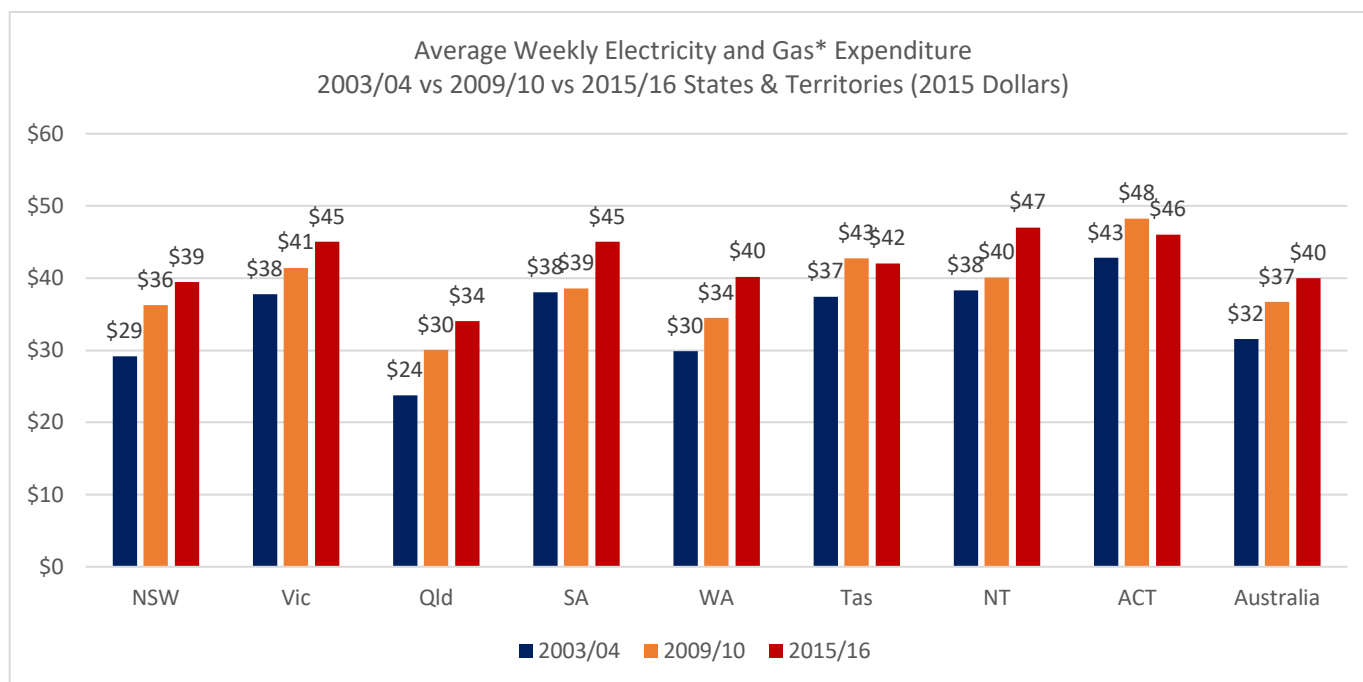
Household Utilities Expenditure Excluding Water & Sewerage Expenditure – i.e. 'Electricity', and 'Gas'*

It is important to note that many renter households (which includes a large proportion of the lower income groups in the NT) do not pay for their water and sewerage (though some may receive an excess water bill), which means that the actual average bill paid by households that do pay for water and sewerage will be higher than the HES averages. It is therefore useful to look at combined expenditure on 'Electricity' and 'Gas' only, to get a picture of patterns of expenditure for rental households.

As Figure 3 below shows, for the NT in real terms, expenditure on 'Electricity' and 'Gas' remained essentially the same between 2003/04 and 2009/10 (increasing from \$38.28 to \$40.08 per week), but there was a significant jump in expenditure between the 2009/10 and 2015/16 HES periods (to \$47.13 per week). The increase in the NT was a much greater increase than seen anywhere else in the country, with the national average expenditure increasing from \$36.68 to \$40.20, less than half of the increase in the NT. This rise in expenditure in the NT can be explained by several price increases between Sept 2009 and March 2014. (e.g. 10.6% increase in the Sept 2012 quarter and 17.7% increase in the March 2013 quarter). (See Figure 4 and Table 6 below).

Note: The reference to Gas also includes 'heating oil & wood' which are all very small expenditure items – and so for ease of reference, the term 'Gas' is primarily used in this report.

Figure 3: Average Weekly Household Expenditure on Electricity and Gas* over the last three HES Periods, 2003/04, 2009/10 and 2015/16 – expressed in 2015/16 Dollars



ABS 2006, Table 5, ABS 2011, Table 27A; ABS 2017a, Table 13.9A.
 *Gas figures refer to Gas, heating oil and wood’.

Further analysis by NTCOSS, however, reveals that this increase in expenditure on ‘Electricity’ would have been even greater over this period, had the figure for ‘Electricity’ expenditure followed the CPI for ‘Electricity’ (for Darwin¹, which also reflects prices changes across the NT). Converting the average household expenditure figure for ‘Electricity’ in the 2015/16 HES (\$33.15) and using the Darwin CPI figure for ‘Electricity’ shows that this figure of \$33.15 would have been **\$48.28 in 2015/16 dollars**, but the actual figure in the **2015/16 HES is only \$44.72**. NTCOSS believes this could reflect the increase in rooftop solar PV installations during this period, as well as some reductions in consumption, contributing to keeping average expenditure down.

In relation to the ‘Gas’ figures from the 2009/10 HES, the figure of \$.1.72 for ‘Gas’ would have been \$1.88 in 2015/16 had it followed the CPI for ‘Gas’ for Darwin, but the figure in the 2015/16 HES is in fact higher \$2.41 – however, the amount of expenditure on gas is so low it is fairly inconsequential to the overall combined ‘Electricity’ and ‘Gas’ figure.

Increase in Rooftop Solar PV contributing to keeping average household electricity expenditure down

An increasing number of households in the NT have installed rooftop PV solar panels over the past couple of decades which means there are an increasing proportion of households with significantly reduced or even zero expenditure on electricity – and this will have had an impact on average figures in the HES data. Around 18.1% of Territory households currently have rooftop solar, as at October 2019 (Climate Council (2019. p. v). This equates to around 17,530 households with rooftop solar (out of approximately 96,850 households in the NT) (Climate Council 2019, p. 12).

¹ See Explanatory Notes 3

Given the HES figures above represent averages for all households (those with and without solar), it means that the average expenditure for households without solar will be even higher than the above figures. (NTCOSS however, is not aware of NT specific data on the savings from rooftop PV solar to do further calculations).

Table 5 below shows the 2015/16 NT and national figures converted to express approximate current expenditure, indexed using Darwin CPI categories for 'Electricity', 'Gas and other household fuels' and 'Water and sewerage', which correspond directly with HES categories and provide an accurate approximation of price changes for the whole of the NT (given the standard prices across the NT for electricity and water and sewerage across the NT).

These calculations indicate that average household expenditure should have decreased since 2015/16, due to the CPI decreases, providing some cost of living relief for a number of households.

Table 5: Utilities Expenditure, NT households 2015/16 and Sept 2019 (HES figures indexed to CPI)

	Northern Territory		Australia	
	2015/16 Ave. Weekly Expend	Sep 2019 Estimated Ave. Weekly Expend	2015/16 Ave. Weekly Expend	Sep 2019 Estimated Ave. Weekly Expend
Electricity	\$44.72	\$43.20	\$29.81	\$34.67
Gas, heating oil & wood	\$2.41	\$2.40	\$10.39	\$11.73
Water & Sewerage	\$17.40	\$17.93	\$13.99	\$14.69
Utilities Total	\$64.53	\$63.53	\$54.19	\$61.09

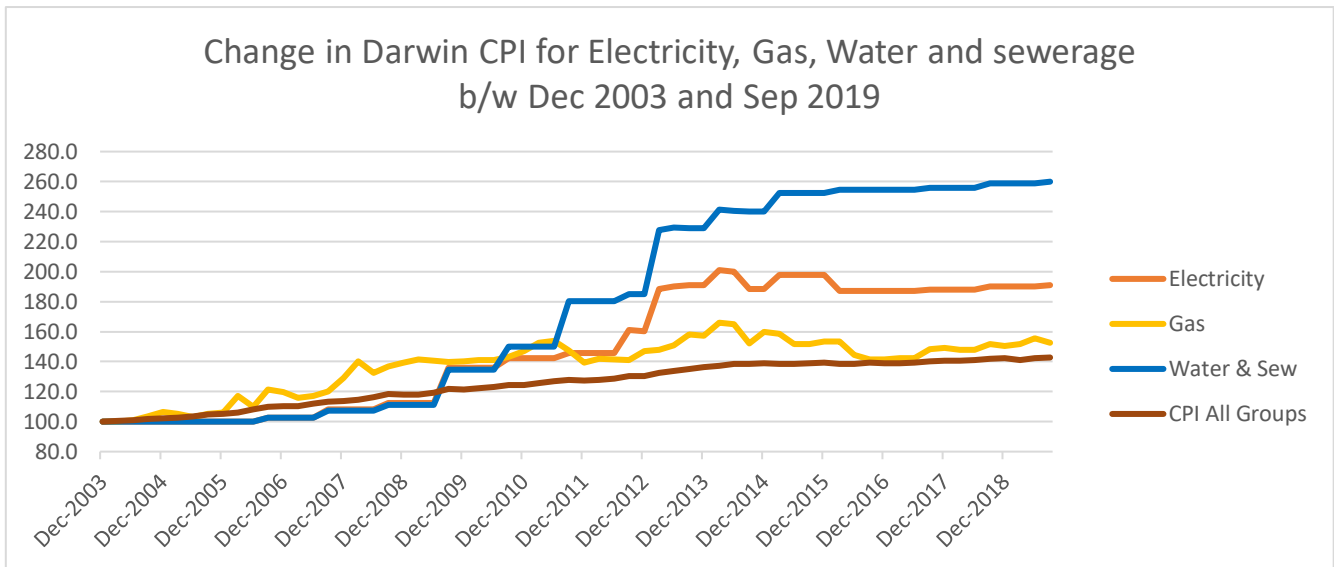
*ABS 2017a Table 27A; ABS 2019a Data 4,6. See also Explanatory Note 3.
Average Weekly Expenditure derived from 2015/16 HES data indexed to 2019 CPI.*

As SACOSS (2012, p.11) have pointed out, the indexing of HES data with CPI changes is based on an assumption that patterns of consumption have remain unchanged, however they also point out that "Demand for essential services is fairly inelastic, meaning the expenditure figures for domestic fuel and water are probably a reasonable estimate".

CPI Figures for Utilities in Darwin Over Time

The following graph shows the rate of change in the CPI for Darwin for 'Electricity', 'Gas and other household fuels' as well as 'Water and sewerage', for the period of the last three HES's.

Figure 4: CPI Darwin for Electricity, Gas*, Water and sewerage, between Dec 2003 and Sep 2019



ABS 2019a, Data 4,5. Note Gas refers to 'Gas and other household fuels'.

Price Changes Over the Longer Term

When examining the figures over the longer term, as per Figure 4, it is clear that **utilities price rises will have impacted greatly on household budgets** over the longer term with the rise in CPI for "Electricity" more than double the rise in the 'All Groups' CPI for Darwin since 2003, while CPI for 'Water and sewerage' has risen almost four times the rate of the All Groups CPI over this period. CPI for 'Gas and other household fuels' rose a little bit higher than the Darwin 'All Groups' CPI. Overall movement for each of the utilities since 2003/04 is summarised in Table 6 below (and corresponds with the HES timeframes).

Table 6: CPI Movement for Darwin for individual utilities for various periods since 2003/04

	Electricity		Gas & other household fuels		Water & sewerage		CPI All Groups	
	Darwin	Aust	Darwin	Aust	Darwin	Aust	Darwin	Aust
Dec 2003 - Dec 2009	35.8%	46.0%	40.0%	45.2%	34.4%	58.0%	21.5%	18.7%
Dec 2009 - Dec 2015	45.6%	50.7%	9.4%	46.5%	87.7%	42.7%	14.8%	15.3%
Dec 2015 - Sep 2019	-3.4%	16.3%	-0.6%	17.2%	3.0%	5.0%	2.3%	6.8%
Dec 2003 - Sep 2019	91.1%	155.9%	52.5%	149.3%	159.9%	136.8%	42.7%	46.1%

ABS 2019a, Data 4, 5, 6.

Recent Decreases in CPI for ‘Electricity’ and ‘Gas and other household fuels’

Since the last HES, there have been decreases in CPI for Darwin for ‘Electricity’ (-3.4%), and ‘Gas and other household fuels’ (- 0.6%), both against the upward trend nationally, and well below the increase in the ‘All Groups’ CPI for Darwin, which indicates there would have been some recent cost of living relief. CPI for ‘Water & sewerage’ increased (5.0%) at a rate just above the ‘All Groups’ CPI, but below the national increase for ‘Water & sewerage’.

Recent decreases in CPI for Electricity and Gas further helping to keep average utilities expenditure down since Dec 2015.

Some households in the NT may have higher electricity bills - despite the CPI decrease in ‘Electricity’ - and may perceive that electricity charges have actual risen. Increased bills may be due to a rise in consumption (possibly brought about by the searing summer temperatures in recent times), or by the cap on electricity concessions for those households whose previous consumption levels meant they received a concession greater than the new cap amount.

CPI for ‘Utilities’: Examining Changes over the Past Decade

It is useful to look at the NT in the national context over the past decade. The recent decreases in CPI for ‘Electricity’ and ‘Gas and other household fuels’ in Darwin just described, have contributed to the CPI for both of these **rising at the second lowest rate in the country** over the past decade and well under their respective national increases.

On the other hand, over the past ten years the CPI for ‘Water & sewerage’ for Darwin has had the **highest rise in the country** (93%), and almost double the national rise (50%); despite the slower growth in CPI in Darwin for ‘Water and sewerage’ in recent years. The change in CPI for ‘Water and sewerage’ has more of a direct impact on higher income households, who are more likely to be homeowners or landlords, though increases in CPI may influence rental price reviews.

Table 7: Summary of CPI Movement for the Last Ten Years – All States and Territories

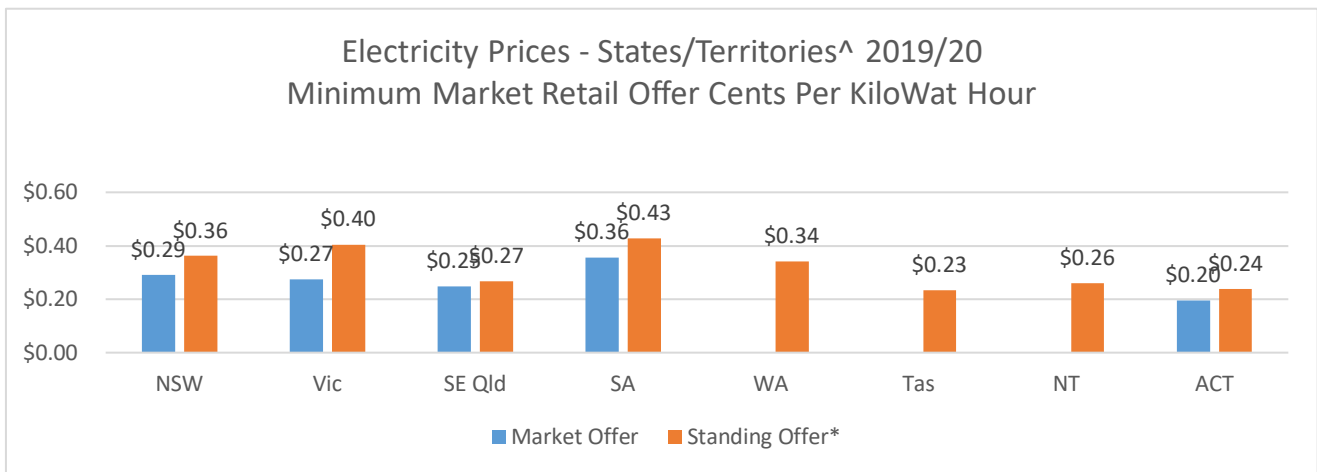
Sept 2009 - Sept 2019	Syd	Melb	Bris	Adel	Perth	Hob	Darw	Canb	Australia
Electricity	68%	95%	64%	99%	81%	40%	41%	49%	77%
Gas	50%	93%	50%	72%	78%	29%	30%	74%	75%
Water & Sewerage	19%	58%	78%	51%	77%	48%	93%	29%	50%

ABS 2019a Data 1-6. Note: Gas refers to ‘Gas and other household fuels’

National Comparison of Electricity and Water Prices

Electricity charges for households in the NT are quite low to moderate compared with other states and Territories, many of who offer both a Market rate and a Standing Offer rate, with the NT having the 4th lowest kilowatt per hour charge available in the country (\$0.26 per kWh), and not too much different from the lowest in the country (\$0.23 kWh in Tasmania), and well below the highest market offer rate in the country of \$0.36 per kWh (SA), (AEMC 2018b). It is very important to note that residential electricity prices in the NT are set by the Northern Territory Government, which subsidises electricity prices so that the prices paid by consumers are less than the cost of supply (AEMC 2018a, p.1). See also discussion on p. 31, regarding the NT Government’s Community Services Obligation (CSO) allocations.

Figure 5: Electricity Prices States* and Territories^ 2019/20

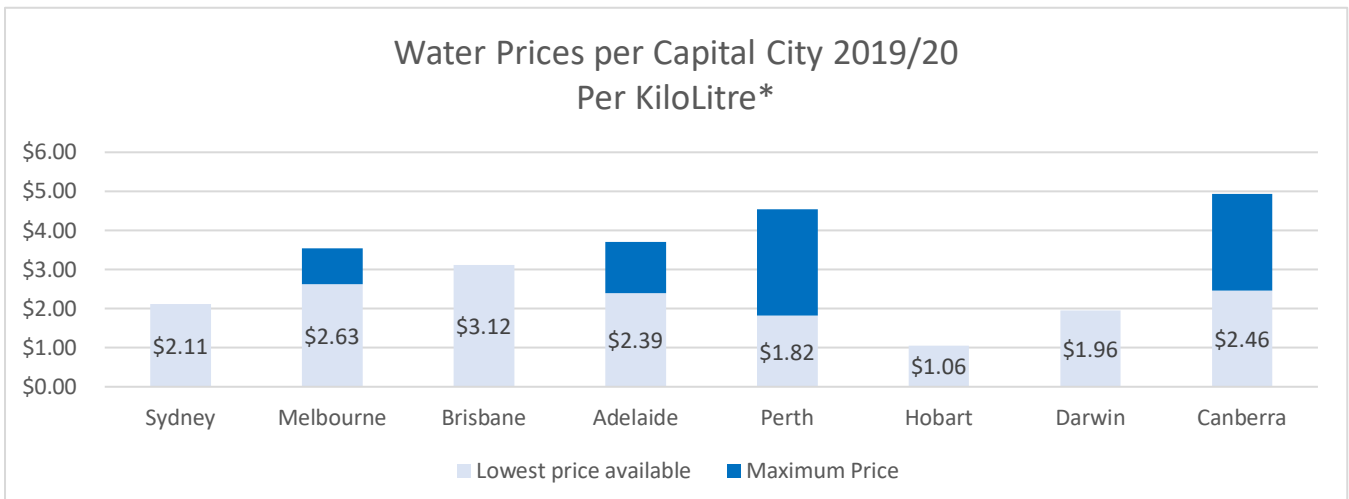


AEMC 2018b, (*The AEMC reports on figures for South East Queensland rather than the whole state).

^Note: The prices noted here are specific to the 'representative consumer' and do not reflect the pricing outcomes for all residential consumers. The representative consumer and their consumption level is different for each jurisdiction and the price levels should not be directly compared between regions. For further information, Table A.1 in the AEMC report sets out the consumption levels applied.

Figure 6 below reflects capital city prices, but given that Darwin has the same price for water for the rest of the NT, the charges for households for water in the NT are quite low to moderate compared to prices in other jurisdictions. Darwin has the 3rd lowest KiloLitre charge available (\$1.96) out of all capital cities.

Figure 6: Water Capital Cities, 2019/20

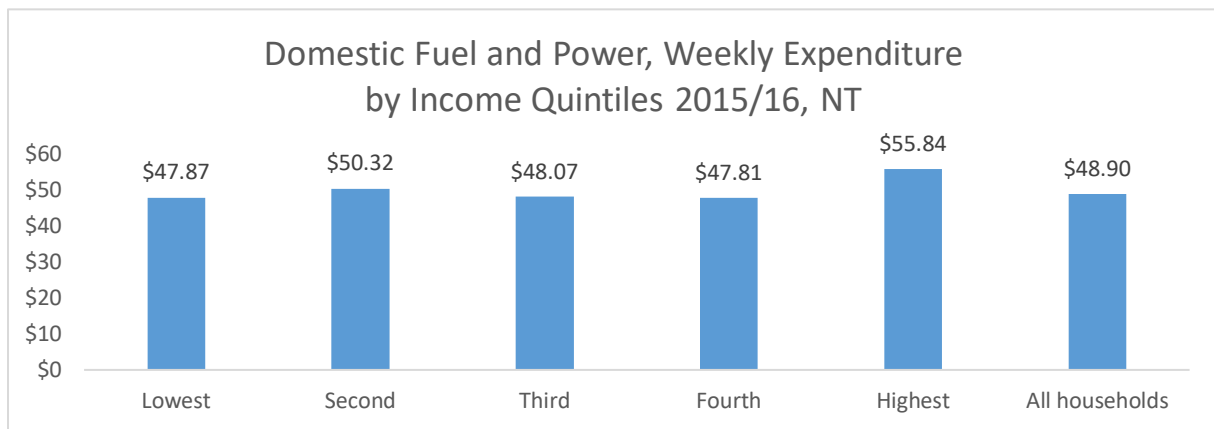


Team Poly Water Solutions for Life, 2019.

Low Income Households

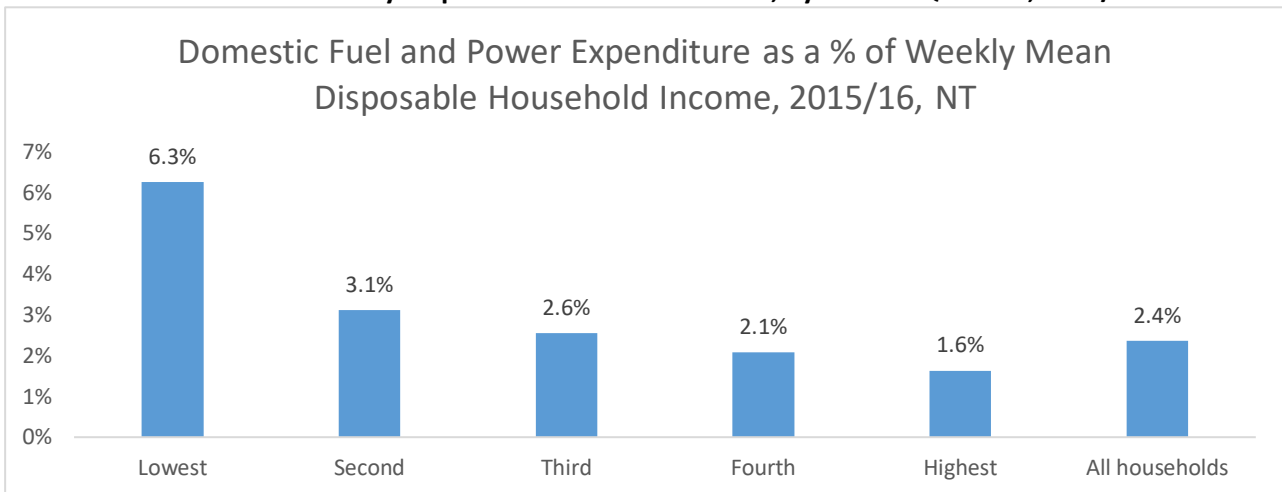
While the overall average figures for NT may appear to bring positive news - averages can actually mask what is happening for particular population groups. The following figures show household expenditure on 'Domestic Fuel and Power' for different household income levels – to allow an examination of spending patterns by income level. *The generic term 'Domestic fuel and power' refers to 'Electricity', 'Gas, heating, oil and wood' for both selected dwellings and other properties, and doesn't have disaggregated data for 'Electricity', and 'Gas' for selected dwellings only. This means that the NT average figure here of \$48.90 is slightly higher than the \$47.13 NT average for 'Electricity' and 'Gas', used elsewhere in this report (as this the \$48.90 figure includes 'other properties'), and also means the 2.4% NT average figure here is slightly higher than the 2.3% figure referred to elsewhere in this report..*

Figure 7a: NT, Weekly Expenditure: Domestic Fuel and Power by Income Quintiles, 2015/16



ABS 2017a, Table 20.1.

Figure 7b: Weekly Expenditure on Domestic Fuel and Power as % of Mean Weekly Disposable Household Income, by Income Quintiles, 2015/16



ABS 2017a, Table 20.1, 20.2.

While the **lowest income households** in the NT **spend the least amount** of money on 'Domestic fuel and power' each week, **they spend a much greater proportion of their income** (6.3%) than the NT 'all households' average (2.4%) and a higher proportion than each of the other income groups, including nearly four times the proportion of income used by the highest income households (1.6%). (ABS 2017a).

Specific Households Types facing ‘Energy Stress’

The following figures highlight utilities expenditure, as well as expenditure as a proportion of weekly mean disposable household income for different household types – and the data also reflects the generic figures for ‘Domestic fuel and power’ as per the previous section.

Table 8: Specific Household Types Paying More than the NT Average on Domestic Fuel and Power

	Dependent children only, youngest child aged under 5	Dependent children only, youngest child aged 5 to 14	Couple family with dependent children Total (b)	One parent family with dependent children	Couple only Reference person aged 65 and over	Couple family with non-dependent children only	Other one family households Total(c)	Lone Person Aged under 35	Lone Person Aged 65 and over	All households
Domestic fuel and power	\$59.56	\$55.91	\$58.72	*\$51.40	\$36.95	\$71.24	\$52.77	\$33.05	*\$14.93	\$48.90
% of Mean Weekly Disposable Household Income	2.8%	2.5%	2.6%	2.7%	2.7%	3.0%	2.6%	3.4%	3.2%	2.4%
Mean Weekly Disposable Household Income	\$2,131	\$2,275	\$2,220	\$1,918	*\$1,366	*\$2,348	\$2,033	\$983	\$464	\$2,073

ABS 2017a, Table 20.7, 20.8.

*estimate has a relative standard error of 25% to 50% and should be used with caution.

Lone Person Households paying above the NT Average on ‘Domestic fuel and power’ as % of income

- For lone person households for persons 65+ in the NT, the average mean disposable income was only \$464 in 2015/16 – that’s \$153 below the national average figure of \$617 (ABS 2017a);
- These households are spending 3.2% of their weekly income on “Domestic fuel and power” (‘Electricity’, ‘Gas’ etc) – well above the all household average for the NT of 2.4%.
- Expenditure is also higher than the national average for this household type, (ABS 2017a).
- It must also be noted that these household types have much lower housing costs, \$79 per week compared with \$259.18 for the average lone person household – which will ease some financial pressure. Many lone person households would have paid off their home mortgage which frees up income for expenditure in other areas (ABS 2017a).
- The extremely low income, however, is of concern and warrants further exploration.

For lone person households for persons under 35+ in the NT

- These households are spending 3.4% of their weekly income on ‘Domestic fuel and power’ well above the all household average for the NT of 2.4%, and is the highest proportion of income expended by any household type in the NT (ABS 2017a)

Other Households Paying Above the NT Average on 'Domestic fuel and power' as a % of Income

Couple family with dependent children in the NT

- Couples with dependent children only, with a youngest child aged under 5 are spending 2.5%; and couples with dependent children only, with a youngest child aged 5 to 14 are spending 2.6% of their weekly income on 'Domestic fuel and power'.

One parent family with dependent children

- These households are spending 2.7% of their weekly income on 'Domestic fuel and power'.

Couple only Reference person aged 65 and over

- These households are spending 2.7% of their weekly income on 'Domestic fuel and power'.

Public Housing Renters (National Figures – see Table in Appendix B)

- These households are spending 4.6% of their weekly income on 'Domestic fuel and power'.

(ABS 2017a)

It is also interesting to look at national income quintile figures related to indicators of household stress, which show that around 14% of people in both the lowest and second lowest income quintiles could not pay either their "gas, electricity or telephone bill on time" (in the previous 12-month period). (ABS 2017a, Table 11.1).

The need for the electricity concessions for households on lower incomes are underlined by these figures. While a number of these above groups would be eligible for the concessions, others will not meet the current eligibility criteria – e.g. sole parents with dependent children, or couples with dependent children who are on low incomes (see also section on Utilities and Concessions, p. 24ff).

Issues for Households using Prepaid Meters: A snap shot from Alice Springs Town Camps

A large number of households across the Northern Territory have pre-payment electricity meters installed at their residences. These take the form of the fairly recently rolled out 'Urban e-token meters' and 'Remote e-token smart meters'; and the 'Ampy wide and narrow mouth meters' but wide mouth meters are currently being phased out (Power and Water 2019b).

Using a Remote E-Token Smart Meter

Householders with a remote e-token smart meter must provide their Power and Water meter ID number to participating retail stores to purchase electricity credit which then goes will go straight to the meter. This can only be done during office hours. Outside office hours, customers can purchase credit over the phone through Power and Water – as long as the individual has a debit card with Visa or Mastercard (Power and Water 2019b).

The system ensures that power will not be disconnected over weekends or public holidays, or overnight². In the instance of a household using more power than it has credit for, the meter will stay connected, and it will go into debit. The power will subsequently turn off on the first working day after a weekend or public holiday, meaning households have to pay the debit amount and additional credit in order for their electricity to go back on (Power and Water 2019b).

Jacana provides data to the Utilities Commission (cited in Tangentyere Council Aboriginal Corporation 2019a, p. 15) about the number of pre-paid meters, self-disconnects and the average duration of these disconnects. 'Self-disconnection' refers to "an interruption to the supply of energy because a prepayment meter system has no credit (including emergency credit) available. (AEMC 2019, p.111).

NTCOSS prefers to use the term **involuntary 'self-disconnection'** to emphasise that the household has not chosen to cease their electricity supply voluntarily, and that this is different to 'self-rationing', for example if someone chooses not to top up their electricity if they are going away.

Urban e-token meter: This meter is able to be programmed as either a prepayment meter, where you purchase credit in advance as you need it, or as an account meter, where your retailer will send you an invoice for the power you have used (Power and Water 2019b).

With the Remote e-token smart meter – no power card is required, instead households use the 3G network to send credit straight to the meter. It works a bit like a prepaid mobile phone. Customers buy credit from a retailer who sends the electricity credit directly to the meter. E-token meters are only available in selected areas (Power and Water 2019b).

Ampy wide and narrow mouth meters: Power is credited to the meter by a single-use card token. which is a magnetic strip card that comes in denominations of \$5, \$10, \$20, and \$50. These meters have \$8 emergency credit which can be used when a power card runs out, but if used, is subsequently deducted from the credit on the next power card to be inserted into the meter. The current wide mouth ampy prepayment meters are no longer being manufactured so replacing them with new meters of the same make is no longer possible (Power and Water 2019b).

² Power will be available overnight if you have any amount of credit (or emergency credit). The system has a non-disconnect period during which time meters cannot be disconnected if the balance drops below -\$8. The non-disconnect period is from: 2pm to 10am during weekdays; 24 hours on Saturday and Sunday for some sites*; 24 hours on public holidays for some sites*

Involuntary 'Self-disconnect' Data by Regional Location in the NT 2018/19

Involuntary 'self-disconnect' data by regional location for July 2018 to June 2019 financial year reveals the following:

- 2374 Territory households had prepayment meters - being located in Town Camps/urban public housing or NGO managed/owned housing
- Of these 2374 dwellings, 1480 (62%) had at least one **involuntary 'self-disconnection' event**
- The average duration for each disconnection event was 462 minutes (7.7 hours)
- In Alice Springs the figure was as high as 74%, and in Darwin 72%, while in Tennant Creek it was 62% and Katherine 50% (Jacana 2019, cited in Tangentyere Council Aboriginal Corporation, 2019a, p.15).

Smart Meters: Impact on Cost of Living – Feedback from Alice Springs Town Camp Residents

With the change from the analog system (Ampy wide and narrow mouth meters) to the smart meter system on Alice Springs Town Camps, a number of things have been impacted:

- With the previous system, anyone in the household (or outside of the household) could purchase a prepaid power token to contribute towards household electricity.
- With the shift to the smart meter system, households are provided with two cards with their customer ID number on it. NTCOSS has been informed anecdotally that there is a reluctance amongst lead tenants to share the card around, in case it gets lost, which then limits who can purchase additional credit for that household.
- While an ID can be provided without actually having the card in person, this is not as straightforward as the previous system which made it easy for anyone to purchase more prepaid electricity, by simply purchasing a power card from a retail outlet.
- Some concerns have been raised in relation to "friendly credit", whereby if credit runs out after 2pm and before 10 am, "friendly credit" kicks in automatically. Feedback from Town Camp residents suggests that the preference would be to be able to select "emergency credit" instead, as it provides a trigger to go and buy more credit (and is the same option people have between the hours of 10 am – 2 pm if they run out of electricity).
- *Some of these concerns are also echoed in feedback from organisations in the Top End regarding limited top up options and households accumulating debts due to friendly and emergency credit.*
- The number of involuntary 'self-disconnections' is a significant concern. The above figures do not detail the actual number of occasions that each of the 1480 households had a self-disconnection. It could well be that many households have experienced multiple disconnections.
- In addition, involuntary 'self-disconnections' are not just inconvenient, they are also costly, e.g.
- The lack of a continuous electricity supply can impact on a large number of vital household activities – such as heating and cooling a house, storing food, cooking food, washing clothes, and charging electrical equipment such as mobile phones and computers;
- Given the average duration of involuntary 'self-disconnections' in NT urban areas for Smart Meter households is 7.7 hours, which will mean refrigerated food would go off in this time (particularly in the summer heat) and have to be discarded and replaced at further cost to the household (or people may have to go without). Either way, it further entrenches poverty and disadvantage and contributes to ill-health and associated costs in the long term.

A related matter is that many remote and town camp households experience low incomes, meaning the reality is that not every household can afford a fridge, or those that do, may have to rely on cheaper (second hand) whitegoods which have low energy efficiency ratings and are more expensive to run and would add to household electricity costs.

In relation to the extraordinary high rate of involuntary 'self-disconnections' just highlighted, NTCOSS believes that research is required to determine the proportion of these households with smart meters who received concessions, and those that don't – and that this be done for both urban and remote smart meter households. Such data will be important in further building a knowledge base around whether electricity concessions are acting as a buffer for those households who use smart meters and do receive concessions; and further information regarding the situation for those that do not receive the concession. This may require some further resourcing to relevant community agencies to conduct such research.

Climate Change and Keeping Houses Cool: Experiences from Alice Springs Town Camps

In its submission to the Senate Inquiry into Newstart and related payments, Tangentyere Council Aboriginal Corporation (Tangentyere Council Aboriginal Corporation, 2019) cited the following:

“The Bureau of Meteorology reports that between July 2018 and June 2019, Alice Springs had a total of 129 days over 35°C and 55 days over 40°C”.

During this period Tangentyere Town Camp housing performed badly with respect to internal temperatures, with some residents reporting “the failure of evaporative air-conditioners.” (Tangentyere Council Aboriginal Corporation 2019, p. 15)

Tangentyere however believe that “it is likely that the basis for the poor climatic performance of Town Camp (and other remote) housing is more complex than the failure of evaporative air-conditioners. It is likely that evaporative air-conditioners have been functioning but that they are insufficient to cool houses to optimal internal temperatures with such extreme weather conditioners prevailing.

Hennessy et al (2004), in a consultancy report for the Northern Territory Department of Infrastructure, Planning and Environment, using data from the Bureau of Meteorology and computer modelling, made predictions about temperature rises across 11 locations in the Northern Territory – with the predictions for 2030 shown here below.

Figures from the Bureau of Meteorology (cited in Tangentyere Council Aboriginal Corporation 2019, p.15) show that in Alice Springs, for example, the number of days over 35°C (129 days) and 40°C (55 days) in the 2018-19 financial year, have already surpassed the 2004 Hennessy et al predictions. This is cause for major concern, and warrants some decisive action.

Table 9: Extreme Temperature Projections for the Northern Territory – for 2030 (Base Year 2004)

	Days over 35°C		Days over 40°C	
	2004	2030	2004	2030
Darwin	10.5	11.7-61.7	0.0	0.0
Goulbourn Island	7.7	8.5-43.4	0.0	0.0
Elcho Island	11.8	12.5-47.1	0.0	0.0
Oenpelli	123.8	128.2-196.3	1.6	1.7-11.1
Laramah	146.9	153.5-213.8	12.0	14.6-46.9
Brunette Downs	153.2	159.8-204.8	36.0	41.0-81.2
Tennant Creek	126.7	132.8-174.2	19.5	24.1-60.6
Rabbit Flat	154.6	161.9-194.2	50.7	57.8-93.4
Jervois	112.7	116.4-143.6	36.5	40.5-65.5
Curtain Springs	102.3	106.7-133.5	28.2	31.5-56.8
Alice Springs	90.0	95.9-125.2	16.9	20.9-43.2

Figures taken from Hennessy et al 2004, p. 34-35.

While the NT has a substantial and effective concession program available for households who meet eligibility criteria – outlined in the next section below - many low-income households still miss out. People on remote communities are particularly vulnerable - where temperatures can be the harshest and where access to other means of cooling (e.g. swimming pools) may be very limited. In addition, people in urban settings, such as Town Camps, where not all housing has been built to a standard to manage the changing climatic conditions, people may be very vulnerable.

Climate warming presents a significant challenge for the NT Government and for all Territorians and is an issue that is not going to go away. It is imperative that measures be put in place to ensure affordable reliable energy is accessible to all NT households, particularly those with low incomes in hot conditions, where the thermal efficiency of housing may be inadequate. Further initiatives need to be considered as a matter of urgency – such as ways to improve thermal efficiency and housing infrastructure, and access to effective and energy efficient appliances, as well as further development of solar energy options for low-income households both in remote and urban areas. All such measures will to help reduce cost of living pressures and produce positive outcomes for the environment.

Utilities and Concessions

“Energy concessions are delivered to address access to energy for people on low-incomes, people relying on medical equipment and people who have additional energy needs due to thermo regulatory illness” and are “a significant arm of the consumer protections in Australia’s domestic energy markets” (ACOSS 2014).

Some people in the NT can access the Commonwealth Utilities Allowance, which is a small quarterly Centrelink payment made available to a narrow pool of recipients and is \$608 per year currently. Those eligible for this allowance are recipients of Widow Allowance and Partner Allowance who are under Age Pension age, and Disability Support Pension recipients who are aged under 21 years without children. As few people in the NT would receive this concession, the main focus is on the NT concessions.

The NT Government through its NT Concession Scheme (formerly the NT Pensioner and Carer Concession Scheme (NTPCCS)), provides electricity, water (both now capped at \$1200 and \$800 per annum respectively) and sewerage concessions to a large number of Territory households. The scheme covers permanent residents of the NT who hold a valid concession card issued by Centrelink, or the Commonwealth Department of Veteran Affairs (in addition, some people were ‘grandfathered’ when eligibility for the scheme altered in 2018 (e.g. Carers Allowance recipients).

The NT Electricity Rebate model has two components, comprising of a flat discount (currently \$1.274 per day) taken off the fixed daily charge, as well as a discount off the variable component (\$0.091 per kW/h of usage). The rebate model for water is structured in the same way with a flat discount (\$0.960 per day) taken off the fixed daily charge, and a discount taken off the variable component (\$0.955 per kL of usage). Both discounts are increased at the same time as the annual increase in the regulated residential energy price. In addition, there is a flat discount taken off the fixed daily sewerage charge as well (\$1.332 per day).

While the NT Government (specifically Territory Families) has traditionally reviewed electricity, water and sewerage concessions annually when Power and Water Corporation and Jacana advise of tariff rate changes (generally implemented on January 1 of each year) it is important to analyse over time whether the increases in the concessions are actually keeping up with the rising prices in dollar terms for recipient households. Given that there are two components to both the charges and concessions for electricity (standard meter) and water, a simple comparison of the percentage change in charges and concessions by doesn’t reflect how the concessions are actually working for customers (see Table 10) – but household scenario examples can show how the concessions are working in practice – as outlined in Scenarios 1 and 2 below.

With the sewerage charges, it is straight-forward, as there is only a fixed daily charge, and examining this over the past five years shows this increased by 7.7%, while the rise in the concession has not quite kept up, rising 5.5%.

The percentage changes for charges and concessions over the last five years are shown in Table 10 here for standard electricity meters, water and sewerage.

Table 10: Comparison of utilities charges and NT concessions over time, Standard Electricity Meters

		Utilities Charges			Utilities Concessions		
		As at Sep 2014	As at Sep 2019	% change b/w 2014-2019	As at Sep 2014	As at Sep 2019	% change b/w 2014-2019
Electricity	Fixed Daily Charge	\$0.5048	\$0.5136	1.7%	\$1.255	\$1.274	1.5%
	Per kWh	\$0.2560	\$0.2605	1.8%	\$0.084	\$0.091	8.3%
Water	Fixed Daily Charge	\$0.7586	\$0.8190	8.0%	\$0.9310	\$0.960	10.3%
	Per kL	\$1.8165	\$1.9613	9.0%	\$0.9030	\$0.955	5.8%
Sewerage	Fixed Daily Charge	\$2.096219	\$2.257104	7.7%	\$1.262	\$1.332	5.5%

Power and Water Corporation 2019a, p.2-3; NT Government 2019a.

The percentage changes for charges and concessions over the last five years for prepayment electricity meters are shown in Table 11. Given that electricity concessions for these households have gone up substantially over the past five years and the per kWh charge has dropped, no separate calculations are required beyond this to show that the concessions have been effective in keeping up with price changes.

Table 11: Comparison of electricity charges and NT concessions over time, Pre-payment Meters

		Electricity Charges			Electricity Concessions		
		As at Sep 2014	As at Sep 2019	% change b/w 2014-2019	As at Sep 2014	As at Sep 2019	% change b/w 2014-2019
Electricity	I Per kWh includes Fixed Daily Charge	\$0.2968	\$0.2864	-3.5%	\$840 per year	\$1140 per year	8.3%

Power and Water Corporation 2019a, p.3; NT Government 2019a

Every household's consumption rate and therefore utilities bill are going to be different, so in order to demonstrate the actual difference made by the concessions for standard meters, two scenarios of electricity and water consumption are used here, comparing 2014 and 2019 tariff and concession levels. One example used is designed to reflect costs for a 'lower income' single person household scenario (in Alice Springs). The second example used is designed to reflect costs for a 'lower income' two person household scenario (in Alice Springs).

Both scenarios examine how much more (or less) out of pocket NT Concession Scheme recipients are, comparing the actual charges paid between 2014 and 2019 (based on the same consumption levels). In addition, 2014 figures are also converted into 2019 dollars to provide a comparison in real terms.

Scenario 1 – One-person household

Table 12a: Increase in Total Utilities Charges & NT Utilities Concessions Sep 2014-Sep 2019

Based on 1-person household consuming 4015kWh electricity and 253 kL water w/o rooftop solar

	Sept 2014 Charges	Sept 2019 Charges	2014 Concessions received	2019 Concessions received	2014 Bill payable after concessions		2019 Bill payable after concessions
					2014\$	2019\$	
Electricity	\$1212.09	\$1233.37	\$795.34	\$830.38	\$416.75	\$452.00	\$402.99
Water	\$736.46	\$795.14	\$568.27	\$592.02	\$168.19	\$182.41	\$203.13
Sewerage	\$765.12	\$823.84	\$460.63	\$468.18	\$304.49	\$330.24	\$337.66
Total	\$2713.67	\$2852.36	\$1824.24	\$1908.58	\$889.44	\$964.47	\$943.79
Change	Up \$138.68		Up \$84.34		Up \$54.35 [Down \$21 in real terms]		

Power and Water Corporation 2019a, p.2-3; NT Government 2019

Scenario 1a - Single person household receiving concessions; paying for electricity only

e.g. rental household (yearly consumption 4015kWh)

As at September 2019, these household will be paying

- \$13.76 per year less on their electricity bill compared to five years ago

When the figures are compared in real terms (i.e. Sept 2014 figures converted to 2019 \$), it shows

These households will be paying

- \$49 per year less in real terms on their electricity bill compared to 5 years ago

For these households the electricity concession is therefore keeping up with rising electricity costs

Scenario 1b - Single person household receiving concessions; paying for electricity, water and sewerage

e.g. homeowners (yearly electricity consumption 4015kWh; water consumption 253kL)

As at September 2019, these households will be paying

- \$54.35 more overall on their total utilities bill, compared to 5 years ago, comprising of
- \$13.76 less on their electricity bill
- \$34.94 more on their water bill
- \$33.17 more on their sewerage bill

When the figures are compared in real terms (i.e. Sept 2014 figures converted to 2019 \$[^]), it shows these households will be paying

- **\$21 less overall in real terms on their total utilities bill, compared to 5 years ago comprising of**
- \$49 less in real terms on their electricity bill
- \$21 more in real terms on their water bill
- \$7 more in real terms on their sewerage bill

[^]Sept 2014 figures converted to Sept 2019 dollars using the CPI Inflation Calculator – see Appendix A.

For these households, while there have been minor increases overall in water and sewerage costs over the five-year period, the utilities concessions overall are keeping up with rising costs.

It is also important to note that incomes have also risen in this time. For a homeowner on a single pension, with no additional income, their income is \$42.70 per week (\$2226 per year) higher than it was five years ago. This additional income will have assisted in meeting any additional utilities costs.

Scenario 2 – Two-person household

Table 12b: Increase in Total Utilities Charges & NT Utilities Concessions Sep 2014-Sep 2019

Based on 2-person household consuming 8395 kWh electricity and 340 kL water w/o rooftop solar

	Sept 2014 Charges	Sept 2019 Charges	2014 Concessions received	2019 Concessions received	2014 Bill payable after concessions		2019 Bill payable after concessions
					2014 \$	2019\$	
Electricity	\$2333.37	\$2374.36	\$1163.26	\$1200	\$1170.12	\$1269.09	\$1174.36
Water	\$894.50	\$965.78	\$646.84	\$675.10	\$247.66	\$268.60	\$290.68
Sewerage	\$765.12	\$823.84	\$460.63	\$468.18	\$304.49	\$330.24	\$337.66
Total	\$3992.99	\$4163.98	\$2270.72	\$2361.28	\$1722.27	\$1867.95	\$1802.70
Change	Up \$170.99		Up \$90.56		Up \$80.43 [Down \$65 in real terms]		

Power and Water Corporation 2019a, p.2-3; NT Government 2019.

Scenario 2a

Household paying for electricity only – e.g., rental household (yearly consumption 8395kWh)

A two-person household (with concessions)

- \$4.24 per year more on their electricity bill compared to 5 years ago

When the figures are compared in real terms (Sept 2019 \$), it shows

A two-person household (with concessions) will be paying

- \$94.73 per year less than they were 5 years ago

For these households, the electricity concession is therefore keeping up with rising electricity costs

Scenario 2b Household paying for all electricity water and sewerage (e.g. homeowners) (yearly electricity consumption 8395kWh; water consumption 340kL)

A two-person household (with concessions)

- \$80.43 more overall on their total utilities bill, compared to 5 years ago, comprising of
- \$4.24 more on their electricity bill
- \$43.02 more on their water bill
- \$33.17 more on their sewerage bill

When the figures are compared in real terms (i.e. Sept 2014 figures converted to 2019 \$^), it shows these households will be paying

- **\$65 less overall in real terms on their total utilities bill**, compared to 5 years ago, comprising of
- \$94.73 less in real terms on their electricity bill
- \$22.08 more in real terms on their water bill
- \$7.42 more in real terms on their sewerage bill

^Sept 2014 figures converted to Sept 2019 dollars using the CPI Inflation Calculator – see Appendix A.

For these households, while there have been minor increases overall in water and sewerage costs over the five-year period, the utilities concessions overall are keeping up with rising costs.

It is also important to note that incomes have also risen in this time. For two-person homeowner household both on aged pensions, with no additional income, their income is \$62.80 per week (\$3274 per year) higher than it was five years ago. This additional income will have assisted in meeting any additional utilities costs.

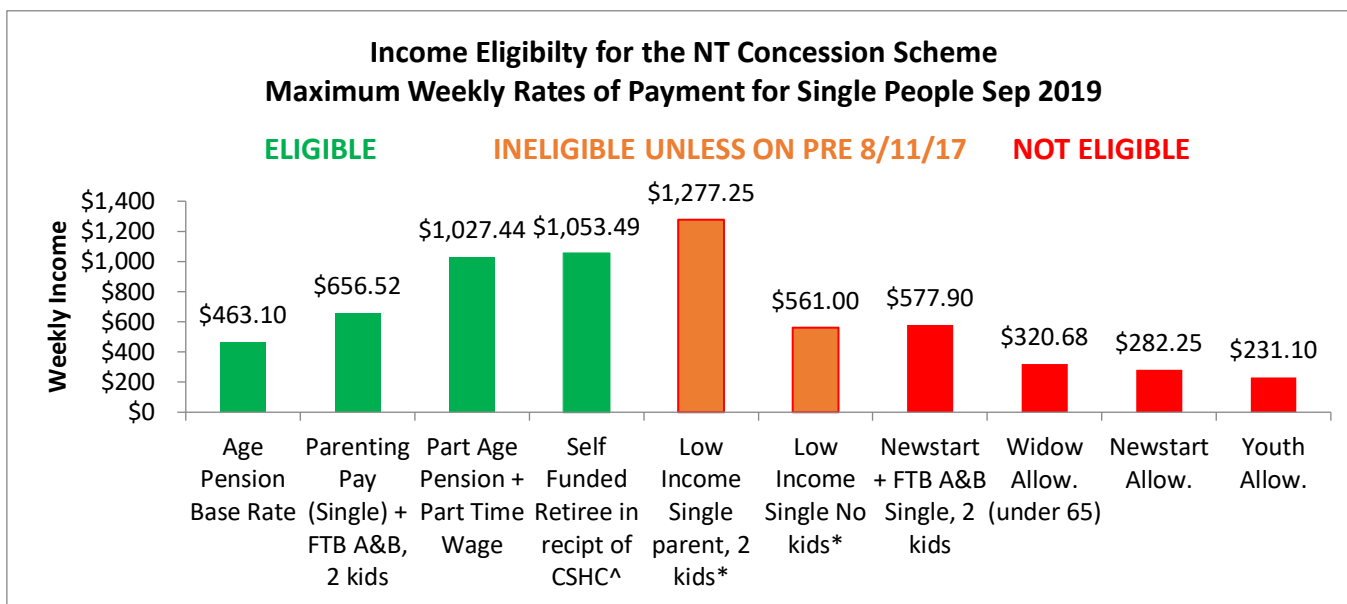
Who is missing out on Electricity Concessions?

While NTCOSS' analysis of how concessions are working provides some positive news for current NT Concession Scheme recipients, NTCOSS is very concerned that some vulnerable households are missing out on concessions.

Due to tight eligibility criteria, there are many low-income Territorians who are not eligible for utilities concessions. With the change to eligibility to the NT Concession Scheme (effective 17 November 2017), new applicants from groups previously eligible for the NT Pensioner and Carers Concession Scheme (NTPCSS) are no longer eligible for the NT Concession Scheme – e.g. Low-Income Health Care Card Holders and recipients of Carer Allowance. Existing members of the NTPCSS from these groups who were already on as at 17 November 2017, however, remained on the scheme - i.e. they were 'grandfathered' into the then new NT Concession Scheme.

The following figure shows the maximum income level for both eligible and ineligible groups, as well as groups who have been grandfathered in the NT Concession Scheme.

Figure 8: Eligibility and Ineligibility for the NT Concession Scheme – by Payment/Income level



Centrelink 2019, p. 2, 5, 12, 13, 25, 28, 29, 33-34, 40-41; Fair Work Commission 2019; Noel Whittaker 2019.

^CHSC refers to Commonwealth Seniors Health Care Card.

*Regarding the income level for a Low-Income Single Parent with two children – this is the **maximum income allowable** for someone to qualify for a Low-Income Health Care Card with Centrelink (and includes Family Tax Benefit Payments in this income figure). It is important to note that **not all single working parents would be earning at this level.**

Income levels for Carer Allowance recipients are not included in the figure above, as overall incomes for people receiving a Carer Allowance can vary greatly. Carers Allowance is an amount of \$129.80 per fortnight (Centrelink 2019, p.19), which is not means tested, meaning people earning a substantial income can receive this allowance but may not actually require the assistance of concessions.

There may however, be people on low incomes who receive Carer Allowance for caring for a person with disability (where the level of care required is not sufficient to warrant a Carer Payment) and now do not meet the NT Concessions eligibility criteria. People in these circumstances could really benefit from utilities concessions which are worth up to \$1200 per year for electricity for a renter household (\$1140 for households using prepaid electricity), and up to \$2468.18 for a homeowner paying for electricity, water and sewerage.

It is telling that someone on an Age Pension³ (single rate) can earn up to \$1027 per week (Centrelink 2019, p.35) and a self-funded retiree who earns up to \$1067 per week (Australian Government, 2019), which enables eligibility for the Commonwealth Seniors Health Card (and therefore NT Concessions, **yet a single person on Newstart receiving \$282.25.20 per week, does not qualify to receive vital support with their cost of living.** This represents an inequitable approach to utilities concessions and needs to be addressed as a matter of priority. In addition, we know from previous NTCOSS Cost of Living reports that the rate of Newstart often does not keep up with overall cost of living increases (NTCOSS 2019a, p. 12).

In addition, people who qualify for the NT Seniors Recognition Scheme, have access to an additional \$500 per year – which, if not spent on travel, can go towards electricity or water and sewerage bills. Some of these households may also qualify for the Commonwealth Utilities Allowance through Centrelink.

Given the high costs of living in the NT, particularly remote NT, it is imperative that concessions reach all those who are eligible. It is a real concern that utilities costs lead to further living cost pressures for people who can least afford it, and who are often receiving smaller incomes than people who are eligible for the NT Concession Scheme, with the Newstart payment approximately \$180 per week lower than the pension rate currently.

NTCOSS therefore again calls for electricity concessions to be extended to all Centrelink Health Care Card holders, and other low-income groups currently missing out. In making this recommendation, NTCOSS believes that this would very much fit with the structure of the NT Concession Scheme as a means-tested scheme “to provide assistance and support with the cost of living” (NT Government 2019) and it would bring the NT into line with all the other states and the ACT, where, at the very least electricity concessions are made available to all Health Care Card holders

In addition, NTCOSS recommends that the NT Government invest resources into relevant agencies (Community agencies, Jacana, Government agencies) to enable research/data collection regarding the rate of access to electricity vouchers (emergency relief) for groups who are ineligible for the NT electricity concessions (e.g. Newstart, Youth Allowance recipients. This will help to build the picture of the impact on households who do not receive concessions.

³ Or someone on the Disability Support Pension, or Carer Payment (both rates are the same as the Age Pension)

Another issue of importance is that there have been concerns raised of a low uptake of concessions by prepayment meter users, as reported by McKenzie (2013, p.5), in a report done in the context of prepayment meters on Town Camps in Alice Springs. It was recommended that, “Agencies administering rebate and concession programs... undertake better marketing in Indigenous communities, and offer support to eligible residents to apply for the programs”.

In light of this last issue, there may be lessons that the NT can learn from other jurisdictions. In Victoria, Yarra Valley Water (2016) (Melbourne’s largest retail water utility) provides an outreach to Centrelink offices once a month, and engages with customers, registers people for concessions, and talks about any other concerns they may have.

While the form of an outreach service may not replicate this Victorian example, there may be mechanisms for further outreach and engagement, that could be explored for ensuring that all potentially eligible customers in remote communities and town camps are signed up for the NT Concessions and register their name and number with the relevant electricity and water and sewerage retailers. The NT Government can play a significant role in ensuring that this occurs by working with energy providers and community organisations.

NT Concession Scheme Recipients who have Photovoltaic (PV) Solar Systems

There are some NT Concession Scheme recipients who have Photovoltaic Solar (PV) systems, and participate in the renewable energy buy back scheme (the buy-back rate is at the same rate as the electricity tariff). Where this is the case, solar credits from PV Solar Systems are applied to the member’s bill before the concessions are applied. If the member’s solar panel system generates enough electricity to cover consumption and a credit is applied to the bill, no concessions will be applied to their account.

If, however, the buyback amount is greater than the combined fixed daily charges and consumption charges for the quarter, the electricity concession is applied to the difference, but is effectively capped, so that the charges incurred by the household are zero for that quarter. The concession system has the flexibility to kick in and out, depending on the consumption level for households for each particular quarter.

This issue further highlights that it could be very advantageous for both the NT Government and eligible NT Concession Scheme recipients, if there were ways to encourage Solar PV installation – and it could be to the government’s benefit to offer incentives for this to occur. Further Installations of solar PV systems would ensure that many households would have negligible or no electricity bills, and the government would make significant savings on its concessions budget – which could free up funding for other services for low-income and senior Territorians.

Improving Energy and Water Efficiency in NT will reduce demand for Government Subsidies

The current rate of concessions for electricity, water and sewerage are the highest in the country and have offered a substantial level of support over a long period of time. Without them, utilities bills would be otherwise unaffordable for many of the eligible low-income households, and the rate of disconnections would dramatically increase.

Given the current tight fiscal context in the Territory, the NT Government - as well as finding the right concessions balance for recipients, which currently *is* happening - also has to ensure that any concessions scheme is financially sustainable. Utilities concessions require a significant financial contribution by the NT Government and further initiatives that provide incentives for people to reduce their consumption need to be put in place.

In addition, the Northern Territory Government's Department of Treasury and Finance provides Community Services Obligation (CSO) "funding to the Power and Water Corporation and electricity retailers in accordance with government policy regarding the provision of services in urban areas for:

- electricity supply to households and small business customers across the Territory at uniform tariffs
- water and sewerage services to all customers at uniform tariffs" (NT Government 2019b, p.269)

This CSO contribution is currently in the order of \$92.491M for electricity and \$7,378M for water and sewerage and means that the NT Government is providing almost \$100M in the current financial year to ensure uniform tariffs ('postage stamp pricing') for electricity and water and sewerage so that all residential households pay the same rate, no matter where they live in the Territory. This means customers are not paying for the true cost of electricity and water. (Note: there is a separate rate for business customers).

In addition, the NT Government also "subsidises utilities services in remote areas through the Indigenous Essential Services (IES) grant paid by the Department of Local Government, Housing and Community Development." (NT Government 2019, p. 266). These are on top of the \$16.435M budgeted for the 2019/20 financial year by Territory Families to Jacana (\$10.254M) and the Power and Water Corporation (\$6.181M) in subsidies for the provision of electricity and water concessions respectively, to eligible households (NT Government 2019, p. 265).

In recent years, as part of the commitment to ensure affordable uniform tariffs, there have been several price drops (e.g. 'Electricity': 5.8% decrease in the Sept 2014 quarter and 5.5% decrease in the March 2016 quarter; 'Water & sewerage': 7.9% decrease in the Sept 2014 quarter, a 4.2% decrease in the June 2015 quarter, and a 5.9% decrease in the June 2016 quarter), along with some smaller increases and decreases.

It is also important to recognise that it does take more energy and water for cooling and heating houses in winter in the Northern Territory, compared with most other jurisdictions in the country – so any reductions in consumption will be a win-win for households, Government and the environment.

The current changes in climate trends (more very hot days) making affordable energy such a critical issue for health and wellbeing for all Territorians – in particular low-income households in social housing that may not provide appropriate thermal cooling appropriate to current climatic conditions - further reinforce these issues.

Providing mechanisms to enable more households (especially low-income and public housing households) to improve water and energy efficiency (such as rooftop solar – see also below) would assist people to reduce their utilities bills and could reduce the subsidies required by Government in the long term – and funds saved can be diverted to other programs and services to benefit Territorians who are in need.

The Living Water Smart (Darwin Region) program, identified that around one in six Darwin homes has an average leak of 500kL per year (Power and Water Corporation 2016e). Increasing access to information, the provision of education and workshops to enable households to take control of their energy and water usage, to reduce factors that contribute to higher living costs are all crucial.

In addition, at a broader level, in order to assist with increasing energy efficiency options for households, NTCOSS believes that there is an urgent need for the development of a comprehensive NT Energy Efficiency Strategy.

A comprehensive Energy Efficiency Strategy required for the NT

NTCOSS believes a comprehensive NT Energy Efficiency Strategy should include a number of complementary components, including the following:

1. Introduction of an Energy Ratings System, requiring mandatory disclosure of energy ratings for all dwellings in the NT. Currently only new dwellings in the NT are required to meet minimum energy efficiency standards – 5 stars for houses, 3.5 for apartments. NTCOSS believes that all dwellings (regardless of tenure type and age) should have to disclose their energy rating so prospective buyers/renters can make an informed decision, knowing the energy rating of a prospective property. *See note below regarding upgrades to housing and requirements of the National Construction Code.*
2. Plan for increase in minimum energy rating requirements for all dwellings
3. A commitment by the NT Government to ensure all social, public and community housing in the NT meets the maximum required energy ratings.
4. An Energy Efficiency Stimulus Program to support compliance with the energy ratings system This could take the form of small grants for householders and businesses to retrofit existing dwellings/premises to improve energy efficiency (similar to the previous home renovations scheme but targeted specifically to improving energy efficiency) and could be building related as well as focused on energy efficient appliances. In particular it is critical that any scheme would ensure that there are improvements to access to energy efficient appliances for lower income households (see also next section).

Such initiatives would be good for the economy, good for householders, good for the community and contribute to environmental sustainability for future generations and assist the NT Government in meeting its target of 50% renewables by 2030. In addition, such approaches would improve energy efficiency across households and reduce the level of demand for concessions by eligible households.

It is worth noting that Building Compliance Permits and Certificates of Occupancy (under the National Construction Code (NCC)) are only required for new houses and work that involves a structural upgrade. As an example, new houses and those that were rebuilt or structurally upgraded on Town Camps as part of the Strategic Indigenous Housing and Infrastructure Program (SIHIP) required Building Compliance Permits. With respect to structural upgrades, however, it is only that part of a dwelling undergoing a structural upgrade that requires a Building Compliance Permit. This means that if a bedroom is renovated it must comply with NCC requirements for insulation, ventilation and natural light, for example, however the existing un-renovated bedroom next to it does not need to be brought up to date with the standards (Tangentyere Council Aboriginal Corporation 2019b).

Note: In the Northern Territory, it is the 2009 version of Volume 2 of the NCC (Section J) that applies to housing, as at this stage the Territory has not adopted the more up to date versions (Tangentyere Council Aboriginal Corporation 2019b).

Support for strengthening the minimum energy ratings for houses also comes from COOLmob and the Arid Land Environment Centre. In a report done by De Mattia & O’Leary, they recommend that the NT Government “increase the minimum NatHERS⁴ rating for households, bringing the NT in line with the rest of Australia”. They cite a draft paper, ‘Built to Perform in Northern Australia’ which “found that on average, across different modelled residential buildings in the three Northern Australian climate zones, strengthening energy efficiency requirements under the National Construction Code could deliver between 27 and 31 percent of the energy savings required to achieve net zero energy in new residential buildings by 2030, compared with baseline data used” (De Mattia & O’Leary, 2019, p.39).

NTCOSS believes it is imperative that all housing across the NT meets with the energy efficiency requirements of the National Construction Code. De Mattia and O’Leary (2019, p. 41) argue that at the point of sale of every dwelling a mandatory audit should occur, which could include “minimum retrofit requirements of a water efficient showerhead, an efficient hot water system and ceiling insulation prior to sale”. These retrofit items could also be tied to a government funded home improvement scheme” – which would fit with the above suggestion in relation to an energy efficiency stimulus program.

With rental properties it is more challenging, as with private housing there is a natural trigger point for checking compliance with the National Construction Code, when houses are bought and sold. De Mattia and O’Leary (2019, p. 41) contend that the NT Government could consider ways to “introduce mandatory reporting on energy efficiency in rental properties”. There are precedents for this in Victoria and South Australia, who have updated their Residential Tenancies Acts “to include minimum energy efficiency standards”. One possible way to practically achieve this on the ground would be for there to be a trigger point to occur between rental tenancies.

⁴ Nationwide House Energy Rating Scheme (NatHERS)

High Number of Renter Households in the NT: Impact on Solar Uptake

Despite the increasing number of solar PV households (18.1% up 3.4% from a year earlier), at October 2019, the NT's share of electricity from renewables is still the lowest in the country at 4% though there are some encouraging signs – with “solar projects in the pipeline” which will help the NT reach the 10% renewable energy mark for the NT (Climate Council 2019, p. v).

One of the issues that the NT faces is the high number of renters in the NT, at 42% of all households, which is the highest in the country by some way. This is one factor that impacts on solar uptake, as there is very little incentive (if any) for a landlord to install solar (ABC 2018b).

In previous Cost of Living reports, NTCOSS has called for greater incentives for landlords to be able to put solar PV on rental properties

Table 13: Percentage of Renters as a proportion of all households, National Comparison

	NSW	VIC	QLD	SA	WA	TAS	ACT	ACT	AUS
Renters	30.6%	27.7%	33.3%	31.4%	28.6%	26.0%	42.0%	31.7%	30.3%

ABS 2017b, Table 13.5

Opportunity for Renewable Energy Project for Low-Income Public and Social Housing Residents

NTCOSS believes current constraints on the installation of rooftop PV solar for renter households actually create an opportunity for change. As detailed earlier, national data for public housing households shows they are the group which spends the greatest proportion of its disposable income (4.6%) on domestic fuel and power (nearly double the national average for all households of 2.4%). With the NT having an extremely high proportion of renters, there is an opportunity to make a positive difference to cost of living for a large number of households over the medium to longer term.

Many houses have poor insulation and in summer if there is no money to top up meters, houses get very hot and become health risks. NTCOSS is aware that the CSIRO is doing thermal monitoring of town camp houses in Alice Springs from July 2020, and the data gathered could be very beneficial for informing such a project and for pre-and post-monitoring of thermal efficiency once solar was installed.

Several factors would need consideration with such a project, e.g. whether pre-payment electricity meters can ‘spin backwards’ to accumulate credit if PV is feeding into the house. Consideration would also need to be given to batteries for storage – which could be a community battery at the transformer rather than single-household units. Such a project would be a wise investment of public funds and would have the support of organisations such as COOLmob and the Arid Land Environment Centre, who recommended, in their COOLmob Energy Efficiency Project, the NT Government “Investigate a model to deliver solar panels to all new and existing Departmental homes (De Mattia and O’Leary 2019, p.40).

In addition, delivery of energy efficiency training courses for Tenant Support Officers, or education and audit programs for community members are available from organisations such as COOLMob (De Mattia and O’Leary 2019, p.40) and such initiatives could further complement the above measures.

Independent Study by the Victoria Energy Policy Centre on the Impact of Renewables on Prices

A recent independent study by the Victoria Energy Policy Centre (which focused on the South Australian electricity market) developed “an econometric analysis of the South Australian data to identify how South Australia’s prices have been affected by renewables and coal generation closure” and examined a number of questions, including “Are customers better off [in terms of reducing wholesale prices] if subsidies are directed to extending the life of existing coal fired generating plants or promoting greater renewable generation? (Mountain et al 2018, p.8, 41).

The study found “renewable generation reduces wholesale prices in South Australia” and “The price reductions associated with renewable generation [wind, solar] in South Australia are more than three times the value of the subsidy associated with that renewable generation” (Mountain et al 2018, p.42).

The study also highlighted that while “Coal generation closure raised prices” these raised prices “were off-set by reductions attributable to the renewable generation that replaced it. Even leaving aside the subsidies that would have been needed to extend the life of [a] generating plant and ... coal mine, electricity consumers would have been worse off to the extent that they would be required to bear the cost of foregone emission reductions” (Mountain et al 2018, p.42).

The study concluded that there is “little doubt that in South Australia, leaving other factors unchanged, promoting renewable production rather than protecting coal generators is the route to lower wholesale and retail electricity prices” (Mountain et al 2018, p .40).

Models of Renewable Energy Projects

Several project models around the country could be considered for the NT. In NSW: Z-NET Uralla is partnering with CORENA (Citizens Own Renewable Energy Network Australia) to roll out a solar PV Landlord-Tenant project in the Uralla Shire. Renters benefits from the solar generation lowering their electricity costs with the solar installation made possible by making interest-free loans available to the property owner, who also shares in the returns (Z-NET Uralla (2019). In addition, CORENA helps broker a fair rent increase to help cover the cost of repayments (ABC 2018a). In Queensland QCOSS have partnered with the Queensland Government to roll out solar PV on a number of public housing dwellings in regional Queensland. In NSW, a Government trial across 5 regions offers a 3-kW rooftop solar system to Pension Concession or Veterans’ Affairs’ Gold Card holders who own their own home, with the residents agreeing to opt out of the Low Income Household Rebate for 10 years.

Some local councils also offer interest free loans, with mechanisms for landlords to pay back the loans through rate instalments (ABC 2018). e.g. Darebin City Council and Adelaide City Council. In another model, landlords don’t have to contribute financially, but agree for a company to install rooftop solar and then charge the tenant, either for the electricity they use, or a fixed lease repayment (ABC 2018).

In conjunction with the installation of solar for rental households, such a project would gain from having complementary measures to address energy efficiency. A lack of access to whitegoods and appliances plays a significant role in decisions people make about what food they can buy for example. Where someone does not have appropriate storage and cooking facilities, their motivations for buying fresh food are limited, and so they are more likely to purchase processed foods - and this is an issue for many low income households in the NT.

Even where households have access to the appropriate whitegoods for storage and food preparation, having access to continuous electricity is another vital issue. It is critical that measures are in place to ensure power is accessible, constant and affordable for food storage and cooking.

Opportunities must be explored to increase individual household access to energy efficient options to reduce electricity costs. There are several schemes already operating in Australia that provide examples of possible approaches the NT could emulate in terms of increasing access to energy efficient appliances.

- The NSW Government offers an **Appliance Replacement Offer**, which reduces the upfront cost to eligible customers by 40-50% when upgrading their old fridge or Television with a new energy efficient model, saving up to \$200 a year on energy bills for eligible customers.⁵
- The SA Government offers the **Retailer Energy Efficiency Scheme (REES)**, where most energy retailers in SA are “required to provide incentives for SA households and businesses to achieve energy savings to potentially lower their energy bills”.
- “Energy Audits will be made available for a number of low-income households in the "priority group", to help assess current energy use practices, compare usage to energy efficient practices and identify practical ways to be more energy efficient at home.
- Energy Efficiency Activities will be made available to South Australian households and many businesses through incentives offered by any retailer with REES targets in a particular year, for the installation of a number of pre-approved Energy Efficiency Activities. These may include activities such as the installation of efficient lighting products, low-flow showerheads and ceiling insulation” (SA Government 2019).
- The Queensland Government in the recent past offered an **Energy Efficient Appliance Rebate Scheme** for Queensland householders who purchased an eligible energy efficient appliance by June 30 2018 received rebates of up to \$300 (where customers purchased an “eligible 4-star or higher energy-rated fridge, washing machine or air conditioner” (Superfund Partners 2019).

⁵ To be eligible, a customer must: -Be a NSW resident; -Own a fridge six years old or older, and want to replace it; or -Own a plasma or cathode ray tube (CRT) television and want to replace it; -Hold one of the following valid concession cards

- Pensioner Concession Card
- Health Care Card or Low-Income Health Care Card from Centrelink
- Veterans Affairs Gold Card (NSW Government 2019)

Access to Credit for Low Income Households

The establishment of no interest loan schemes over recent decades (e.g. Good Shepherd Microfinance's NILS Scheme), has been an extremely important development providing safe, fair and affordable loans for people on low incomes. There are barriers though for some people to accessing such schemes particularly those living in remote communities.

Access to No Interest Loan Scheme (NILS) – Requirements for Applicants

For example, to apply for a NILS loan an applicant must provide:

- Photo ID;
- A three-month bank statement;
- Any loan or lease statement;
- Tenancy Reference/Agreement (proof of residence);
- Power bill (only if applicable – not needed for prepaid power);
- Quotes for items client wants to purchase.

There is also the requirement to have an interview with a staff member, which can be done at an office or over the phone, though paperwork does need to be provided prior to any phone interview.

(Anglicare 2019b)

While the NILS is available across the whole of the NT for those who are eligible, the reality it is that the process is very difficult for residents of remote communities and some residents of major centres. NTCOSS recommends a review of the scheme and the application process to enable more people in need to access the NILS scheme. This may include incentives for local Aboriginal controlled organisations to auspice the scheme in remote communities.

Concerns about Appliance Rental Schemes and Same Day Loan Schemes

Various forms of credit are available for low income households, though there are high fees, charges and penalties for not maintaining payment schedules. It does appear that remote community residents, when they visit major centres, are able to access appliance rental schemes or same day loan schemes. In short, these schemes are very costly, and may put people under enormous financial pressure.

Income Levels and Affordability in Remote NT

Another issue of significance is that the income levels of Indigenous people in remote areas are falling. This creates further barriers for these households – in terms of managing with regular cost of living expenditure as well as greatly limiting the capacity for households to take steps to improve energy efficiency in their homes. Markham and Biddle (2018, p. iii) analysed data from the last three censuses (2006, 2011 and 2016) and found a “growing divergence between the incomes of Indigenous people in urban areas and remote areas.”

While income levels for Indigenous people in urban areas have grown steadily, with the \$57 increase in real terms for median disposable equivalised household income between 2011 and 2016 positive news, very remote areas experienced a fall of \$12 per week (Markham and Biddle 2018, p. iii). They urged “Urgent policy action...to ameliorate the growing prevalence of poverty among Indigenous people in very remote Australia” (Markham and Biddle 2018, p. iii). NTCOSS has regularly highlighted that payment levels for people on income support such as Newstart are inadequate for keeping up with cost of living requirements. Research from the University of NSW (2017, cited in ACOSS 2018), showed a single person required a minimum of \$433 per week to cover basic household expenses such as “housing, food, transport etc” which is \$150 over the base rate of the Newstart Allowance.

Jacana’s Hardship Policy – Stay Connected Program

Jacana Energy’s revised ‘Hardship Policy – Stay Connected Program’ has been in operation since 1 July 2019 and feedback provided by community sector organisations to date has been generally positive. A further encouraging development has been that Jacana Energy has decided to convene quarterly meetings of NGOs that assist, work with and advocate for their customers.

In addition to this NTCOSS believes it would be beneficial for regular reporting to the community sector/wider community with regional and NT wide data about the number of payment plans, number of vouchers provided (and total value) and number of disconnections occurring each year (NTCOSS 2019c).

De Mattia and O’Leary have also recommended there be “a partnership between Jacana Energy and COOLmob whereby customers on the Stay Connected program are required to have a home energy audit to educate and empower them to reduce their consumption” (De Mattia and O’Leary, 2019, p.40).

CONCLUSION

The analysis of data related to utilities expenditure and pricing in the Northern Territory is of necessity multi-layered. The broad average figures from the Household Expenditure Survey (HES) for the NT overall and Darwin, and the CPI data for Darwin both cast a fairly positive light overall on affordability in terms of both utilities price changes and expenditure for a range of households in the NT, in recent years.

While average household expenditure in the NT for combined utilities ('Electricity', 'Water and sewerage' and 'Gas and other household fuels') is the highest in the country, due to high average mean disposable incomes, as a proportion of income the Territory expenditure rates as the equal 3rd lowest in the country (ABS 2017a).

In addition, in terms of the actual residential price of electricity, prices in the NT are in the lower range, when compared to the other states and Territories. This is due to the fact that the electricity prices are subsidised by the NT Government "so that the prices paid by consumers are less than the cost of supply." (AEMC 2018, p. 1). This means bills are significantly lower than if households were charged the true cost of their electricity. Residential water prices are also in the lower range in a comparison of capital cities, and given the NT has uniform water tariffs, we can conclude the NT water prices are also low in comparison to other jurisdictions.

In addition, over the last three years or so, the Darwin CPI for 'Electricity and 'Gas and other household fuels' have decreased, and the Darwin CPI for 'Water and sewerage' has risen moderately, compared with the several years previous. In fact, the CPI for 'Electricity' and 'Gas and other household fuels' over the last decade has risen the second slowest out of all the capital cities (and well below the national increase), though water has risen above the national increase (ABS 2019a).

The Northern Territory also has the most substantial concession system in the country (for electricity, water and sewerage, which overall are keeping up with cost of living increases that have occurred over recent years.

Despite this, it is also clear that some households are doing it tough. As the report outlines, it is important to look beyond the average figures to see how a range of household types are faring. Many low-income households in the NT facing utilities cost of living pressures which may be masked by the average figures.

The report highlights that public housing tenants (using national figures) spend the greatest proportion of weekly disposable income on 'Domestic fuel and power' ('Electricity', 'Gas, heating, oil and wood') in the country (4.6%, and nearly double what the NT household average is). With a high proportion of public housing households in the NT, it means that many Territory public households will be facing large electricity and gas bills relative to their low incomes (with public housing eligibility being means tested, it means all public housing households would have incomes at the lower end of the spectrum).

The report highlights that low-income households in the NT spend a much greater proportion of their disposable income on utilities than higher income households – including single people under 35, or over 65, one parent families with dependent children and couples with dependent children (ABS 2017a)

The narrow eligibility criteria, for concessions, however, means that many vulnerable groups are still missing out on vital support that is provided to people in similar circumstances elsewhere in the country – e.g. all Centrelink Health Care Card holders, adding to the financial strain for people on very low incomes.

The report also highlights that nearly two-thirds (62%) of all of the houses in the NT who have an urban e-smart meter experienced at least one involuntary 'self-disconnection' in the last financial year (Tangentyere 2019a).

In addition, the HES figures do not include very remote households or Indigenous communities, but given income data showing that incomes in remote areas have fallen – it can be assumed that many households in remote areas are facing electricity cost of living pressures.

With access to electricity and gas essential for storing and cooking food; bathing, washing clothes and charging electrical equipment for example – it makes it an essential expenditure area, as any interruptions to electricity supply for example can have a massive impact on a household's ability to interact with the outside world.

NTCOSS urges the Territory Government to develop further initiative to increase access to renewable energy, including solar power, to reduce power costs for lower income households and for this to include incentives for landlords. In addition, there is further scope for initiatives to assist low income households to increase access to energy efficient and reliable appliances (e.g. fridges; microwave ovens). This should include strategies to increase and improve access for residents of remote communities to no-interest loan schemes.

NTCOSS has also highlighted the need for additional research and data collection in relation to Smart Meters and households who receive electricity concessions – and those who don't meet eligibility criteria; as well data collection regarding the rate of access to electricity vouchers (emergency relief) for groups who are ineligible for the NT electricity concessions.

In addition, at a broader level, in order to assist with increasing energy efficiency options for households, NTCOSS believes that there is an urgent need for the development of a comprehensive NT Energy Efficiency Strategy. Components of such a strategy need to include an energy efficiency stimulus program, mandatory disclosure of energy ratings for all dwellings in the NT, a plan to increase the minimum energy rating requirements and a commitment to ensuring all social, public and community housing in the NT meets the maximum required energy ratings.

Whilst there are a number of positive structures in place (low pricing, substantial concessions for those who are eligible, and decreasing or low CPI in recent years) many issues require addressing at multiple levels. If we are to achieve a fair and just Northern Territory, issues of utilities' affordability for low-income Territorians must be addressed as a matter of extreme urgency.

APPENDICES

Appendix A

Table 14a: SCENARIO 1 – ONE PERSON HOUSEHOLD – used in Table 12a above
Calculations of how the concessions are working – 5 year comparison
Based on 4015 kWh per year Electricity (Standard Meter) and 253kl Water usage
(See Explanatory Notes)

	September 2014			September 2019			
	Fixed Daily Charge (365 days)	Consumption charge kWh or kL (365 days)	TOTAL 2014	Fixed Daily Charge (365 days)	Consumption charge kWh or kL (365 days)	TOTAL 2019	% Change in total b/w 2014 and 2019
Electricity Charges Standard Meter- 4015 kW p/a	365x\$0.5048 = \$184.25	4015x\$0.2560 = \$1027.84	\$1212.09	365x\$0.5136 = \$187.46	4015x\$0.2605 = \$1045.91	\$1233.37	1.8% Up \$21.28
Concession received based on 4015 kW	365x\$1.255 = \$458.08	4015x\$0.084 = \$337.26	\$795.34	365x\$1.274 = \$465.01	4015x\$0.091 = \$365.37	\$830.38	4.4% Up \$35.04
Bill Payable	(-\$273.82)	\$690.58	\$416.75 [2019\$ \$452]	(-\$277.55)	\$680.54	\$402.99 [Down \$49 in real terms]	-3.3% Down \$13.76
Water Charges – 253 kL p/a used	365x\$0.7586 = \$276.89	253x\$1.8165 = \$459.57	\$736.46	365x\$0.8190 = \$298.94	253x\$1.9613 = \$496.21	\$795.14	8% Up \$58.68
Concession received based on 253kL	365x\$0.9310 = \$339.82	253x\$0.9030 = \$228.46	\$568.27	365x\$0.960 = \$350.40	253x\$0.955 = \$241.62	\$592.02	4.2% Up \$23.75
Bill Payable	(-\$62.93)	\$231.12	\$168.19 [2019\$ \$182.41]	(-\$51.47)	\$254.59	\$203.13 [Up \$20.72 in real terms]	20.8% Up \$34.94
Sewerage Charges	365x\$2.209629 = \$765.12	N/A	\$765.12	365x\$2.257104 \$823.84	N/A	\$823.84	7.7% Up \$58.72
Concession	365x\$1.262 = \$460.63	N/A	\$460.63	365x\$1.332 = \$486.18	N/A	\$486.18	5.5% Up \$25.55
Bill Payable	\$304.49	N/A	\$304.49 [2019\$ \$330.24]	\$337.66	N/A	\$337.66 [Up \$7.42 in real terms]	10.9% Up \$33.17
Total Bill Payable		Sept 2014	\$889.44 [2019\$ \$964.47]		Sept 2019	\$943.79 [Down \$21 in real terms]	6.1% Up \$54.35

Power and Water Corporation 2014 and 2019a, Jacana 2019a; NT Government 2019; NTCOSS 2019b; Laidlaw 2015; ABS 2019b.
 Sewerage per annum if own and live on own homes - 365 days usage.

Note: The ABS CPI Inflation Calculator was used to convert total figures into 2019 dollars, shown in red.

Table 14b: SCENARIO 2 - TWO PERSON HOUSEHOLD – used in Table 12b above
Calculations of how the concessions are working – 5 year comparison
Based on 8395 kWh per year Electricity (23 kWh per day) (Standard Meter) and 340 KI Water usage
(See Explanatory Notes)

	September 2014			September 2019			
	Fixed Daily Charge (365 days)	Consumption charge kWh or kL (365 days)	TOTAL 2014	Fixed Daily Charge (365 days)	Consumption charge kWh or kL (365 days)	TOTAL 2019	% Change in total b/w 2014 and 2019
Electricity Charges Standard Meter-4015 kW p/a	365x\$0.5048 = \$184.25	8395x\$0.2560 = \$2149.12	\$2333.37	365x\$0.5136 = \$187.46	8395x\$0.2605 = \$2186.90	\$2374.36	1.8% Up \$40.99
Concession received based on 4015 kW	365x\$1.255 = \$458.08	8395x\$0.084 = \$705.18	\$1163.26	365x\$1.274 = \$465.01	8395x\$0.091 = \$763.95 [Capped at 734.99]	\$1200 capped	3.2% Up \$36.74
Bill Payable	(-\$273.82)	\$1443.94	\$1170.12 [2019\$ \$1269.09]	(-\$277.55)	\$1422.95 [Capped at 1451.91]	\$1174.36 [Down \$94.73 in real terms]	0.4% Up \$4.24
Water Charges – 253 kL p/a used	365x\$0.7586 = \$276.89	340x\$1.8165 = \$617.61	\$894.50	365x\$0.8190 = \$298.94	340x\$1.9613 = \$666.84	\$965.78	8% Up \$71.28
Concession received based on 253kL	365x\$0.9310 = \$339.82	340x\$0.9030 = \$307.02	\$646.84	365x\$0.960 = \$350.40	340x\$0.955 = \$324.70	\$675.10	4.4% Up \$28.26
Bill Payable	(-\$62.93)	\$310.59	\$247.66 [2019\$ \$268.60]	(-\$51.47)	\$342.14	\$290.68 [UP \$22.08 in real terms]	17.4% Up \$43.02
Sewerage Charges	365x\$2.209629 = \$765.12	N/A	\$765.12	365x\$2.257104 = \$823.84	N/A	\$823.84	7.7% Up \$58.72
Concession	365x\$1.262 = \$460.63	N/A	\$460.63	365x\$1.332 = \$486.18	N/A	\$486.18	5.5% Up \$25.55
Bill Payable	\$304.49	N/A	\$304.49 [2019\$ \$330.24]	\$337.66	N/A	\$337.66 [Up \$7.42 in real terms]	10.9% Up \$33.17
Total Bill Payable		Sept 2014	\$1722.27 [2019\$ \$1867.95]		Sept 2019	\$1802.70 [Down \$65.22 in real terms]	4.7% Up \$80.43

*Power and Water Corporation 2014 and 2019a, Jacana 2019a; NT Government 2019; NTCOSS 2019b; Laidlaw 2015; ABS 2019b.
Sewerage per annum if own and live on own homes - 365 days usage.*

Note: The ABS CPI Inflation Calculator was used to convert total figures into 2019 dollars, shown in red.

Appendix B: Expenditure on Domestic Fuel and Power by Housing Tenure; Financial Stress Indicators

**Table 15: Weekly Expenditure on Domestic Fuel and Power,
by Housing Tenure, 2015/16 – National Figures**

	Owner without a mortgage	Owner with a mortgage	State/territory housing authority	Private landlord	Other landlord type	Total renters	Other tenure type	All households
Domestic Fuel and Power	\$35.97	\$47.02	\$33.67	\$36.63	\$34.50	\$36.20	\$38.26	\$40.20
Weekly Mean Disposable Income	\$1,441	\$2,145	\$733	\$1,538	\$1,362	\$1,439	\$1,463	\$1,706
% of Weekly Mean Disposable Income	2.5%	2.2%	4.6%	2.4%	2.5%	2.5%	2.6%	2.4%

ABS 2017a, Table 8.1, 8.2.

**Table 16: Weekly Expenditure on Domestic Fuel and Power,
by indicators of Financial Stress, 2015/16 – National Figures**

	Number of Indicators of Financial Stress					All households
	None	One indicator	Two indicators	Three indicators	Four or more indicators	
Domestic Fuel and Power	\$39.95	\$40.54	\$41.69	\$40.98	\$40.17	\$40.20
Weekly Mean Disposable Income	1,990	1,466	1,420	1,350	1,067	1,706
% of Weekly Mean Disposable Income	2.0%	2.8%	2.9%	3.0%	3.8%	2.4%

ABS 2017a, Table 11.4, 11.5.

Appendix C: Comparison of Electricity Concessions for Prepayment Meter vs Standard Meter Households

The following table shows the value of the concessions relative to electricity charges comparing households with a prepayment meter and those with a standard meter, at different consumption levels

Table 17 Comparison of the application of concessions for Prepayment Meter and Standard Meter Households Figures based on 2019/20 Tariff Charges and Concession Rates

kWh consumption (kWh)	Prepayment Meters			Standard Meters		
	Electricity Charges \$0.2864 kWh	Concession Applicable \$1140 Flat rate	Final Annual Charges Payable	Electricity Charges \$0.5136 FDC + \$0.2605 kWh	Concession Applicable \$1.274 p/d on FDC +\$0.091 on kWh	Final Annual Charges Payable
6000	\$1718	\$1140	\$578	\$1750	\$1011	\$739
7000	\$2005	\$1140	\$865	\$2011	\$1102	\$909
7200	\$2062	\$1140	\$922	\$2063	\$1120	\$943
7383	\$2114	\$1140	\$974	\$2111	\$1137	\$974
8395	\$2404	\$1140	\$1264	\$2374	\$1200	\$1174
10,000	\$2864	\$1140	\$1724	\$2792	\$1200	\$1592

Power and Water Corporation 2014 and 2019a, Jacana 2019a; NT Government 2019.

Appendix D: Calculations used for Weekly Payment Rates – used in Figure 6 above

Table 18: Weekly Payment Rates at 19 September 2019

	BASE RATE	Other	Energy Supp	FTB A	FTB B	FTB B	Pharm Allow	TOTAL PAYMENT
Age Pension (single)	\$421.80	\$34.25 Pen Supp	\$7.05					\$463.10
Newstart (single, no children)	\$277.85		\$4.40					\$282.25
Newstart (single, 2 children)	\$300.55		\$4.75*	\$93.10 Ch u13	\$121.10 Ch 13-15	\$55.3 0	\$3.10	\$577.90
Youth Allowance (single, no children)	\$227.60		\$3.50					\$231.10
Widow Allowance (single, under 65, no children*)	\$300.55	\$12.28	\$4.75				\$3.10	\$320.68
Parenting Payment (single, 2 children)	\$388.05		\$6.00	\$93.10 Ch u5	\$93.10 Ch u5	\$79.17 Ch u5	\$3.10	\$656.52
Low Wage, Single (no children)	\$561.00							\$561.00
Low Income Wage (single, 2 children)	\$1003.00		\$4.75	\$93.10 Ch u13	\$121.10 Ch 13-15	\$55.30 Ch u13		\$1277.25
Part Age Pension Max rate of income (single, no children)	\$7.20 + \$1013.19		\$7.05					\$1027.44
Self-funded Retiree Receives CSHC* (single, no children)	\$1067.48							\$1067.48

Centrelink 2019, p. 2, 5, 12, 13, 25, 28, 29, 33-34, 40-41; Fair Work Commission, 2019; Noel Whitaker 2019.

NB: All Centrelink figures based on max payment rates where relevant.

Note: For Newstart (single) with children the Energy Supplement for FTB A and FTB is only payable to recipients who have been receiving the FTB Energy Supplement(s) continuously from 19 Sep 2016. The above calculation based on a new recipient, not eligible for the additional supplements.

Youth Allowance based on Living away from home rate.

-Widow allowance –Single, higher rate payable after getting Widow Allowance for 9 months in a row; Annual Utilities Allowance payable:

-For Single Self-Funded Retiree, annual income must be under \$54,929 for eligibility for the Commonwealth Seniors Health Card (CHSC).

Appendix E: List of Indicators of Financial Stress

- Unable to raise \$2000 in a week for something important
- Could not pay gas, electricity or telephone bill on time
- Pawned or sold something
- Sought assistance from welfare/community organisations
- Sought financial help from friends or family
- Could not afford friends or family over for a meal once a month-
- Could not afford special meal once a week
- Could only afford second hand clothes most of the time
(ABS 2017a, Table 11.1).
- Spend more money than received
- Could not pay registration or insurance on time
- Went without meals
- Unable to heat home
- Could not afford holiday for at least one week a year
- Could not afford a night out once a fortnight
- Could not afford leisure or hobby activities

EXPLANATORY NOTES

1. What is the Consumer Price Index CPI?

“The Consumer Price Index (CPI) measures quarterly changes in the price of a 'basket' of goods and services which account for a high proportion of expenditure by the CPI population group (i.e. metropolitan households). This 'basket' covers a wide range of goods and services, arranged in the following eleven groups:

- Food and non-alcoholic beverages
- Alcohol and tobacco
- Clothing and footwear
- Housing
- Furnishings, household equipment and services
- Health
- Transport
- Communication
- Recreation and culture
- Education
- Insurance and financial services.” (ABS 2019a, Explanatory Notes)

“The capital city indexes measure price movements over time in each city individually. They do not measure differences in retail price levels between cities.” (ABS 2019a, Explanatory Notes). CPI is based on the price at the time a product is acquired - e.g. changes in electricity charges

2. What is the Household Expenditure Survey (HES)?

“The Household Expenditure Survey (HES) collects detailed information about the expenditure, income and household characteristics of a sample of households resident in private dwellings throughout Australia. From 2003-04 information on household net worth is also collected. Average weekly expenditure on over 600 goods and services can be obtained from the survey and cross classified with household income, household net worth, household characteristics and broad geographical areas (state, capital city/rest of state). The general objectives for conducting the HES are to:

- identify the net levels and patterns of expenditure of Australian private households on a comprehensive range of goods and services purchased for private use;
- determine how these levels and patterns vary according to income levels and other characteristics of households, such as size and composition, location and principal sources of cash income.”

“The HES provides data that assists in measuring the economic well-being of the population and provides information on the command over economic resources of individuals and households. This enables assessment of levels of economic inequality, the effectiveness of the social support system and the mechanisms by which the system of government taxes and benefits redistributes income between different types of households.” (ABS 2019c)

The 15 HES Expenditure categories are shown in Figure 1 on page 7 of this report.

3. Conversion of Historical Household Expenditure Figures into Constant Dollars

Using the ABS CPI Inflation Calculator

The data contained in Figures 2 and 3 are calculated by using historical HES figures from the, 2003/04 and 2009/10 and 2015/16 surveys and using the ABS CPI Inflation Calculator, which enables a calculation of how much purchasing power has changed over time. The expenditure amounts from the previous HES figures (December 2003 and December 2009 as the base year) are converted into December 2015 dollars – to allow for a comparison with the most recent HES figures (2015/16) (ABS 2017a).

The ABS CPI Inflation Calculator uses data from the Australian Bureau of Statistics publication [Consumer Price Index \(Cat. no. 6401.0\)](#) for Quarterly indexes and [Consumer Price Index: Concepts, Sources and Methods \(Cat. no. 6461.0\)](#) for Annual indexes to demonstrate the change in purchasing power of an amount of money between two chosen dates. The difference shown between the user's input value and what the CPI Inflation Calculator outputs demonstrates the effect of inflation over time” (ABS 2017h).

ABS Disclaimer: The ABS has the following disclaimer about the use of the calculator

“The results produced by this Calculator are intended as guides only and should not be regarded as official Australian Bureau of Statistics (ABS) calculations. While every effort has been made by the ABS to ensure that the data and formulae used to generate the results are accurate, the ABS accepts no liability or responsibility for the resulting calculations. The ABS recommend that users exercise their own care and judgment with respect to the Calculator's use, and interpretation of its results.” (ABS 2017e).

Using the ABS CPI Darwin Figures

State/Territory CPI figures are not available through the ABS, only capital cities. Ordinarily the Darwin CPI figures would not be appropriate to apply to the whole of Northern Territory HES figures. However, given that there is essentially a standard price for electricity, water and sewerage, and the fact that gas is a very small household expenditure item in the NT – the Darwin CPI figures provide an accurate representation of what the whole of Territory CPI figure would be for these expenditure areas. Darwin CPI figures for ‘Electricity’, ‘Water and sewerage’ and ‘Gas and other household fuels’ are therefore used to convert 2015/16 HES Expenditure figures into current figures.

4. Calculations of Yearly Consumption Figures for Electricity and Water (used in Figures 14a and 14b)

NTCOSS is not aware of publicly available data that provides an average electricity and water consumption figure for households eligible for the NT Concession Scheme, but information from a range of sources was used to calculate figures that would be indicative of lower income households, to be reasonably reflective of the situation for a low income NT Concession Scheme recipient.

Electricity: The average yearly figure used for electricity for a single person household is based on the Jacana Energy figure for Alice Springs for a one-person household of 11kWh per day (= 4015 kWh per year (Jacana 2019).

Water: The average yearly figure used for water for a single person households is based on figures from the Bureau of Meteorology (Australian Government 2018), which are provided by the Power and Water Corporation, for an Alice Springs House household for 2017/18; this figure is then used in conjunction with calculations based on Water Audit information from Alice Water Smart Participants (for the years 2011-12 and 2012-13). Water use data provided at this time showed the average water consumption for a detached (unit) household to be 277 kL per year (Laidlaw 2015). At this time it represented 56.5% of the average household water bill for 2012-13 of 490. The 56.5% has therefore been applied to the latest BoM figure for Alice Springs of 448 kL per year = 253 kL.

The average yearly figure used for a two person household is based on figures from the Bureau of Meteorology for an average Alice Springs household for 2017/18; then it is multiplied by 0.79 as a 2-person household represents 0.79 of the average household size in the NT of 2.54 persons based on there being a population of 228,833 in and there being 89,959 households = 2.54 persons per household. (ABS 2017c).

Note: The actual water figures used are representative only, and not really the focus of the calculations – but is primarily being used by way of example to demonstrate the difference in the concessions received and final bill payable for NTPCCS recipients in 2014 and NT Concession Scheme recipients in 2019, but the 253kL figure should be broadly representative of a single person household who receives concessions.

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