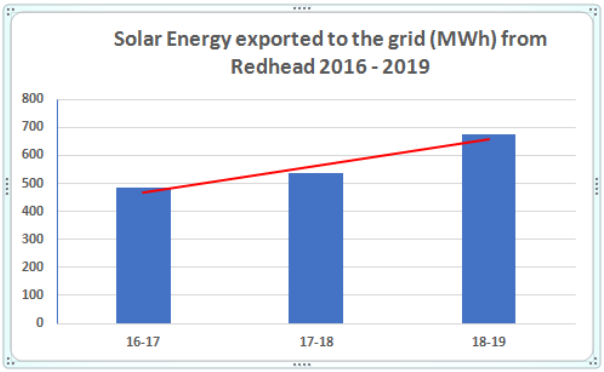
We have experienced changing times with COVID-19 in Redhead, but it is great to hear about how the community have bonded and supported each other. Many caring neighbours have helped the vulnerable in our village by delivering food and giving social support. Redhead has a lot to be proud of.

During this crisis we could also notice how positively nature has responded to less CO2 pollution, and as usual the Redhead Community has been leading the way. We have been riding a different style of wave, an **EnergyWave**! Over 18% of Redhead residences and businesses are now producing solar energy because they have taken the decision to invest wisely in solar PV panel installations. Redhead, for example, exports 1 ½ times more renewable energy per person to the power grid as Charlestown does. The reasons people give are - **saving money and doing their bit for the environment.**



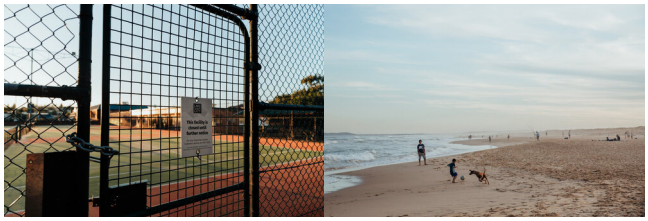
In 2018-19 Redhead exported 674 MWh of solar energy to the grid, up from 484 MWh in 2016-17, and 536 MWh in 2017-18. Despite the population increase the energy use in Redhead, fell by 4 ½ % in the same time from 8431 to 8064 MWh, due to energy saving measures also adopted by Redhead residents. Wise energy use is contributing to people saving money and lessening harmful emissions. Many people report that they will be able to have their investment returned in just 3-5 years by their electricity savings from solar generation and changing their energy use habits. A few people have said 'It really is a no-brainer'!

Redhead residents and businesses have installations ranging from 3 to 150 panels. It is estimated that currently the 3700 panels in Redhead are generating approximately 2940 MWh per year, of which the people are using about 70% and exporting the rest to the grid.

Many are adopting a dream of ***"Redhead to export more energy than we use!"***

An Unscripted pause

Melanie Muddle is a local Newcastle photographer from Brown Street in Redhead. She started a project called ***An Unscripted Pause*** that aims to capture a visual narrative of **our community, our common ground and our diversity wrapped in the time and space** of the COVID-19 pandemic.



She spent time photographing people from our community either in front of their homes, in their back yard (via their rear lane) and out the front of their businesses. She also collected some written insights into how people have found this time, the things they have struggled with and the moments that have been positive. The aim was to create a creative visual, historic representation of a time that we hope will never be repeated"

For more photos see www.theserialnarrative.com

EnergyWave Redhead

Objectives

1. **Reduce carbon emissions**
2. **Reduce energy consumption**
3. **Increase the production of renewable energy in Redhead.**

COVID-19 and Redhead Pharmacy

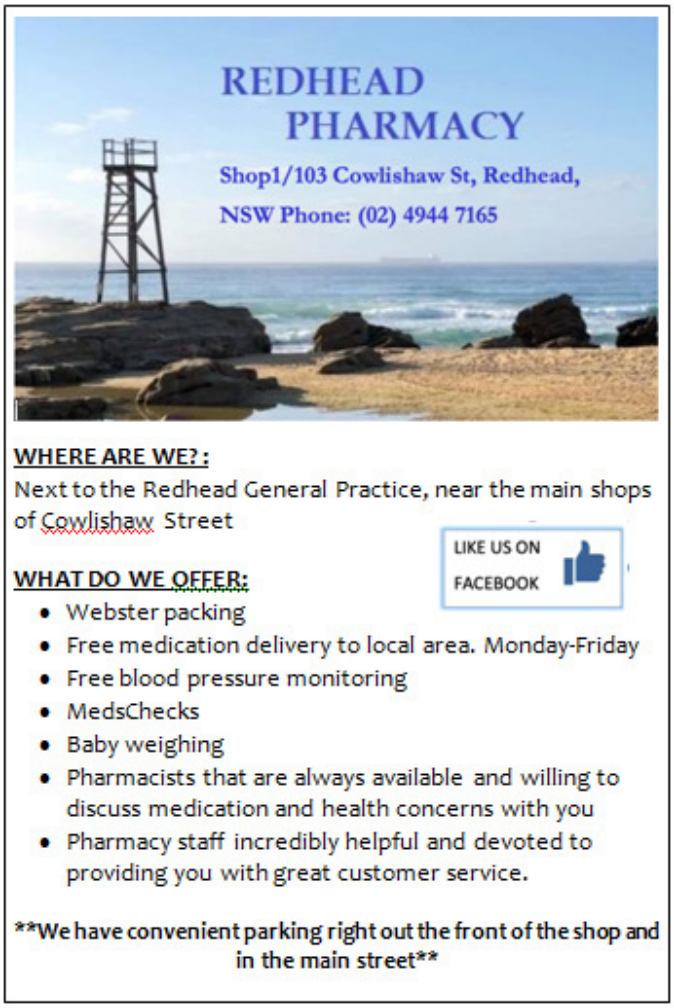
"During the past months toilet paper, masks, thermometers and ventolin have been rushed out the door. The arrival of a supply of locally made hand sanitizer has brought excitement and relief to the staff. A mass of black, red and white signs have taken over the front of the pharmacy as we embraced new ways of doing things whilst in constant motion forward into this uncertain time.

Throughout the past months we have appreciated how ***our Redhead customers have adjusted and embraced our "new normal" way of doing things****. Through all the craziness there has always been underlying calmness and respect which we appreciate. Even at safe social distances there has been* ***an engaging community spirit of people waiting patiently*** *outside the shop for their scripts, even in the cold.*

Services like the flu clinic have shown to us how thoughtful our community is with many people's main reason for receiving the vaccine being for the protection of the more vulnerable members of our community. We are not out of the woods yet but ***we go forward with optimism and we thank the Redhead community for supporting local****.*

At Redhead Pharmacy we are very happy with the government rebated upgrade to LED lighting. It's been great for the environment, has reduced our electricity bills and is a nice light to operate under."

Fiona Campbell, Pharmacist



Redhead Anglican Op Shop

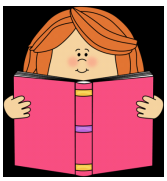
We have **reopened Monday 15 June 2020** and welcomes visitors to peruse our vast array of donated goods at our store near the medical centre in Cowlishaw Street Redhead.

Open Mon-Fri, 9.00-4.30 and Saturday, 9.00-12.00

We welcome donations of clean reusable items, excluding electrical and furniture items.

NEW Phone Number is 0491 627606

REDHEAD COMMUNITY LIBRARY
16 HUTCHINSON ST REDHEAD NSW 2290



WE HOPE TO GET PERMISSION TO RE-OPEN IN EARLY JULY

Lake Macquarie Council is working hard to develop a COVID safety plan for us and when that is finalised, they will give us the ok to re-open.

KEEP AN EYE OUT FOR THE OPEN SIGN IN JULY OR PHONE 49447473 DURING OPENING HOURS

Opening Hours THURS-FRI 3-5PM and SAT 10-12

Our Friendly volunteers will welcome you soon.

LOCAL BUSINESS LEADING THE SOLAR WAY

David Moore, Director, reports:

"33% electricity saving for Club Redhead"

In 2016 due to the ever-increasing costs of electricity the Board of Directors of Club Redhead aka Redhead Bowling Club decided to investigate alternate sources of energy supply for the premises. Several quotations were obtained and finally we sourced a local company HCB Solar to prepare a proposal to convert to a partial solar energy system.

As the Club has one of the largest buildings in the Redhead area and having a flat roof construction, the solar panels are not visible to the general public.

The proposal included a summary of the system, advanced bill analysis, solar potential, Bureau of Meteorology data and financial number crunching.

Some of the number crunching was:

Expected annual electricity generation	**66,851 kWh**
Contribution to electricity estimate	**23%**
Electricity savings estimate per year	**$8,977.00**
30-year electricity generation of	**1860MWh**
Total electricity savings	**$391,459.00**
Emissions offset of	**1,767T CO2**

The project consisted of installing 142, 280-Watt Polycrystalline solar panels and 2 inverters.

The total cost of the project was $74,000.00. Between 2016 and 2020 the club has **saved approximately 33% on their electricity accounts**, a considerable amount.

HCB Solar has now become one of the Clubs major sponsors.

Club Redhead look forward to seeing you all back.

The club opens again on 1st of July 2020 at 11:30am

Guan recommends:

"Install as much solar as you can afford"

Tham Guan Lee (known as Guan), the owner of **Seaview Malaysian Kitchen** installed his solar system about 2 years ago. He is not quite sure how big it is, but as he says "I filled the roof with as many panels as it could fit". His electricity provider Origin helped him with advice on the installation, and he now has 90+ panels covering the entire roof. His kitchen uses a lot of large refrigerators, exhausts, high powered cookers and kitchen machines, so his monthly energy bill is very large, but the solar system has saved him about 15% or $400 of his monthly bill. "I would recommend all small to medium business to install as much solar as they can afford in capital outlay, as it is a very worthwhile investment with a short payback time", says Guan. Seaview Malaysian Kitchen has served up lots of take-away throughout the COVID-19 pandemic. The dining room has now re-opened, and Guan invites Redhead families to dine in again.

Seaview

Chinese Malaysian Thai

Thank you to our customers for your loyal support and understanding during COVID pandemic

We welcome you back for seated dining now available

PH 49447996

21 Beach Rd, Redhead

Fully Licensed

TALK TO YOUR NEIGHBOURS ABOUT SOLAR

Kelly & David say:

"No electricity bills, we earn $90-120"

Kelly & David of Elsdon Street installed a 5 KW system of 20 panels 2 years ago. The system cost $9-10,000 on a 5 year loan and was provided by Aztec Solar. They decided to buy the dearer Coastal panels to withstand the corrosion in Redhead. They are extremely happy with the savings. Their family consist of 2 adults and 2 kids, who use about $400-450 of electricity per quarter. "***We have now reduced our electricity bill to $0 and we earn $90-120 credit on feed-in instead***", says Kelly. The system will have paid itself off in the 5 years easily. It has changed the way the family use electricity. They used to run washing machine and dishwasher at night, when the rates were lower. Now they use most electricity as the sun shines, so you use what you need from your panels first and the rest goes to the grid. They have been very happy with their investment, which is now producing an income for them.

Alan says:

"There is a huge range on offer"

The Andoni household bought their second solar system in March 2020. *"It replaced the 10 year old one we had,"* says Alan, "*but technology is changing rapidly and with the new technology you can go online and see how each panel is operating. All systems will be less efficient over time, especially if they get dirty. Here at Redhead we have an issue with salt, accumulating on your glass panels like on your windows.*" Through their local energy provider they can monitor how they are going with a daily readout 24-48 hours later.

Alan has a 6.6kW system with German panels, which is pretty standard, and they chose not to go with batteries as they felt they are not value for money – yet.

"We are producing $5-6 worth of energy per day, and it only cost us $2 per day to run the house. So we are $4 ahead most days, depending on the sunshine."

Alan's system cost $5,500 installed, with a Government rebate. "***A lot of the cost is labour, so look around, there is a huge range on offer***.'

David says:

"Environmental Responsibility in focus"

David Herridge of Dodds Street has recently had HCB Solar install 20 panels on his west facing low pitch roof. David and Sue's main driver was to ***become more energy efficient and more environmentally responsible with their electricity usage***, however for them it also adds up financially. The 20 commercial grade panels could achieve around 6.5 kilowatt hours of electricity on a clear hot day, however David says it average around 5 kilowatts, saving them approximately $ 1800 per year on their power bills. At a cost of $ 14,000 David estimates the system will pay for itself in 8 years and then begin to really save them money. David and Sue chose HCB Solar because they are a reputable local Newcastle company whose owner is also a Redhead resident who wants to see Redhead become a more sustainable community by using quality solar electrical systems, panels and batteries.

Stuart says:

"Solar best return you are likely to earn"

Stuart Dawson is a Redhead local who is a passionate advocate for the benefits of home solar panels. He first purchased a 1.5kilowatt (kW) system 10 years ago.

"Back then we could get 60 cents per kW hour for feed in to the grid" The system wasn't big enough for all our needs, but it definitely reduced the bills," says Stuart.

"*In 2018 we purchased an extra 3kWs to add to our existing panels, so we now have a total of 4.5kWs. We chose a company called Captain Green, and it cost $3,000. In December 2019 we changed electricity supplier from Energy Australia, who gave us a 12.5 cent feed in tariff to AGL giving 21 cents. Our first quarterly bill, noting it was summer, was a $93 credit."*

"There is a wide choice of solar firms out there, and prices are around this mark eg. 6 kW systems are advertised for $6,500, but some quote considerably more." Stuart thinks that quality shouldn't be a major concern as most use aluminium frames and panels are coated in glass. *"My advice to anyone is, if you have $3,000 - $4,000 in a bank account that you don't need for the next 3 years, invest in solar panels. It will save you on electricity costs more than any returns you are likely to earn."*

Landcare New South Wales

Landcare resumes
Sunday 30th June 2020 8:30-11:30am
at the Landcare shed in Cain Street.
We would love to see you!

HCB SOLAR | LG Life's Good | Supported by the NSW Government

Solar & Battery Combo
INTEREST FREE

NSW Government Program Trial with no Interest to pay

HCB Solar is now an Approved Supplier of the NSW Governments INTEREST FREE LOAN on batteries/Solar and batteries.

$14,000 towards a Solar PV and battery system (up to 8 years)

$9,000 towards retrofitting a battery

Eligible Postcodes:

Redhead

hcb-solar.com.au (02) 4953 7732

smart energy

Smart Energy, Australia's market leading solar company is now in Redhead

We're giving homeowners in your area access to interest-free loans to install solar and battery systems as an approved supplier of the NSW Government's Empowering Homes pilot.

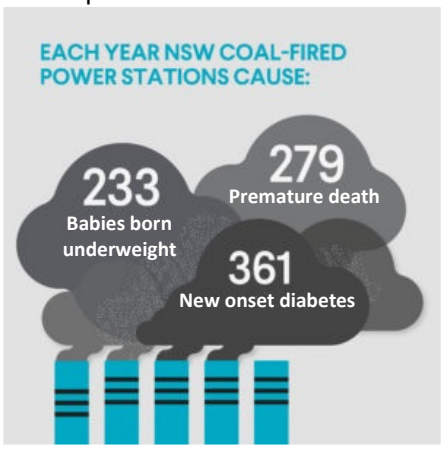
⚡ **$14,000 towards a solar PV and battery system** (repayable over a range of terms up to 8 years) OR

⚡ **$9000 towards retrofitting a battery system to an existing solar PV system** (repayable over a range of terms up to 10 years).

For more information head to **smartenergy.com.au and to see if you qualify** contact info@smartenergygroup.com.au or call **1300 133 055** today.

Your health and coal-fired power

Coal-fired power stations emit a range of toxic substances that contribute to illness and premature death. By installing best available emission control technologies power generators can reduce dangerous sulphur dioxide and oxides of nitrogen emissions by 90% or more. However, these pollution controls are not required by our environmental regulators and **none of Australia's coal-fired power stations are fitted with these controls**, despite being mandatory for power stations in other parts of the world.



Our health is being affected

There are five coal-fired power stations in NSW – Liddell, Eraring, Mt Piper, Bayswater and Vales Point. Two are on the Central Coast, two in the Upper Hunter and one in Lithgow and cause adverse health effects.

The following information is taken from two publications produced in November 2018 provided by Environmental Justice Australia, a not-for-profit public interest legal practice.

Did you know…?

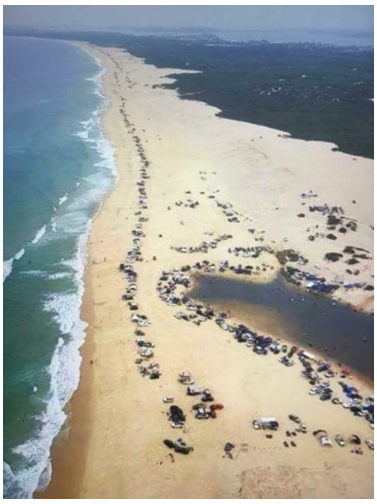
- There is no safe level of air pollution
- Coal-fired power stations release more than 30 toxic pollutants and are the single biggest source of dangerous sulphur-dioxide (SO_2), oxides of nitrogen (NO_x) and fine particle pollution (PM_{25}) in Australia.
- PM_{25} has the strongest impact on our health.
- Coal-fired power stations produce particles of two kinds: the primary particles released as coal is burnt, and secondary particles that form in the atmosphere from the SO_2 and NO_x gasses released during combustion.
- Tiny particles of pollution are drawn deep into the lungs and then move into the bloodstream.

How we can make a difference

Read about the health issues, costs and benefits of improved technology, who is responsible and how you can take action. You can access the full Environmental Justice Australia articles, including much more detail about the health effects for each locality, from our website, sustainableredhead.wordpress.com or at www.envirojustice.org.au/healthstudynsw.

Continued degradation of Nine Mile Beach?

It was announced in the Newcastle Herald in May 2020 Management shake-up for state park that the Board of the Belmont Wetlands State Park was disbanded, "following a bitter power struggle" and that an Administrator from the 'private' sector would be appointed.



Redhead Sustainable Neighbourhood has asked our local Members of Parliament *"What does this mean for the protection of Nine Mile Beach and the dune ecosystem? How can the community be assured that suitable resources will be provided to prevent the continued degradation caused by unregulated 4WD access?"*
So far, no answer is the stern reply.
We shared on our Facebook page the article that appeared in the Tracks Magazine.
https://www.tracksmag.com.au/news/how-my-local-beach-became-a-4wd-park-548663.

We received over 10000 hits and 90 comments, many positive, balanced and urging controls of 4WD access to Nine Mile Beach for environmental protection reasons, most however, were abusive and threatening. An example: "Bunch of whingers! I'm going down to rip it up!!"

You may like to search the multitude of visual evidence of environmental degradation available on YouTube of 4WD activity on Nine Mile Beach, and contrast it with the claims of some 4WD enthusiasts saying, that it is the Landcare volunteers, wind and waves causing the erosion problems.

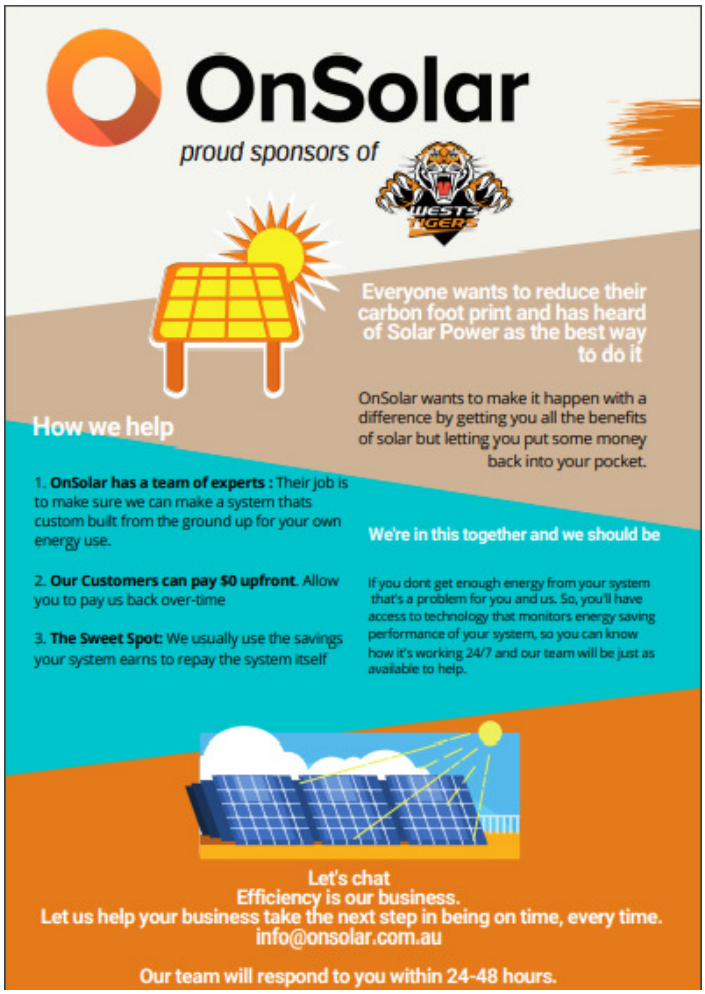
We have never used the argument that it is a beach only for locals. We are concerned about the loss and degradation of this ecosystem for future generations facing climate change and sea level rise. The continued impact on vegetation, birds, reptiles, ocean life, pippis and sand dwellers has to be recognised and avoided.

We understand that this is a difficult situation but if no action, politically and physically, is taken and no compromise sought to prevent further degradation, the disaster will become even worse.

Ideas to save energy

Making small changes to your energy use can result in big saving:

- Switching off lights, computers and photocopiers when not in use and make use of natural lighting.
- Manage heating and cooling by insulating, sealing drafts and shading.
- Every degree an air conditioner's set point is adds another 10% to heating and cooling costs.
- Buy an **accredited GreenPower** product from your electricity provider and you will be buying renewable energy as part of your bill.
- Replace old lights with new LED bulbs.
- Reduce lamp wattage, coupling this with dimmable lighting and efficient desk lamps for task lighting.
- Install light sensors to maximise efficiency.
- Borrow **a Save Power Kit from Lake Macquarie Libraries** to measure and better understand your power use. The kit includes an infrared thermometer, Power-Mate Lite, compass, stopwatch, Save Power thermometer and a user guide.



Kiribati: The Front Line of Change

It's no surprise that the communities and villages that are most under threat from climate change are the ones finding urgent, practical solutions. People lucky enough to live close to the ocean, like us at Redhead, are literally on the front line. Yet by looking at other ocean side communities we can see there are paths to also make it the front line of change.

Redhead King Tide
(Shannon Hartigan Images)

Many nations in the South Pacific face greater threats than us. They are far more open to rising sea levels, more severe storms, change to rainfall that supplies fresh water and other dangers of climate change. Many also rely upon the importation of their fossil fuel for energy.

However transitions to renewable energy can address these problems. ***Kiribati (khi-ra-bus) was one such nation who realised the problem early and set about tackling it themselves***. The islands are counted one of the most isolated countries in the world, and the shallowest. The highest point on many of the islands is just a couple of metres above sea level, so at high risk of the effects of climate change.

In 1990s home solar programs funded by Japan and the EU were introduced to the islands. Since then a company, Kiribati Solar Electric Company, has managed the program. Now more than 2000 residential units and 100 community building solar systems have been installed on 18 islands. The Kiribati Solar Energy Company installs the PV panels, battery and wiring for about $80, after which each family pays $9 each month as a maintenance charge. This is far less than each house was spending on oil a month. Unlike fossil fuels, the price too can be expected to decrease over time; the sun's energy is constant and reliable.

In 2016, the program was expanded and they installed solar on four government-owned facilities, to further cut its dependence on imported fossil fuels. A total of 548kW of solar was installed and funded by the World Bank, the Australian government and the Global Environment Facility. The solar produced on these facilities means that they will reduce diesel fuel use on the main island's grid – servicing 52,000 people – by 230,000 litres a year, slashing its greenhouse gas emissions, and save the Kiribati government $US290,000. ***Kiribati has found climate change mitigation measures that are sustainable, reliable and affordable***. Their situation remains perilous, but at least they are taking up the fight using their own resources.

This is a path that we all could follow. The Redhead **EnergyWave** project is one such way to help the planet and save money. By concentrating on energy saving and increasing the generation of renewable energy in Redhead, our little seaside community can also lead the way.

The Possum Award in 2020

The Possum Award is presented each year to the individual or group of students of Redhead Public School who have made the greatest contribution to the environment of Redhead. This year in 2020 we will be searching for the student or group who have done the most to increase the supply of Renewable Energy in Redhead or have saved the most energy by their efforts.

The very first Possum award was given almost 30 years ago in 1991, when it was awarded to the whole of Redhead School for all of the students' work in Webb Park. The award will be given in December 2020, and we look forward to receive nominations.

In line with Redhead Sustainable Neighbourhood's **EnergyWave** Initiative we want to encourage our youngest residents to participate in the whole community's effort to produce or save more of our energy use.

HOW MUCH ENERGY DOES YOUR APPLIANCE USE?

https://www.ausgrid.com.au/-/media/Documents/energy-use/Appliance-energy-use-guide.pdf

1 kW = 1000 W (a typical Microwave oven or Toaster or Bathroom Heater), 1 MW = 1000 kW

If a 1kW small bathroom heater is run for 1 hour it uses 1kWh of energy.

An average solar panel is 300W=0.3kW. When the sun shines a single solar panel produces 0.3 kWh energy per hour.

Lake Macquarie has 2665 hours of sunshine per year,

so ONE Solar panel has the potential to produce about 800 kWh per year.

An common installation of 20 solar panels can produce up to 6.0kWh per hour and 16 MWh per year

Many energy saving programs are available to residents and businesses in Redhead. For more information see energysaver.nsw.gov.au or call Service NSW on 137788:

Empowering Homes - solar battery offer

The NSW Government will help homeowners in Redhead access interest-free loans to install solar battery systems. Eligible households can get an interest-free loan:

- **$14,000 towards a solar PV and battery system** (repayable over a range of terms up to 8 years), or
- **$9000 towards retrofitting a battery system to an existing solar PV system** (repayable over up to 10 years).

LED Lighting

The government LED Lighting incentive apply to **both households and business**. Switching to LEDs will help you reduce your energy consumption. This means you can expect to see long-term cost savings on your bills. For example, if you change 20 halogen downlights to LED downlights, you can save up to $210 a year on energy costs. Other benefits include reduced maintenance, because LEDs last longer than other lights. They will also lower your environmental impact. The cost is subsidised by the government.

Energy Efficient Appliance replacement

Eligible residents of NSW are offered discounts on new energy efficient fridges and televisions.

- Replacing an old, inefficient fridge can save between $100 and $200 per year
- Replacing a plasma or cathode ray tube (CRT) television with an LCD television can save between $50 and $125 per year

You can receive 40-50% off the cost of selected fridge and television models, if you hold one of the following: Pensioner Concession Card, Health Care Card or Low Income Health Care Card or Veterans' Affairs Gold Card Your current fridge must be at least ten years old, and/or you own a plasma or cathode ray tube (CRT) TV.

Commercial Refrigeration Rebates

Small Businesses in Redhead can receive a rebate of up to $1490 per fridge. Savings vary between models. For example, you could get a rebate of $500 on an energy efficient vertical display fridge. Compared to a standard fridge, this could save you over $350 a year off your energy bill. The rebate is calculated based on the estimated energy consumption over the lifetime of the fridge. The business need to purchase or lease one through a commercial fridge dealer or manufacturer.

Commercial Building Upgrade Finance

Building Upgrade Finance is available for Lake Macquarie Council to offer to building owners and businesses. Funding sources includes co-financing packages, loans, tax incentives and other innovative financing solutions. Many are designed to support transition to a low carbon economy or to help overcome barriers to energy efficiency uptake. Your industry association or energy service company can be a good starting point for discussion. It is worth conducting an energy assessment prior to considering finance options, as this will help you determine where gains may be made.

Solar video series

Finn Peacock, author of The Good Solar Guide (2018) has produced a series of bite-size videos packed with information to demystify solar for you.

This 11 part video series answers some of the most common questions about solar like: how does solar work; how to calculate your potential savings with solar; how to avoid dodgy solar companies through to panel position on your roof. The videos are available on https://www.solarquotes.com.au/councils

Redhead Sustainable Neighbourhood

Vision: To celebrate and sustain our coastal village community, its assets and the surrounding natural environment for all to enjoy

CONTACT US **Email:** sustainableredhead@gmail.com

Meeting: 2nd Tuesday of every month, Redhead Library 6:15-7:30pm

Website: https://sustainableredhead.wordpress.com/

Newsletter Contributions

All contributions and comments are welcome from anyone receiving our Newsletter. Contact us, if you would like to place an ad, if you have an article, or would like to learn more about us.

Thanks to our sponsors for this edition OnSolar, HCB Solar, Smart Solar, Hunter Solar, Seaview Malaysian Restaurant, Redhead Pharmacy, Redhead Family Dental, and Your Food Collective