powersavvy is all about being smart with power. powersavvy aims to reduce power usage in homes, businesses, government buildings, schools and early childhood education and care services by changing the way people think about and use power. Being smart about using power saves money and also saves diesel fuel that makes the power in remote communities.

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We acknowledge the traditional owners, past and present, of both Aboriginal and Torres Strait Islander culture.
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What is the Early Childhood National Quality Framework?

In all states of Australia, the National Quality Framework was introduced in 2012 to improve the quality of learning outcomes of children in early childhood education and care services. From 2012, any school providing services for children under the age of five and/or providing outside school hours care must meet the Education and Care Services Law Act 2010 and the Education and Care Services National Regulations 2011.

A new national organisation called Australian Children’s Education & Care Quality Authority [www.acecqa.gov.au](http://www.acecqa.gov.au) is responsible for laws and regulations, forms and applications, learning frameworks and supporting documents including quality improvement plan templates and fact sheets.

In Queensland the regulatory authority is the Office for Early Childhood Education and Care. It is responsible for monitoring, compliance of law and regulations and assessing services against the National Quality Standard. Visit [www.education.qld.gov.au/earlychildhood](http://www.education.qld.gov.au/earlychildhood).

How does this relate to powersavvy?

*powersavvy* works in remote and isolated communities in Queensland. *powersavvy* also works extensively to help people and organisations reduce power bills through auditing and providing advice on technical changes to help buildings become more energy efficient.

The *powersavvy* message, which encourages behavioural change to reduce power use, directly relates to the National Quality Standard’s Quality Area 3: Physical Environment. This guide for educators was designed to practically demonstrate how being *powersavvy* will meet the relevant elements in the National Quality Standard. Website references are included as additional resources for educators.

Does being *powersavvy* mean more work?

No. By thinking about how much power you are using and making simple changes in your daily activities, you can easily reduce how much energy you currently use, and save money on your power bill. You will also be reducing greenhouse gas emissions and working towards a sustainable future for our children.

We already have Environmental Plans. How does it all fit together?

For educators who work in state schools, your school’s Environmental Management Plan (or SEMP) will provide additional goals, information and strategies that will provide support in meeting the National Quality Standard’s Quality Area 3. This policy document can account for early childhood and other year level sustainability practices and priorities. More information can be gained about your school’s energy use by visiting this website: [www.education.qld.gov.au/facilities/solar/pdfs/school-manual.pdf](http://www.education.qld.gov.au/facilities/solar/pdfs/school-manual.pdf)
The science of *powersavvy*

**Greenhouse gases**

Australia’s biggest single source of greenhouse gas emissions is electricity generation. Reducing electricity consumption is an effective way to reduce emissions and tackle climate change.

The majority of Australia’s electricity supply is generated by burning coal. This electricity is then fed into a grid system which disperses power throughout each state.

In 39 remote Queensland communities, power is generated independently and is not connected to the Queensland electricity grid. Each community is supplied by a diesel-fuelled power station which uses automotive diesel to make electricity. The principle is the same as a home generator but on a much larger scale.

**Fast facts**

Oil is a non-renewable resource. It takes 1.1 litre of crude oil to make 1 litre of diesel. In the 39 remote communities of Queensland that rely on diesel to generate their power, 1 litre of diesel makes 3.8 kWh of electricity. That’s enough to run:

- a plasma TV for 9 hours
- a ceiling fan on high for 2 days
- an outside floodlight for 7½ hours
- a fridge for 31 hours
- an electric frying pan for 2½ hours
- a box air conditioner for 7 hours.
Climate change

Both coal-fired and diesel-generated electricity produce carbon emissions that increase the levels of carbon dioxide in the atmosphere. Our atmosphere is made up of several layers of gases. One of these layers is a carbon dioxide (CO₂) layer. This layer is arguably the reason why life can exist on Earth. The CO₂ layer acts like a blanket, trapping warmth in our atmosphere. Adding more CO₂ to the atmosphere is like adding another blanket to your bed at night time, causing more heat to be trapped, and hence increasing temperature.

Visit this website to view two animations about climate change and the reef:
www.reefed.edu.au/home/reefbeat/climate_change_and_our_greatBarrier_reef

There are many effects from this increase in temperature in the atmosphere. Some of these are:

1. Melting polar regions are raising sea levels. Many low-lying islands in the world will be inundated by sea and communities will need to be relocated. Evidence exists for this occurring at Tuvalu between Australia and Hawaii. Evidence is growing for this happening to islands in the Torres Strait such as Saibai and Boigu.

2. Our oceans are normally an alkaline environment. It is normal for CO₂ to dissolve in oceans. However, with the extra CO₂ in the atmosphere, more CO₂ is dissolving in seas. This extra CO₂ creates acidic conditions. The increased acidity affects sensitive corals which require alkaline sea conditions. The loss of corals will have a flow-on effect with many species of fish and sea life being lost. This will have a devastating affect on areas like the Torres Strait and Cape York where the communities have strong cultural ties to the sea and its creatures. The ocean is also a major source of food for people.

3. Climate change also increases the severity of weather resulting in more intense and more frequent storms.
World oil supplies

At present, most scientists agree that there is a limited reserve of oil on Earth and that one day, oil will run out. There is no agreed life expectancy for oil reserves. Estimates range from 10 years to 100 years or longer. The rate of oil consumption is a major factor in determining when oil will no longer be available. As supplies decrease, oil will also become less affordable. Unavailability of oil will have an impact on several areas of our present lives. Consider some of the by-products of oil: bitumen for roads, fuel for ships, lubricating oils, diesel, jet fuel, petrol for cars and boat motors, aspirin, plastics, nylon rope, refrigerator linings, eskies, water pipes, tyres, shower curtains, credit cards, glasses and sunglasses.

Some examples of areas where this will impact on the remote communities of Queensland are:

- air travel
- barge delivery of food and freight
- and
- outboard motor fuel.

Reducing oil consumption will slow down the speed at which oil supplies are diminished.

How can we be sustainable?

Sustainability means enough for all for ever. Our challenge is to make the connections. As educators we need to ensure that our students’ minds connect their local actions with global impacts. For example:

- Turning off the second fridge in the centre when it is not being used really does make a difference to the health of the local reef and this in turn helps the fish live healthily.
- Turning the lights and fans off when you go outside to play really does make a difference to saving energy and reducing the amount of diesel fuel your community uses to make power.
What is it?

The National Quality Standard sets a new national benchmark for the quality of education and care services and contributes to positive learning outcomes for children. It is an important part of the National Quality Framework, which will help families to make informed decisions about the services providing education and care to their child.

The National Quality Standard comprises quality areas, standards and elements. The seven quality areas in the National Quality Standard are:

1. Educational program and practice
2. Children’s health and safety
3. Physical environment
4. Staffing arrangements
5. Relationships with children
6. Collaborative partnerships with families and communities
7. Leadership and service management

The National Quality Standard is linked to national learning frameworks that recognise that children learn from birth. It outlines practices to support and promote children’s learning. These are:

- Belonging, Being and Becoming: The Early Years Learning Framework for Australia (Early Years Learning Framework)
- My Time, Our Place: Framework for School Age Care in Australia (Framework for School Age Care).
How does being powersavvy demonstrate the standard?

*powersavvy* behavioural changes and technical changes can be observed, discussed and sighted as per the Guide to the National Quality Standard.

**Observe**

The assessor observes what children, families, educators, co-ordinators and staff members are doing. For example, children take responsibility for turning off switches.

**Discuss**

The assessor and approved provider, nominated supervisor, educators, co-ordinators, Family Day Care educator assistants and/or staff members engage in a discussion about why and how particular practices occur at the service. For example, energy consumption data from [www.solarschools.net](http://www.solarschools.net) is a staff meeting agenda item.

**Sight**

The assessor sights documentation provided as evidence to support particular practices at the service such as a School Environmental Management Plan, a *powersavvy* audit of premises and evidence of recommended changes, and/or *powersavvy* behavioural reminder stickers on switches and appliances in centres.
The physical environment: let’s look at Quality Area 3 of the National Quality Standard

This quality area of the National Quality Standard focuses on the physical environment and ensuring that it is safe, suitable and provides a rich and diverse range of experiences that promote children’s learning and development.

Standard 3.1 The design and location of the premises is appropriate for the operation of a service

Element 3.1.1 Outdoor and indoor spaces, buildings, furniture, equipment, facilities and resources are suitable for their purpose

How could this element be observed, discussed or sighted?

Be powersavvy. Be smart with power.

• Only use air conditioning in the hotter months.
• Open windows to allow fresh air through.
• Set all air conditioners to 25 degrees.
• Set air conditioner timers to two hours according to Queensland Government guidelines.

In November 2011 the powersavvy commercial team visited Tagai College on Warraber Ngurpay Lag. Educator Ms Weimess reported her air conditioning timers were set to eight hours. The team was able to change it to two hours.
Element 3.1.2 Premises, furniture and equipment are safe, clean and well-maintained

How could this element be observed, discussed or sighted?

**Be powersavvy. Be smart with power.**
- Ensure all air conditioners are cleaned regularly.
- Set air conditioner remote controls to 25 degrees.
- Ensure all shower heads are designed to reduce water consumption.
- Report leaking taps immediately to the maintenance person.
- Only use cold water in washing machines.
- Dry washing in the sun, not in clothes dryers.
- Clean and defrost all fridges and freezers regularly and replace seals when necessary.
- Fridges more than 10 years old use much more electricity than newer models. If you are buying a new fridge or freezer, contact powersavvy via www.powersavvy.com.au for information about energy-efficient models. You may also qualify for a powersavvy subsidy on the appliance.

*Torres Strait school freezer 2011*  
*Torres Strait school fridge 2011*
Element 3.1.3 Facilities are designed or adapted to ensure access and participation by every child in the service and to allow flexible use, and interaction between indoor and outdoor space

How could this element be observed, discussed or sighted?

**Be powersavvy. Be smart with power.**

- In the cooler months, leave doors open to allow children to move between areas and for fresh air flow.
- Use fans instead of air conditioning where possible.
- When air conditioning is used and the doors are closed to keep the cold air in, make sure that one door is accessible so children can move in and out.

**Standard 3.3 The service takes an active role in caring for its environment and contributes to a sustainable future**

**Element 3.3.1 Sustainable practices are embedded in service operations**

How could this element be observed, discussed or sighted?

**Be powersavvy. Be smart with power.**

- Provide all staff with **powersavvy** energy saving information as part of their induction [see example induction brochure on the opposite page]. Switch off hot water systems for holidays and turn off refrigerated drinking water systems for the weekend to save power and save money. Switch off and save!
Congratulations on accepting the challenge

Life in a remote community will probably be different from anything you’ve ever experienced — from posting letters to doing your grocery shopping. You’re also probably used to being environmentally friendly — recycling, composting and even using public transport. Just because you’re away from those mainstream opportunities doesn’t mean there aren’t ways to look after the environment.

Your community power supply

Have you ever thought about where your power comes from when you flick the switch? In your new community, it comes from the diesel-fired power station down the road, which gets supplied by trucks and barges from Cairns, Townsville or Brisbane.

Burning diesel is the most expensive way to generate and supply electricity. One litre of diesel generates 3.8 kWh of electricity at a cost of about 50 cents per kWh. It also produces 4 kg of greenhouse gases per litre.

Everyone in Queensland pays the same price for electricity, no matter where they live. The current tariff is 23 cents per kWh.

All electricity is not equal however! Check out the differences:

Card meters

The other way your electricity supply differs is the meter. In the city, someone comes and reads the meter every three months and sends you the bill. In remote communities, most people have a pay-as-you-go meter which uses small pre-paid cards.

Even though you may not buy the cards yourself, you may have to load them into your meter. Try keeping track of your power use by recording when you put in a new card, and see how long you can make one last.

Keeping your cool when it’s hot

We know it can get hot but there are ways to keep comfortable without wasting electricity.

• **Use fans instead of the air conditioner where possible.** Fans use a fraction of the electricity that air conditioners use.

• **Set your air conditioner to 25 degrees.** Every degree cooler costs an extra 10 per cent to run and creates more greenhouse gases.

• **Switch off the air conditioner when you leave the house.** It doesn’t take long to cool a room down when you get home.

• **Turn over to see heaps more ways to save power and help the environment.**

Be SMART with power

**Be powersavvy!**

Although you may not have to personally pay for your electricity, that’s no reason to waste it. Every kilowatt hour costs both the taxpayer and the environment.

For more ways to save go to:

Element 3.3.2 Children are supported to become environmentally responsible and show respect for the environment

How could this element be observed, discussed or sighted?

**Be powersavvy. Be smart with power.**

- Praise and reward all behaviours demonstrated by children. For example: “Good girl Matilda. You reminded me to turn off the light when we all went outside”.
- Staff make links to the environment for children. For example: “Great job Billy. You checked the number on the air con remote was 25 degrees. That means we are not wasting power today and we are helping the fish and birds have healthy reefs and skies”.
- Make powersavvy posters and books available for the children to read and enjoy. These also will provide links to home and the community as similar texts are visible in homes and within the community.
- Get children to take turns at being the ‘power ranger’ for the day or powersavvy leader for the day.

*Josie finds the number 25 on the air con remote.*

Air conditioners have a motor that works like a fridge. The motor sucks hot air out of the room, passes it over a cooler to remove the heat, and then pumps the cooled air back inside.

Set air cons to 25 degrees. Every degree cooler costs an extra 10 per cent.
powersavvy early learning experiences

Warraber Ngurpay Lag

Children at Warraber Ngurpay Lag, Tagai State College, made the connection between personal power use and greenhouse gases harming their reef. The class made a plan about how they could reduce their carbon footprint and be more sustainable. The educators supported the children by helping them to audit their room to discover all the ways power was being wasted. The children found that they had two fridges and neither was very full. They moved everything into one fridge and turned off their second fridge. The children also decided to turn off their Christmas tree lights, and the educators supported this decision by organising some solar Christmas tree lights to be posted out.

Masig Muysaw Ngurpay Lag

powersavvy officer and respected elder Rocky Gela visited the centre at Masig Muysaw Ngurpay Lag, Tagai State College, to show children and staff the new shower heads that were installed into every house in the community. Rocky yarnd how saving water saves power. The children became familiar with the new technology and learned the associated language. The shower heads were left in the centre for the children to use in play. The children played powersavvy.
Pormpuraaw State School

Children read *powersavvy* stickers and placed them in meaningful areas around their room. Educators used this opportunity to plan where the stickers should go and to talk about what the words on the stickers say. Attention to print was achieved when the children placed the stickers upside down. The educator reminded the children about words starting in the top corner and going from left to right.

Kubin Village

Pre-Prep class at Kubin Village practiced words in the *powersavvy* book *Be smart with power*. The teacher used these words as a focused lesson on phonological awareness for the day. Children stretched out the words: power, electricity.

Children snapped/clapped some key phrases:

- Be smart with power.
- Only a fool would keep no-one cool!
The power of words: playing with, thinking about and talking about power and energy

In most powersavvy communities where electricity is generated by burning diesel, most children’s home language is not Standard Australian English.

Successful and quality early childhood programs recognise this and use a range of strategies so that children have every opportunity to play and think in their home language.

Energy cannot be seen ... so in order to play with, think and talk about energy and power, educators need to ensure they provide children with experiences that will build up their language about energy and power. The fact that phrases like greenhouse gas and energy efficient do not exist in some home languages does not mean that children who are under five years of age cannot learn to use these words appropriately and meaningfully.

Early learning experiences that build up such language are achievable even at this age, and educators should not assume that children can’t cope with either the concepts or associated language of energy efficiency. In fact these English words are wonderful for playing with and exploring phonological awareness.

Concepts and language for wasting power and saving power can be introduced and built on so children can talk about power. If the home language of the children is not your home language too, then you need to get expert assistance from a home language speaker to make links for the children.
Although children cannot see energy, they are often familiar with, and see, diesel drums and fuel tanks. It is this diesel fuel which drives the generator to make power for their houses. Children cannot see greenhouse gases either, so educators must explain the concept clearly. Most children will have some experiences through television and DVDs of stories like Nemo and Happy Feet.

These stories can make links to global issues of:

- healthy reefs and oceans where the coral is healthy and does not die
- healthy ice and snow where the penguins and polar bears have plenty of room for their homes.

When we eat healthy food, we give our body good energy to play.

Wow! Look at the way you are wriggling around. You have plenty of energy today.

Good choice. That choice makes sure we have a beautiful world forever.

How does the fan work? The power house down there makes power to give the fan energy to keep you cool.

Let’s check the solar power is working — that it is making our energy from the sun, not from the power house.
Linking language and concepts

powersavvy early learning experience

The children were explaining to a visitor that they turn off the lights when they go outside to save the power. The visitor responded by saying "What wonderful children! You are helping to reduce your power and make the world green and clean". The visitor went on to make a crocodile mouth with her arms and closed the crocodile’s mouth to show what reduce meant.

“When the mouth is open we use this much power, but if we close the crocodile mouth we can reduce the power,” she said.

Every child was running around making crocodiles with their arms and closing them down and saying the word reduce, reduce, reduce over and over.

powersavvy early learning experience

One Pre-Prep class received a box in the mail from powersavvy. They opened the box to find a small solar-powered grasshopper. The children were very interested in the box but as they passed the grasshopper around they noticed it did not move. The educator explained to the children that the grasshopper had no energy — it needed something to give it power. The children thought maybe it needed food to give it power. One child thought maybe the words on the box would tell everyone what food the grasshopper needed. The educator found the words solar-powered on the box and showed the children. The children all guessed what solar-powered could mean. The educator explained that solar-powered meant the sun would make energy to give the grasshopper power, just like the sun made energy to give you hot water at your house. The children took the grasshopper outside and squealed as it moved and had plenty of energy! The educator asked the children "What would happen if it was raining?" The children decided to try taking the grasshopper outside next time it rained.
This is the story of one man with two identities. By day he is just another ordinary Masig Islander. He blends in seamlessly with the local people, going about his business in the usual way so as not to attract attention.

But by night, his secret and true identity is revealed.

By night he becomes … powersavvy Man! (try saying it in a deep announcer’s voice!)

Donning his black mask and emerald-green caped costume and carrying his trusty solar powered torch, powersavvy Man single-handedly patrols the school grounds, council offices, community hall and all other public buildings on Masig. He is forever on the lookout for lights, fans and air-conditioners that have been unnecessarily left on unattended.

At first, the good people of Masig mistook our man for another superhero The Green Lantern, who, regrettably it must be said, is similarly attired. But soon the Masig people began to recognise that they had someone amongst them who was truly unique but also at the same time very ‘Masig-style’. The local people soon became accustomed to finding their superhero’s calling cards neatly slid under public building doorways, to be discovered by the first person entering the premises the following morning. If indeed our caped crusader had stumbled upon an example of power wastage from the previous night, he would leave one of his white printed cards at the scene as a reminder to properly switch off appliances when not in use. On the card is printed our masked hero’s motto: “With power comes responsibility”.

Late one recent moonless night, powersavvy Man was in the middle of doing what he does best: staging another of his fearless patrols, when he came face-to-face with … the long arm of the law!

“Stop! Who goes there?” called the police officer, shining his Maglite on our power ranger vigilante, illuminating the darkened backdrop of one of the school buildings at the same time.

PSM: Never fear, it is I, powersavvy Man.

The police officer seemed unimpressed.

Police: Take off that mask and then keep your hands where I can see them!

PSM: I cannot take off my mask my good sir, for then my true identity would be revealed. powersavvy Man stood firm in the glare of the lawman’s torchlight.

Police: Who are you?

PSM: I am powersavvy Man — defender of our planet’s ozone layer, conserver of energy, ‘switcher-off-er-er’ of all forgotten appliances and all-round good guy.

Police: Yes, yes, but who are you really?

PSM: I am an ordinary citizen here on Masig. You know me. Everyone knows me. But no one knows my real identity which I must protect at all costs.

Police: Mmmmm, your voice does sound familiar. All right powersavvy Man, you seem to be on the side of what’s good and what’s right. I must be on my way.

The constable extinguished his torch, leaving powersavvy Man standing alone in the shadows. Just as the officer was about to leave, powersavvy Man thrust into the island copper’s hand one of his trusty printed cards.

Watt’s Up?
Police: What's this?
PSM: Read it.

The officer switched back on his torch and shone it down at the white card in his hand. He read the words slowly and aloud to himself: “With power comes responsibility”. The officer unfastened his right shirt pocket and slipped the card inside.

Police: Didn’t Spiderman used to say that?
PSM: Yeah, but I say it with double the meaning.

With that, the officer got back into his patrol car and drove off into the night.

**powersavvy Man** was left once more standing alone in the darkness with only his thoughts for company. **powersavvy Man** dreamed of the day when his services would no longer be needed; when people would never forget to switch off electrical devices in public buildings after hours; when the message that power and responsibility are twin brothers that cannot be separated would truly be lived by all.

People on Masig were changing their energy habits, but true change takes time. For the moment, **powersavvy Man** will continue to roam the streets of Masig at night in his bright green costume looking for power appliances that need switching off. His legend grows by the day and Masig Islanders now accept that a masked superhero walks amongst them. They also know that should they ever see him, never to ask “Watt’s up?” but rather offer his preferred greeting “Watt’s down, **powersavvy Man**!

*Watt’s Up! was written by Years 5, 6 & 7 and Mr Donaldson at Masig Muysaw Ngurpay Lag, Tagai College 2012*
Other useful resources

The NSW Early Childhood Environmental Education Network (ECEEN). This is a community of educators, families and children striving to create living and learning spaces within our communities that reflect and encourage sustainable practices.

www.eceen.org.au

Contacts

powersavvy

www.powersavvy.com.au
E-mail: info@powersavvy.com.au
1800 553 635

Indigenous Schooling Support Unit

Pre-Prep

Early Childhood Education and Care


Earth Smart Science


We acknowledge our education partners:

- Education Queensland Indigenous School Support Unit, Far North Queensland: its Pre-Prep Advisory Teachers support educators in remote Queensland State Schools
- Early Childhood Education and Care, Cairns Regional Office: which is supporting educators to monitor and promote the consistent application of the Education and Care Services National Law and Regulations across Queensland
- Earth Smart Science, Teaching and Learning Branch: its facilitators assist state schools with Environmental Management Planning
## How do appliances compare?

<table>
<thead>
<tr>
<th>Appliance</th>
<th>Power (W)</th>
<th>Usage Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluorescent Light</td>
<td>40W</td>
<td>5 hours</td>
</tr>
<tr>
<td>Standard TV</td>
<td>100W</td>
<td>4 hours</td>
</tr>
<tr>
<td>Washing Machine</td>
<td>350W</td>
<td>2 washes</td>
</tr>
<tr>
<td>Ceiling Fan</td>
<td>70W</td>
<td>10 hours</td>
</tr>
<tr>
<td>Electric Kettle</td>
<td>1200W</td>
<td>Boiled 6 times</td>
</tr>
<tr>
<td>Large Plasma TV</td>
<td>420W</td>
<td>4 hours</td>
</tr>
<tr>
<td>Exterior Floodlight</td>
<td>500W</td>
<td>8 hours</td>
</tr>
<tr>
<td>Small Chest Freezer</td>
<td>180W</td>
<td>24 hours</td>
</tr>
<tr>
<td>Electric Stove 1 Element</td>
<td>2400W</td>
<td>2 hours used 4 times for 30 minutes each</td>
</tr>
<tr>
<td>Electric Frypan</td>
<td>1800W</td>
<td>8 hours</td>
</tr>
<tr>
<td>Refrigerated Air Conditioner</td>
<td>750W</td>
<td>24 hours</td>
</tr>
<tr>
<td>Medium Fridge</td>
<td>160W</td>
<td>8 hours</td>
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<tr>
<td>2kW Split System Air Conditioner</td>
<td>2000W</td>
<td>8 hours</td>
</tr>
<tr>
<td>Welder</td>
<td>6000W</td>
<td>1.5 hours</td>
</tr>
</tbody>
</table>

These amounts were calculated on the Queensland notified Tariff 11 for 2011–12.
This household knows how to be powersavvy and is doing at least 10 things to save power and $$$ every day. How many can you find? See tips over the page for clues.
Do you want to be powersavvy?

Make the switch to being smart with power by using these powersavvy tips every day...

Here are some simple, every day things you can do to make a difference to your power bill and your environment. Start practising some of them to see how much you can save so you’ve got more money for the things you like doing most.

**Be smart about keeping cool**
- Use natural breezes and fans to keep cool
- If you turn on the air conditioner, close the doors and windows to keep the cool air in
- Turn off lights, fans and air conditioner when you go out
- Set your air con thermostat to 25 degrees

**Be smart with appliances and equipment**
- Turn off appliances and equipment that are not being used at the power point

**Be smart with lights**
- Install energy-efficient light bulbs
- Turn off the outside lights during the day

**Be smart in the kitchen**
- Put the lids on pots when cooking
- Use energy-efficient appliances like microwaves instead of the oven
- Check your fridge and oven door seals to keep the cold or hot air in

**Be smart about washing your clothes**
- Use cold water to wash clothes
- Dry your clothes in the sun if possible
- Install a solar hot water system

Get a FREE home energy-saving consultation

We invite you to join other powersavvy residents and businesses who are already reducing their energy costs and their impact on the environment.

To make a time for one of them to come and talk to you about ways you can save money and power at your house call the powersavvy team today.

1800 553 635

For more information about how to become powersavvy call:
1800 553 635

*BE SMART WITH POWER*
How much does it cost to keep cool?

Ceiling fan
70W
12 hours per day x 7 days
$ costs about $1.35 per week

Refrigerative air conditioner
750W
12 hours per day x 7 days
$ costs about $11.50 per week

Split system air conditioner
2000W
12 hours per day x 7 days
$ costs about $30.50 per week

Air-conditioners have a motor that works like a fridge motor.

The motor sucks hot air out of the room, passes it over a cooler to remove the heat and then pumps the cooled air back inside.

These amounts were calculated on the Queensland notified Tariff 11 for 2011–12.
How much does it cost to keep cool?

- **Split system air conditioner**: 2000W * 12 hours per day * 7 days = $11.50 per week.
- **Refrigerative air conditioner**: 750W * 12 hours per day * 7 days = $30.50 per week.
- **Ceiling fan**: 70W * 12 hours per day * 7 days = $1.35 per week.

Air-conditioners have a motor that works like a fridge motor.

How air-conditioning works...
The motor sucks hot air out of the room, passes it over a cooler to remove the heat and then pumps the cooled air back inside.

Before you leave....

- Turn off the air conditioner
- Turn off the lights
- Turn off the fans
- Switch off appliances at the wall