



CROW Newsletter

(Keeping our eye on the climate news))

February, 2021

The good news: CROW and other local climate groups' submissions bring about changes in Wagga's 2040 Planning Statement.

Thanks to all those who made a submission calling for inclusion of climate action in the Wagga Council 'Local Strategic Planning Statement' (LSPS) at the end of last year.

Council staff reported that 21 of the 74 submissions on the LSPS identified sustainability/climate change as a key concern. As a result, two key actions were added to the LSPS:

- "Support the implementation of the NSW Government Net Zero 2050 and NSW Government Riverina Murray Integrated Regional Vulnerability Assessment
- Further consider local opportunities that will contribute to achieving Net Zero through an appropriate local strategy."

Again, "net zero" means reducing emissions as much as possible and offsetting any remaining emissions with tree planting or the like.

This a significant step towards adequate local action on climate change. It builds some alignment to the Paris Agreement into a local document that has some importance for Council action.

Also, at the Council meeting on Mon 8 Feb it was indicated that the detailed submissions about needed actions for climate change would be passed on to the team managing the upcoming consultation for the Community Strategic Plan.

SCIENCE

[The threats to freedom of speech in Australian science.](#)

Many political commentators have recently raised fake freedom of speech concerns for characters like Craig Kelly, George Christenson and others who want to spread wacky and incorrect myths about coronavirus and climate change.

But here is the real threat to freedom of speech – to scientists who are trying to make us aware of real threats to our environment and survival.

"I declared the (action) unsafe. I was overruled and ... was told to be silent or never have a job again."

"We are often forbidden (from) talking about the true impacts of, say, a threatening process [...] especially if the government is doing little to mitigate the threat."

"I was directly intimidated by phone and Twitter by (a senior public servant)."

"... governments allow (industry) to treat data collected as commercial in confidence. This means experts most able to comment on the details of big mining and construction projects are hopelessly conflicted and legally gagged from discussing these projects in public."

"(Government) staff are rewarded or penalized on the basis of complying with opinions of senior staff regardless of evidence."

"I proposed an article in The Conversation about the impacts of mining [...] The uni I worked at didn't like the idea as they received funding from (the mining company)."

All these comments, straight from the mouths of some of Australia's most esteemed scientists, highlight the threats faced by ecologists, conservation scientists, conservation policy makers and environmental consultants, whether they are working in government, industry or universities.

[Read the full article here.](#)

Coal - the hidden health hazard in our regional communities

The impacts of coal pollution are horrifying.

Last year a nationwide scientific study found that coal pollution caused 800 premature deaths a year across Australia, and the ill health of thousands of others.

The invisible particulates from burning coal can reach into our lungs and our brains, even harming babies who are still in the womb and contributing to low birth weights. Families in communities near where coal burning takes place experience a higher rate of childhood asthma due to pollution from coal burning power stations. Unless we take action to limit coal pollution and switch to cleaner, safer renewable energy, this will be the enduring legacy of coal in our regions.

For more also read: **Just [how bad are the killer effects of coal](#)**

And here: **[Fossil fuel pollution may have killed 8.7 million people in a single year, says Harvard study.](#)**

And for an excellent database tracking all the damage that coal is doing visit <https://coalimpactsindex.com.au/> which is the most comprehensive list of breaches, breakdowns, and pollution events at Australia's coal fired power stations ever assembled.

For instance, you will find (H/T Grant Adams) that AGL is the country's single biggest emitter of carbon dioxide - and that **it's responsible for more than 70% of the published licence breaches that occurred at coal power stations in NSW and VIC in the last five years.**

Busting your mad uncle's climate myths – [here's a place to start](#)

Do you have an uncle, friend, Facebook pest, DA letter writer or local politician who says:

- Australia is on track to meet and beat the Paris Accord emission targets, or
- Australia is doing its fair share on Climate Change, or
- Our LNG exports are driving down emissions, or
- Australia's carbon emissions are falling.

And you need some help in countering their silly ideas ...then the Climate Council has you covered. Click [here](#) or [here](#) for help

Climate Change Uproots Global Agriculture

Climate change is shifting where ideal growing conditions exist and is leaving farmers behind.

In much of the world, climate change is altering regional growing conditions and making them more unpredictable. Farmers are finding it harder to consistently grow enough food to meet increasing demand. Securing the world's food supply for the future, experts assert, requires us to tally the good and the bad in the current agricultural structure, including the infrastructure and technology in food distribution systems.

Small farms, which account for about 90% of the world's 570 million farms, are particularly vulnerable to changes in seasonal climate. Land tended by families for generations may suddenly become nonarable. A change in the timing or intensity of yearly rainy seasons or the

El Niño-Southern Oscillation (ENSO), for example, could bring rains or drought that wipe out a family's crops.

New Research – the world is at its hottest for 12 000 years

Scientists say temperatures globally at highest level since start of human civilisation

The planet is hotter now than it has been for at least 12,000 years, a period spanning the entire development of human civilisation, according to research.

Analysis of ocean surface temperatures shows human-driven climate change has put the world in “uncharted territory”, the scientists say. The planet may even be at its warmest for 125,000 years, although data on that far back is less certain.

The research, published in the journal Nature, reached these conclusions by solving a longstanding puzzle known as the “Holocene temperature conundrum”. Climate models have indicated continuous warming since the last ice age ended 12,000 years ago and the Holocene period began. But temperature estimates derived from fossil shells showed a peak of warming 6,000 years ago and then a cooling, until the industrial revolution sent carbon emissions soaring.

This conflict undermined confidence in the climate models and the shell data. But it was found that the shell data reflected only hotter summers and missed colder winters, and so was giving misleadingly high annual temperatures.

“We demonstrate that global average annual temperature has been rising over the last 12,000 years, contrary to previous results,” said Samantha Bova at Rutgers University–New Brunswick in the US, who led the research. “This means that the modern, human-caused global warming period is accelerating a long-term increase in global temperatures, making today completely uncharted territory. It changes the baseline and emphasises just how critical it is to take our situation seriously.”

MONEY

Will Australia be punished for its lack of a climate policy?

If the Morrison government does not impose emissions reduction policies, exporters may need to buy carbon permits in the EU

Big-emitting Australian businesses that export to Europe could soon face steep carbon levies of more than \$70 a tonne unless the federal government imposes emissions reduction policies. The carbon tariff proposal was [endorsed by the European parliament's environment committee](#) last week and is expected to form the basis for a European Commission policy due in June.

The cost of climate change – from the Climate Council

Forget the spin about the cost of dealing with climate change – the costs of not dealing with it are far, far worse.

The Climate Council's latest report finds that 2019-20 was the most intense period yet for climate change-fuelled extreme weather, capping off a decade of climate inaction which has cost the Australian economy more than \$35 billion.

By 2038, as extreme weather becomes more frequent and more severe, climate change is expected to cost the Australian economy up to \$100 billion every year. That's billion not million, and every year, not every decade.

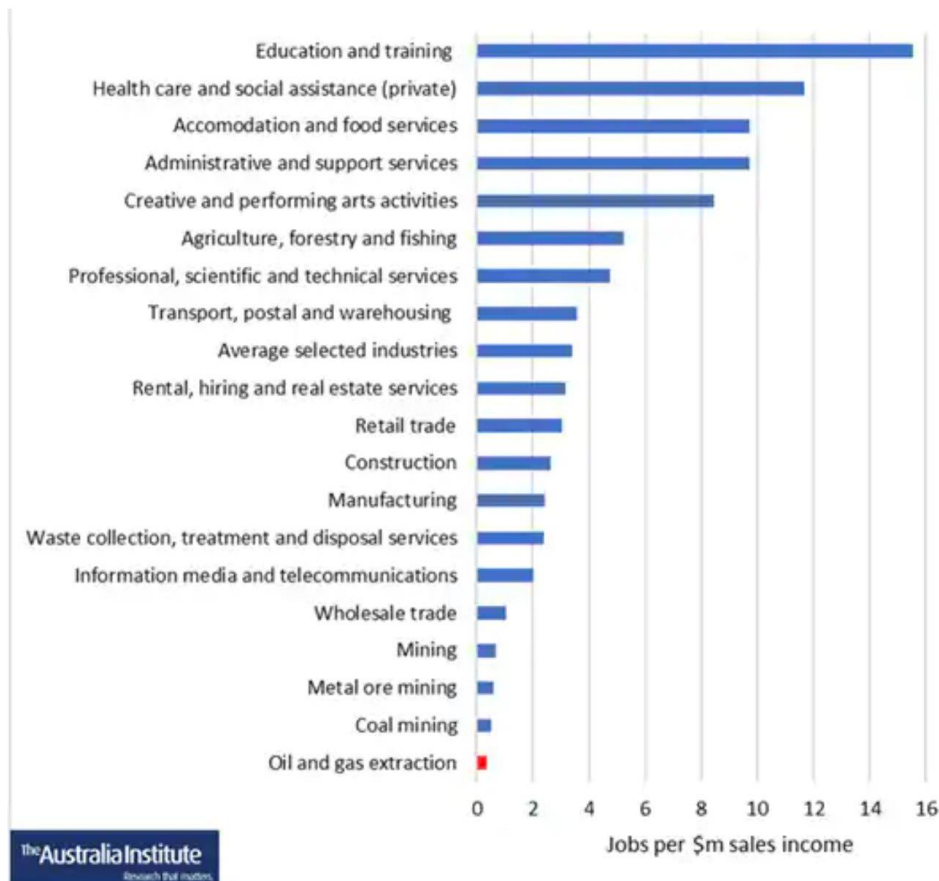
No country has more to gain from transitioning to a zero carbon economy than Australia. We are one of the sunniest and windiest countries in the world, and renewable energy is already cheaper than fossil fuels, can employ more people – particularly in regional Australia - and be rapidly expanded to reduce global emissions.

It's time to make the costs of climate change hit home. Over the coming decade, Australia must aim to at least halve its emissions, and reach net zero emissions, well before 2040.

If you access the report from the heading above, you can send a copy to your local member.

“But what about all the fossil fuel jobs?”, I hear you cry

Well there they are, right down at the bottom of this graph of jobs per million dollars income.



POLITICS AND POLICIES

Actual Farmers want a zero 2050 CO₂ target, the Nationals don't

Australian agriculture industry bosses have vowed to continue efforts to lower carbon emissions from farming, despite an opposing push by the federal Nationals to have agriculture excluded from any net zero emissions target.

Key points:

- Pork producers are leading the way with efforts to reduce carbon emissions
- Farming groups have rejected a Nationals push to make agriculture exempt
- Climate experts say farmers cannot afford to be left behind

The National Party's position is at odds with the support shown by various agricultural bodies including Meat and Livestock Australia, the National Farmers Federation and Farmers for Climate Action.

The Australian pork industry thinks of itself as a leader on climate action, having moved beyond the debate to focus on cutting emissions now.

Australian Pork Limited (APL) chief executive Margo Andrea said over the past 30 years, pork producers had reduced carbon emissions by 69 per cent and water use by 80 per cent. "We wanted to demonstrate as an industry that we could become carbon neutral," Ms Andrea said.

See more here: [Nationals' push to carve farming from a net-zero target is misguided and dangerous](#) (*The Conversation*)

(H/T Grant Adams)

Meanwhile

- US rejoins Paris Agreement
- US cancels \$9b Keystone XL pipeline
- US reimposes ban on drilling in Arctic
- US reviews 100 anti-environment Trump rules
- US court vacates rule to lower power sector emissions

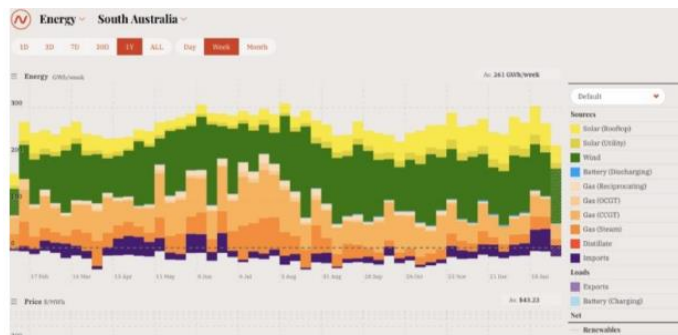
Australian Prime Minister says zero by 2050 is "preferable" and Australian newly released and two years late Future Fuels Strategy (FFS) [contains very dodgy figures that close down EV's.](#)

Australia's Deputy Prime Minister says he is not concerned about what happens in 30 years time and that mining, agriculture and power stations should be exempt from any requirement to reduce their carbon pollution.

TECHNOLOGY

[South Australia is a world beater](#)

South Australia has achieved a world-leading 60 per cent share of wind and solar in its local grid in the last 12 months, reaching a level of "variable" or "intermittent" generation that is unmatched in a market of its size anywhere in the world.



You only need to go back a little more than a decade to find critics who claimed that it was impossible to accommodate more than 10 per cent wind and solar in the grid, or just two years to hear the current federal energy minister Angus Taylor claim there was already too much wind and solar in the grid.

Now, the South Australia state Liberal government has a target of reaching net 100 per cent renewables (wind and solar) by 2030, and if the new transmission link goes ahead it is likely to reach that target well before then.

[So much for excluding Agriculture from the zero by 2050 target](#)

The country's biggest free-range meat chicken farm has slashed its power bill after installing one of agriculture's most extensive solar and battery systems.

A large-scale free-range meat chicken farm has invested in extensive solar and battery systems. It is also turning straw and manure from chicken sheds into profitable compost.

"Before we put the system in, our cost of energy imported from the network was getting towards \$1 million," said Ben Edser from AAM, the investment group that owns Riverlands Free Range. "Following the investment we've put in place, which has been circa \$5 million, we've been able to reduce our consumption by about 70 per cent."

The investment group that owns the farm believes the sustainable model can be rolled out to all areas of agriculture

Albury features in a smart alternative to pumped hydro

A new big battery project to be co-located at a run of river hydropower station in southern New South Wales has been given the green light by planning authorities,

The battery will be co-located with the Hume hydro power station, located around 20km outside of Albury, with project developers Meridian Energy planning to take advantage of the battery by charging during periods of low demand and low energy prices, while having an additional supply of power available during peak periods.

Meridian Energy says that the new battery will be able to draw power directly from the existing hydropower station, making the project the first of its kind in Australia.

“Once completed the battery paired with an existing hydro generator will be the first pairing of its kind in Australia and will mean the Hume Power Station can remain online to supply clean, reliable and importantly dispatchable power to meet Australia’s future energy needs,” Meridian energy CEO Jason Stein said.

And a more conventional approach near Yetholme

This is a more conventional approach to pumped hydro. Yetholme is between Bathurst and Lithgow in the NSW Government’s Central West Regional Energy Zone.

Canadian gas giant Atco has bought the rights to develop the \$500m 325 MW Central West Pumped Storage Hydro Project near Yetholme in Central West New South Wales (NSW), Australia. The project marks Atco’s first major move into renewables in the National Energy Market (NEM) and could prove a significant one considering its centrality to the proposed Central West-Orana Renewable Energy Zone (CWOREZ).

The 325 MW pumped storage project will be able to generate 2,600 MWh of stored energy for a period of up to eight hours. The location’s close proximity to copious resources of solar and wind and also a 330 kV grid connection supporting the Sydney load centre makes it an important firming agent to the NSW government’s CWOREZ.

This month’s “world’s biggest battery” announcement goes to Kurri Kurri

A new contender for the world’s biggest battery – and this one is fired up by a network of industrial rooftop panels.

CEP.Energy has announced plans to build what it says will be the “world’s biggest battery” – 1,200MW – at the industrial centre of Kurri Kurri in the Hunter Valley, right where the Morrison government wants to build its own gas-fired generator.

The CEP plans follow on from the announcement last October that the company would build a network of industrial-scale rooftop solar and battery storage installations, totalling up to 1,500MW.

These plans have now been expanded to encompass grid-scale batteries, with the 1,200MW Kurri Kurri battery – there is no word yet on the storage duration – to be part of a network of four big grid-scale batteries across the country with a total capacity of 2,000MW.

Boeing aims at fossil fuel free flying

Boeing says its fleet will be able to fly on 100% biofuel by 2030. (Of course we will then have to be able to produce enough bio-fuel to keep them up there.)

Boeing Co says it will begin delivering commercial airplanes capable of flying on 100 percent biofuel by the end of the decade, calling reducing environmental damage from fossil fuels the "challenge of our lifetime."

Boeing's goal – which requires advances to jet systems, raising fuel-blending requirements, and safety certification by global regulators – is central to a broader industry target of slashing carbon emissions in half by 2050, the US planemaker said.

"It's a tremendous challenge, it's the challenge of our lifetime," Boeing Director of Sustainability Strategy Sean Newsum told Reuters. "Aviation is committed to doing its part to reduce its carbon footprint."