

Your guide to energy efficiency



*How to save energy
in the Northern Territory*



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Welcome to the Northern Territory

The Northern Territory is like no other place in Australia. Its mix of tropical greenery and dry desert is unique and beautiful. The landscapes are a product of different climates, and it's these extremes in weather conditions that can have a huge impact on your energy consumption.

Have you ever been on a run in the wet season? Or perhaps a walk through Alice Springs on a hot summer's day? Even if the answer is a firm 'no way!' you can imagine how much harder your body might have to work in the extreme heat compared to a cool day down South. Just like your body, appliances have to work harder in hot climates, requiring more energy to maintain a consistent temperature. Your fridge, for example, will need to work a lot harder to keep the veggies cool when it is very hot outside.

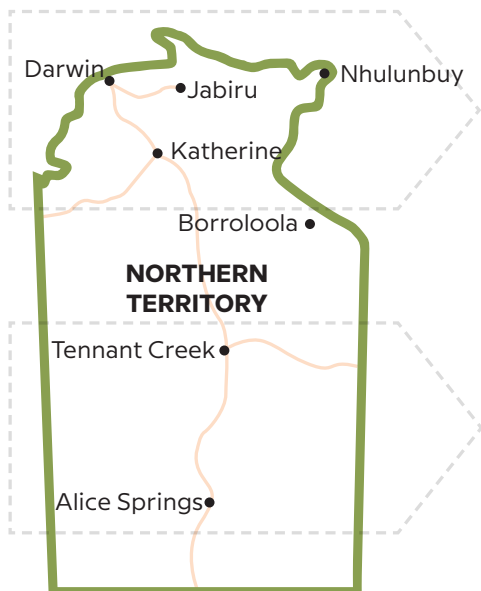
As a consequence, NT residents will often find their power bills peak over summer or the wet season. This guide is here to help you navigate your way through energy consumption in the Territory and explain how you can make big savings through small everyday changes.

The Top End

Top End weather consists of wet and dry seasons. During the wet, humidity reaches sweltering levels. This puts additional stress on our appliances at home, particularly the ones that keep us cool. From October to March, we see energy consumption peak as we use aircons more often and appliances work harder in hot conditions.

Central Australia

Like the rest of Australia, it has four seasons and can experience extremes of both hot and cold. These extremes result in appliances being used more often for both cooling and heating which leads to higher power consumption.

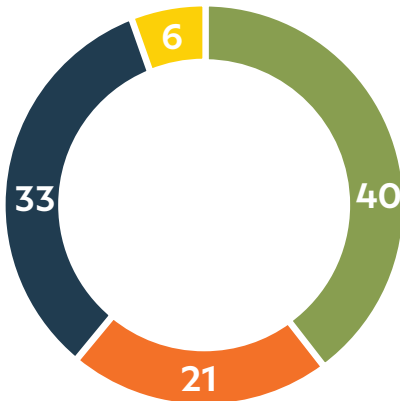


How we use energy

It's not often we're asked to reflect on our energy usage. Many Australians haven't given a thought to where the majority of energy is used around their home, but with knowledge there's power.

Here's a helpful breakdown of the energy split in the average Australian household. In extreme weather conditions, we tend to see an increase in heating and cooling which directly impacts our power bills.

Household energy use (by %)



Energy isn't used equally around your home

- Heating and cooling
- Water heating
- Appliances & equipment (inc. refrigeration, cooking and standby power)
- Lighting

Figure 1 <http://www.yourhome.gov.au/energy>

Summary

- Heating and cooling account for 40% of the average Australian household energy usage. In the NT, aircons are the biggest energy users.
- Household appliances like refrigerators, driers and dishwashers are next in line, accounting for around one-third of household energy use.
- Pool pumps can also be huge drains on power and are used regularly in the NT. Like other appliances, they need to use more power to function in the extreme heat and humidity.



Not all appliances are made equal

There are items in your home that use significantly more energy than others.

We want to help you understand how one appliance might be draining your power (and increasing your bill!).

The most common culprits:



AIRCONS

In the NT, these are the major energy drainers and can have big impacts on our bills. Aircons use energy at a rate that is based on outdoor temperature and relative humidity. They work by removing heat and humidity in the air; so the hotter and more humid the air, the harder the unit will have to work.



WASHING MACHINES AND CLOTHES DRYERS

Hot washes and half loads use lots of energy when cleaning clothes. There are many machines now available with various energy and water saving features and it is worth researching before purchasing a new one.

Clothes dryers are producing large quantities of heat to help dry your clothes quicker. This is a big drain on your consumption.





FRIDGES AND FREEZERS

Outdoor fridges are silent energy suckers. Maintaining a temperature inside an outdoor fridge is much harder in hot and humid climates and requires more energy. In the kitchen, to keep your food at the perfect temperature, the fridge compressor kicks into more intensive mode when it's near a heat source. Not only does this make your fridge work harder, it's also a waste of energy and may damage your fridge overtime. So try to keep the fridge away from the oven, dishwasher and direct sunlight if possible.



POOL PUMPS

Pool pumps are used more frequently in the Territory to help keep pools nice and clean. How long you should run the pool pump really depends on the size of your pool. Speak to your local pool shop to get tailored advice.



DISHWASHERS

These can be life-savers after a busy work day, but they can also lead to bill shock. Dishwashers with good drying performance features, for example, will use significantly more energy. Features like this are very convenient but require a lot more energy. The use of hot water can also add to the consumption; opting for a cold wash is always the better alternative.



HOT WATER SYSTEM

Who needs scorching-hot showers when it's already hot outside? During the hot months, it makes sense to reduce the temperature setting on your hot water system. You will conserve energy and save your water heater from overworking.





Energy ratings

When purchasing a new appliance it pays to do your research.

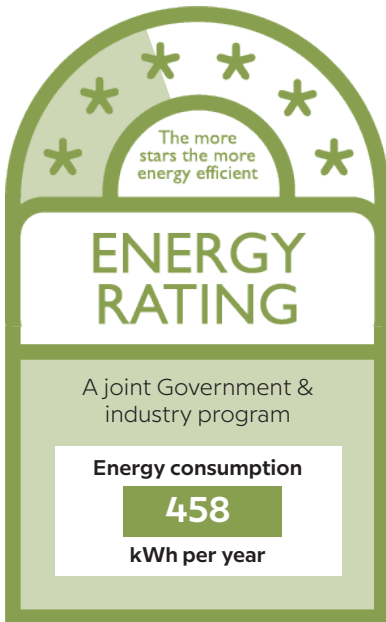
Appliances with a high star rating are more energy efficient and will help you save money in the long run.

Energy rating labels are an Australian Government standard for new appliances, making it easy for consumers to compare running costs.

When buying appliances, choose one with a high energy star rating as it will use less power and can save you money.

If you have old appliances such as aircons, dryers or fridges consider upgrading to more energy efficient, high energy star rated models.

Install energy-saving LED globes as they use approximately 1/5 the energy of a regular globe.



To see how much that new appliance is really going to cost you, head to www.energyrating.gov.au and compare appliances.



Standby power

the secret energy sponge

Standby power is the energy an appliance consumes when it is not in use; anything that is still connected to your power supply yet not being actively used. The most common items left in standby power are TVs, games consoles and wireless modems. According to the Australian Department of Industry, Innovation and Science standby power costs the average Australian \$100 per year and is responsible for 5.9% of Australia's energy consumption.*

Across the nation, this is costing Australian consumers millions of dollars a year, and results in nearly 2.6 million tonnes of carbon dioxide emissions.*

In order to help the environment and save on our bills, it is important to be aware of the huge impact standby power can have over time.

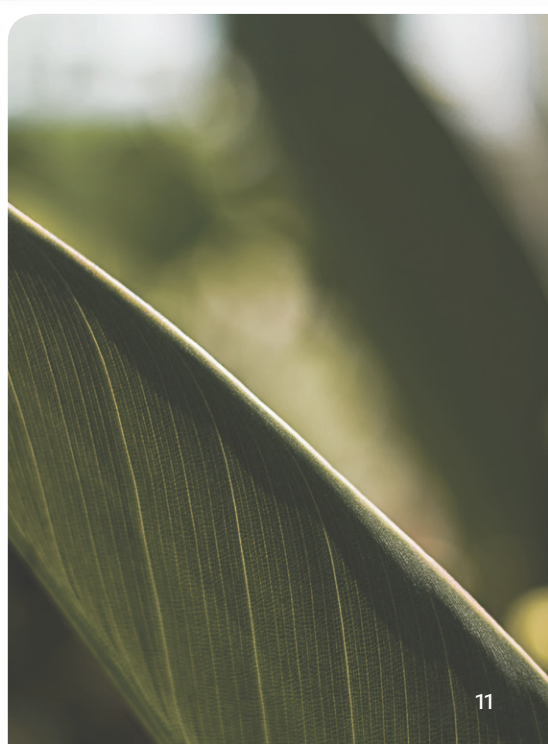
Type of appliance (Average model)	Average active standby Watts/hour	AUD/year ¹
Television LCD	2.3	\$5.25
Microwave	2.4	\$5.48
Game console	5.4	\$12.32
DVD player	1.5	\$3.42
Computer monitor	1	\$2.28
Washing machine	1-6	\$2.28-\$13.69
Clothes dryer	2.6	\$6.8
Dishwasher	3	\$0.78
Air-conditioner	2	\$4.56
Wireless modem	7-10	\$15.97-\$22.82
Laptop ²	1.6	\$3.65

¹Estimates only. Actual costs may vary.
Check jacanaenergy.com.au/tariff for the latest electricity prices.

²Off mode, plugged in.

*Source: http://www.energyrating.gov.au/sites/new.energyrating/files/documents/E3-2010-Intrusive-Survey-FINAL-Report_0.pdf.





Energy saving tips you can implement today

It's amazing how a few small changes around your home can have an impact on your electricity bill and add up to big savings over time.

We've created a simple list of tips for you to implement around the home today.

Aircons

- Set between 24°C to 27°C and use your ceiling fans at the same time.
- Keep your filters clean so your aircon works efficiently.
- Look out for any leaks caused by blockages or over-use and service the aircons regularly.
- Run your aircon on a timer to reduce how often it is used.
- Turn it off when you go out - your aircon uses less power when completely turned off, than if you leave it on all day!
- Only cool the rooms you're in and shut the doors of the rooms you're not using.

Fridges/Freezers

- Get rid of your rarely used second fridge.
- Make sure your fridge and freezer door seals are in good condition so they keep the cool air in and the hot air out.



TIP: Place a piece of paper between the fridge and the fridge door. If the seals don't hold the paper in place when the fridge door is shut, then consider replacing the seals.

- Leave some space around the back of your fridge or freezer for air to circulate.

- Keep the condenser clean to help the air flow.
- Set your fridge between 3°C TO 5°C.
- Set your freezer to -15°C to -18°C.

Dryer



TIP: The dryer is one of the most energy hungry appliances in your home. Hanging your clothes on the washing line or on a frame under a ceiling fan, could save you lots on your electricity bill.

- Don't overload your dryer as it will need more energy to dry your clothes.
- Clean the dryer lint filter after use.
- Set your dryer to 'warm' rather than 'hot'. Clothes may take longer to dry, but you'll use less energy overall.

Washing machines

- Wash your clothes on cold.
- Use an economical or shorter cycle.
- Always wash a full load.



Pool Pump



TIP: Don't overlook the contribution your pool makes to your electricity bill. Most people set their pool pump and then forget about the hours it's running for, often much longer than it needs to.

- ☐ Reduce pool running time, a few less hours a day could save you up to \$350 a year.



TIP: Check in with your local pool shop to find out what is the most efficient running time for your pool. Often 8-10 hours a day will be enough.

- ☐ Purchase a pump with a high energy star rating.
- ☐ Test your water regularly. The right chemical balance means your pump won't work as hard to keep the water clean.
- ☐ Clean the skimmer box and filters regularly.

Switch off

- ☐ Switch off non-essential items at the power point when not in use.
- ☐ Avoid having any appliances on standby.

Block out the sun

- ☐ To increase your protection against the outside heat, invest in white-backed blackout curtains for your largest windows.

Dishwashing

- ☐ Use a cold connection.
- ☐ Let the dishes air dry instead of opting for the dry cycle.
- ☐ Use the economy cycle.
- ☐ Make sure it's full before it runs.

Lighting

- ☐ Replace high bay or fluorescent lights with LEDs.
- ☐ Remove unnecessary light fittings in your home.
- ☐ Use sensors and timers, especially for your outdoor lights

Hot Water

- ☐ Set your hot water system thermostat between 60°C to 65°C.

Tips to save energy in winter – Alice Springs

- Keep your door and window seals in good condition. This will minimise cold air entering the house.
- Set your heater's between 18°C and 20°C – every degree can save up to 10% on your energy use.
- Reduce long hot showers. Hot water can account for up to 21% of your electricity bill.
- On sunny days ensure all your curtains and blinds are open.
- During the night close your blinds and curtains to stop heat from escaping.
- Dress for the weather, by layering up you will be less inclined to reach for the heater.
- Use a hot water bottle instead of the electric blanket. A hot water bottle can warm your bed up the same way, for a fraction of the price.
- Only heat the room you are using. Close off other rooms so your heating system doesn't need to work as hard.
- If you're investing in a heater, choose a reverse cycle airconditioner with heating and cooling capacity rather than small, stand-alone, heaters. These small heaters, by comparison, are inefficient and a big energy drain.



Long-term energy saving tips

Planning for future savings will have a huge impact on your power bill. Here are some changes to consider implementing over a number of years.

Insulation

Reduce your cooling costs by installing bulk and reflective insulation in your home. Ceiling insulation is particularly effective in reducing the transfer from outside heat to the inside of your home.

Solar energy

Initially, installing solar can be an expensive investment. However, the long-term benefits and savings can make this the most cost effective energy saving change you can make.

Passive design

If you are considering building, buying, or renting a new property it is worth checking its design. Passive design is when a home is designed to make the most of local conditions to regulate the temperature inside. It reduces or eliminates the need for heating or cooling, which accounts for about 40% of energy use in the average Australian home. Things to look out for include:

- **Orientation:** This is how your house is positioned to make the most of either the sun or cooling breezes and shade. In a tropical climate for example, south-facing or well-shaded is preferable.
- **Shading:** It is possible for effective shading to block approximately 90% of heat from the sun. This can include shade cloths, shutters, plants, pergolas and more.

- **Insulation:** Insulation acts as a barrier to heat flow and is essential for keeping your home warm in winter and cool in summer.

Energy ratings

When buying new appliances purchase one with a high energy star rating.

Gas stoves vs electric

If you are thinking of moving rentals or need to purchase a new oven, invest in a gas stove as they heat faster and cost less to operate. In the NT, however, this can get a little tricky as there is no town gas supply and you will need to buy gas bottles. If you have an electric stove, be sure to optimise it by using correctly-sized cookware, keeping lids on your pots and pans, and choosing the right burner for the job.

Hot water

Install a low flow 3-star rated shower head and reduce your showering time to save half of your hot water use.

The garden

By planting suitable trees and shrubs around your home you can create cooling shade. By blocking the sun from windows, walls and roofs your house will naturally be cooler.

The NT high bill checklist

The Territory experiences extreme weather conditions which means bills can often differ from quarter to quarter. We've listed a few reasons why your bill might be higher than usual. If you need to discuss your account more specifically, call our contact centre on 1800 522 262.

○ Are you comparing the same periods?

If you are comparing two bills, always compare consumption for the same period in the previous year and not the last bill. For example, January to April 2020 compared with January to April 2019. Weather affects how much electricity we use, so comparing the same period each year will give you a more accurate comparison.

In the Top End, comparing a Dry Season and a Wet Season bill would show quite a high variation in cost and use. As temperatures and humidity soar, you are likely to use more air conditioning than in the cooler months and this increase will be reflected on your bill.

○ Have we estimated your bill?

If the network provider is not able to access your meter they'll provide us with an estimated read so we can bill you. The estimate is usually based on your electricity use at the same time last year.

○ Have we adjusted your bill?

If your previous bill(s) have been estimated and we have now received an actual meter read from the network provider, we may have adjusted your current bill to cover any undercharged amounts. That could be the reason why your current bill is higher.

○ Was it a longer billing period?

You'll normally be billed for around 91 days at a time. Sometimes delays occur in obtaining a meter reading from the network provider. This can lead to additional days being included on your bill; hence a higher cost. Check the number of days in the billing period on the back of your bill.

○ What was the weather like?

Weather conditions affect how we use electricity around the house. In extreme weather such as during the Top End Wet Season or Summer in Central Australia, fridges, pool pumps and air-conditioners have to work harder and use more electricity than they would the rest of the year. During the hot months of the year, our cooling needs increase and as the air conditioning clocks-up day and night, so does our electricity use.

○ Are you owing money from a previous bill?

If you have not paid your previous bill in full, the amount outstanding will carry forward onto your next bill. You will notice an additional charge for amount in arrears on your bill.



○ **Were there extra people at home?**

Children at home during school holidays, relatives visiting, a new arrival in the family, all these life events can have an impact on your electricity use. The more people at home, the more energy your household is likely to use.

○ **Was there a price increase during the billing period?**

Prices vary from time to time. We will always let you know when this happens with a message on your bill and information on our website.

○ **Are your concession details up to date in our system?**

If you are eligible for the Northern Territory Concession Scheme, check that your concession has been applied to your bill. If not, please get in touch on 1800 JACANA (1800 522 262).

○ **How are your appliances aging?**

When buying new appliances for your home, the price tag is not the only tag you should check. Appliances with a five energy star rating are the most efficient and can save you money over time. If your household appliances are aging, they could be costing you a bundle as they struggle to function.

Difficulties paying your bill?

We know bills that are higher than expected can be difficult to pay on time. If you need help managing your energy bills, give us a call on 1800 JACANA (1800 522 262) and we can discuss your options. For more information you can also read about our range of payment plans and the Stay Connected hardship program on our website. Don't leave it to chance, we're here to help.



Stay on top of your bills and usage

Now you are equipped with the information you need to keep your usage (and bills) under control. We understand, however, that sometimes it can be difficult to put it all into practice.

Regular Payment Options

It makes sense to pay small amounts more frequently to stay ahead.

Regular BPAY payments

Pay regular amounts towards your bill by setting up a regular BPAY payment on your telephone or online banking. Contact your bank for more information about BPAY if you're unsure.

Centrepay

Did you know Centrelink offers a free and voluntary service to pay bills and expenses as regular deductions from your Centrelink payments? For more information visit www.servicesaustralia.gov.au.

Direct Debit

Direct Debit is an easy way to stay on top of your bills. With Direct Debit you can choose to make regular payments at set dates. Complete the Direct Debit form on our website to get started.

Regular payments at any Australia Post outlet

Drop into any Australia Post outlet with your bill to make payment. They accept a variety of payments methods including BasicsCard.

Time to pay options

If you're unable to pay your bills by the due date, we can offer you a payment extension of up to 21 days.

If a payment extension is not for you, you can request to enter a payment arrangement to pay your bill and any arrears in more manageable instalments. Visit our website to apply or call us on 1800 522 262.

Stay Connected hardship program

Stay Connected is a personalised assistance program that goes beyond traditional payment plans. Our specialised team will tailor a payment plan that considers your current financial situation and what you can afford to pay. They can also refer you to a range of other support services. Call 1800 522 262 to get started.



Useful Resources

Jacana Energy: energy saving tips

www.jacanaenergy.com.au/save

Jacana Energy: Your bill and energy use

www.jacanaenergy.com.au/residential/bill

Jacana Energy: eBilling

www.jacanaenergy.com.au/residential/ebilling

Energy ratings Australia

www.energyrating.gov.au/

The Department of Industry Science and Resources

www.energy.gov.au/

Your home: Australia's guide to environmentally sustainable homes

www.yourhome.gov.au/energy

Cool Mob: Sustainable living in the Territory

www.coolmob.org/

Utilities commission of the Northern Territory

www.utilicom.nt.gov.au/electricity

Power and Water: Outages and faults

www.powerwater.com.au/customers/outages

Building and energy efficiency: (NT Gov)

www.nt.gov.au/property/building-and-development/build-or-renovate-your-home/building-and-energy-efficiency

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