



## Eurobodalla's environment group

# Kayak 4 Earth Paddler, Steve Posselt, Arrives Moruya Wharf Despite Mishap on River Bar

Steve Posselt made it to Moruya from Ballina, but only just. After an uneventful paddle from Ballina, the Moruya bar lived up to its reputation and took its toll. Steve was capsized by a rogue wave as he entered the River with a strong NE wind behind. He eventually made it to safety towing his kayak, but lost gear in the accident.

On the Tuesday he proceeded down the Moruya River met by a flotilla of kayaks and the Nature Coast Dragon Boat Club boat "Yang".



Overall there were about 140 people to greet Steve. They represented many community organisations including 14 members of the Coastwatchers Association.

He was presented with the local Climate Emergency Declaration Petitions by the ESC Deputy Mayor, Anthony Mayne.

The Petition highlights the climate

### 21 February 2017

emergency that the world faces, and calls on the Australian Parliament to stop bickering and get on with the transition to renewable energy.



Later Steve proceeded up the river to the Kiora Weir, then commenced dragging his kayak along the road to Canberra with the petitions. Steve has a special harness and the kayak has wheels. Contemplate the effort needed to haul the kayak up the Araluen Road past the Deua River, then finally from Araluen to the top of the escarpment.

Steve will arrive in Canberra on Saturday 25 February at 11.00 am, near the Ferry Terminal in the West Basin of Lake Burley Griffin.



The Petitions will be presented to the Australian Parliament by John Hewson on Monday 27 February 2017, in the Parliament House forecourt at 12.00 noon.

# The Need to Preserve Old Trees for the Conservation of Wildlife

The NSW Government is still allowing the logging of native forests, including in some areas old growth forests, here on the South Coast of NSW. This article was submitted by John Perkins to remind members of the critical significance of old trees.

As you all know trees provide resources for wildlife - for foraging, shelter, roosting and nesting. However, trees which contain hollows are particularly important for those species of animals, including many threatened species, which specifically require hollows for shelter and nesting.

Any decrease in the availability and natural diversity of hollows can lead to significant loss of hollow dependent animal species, diversity and abundance. In some cases it may result in local extinction of these species.



Where older trees with hollows die out or are felled, and regrowth trees prevail, animal diversity is drastically reduced. The continued viability of the Yellow Belly Glider (*Petaurus australis*) is totally reliant on large areas of unfragmented forests, with suitable feed trees and tree hollows. The Greater Glider (*Petauroides volans*) is particularly sensitive to native forest logging, as they have relatively small home ranges.

In research carried out by CSIRO (Hugh Tyndale-Biscoe) in the 1960s, they found the Greater Glider stayed faithfull to their home range even after severe logging, and died in situ, rather than move to adjacent undisturbed forest. Massive losses occurred.



Large old trees are invaluable. Many are 200 to 800 years old, and some are even older. Such trees represent the vestiges of once-intact ecosystems and provide some sense of what the landscape was like before the arrival of the Europeans.

By virtue of their size, older trees

provide more food and nesting resources than younger trees. For example a 300 year old tree with a height of 20 meters and a trunk diameter of 1.5 meters, has a bark surface area of approximately 94 square meters. By contrast a 20 year old tree with a trunk surface area of 20 cm and a height of 15 meters has a bark surface area of just 9 square meters.

The larger older tree is therefore equivalent to 10 smaller trees, at the same time decreasing the risk of predation, by not having to travel from one tree to the next.



Big old, healthy trees produce more nectar, foliage and fruits than younger trees. These highly productive nectar sources are vital to the survival of some wildlife species, providing energy to nectar feeders such as the Regent Honeyeater (*Anthochaera phrygia*) and the Musk Lorrikeet (*Glossopsitta concinna*). Other species can rely on insects that are dependent on the nectar, such as the Brush-tailed Phascogale (*Phascogale rapoatafa*).

The Coastwatchers Association Inc. PO Box 521, Batemans Bay NSW 2537 Email

coastwatchers.committee@gmail.com

# Eurobodalla Shire Council Votes to Divest from Fossil Fuel Investments

At the Council meeting on 14 February 2017, the Council in a 5:4 vote agreed to give preference to investing with financial institutions that do not invest in, or finance, the fossil fuel industry.

Councillors McGinlay, Brown, Thomson, Constable and Deputy Mayor Anthony Mayne supported this motion, and the Coastwatchers congratulate them on this positive action.

The decision is subject to:

- the investment being compliant with Council's current 'Investment Policy',

- the investment rate of interest being equivalent to other similar investments that may be on offer to Council at the time of investment, and

- a briefing be provided to Councillors at the end of the 2016-17 financial year to assess the results of this moderate divestment strategy.

The aim is to have two-thirds of the Council's investments lodged with financial institutions that have a stated intent, and/or track record of non-investment in the fossil fuel industry, by the end of the 2016-17 financial year.

Already one third of investments are in this category. Hopefully this will increase to 100% within 2 years.

# Updated Coastwatchers Website to be On Line in Next Few Days

In the next few days the updated Coastwatchers website will be placed on line. The Committee hopes navigation will be easier and more up to date than the previous site. The Archive is still be completed, as it takes time to review all material before it goes on line.

One major change is that there is a "Members Only" section, which is yet to be completed, where members will have access to all Management Committee Minutes.

## Environmental Defenders Office Provides Advice on the New NSW Planning Laws

The Environmental Defenders Office has provided detailed advice on the proposed changes to NSW Planning Laws.

The NSW Government is proposing to amend State planning laws – updating the Act's objects and structure, clearer public participation requirements and timeframes, reforms to state and local decision-making panels, speeding up decisions on large and small development, and putting another nail in the coffin of the former 'Part 3A' major projects pathway.

The community has until **Friday 31 March 2017** to comment (extended deadline). The Government will then introduce a revised Bill to Parliament.

The 8 page advice can be found at:

https://d3n8a8pro7vhmx.cloudfront.ne t/edonsw/pages/3549/attachments/ori ginal/1487196315/Six\_significant\_chan ges\_to\_the\_Planning\_Act\_in\_2017\_with\_Part\_3A\_update\_EDO\_NSW.pdf ?1487196315

The Association will be making a submission to the NSW Government, and members interested are encouraged to do likewise.

# Yahoo Email Users

A word to all Yahoo email users. For some unknown reason, emails from the Association to its members with Yahoo email addresses, keep being rejected, especially when there is an attachment. For those in this situation can you please contact the Association, and if possible provide an alternate email address.

# Dargues Reef Mine Gets Conditional Final Approval from the Commonwealth Government

Most members were under the impression that all approvals for the Dargues Reef Mine were finalised, and that mining was set to commence, as the Miner was saying.

However, that was not correct and the Association has been monitoring the Commonwealth website for this decision. It was made last Friday 17 February 2017. This approval was made by the Commonwealth Government's powers covering threatened species listed in the Commonwealth EPBC Act (The Environment Protection and Biodiversity Conservation Act 1999).

This is a fascinating decision for two reasons. First it is a conditional approval, and second, for the first time in 16 years with this project, an approval agency has taken into account DOWNSTREAM impacts. This is a monumental change and is to be wholeheartedly welcomed. Up until now the NSW and Commonwealth Governments have been only interested in an a few kilometres around the mine site.

The Association has been arguing that the major problems that beset mines the world over, are when tailings dams leak or burst and the water, sediment and chemicals burst into the environment.

Remember just 16 months ago BHPs tailings dam in Brazil burst killing 17 people and smothering entire villages. The sludge travelled 650 km to the Atlantic Ocean killing everything in its path. The list goes on and on, with 1 -2 major failures every year somewhere in the world. At last the light bulb was switched on for the Commonwealth Government. Maybe there is insufficient power in NSW to light another bulb.

The Commonwealth Department's decision can be found at:

http://epbcnotices.environment.gov.au/ e ntity/annotation/8a6d6b86-d6f4-e611-88e4-005056ba00a7/a71d58ad-4cba-48b6-8dabf3091fc31cd5?t=1487821456929

No mining can commence until the conditions of this approval are met and the Minister has signed off his approval.

The Conditions are that the Miner must prepare:

1. A Construction Environmental Management Plan (CEMP) to protect downstream listed threatened species and communities, and

2. A Water Management Plan (WMP) be prepared to protect downstream listed threatened species and communities.

In its August 2016 submission regarding Commonwealth approvals relating to the EPBC Act the, Coastwatchers Association recommended:

#### "...5. RECOMMENDATION

The Coastwatchers Association Inc recommends to the Australian Government that the project NOT be approved under the Environmental Protection and Conservation Act 1999, given the potential catastrophic impacts of the Dargues Reef Gold Mine on the Critically Endangered, Endangered and Vulnerable flora and fauna downstream from the mine. Spillages and Tailings Dam failures are a worldwide characteristic of mining, especially mining at the top of a 700 meter escarpment whose river system runs through the Deua National Park, and is the source of the Eurobodalla Shire's water supply.

For once Government appears to have listened. The Association will be considering options in the near future.

# Australia's Electricity Market is Not Agile and Innovative Enough to Keep Up

By **Hugh Sadler**, Honorary Associate Professor, Centre for Climate Economics and Policy, Australian National University

(The Conservation 18 February 2017)

On the early evening of Wednesday, February 8, electricity supply to some 90,000 households and businesses in South Australia was cut off for up to an hour. Two days later, all electricity consumers in New South Wales were warned the same could happen to them. It didn't, but apparently only because supply was cut to the Tomago aluminium smelter instead. In Oueensland, it was suggested consumers might also be at risk over the two following days, even though it was a weekend, and again on Monday, February 13. What is going on?

The first point to note is that these were all very hot days. This meant that electricity demand for air conditioning and refrigeration was very high. On February 8, Adelaide recorded its highest February maximum temperature since 2014. On February 10, western Sydney recorded its highest ever February maximum, and then broke this record the very next day. Brisbane posted its highest ever February maximum on February 13.

That said, the peak electricity demand in both SA and NSW was some way below the historical maximum, which in both states occurred during a heatwave on January 31 and February 1, 2011. In Queensland it was below the record reached last month, on January 18.

Regardless of all this, shouldn't the electricity industry be able to anticipate such extreme days, and have a plan to ensure that consumers' needs are met at all times?



Hugh Sadler

Much has already been said and written about the reasons for the industry's failure, or near failure, to do so on these days. But almost all of this has focused on minute-by-minute details of the events themselves, without considering the bigger picture.

The wider issue is that the electricity market's rules, written two decades ago, are not flexible enough to build a reliable grid for the 21st century.

## Vast machine

In an electricity supply system, such as Australia's <u>National Electricity Market</u> (NEM), the amount of electricity supplied must precisely match the amount being consumed in every second of every year, and always at the right <u>voltage</u> and frequency. This is a big challenge – literally, considering that the NEM covers an area stretching from Cairns in the north, to Port Lincoln in the west and beyond Hobart in the south.

Continent-sized electricity grids like this are sometimes described as the world's <u>largest and most complex machines</u>. They require not only constant maintenance but also regular and careful planning to ensure they can meet new demands and incorporate new technologies, while keeping overall costs as low as possible. All of this has to happen without ever interrupting the secure and reliable supply of electricity throughout the grid.

Until the 1990s, this was the responsibility of publicly owned state electricity commissions, answerable to their state governments. But since the industry was comprehensively restructured from the mid-1990s onwards, individual states now have almost no direct responsibility for any aspect of electricity supply.

Electricity is now generated mainly by private-sector companies, while the grid itself is managed by federally appointed regulators. State governments' role is confined to one of shared oversight and high-level policy development, through the <u>COAG Energy Council</u>.

This market-driven, quasi-federal regime is underpinned by the <u>National</u> <u>Electricity Rules</u>, a highly detailed and prescriptive document that runs to well over 1,000 pages. This is necessary to ensure that the grid runs safely and reliably at all times, and to minimise opportunities for profiteering. The downside is that these rules are inflexible, hard to amend, and unable to anticipate changes in technology or economic circumstances.

Besides governing the grid's day-to-day operations, the rules specify processes aimed at ensuring that "the market" makes the most sensible investments in new generation and transmission capacity. These investments need to be optimal in terms of technical characteristics, timing and cost.

To borrow a phrase from the prime minister, the rules are not agile and innovative enough to keep up. When they were drawn up in the mid-1990s, electricity came almost exclusively from coal and gas. Today we have a changing mix of new supply technologies, and a much more uncertain investment environment.

Neither can the rules ensure that the closure of old, unreliable and increasingly expensive coal-fired power stations will occur in a way that is most efficient for the grid as a whole, rather than most expedient for individual owners. (About 3.6 gigawatts of capacity, spread across all four mainland NEM states and equalling more than 14% of current coal power capacity, has been closed since 2011; this will increase to 5.4GW and 22% when Hazelwood closes next month.)

Finally, one of the biggest drivers of change in the NEM over the past decade has been the construction of new wind and solar generation, driven by the <u>Renewable Energy Target</u> (RET) scheme. Yet this scheme stands completely outside the NEM rules.

The <u>Australian Energy Markets</u> <u>Commission</u> – effectively the custodian of the rules – has been adamant that climate policy, the reason for the RET, must be treated as an external perturbation, to which the NEM must

adjust while making as few changes as possible to its basic architecture. On several occasions over recent years the commission has successfully blocked proposals to broaden the terms of the rules by amending the National Electricity Objective to include an environmental of boosting goal renewable energy and reducing greenhouse emissions.

Events in every state market over the past year have shown that the electricity market's problems run much deeper than the environmental question. Indeed, they go right to the core of the NEM's reason for existence, which is to keep the lights on. A fundamental review is surely long overdue.

The most urgent task will be identifying what needs to be done in the short term to ensure that next summer, with Hazelwood closed, peak demands can be met without more load shedding. Possible actions may include establishing firm contracts with major users, such as aluminium smelters, to make large but brief reductions in consumption, exchange in for appropriate compensation. Another option may be paying some gas generators to be available at short notice, if required; this would not be cheap, as it would presumably require contingency gas supply contracts to be in place.

The most important tasks will address the longer term. Ultimately we need a grid that can supply enough electricity throughout the year, including the highest peaks, while ensuring security and stability at all times, and that emissions fall fast enough to help meet Australia's climate targets.

# Sustainability Alliance SHASA

SHASA is a non-profit organisation, in the Eurobodalla, which aims to promote renewable energy and energy efficiency.

SHASA identified solar bulk buy as a way to reduce the unit costs, ensure a quality product, certified local installers and good warranties. SHASA went out to tender in 2016 for solar panels for households and businesses.

The Smart Energy Network won the tender and SHASA have locked in prices until 31 March 2017. They have quality panels, hybrid battery ready invertors and local installers. The Smart Energy Network have quality panels, hybrid battery ready inverters and local installers. A 5kw system with a 10 year warranty on the inverter will cost approximately \$7,000 for the value bundle (chinese made panels) and \$7,500 for the aussie bundle (Australian made panels).Solax inverter is hybrid battery ready so you can easily install batteries.



Solar makes brilliant economic sense. The Internal Rate of Return is a measure of how quickly an investment returns a profit, or in the case of solar panels, pays for itself through reduced electricity bills. With the dramatic reduction in the cost of solar, and rising energy prices, for businesses that use electricity mainly during the day systems can be paid off with electricity savings in 5-7 years or less. A rate of return of 18% is better than any other investments.

With the imminent closing of the Hazelwood coal power station in Victoria electricity prices are

anticipated to increase between 6-10%. Installing solar will assist your business to control your electricity costs by supplying 50-70% of your power needs and after 5-7 years, your system will have paid itself off with the electricity savings.

To get a free, no obligation, desk top quote which includes a financial return on investment please ring Beth Macdonald or Dan MacDonald from the Smart Energy Network. Beth's phone number is 0413057363, and email is beth@networkedinnovations.com.au or Dan's phone number is 0403042529 and email is dan@networkedinnovations.com.au or contact Kathryn Maxwell or Annette Kennewell from SHASA. Kathryn's number if 0467558645 and Annette's number is 0417203610 and we will liaise with the Smart Energy Network to organise the desk top quote.



SHASA stall at the Bega Show 18 February 2017 - promoting the solar bulk buy