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ENERGY

Home appliances that don't cost the earth!

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JOIN A NEW POWER GENERATION

Saving energy and money from household appliances

Cost guide and tips for efficient use

A common misperception that energy efficient appliances are more expensive. However the purchase price is only half the story – the running costs of an inefficient appliance are a secondary expense that quickly adds up. Use this guide to gauge how much a more efficient appliance will save you in the long term, and test your knowledge on our energy saving tips for each appliance type. Apply these and you'll be saving energy, carbon and money in no time!

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Household energy use

Australian households generate 20 per cent of **Australia's** total **carbon emissions** - an **average** of between 7 to 14 tonnes (7-14,000 KG) per **household** each year.

Enova's commitment to helping you reduce your energy use is not just about saving you money on your energy bills. We actually have an other important motive….. we were formed for the purpose of taking action on climate change. Energy efficiency is a key aspect of direct action on climate change. To reduce your emissions you can reduce energy use through good design, the use of energy efficient technologies, and behaviour that focuses on energy conservation.

In our homes we use energy for heating and cooling, water heating, appliances including refrigeration, cooking and lighting – not to mention the increasing array of entertainment and technology. Want to make a difference to climate change? Learn all you can about energy efficiency and reduce your household's carbon emissions.

You'll be surprised how much your household emissions can be greatly reduced by following the advice in this book.

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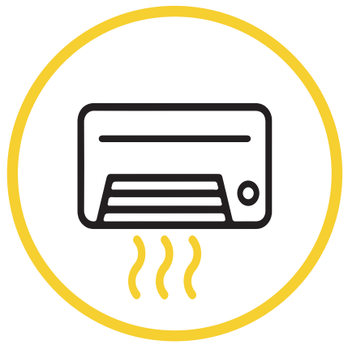
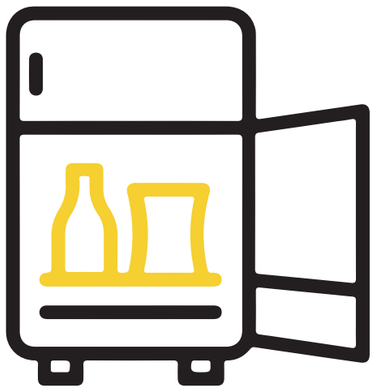


Fridges/Freezers



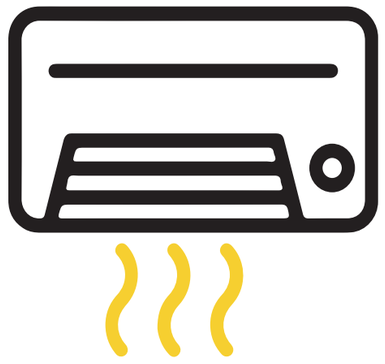
Tips

- A fridge is one of the highest energy users in the home. Select a fridge with a high star rating **- every extra star saves approximately 20% on running costs.**
- Choose the right size fridge for your needs. If it's either too full or mostly empty it will run less efficiently (a fuller fridge is better if the door is opened regularly. e.g. with kids!).
- Look for "smarter" models with door alarms, inverter technology and adjustable defrost.
- Set the temperature of your fridge between three and five degrees, and your freezer between -15 and -18 degrees. Place a thermometer inside for five minutes to check the temperature.
- If you want to buy a more efficient fridge but can't afford it, the NSW Government has subsidies available for eligible low income households. Go to: **households/rebates-and-discounts/appliance-replacement-offer**

	Energy Consumption Per Year (kWh)		Running Costs Per Year			Cost Savings Over 10 Years using a 4 star appliance rather than a 1 star
Type / Size	**1 Star**	**4 Star**	**1 Star** (@27.7c/kWh)	**4 Star** (@27.7c/kWh)	**Savings** (4 stars vs 1 star)	
200L fridge only	300	210	$83	$59	$24	**$243**
200L fridge freezer*	472	215	$131	$60	$71	**$705**
350L fridge freezer*	620	280	$172	$78	$93	**$933**
500L fridge freezer*	750	345	$208	$97	$111	**$1,112**
2 door, 12 years old	830	N/A	$230			
Bar fridge 50L	255	124	$71	$35	$36	**$359**
Chest freezer 150L	280	230	$78	$64	$13	**$132**
Upright freezer 250L	450	250	$125	$70	$55	**$547**

*Note: 4 stars is not the highest rating available.

Air Conditioning



Tips

Winter

- In winter, set your heating to between 18 and 21 degrees. **Every degree warmer uses around 5-10%** more energy depending on your climate zone.
- Let the sun shine in the windows during the day, close curtains at night to keep the heat in.
- Layer up with extra clothes or a blanket to keep snug.

Summer

- In summer, set the temperature between 24 and 26 degrees. **Every degree colder will use around 5-10%** more energy depending on your climate zone.
- Shade windows from direct sunlight with curtains, shutters or awnings to stop the heat getting in and better insulate your house.

REVERSE CYCLE SPLIT SYSTEM

Type / Size	Energy Consumption Per Year (kWh)		Running Costs Per Year			Cost Savings Over 10 Years using a 4 star appliance rather than a 1 star
	1.5 - 2.5 Star	4 Star	1.5 - 2.5 Star (@27.7c/kWh)	4 Star (@27.7c/kWh)	Savings (4 stars vs 1 star)	
Large wall unit (5kW)	1336	1064	$370	$295	$75	**$753**
Medium (3kW)	632	531	$175	$147	$28	**$280**
Portable window unit (1.5kW)	578	N/A	$160	N/A	N/A	**N/A**

*Note: 4 stars is not the highest rating available.
These calculations are based on usage of three months per year, five hours a day for both heating and cooling, in Northern NSW.
For results more specific to your location and usage, go to:http://www.energyrating.gov.au/calculator.

Televisions

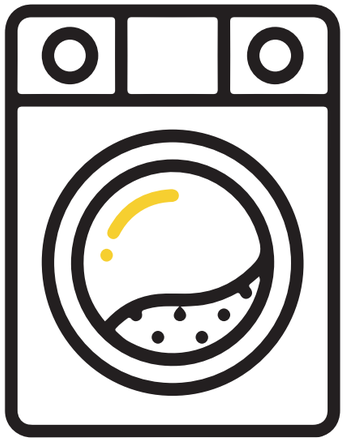
Tips

- The technology type of your television impacts how much power it uses - consider choosing a more efficient technology such as LED.
- Each additional star is 20% more energy efficient than the previous star.
- Reduce the brightness setting in your TV (or use Eco mode if it has one). **This can reduce energy use by 20%**.
- Turn your TV off at the wall when not in use, especially if it is an older model.

	Energy Consumption Per Year (kWh)		Running Costs Per Year			Cost Savings Over 10 Years using a 4 star appliance rather than a 1 star
Type / Size	**1 Star**	**4 Star**	**1 Star** (@27.7c/kWh)	**4 Star** (@27.7c/kWh)	**Savings** (4 stars vs 1 star)	
LED, large 52"	711	364	$197	$101	$96	**$961**
LED, medium 42"	472	242	$131	$67	$64	**$637**
LED, small 28"	216	111	$60	$31	$29	**$291**
Plasma **	900	242	$249	$67	$182	**$1,823**
CRT (old style,deep set) **	550	242	$152	$67	$85	**$853**

*Note: 4 stars is not the highest rating available.
All calculations based on four hours viewing per day.
Compared to a 42”, 4 star LED television.

Washing Machines



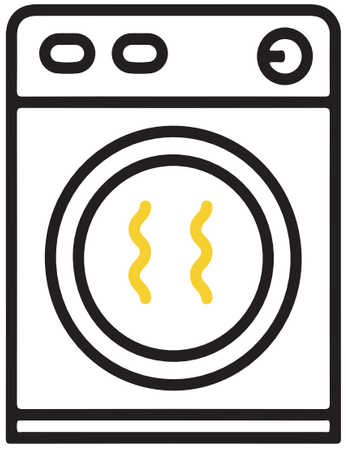
Tips

- **Washing with cold water instead of hot water will reduce your energy costs from washing by on average between 60% - 80%!**
- Get the right size machine for your needs, under filling a machine reduces its efficiency.
- Frontloaders use about half the water of toploaders and are often cheaper to run.
- Turn your machine off at the wall when not in use.

	Energy Consumption Per Year (kWh)		Running Costs Per Year			Cost Savings Over 10 Years using a 4 star appliance rather than a 1 star
Type / Size	**1.5 Star**	**4 Star**	**1.5 Star** (@27.7c/kWh)	**4 Star** (@27.7c/kWh)	**Savings** (4 stars vs 1 star)	
5kg, warm wash	228	104	$63	$29	$34	**$340**
7kg, warm wash	319	145	$88	$41	$48	**$478**
8.5kg, warm wash	387	176	$107	$49	$58	**$579**
5kg, cold wash	62	45	$17	$13	$5	**$46**
7kg, cold wash	80	50	$22	$14	$8	**$82**

*Note: 4 stars is not the highest rating available.
Based on three washes per week.

Dryers



Tips

- Dry your clothes on a clothes line whenever you can, making use of free energy from the sun.
- If your machine has an ‘eco’ mode, use it!
- Turn your machine off at the wall when not in use.
- Use the timer to avoid excess energy use.

	Energy Consumption Per Year (kWh)		Running Costs Per Year			Cost Savings Over 10 Years using a 4 star appliance rather than a 1 star
Type / Size	**1.5 Star**	**4 Star**	**1.5 Star** (@27.7c/kWh)	**4 Star** (@27.7c/kWh)	**Savings** (4 stars vs 1 star)	
Small, 5kg capacity	733	488	$203	$137	$66	**$664**
Large, 7kg	1026	684	$284	$192	$93	**$927**
5kg heat-pump dryer	733	65	$203	$18	$185	**$1,848**

*Note: 4 stars is not the highest rating available.
Based on three uses per week.

Dishwashers

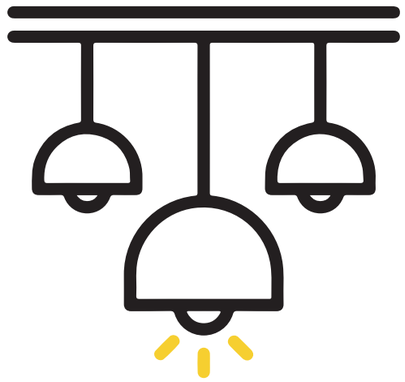
Tips

- Fill your dishwasher to capacity every time you use it.
- Use your machine's 'eco' or short wash programs if it has them.
- When shopping for a new machine, choose models with 'eco' programs and low water consumption.

	Energy Consumption Per Year (kWh)		Running Costs Per Year			Cost Savings Over 10 Years using a 4 star appliance rather than a 1 star
Type / Size	**2 Star**	**4 Star**	**2 Star** (@27.7c/kWh)	**4 Star** (@27.7c/kWh)	**Savings** (4 stars vs 1 star)	
Small, 7 place settings	236	116	$65	$32	$33	**$329**
Medium, 10 place settings	335	164	$93	$46	$47	**$469**
Large, 14 place settings	469	229	$130	$64	$66	**$658**

*Note: 4 stars is not the highest rating available.
Based on seven loads per week.

Lighting



Tips

- Replacing halogen lights with LEDs can be expensive initially, but will pay for themselves over time.
- The NSW Government currently offers a rebate on the cost of replacing halogen downlights with LEDs, installed by approved electricians.

  Go to: https://energysaver.nsw.gov.au/households/rebates-and-discounts/discounted-energy-efficient-lighting-households
- Turn off lights when you're not in the room, or install motion sensors.
- For information about different types of lighting options and their costs see this Choice guide:

  https://www.choice.com.au/home-improvement/energy-saving/light-bulbs/buying-guides/light-bulbs

Type / Size	**Energy Consumption** per year (kWh)	**Running Costs** per year (@27.7c/kwh)	**Running cost savings per year** (LED option vs standard)	**Cost Savings Over 10 Years** using a 4 star appliance rather than a 1 star
Halogen downlights x15 *	1204	$334		
LED downlights x15 *	219	$61	$273	**$2,728**
Floodlight (150W) **	110	$30		
LED floodlight (20W) **	15	$4	$26	**$263**

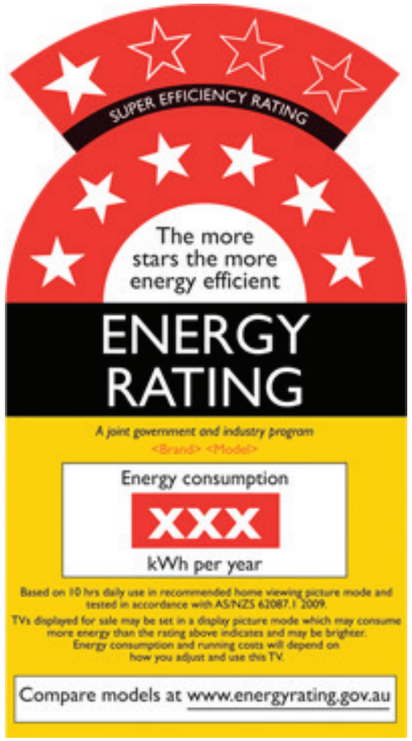
Note: *Based on average use of four hours per day.
**Based on average use of two hour per day.

Resources

MORE STARS, MORE SAVINGS

When comparing similar sized products look for more stars to save money

Energy Rating Labels are an Australian Government requirement on new appliances, making it easy to compare running costs



LOW SCORE SAVES MORE

The lower the energy consumption score, the less electricity the appliance uses, and the cheaper it will be to run.

Energy Rating Labels are an Australian Government requirement on new appliances, making it easy to compare running costs

Information Sources:

Energy Rating Calculator: http://www.energyrating.gov.au/calculator

https://www.energy.gov.au/household-guides
https://energysaver.nsw.gov.au/households/rebates-and-discounts/appliance-replacement-offer
http://www.energyrating.gov.au/
http://www.energyrating.gov.au/calculator
https://www.choice.com.au/home-improvement/energy-saving/light-bulbs/buying-guides/light-bulbs
https://energysaver.nsw.gov.au/households/rebates-and-discounts/discounted-energy-efficient-lighting-households

Here's a nice video explaining how the energy star rating system works when you're buying an appliance:
https://www.youtube.com//embed/UBi79vyL0I0?rel=0

DISCLAIMER: The advice in this information sheet is general in nature and intended as a guide only. Calculations are based on usage assumptions that could vary significantly between households and users. For more specific information on energy consumption refer to the Energy Rating of specific appliance in the internet resources provided.