



# As the crow flies

(Straight to the point)

November, 2019

## NEWS

### Should we have a new special day of the year?

Last Monday, 11<sup>th</sup> of November was the first day since records have been kept that no rain was recorded anywhere in Australia. So should this be a new remembrance day when, in future, we can all sit around our parched land and think about what it was once like and still could have been if we had just listened and acted in time?

### The annual Brown to Green report doesn't think much of our efforts

Australia's response to climate change is one of the worst in the [G20](#) with a lack of policy, reliance on fossil fuels and rising emissions leaving the country exposed "economically, politically and environmentally", according to a new international report. Australia's progress to meeting its already "unambitious" Paris climate targets was third worst, fossil fuel energy was on the rise and policies to tackle high transport emissions and deforestation were also among the worst across the G20 countries.

[Read more here](#) (but it doesn't get much better)

### Joining the inner Wagga branches of the raving, latte sipping climate warriors

More and more local people are becoming actively involved in pressing for action on climate change in Wagga. If you would like your voice to have more impact then look for the Facebook pages of;

[CROWagga](#)

[Wagga Wagga Fridays for Future](#)

[Stop Adani Wagga](#)

[Wagga Conservatives for Climate Action](#)

[Farmers for Climate Action](#)

CROW also has a [web page](#) where you can find all back issues of the CROW Newsletter.

## SCIENCE

Interested in answers to these questions? Dealing with a denier? Writing to the DA? Follow these links for great answers from the Climate Council.

[1. What is climate change?](#)

[2. What is causing climate change?](#)

[3. How is climate change affecting Australia?](#)

[4. Why do only a few degrees of warming matter?](#)

[5. How do scientists know the climate is changing?](#)

[6. What are the main sources of greenhouse gas emissions in Australia?](#)

[7. What can Australia do to combat climate change?](#)

[8. Where can I find out more?](#)

### [Climate change and bushfires – scientists say the link is clear](#)

The link between rising greenhouse gas emissions and increased bushfire risk is complex but, according to major science agencies, clear. [Climate change](#) does not create bushfires but it can and does make them worse. A number of factors contribute to bushfire risk, including temperature, fuel load, dryness, wind speed and humidity.

## POLITICS AND POLICY

### “I accept the science of climate change – sort of”

Ask a politician about climate policy these days and they will say “I accept the science of climate change”.

It’s a phrase crafted in the PR engine rooms of the political machine as a talking point when a politician is avoiding a direct answer.

They don’t say “Yes I accept the scientific consensus that the world is warming rapidly, that this is more than 100%\*caused by human actions, principally the burning of fossil fuels; that sea levels are rising at faster and faster rates; that the oceans are becoming more acid; that the arctic sea ice is disappearing; that glaciers are melting; that a massive number of animal and plant species are becoming extinct; that weather is becoming more erratic; that bushfires, floods and droughts are increasing worldwide; that if we don’t act decisively within the next two years to our chances of averting an unimaginably horrendous future are gone.

They know that reporters will never pin them down to answering questions about these things. And if they try then the good folk in the PR engine room have sorted out some more talking points. Some recent examples:

“People are dying and losing their homes. This is not the appropriate time to be talking about climate change.”

“I don’t think we should get into political disputes about climate at this time.”

“If only the greenies hadn’t stopped proper land clearing this wouldn’t be happening.”

For these politicians “accepting the science” never means a policy, never means action, never means listening to what scientists and hundreds and thousands of protesters actually say.

Instead it means new laws so that overseas emissions can be ignored, it means new laws to stop ‘secondary’ protests, it means cuddling up to Gina Rinehart at the Melbourne Cup and, most of all, it means protecting the flow of mining money into party bank accounts.

\* If carbon dioxide levels were not increasing the world would be very slowly cooling.

### ... well not at all really

[@mjrowland68](#)

: Do you agree climate change is creating conditions that are causing the [#NSWfires?](#)

[@GladysB](#)

There's no doubt drought (NB like all politicians she never says “climate change”) has contributed to the conditions ... But I don't think it's appropriate to get into a political argument as to what the causes are at this stage.

But she does think it is appropriate to introduce laws this week that will stop carbon dioxide emitted overseas from our coal to be considered when granting mining approvals, Of course ‘foreign’ carbon dioxide contributes exactly as much to **global** warming as the stuff we burn here. And that will come back to bite us with even worse wildfires in the future.

Deputy PM McCormack (“batteries not included”) says linking bushfires to climate change is 'woke capital-city greenies ravings'

But he too, says, even in letters. That he “accepts the science of climate change”.

Meanwhile, Liberal Senator Gerard Rennick from Queensland, [has doubled down on his claim](#) that the Bureau of Meteorology has fudged its figures about past temperatures in Australia as part of the secret international climate change agenda.

## Meanwhile in New Zealand



This is the Prime Minister of New Zealand and the Leader of the Opposition celebrating the unanimous passing of their climate bill to move to zero emissions by 2050.

Just like Australian politics really.



... or perhaps not.

## MONEY

### Iron ore mining hub to be repowered with renewables

ARENA is helping to fund Alinta Energy to construct a large solar farm at Fortescue Metals Group's mining hub in the Chichester Ranges, three hours drive south of Port Hedland in Western Australia.

In addition to installing a 60 MW [solar farm](#), Alinta will construct 60 kilometres of new transmission lines to connect to the new power system to Fortescue's Christmas Creek and Cloudbreak mines, which operate within the Chichester Hub.

The transmission lines will connect the new system to Hancock Prospecting's Roy Hill mine and Alinta's existing 145 MW gas-fired Newman Power Station, which is also home to the 35 MW / 11 MWh Newman storage system – [Western Australia's largest lithium-ion battery](#).

ARENA's funding has been allocated as part of the agency's recently announced priority to [invest in projects that help industry](#) to decarbonise. Remote, energy hungry mines have been an early focus, with [ARENA already announcing funding for hybrid wind, solar and battery systems](#) at GMA's garnet mine in Port Gregory, and Gold Field's Agnew gold mine.

### Wind and solar now kill coal and nuclear on costs

The cost of wind and solar continue to decline and are now at the point where they beat, or at least match, even the marginal costs of coal-fired generation and nuclear power, according to the 13th and latest edition of Lazard's Levelized Cost of Energy Analysis, one of the most highly regarded assessments in the world.

The [new Lazard](#) report puts the unsubsidised levelised cost of energy (LCOE) of large scale wind and solar at a fraction of the cost of new coal or nuclear generators, even if the cost of decommissioning or the ongoing maintenance for nuclear is excluded.

Wind is priced at a global average of A40-\$A78/MWh, while solar is put at a range of A46-\$A60/MWh depending on whether single axis tracking is used.

This compares to coal's global range of \$US66-A96-\$A220/MWh and nuclear's estimate of A171-\$A278/MWh.

Wind and solar have been beating coal and nuclear on costs for a few years now, but Lazard points out that both wind and solar are now matching both coal and nuclear on even the "marginal" cost of generation, which excludes, for instance, the huge capital cost of nuclear plants. For coal this "marginal" is put at \$US33/MWh, and for nuclear \$US29/MWh.

## TECHNOLOGY

### Offshore wind will meet all the world's energy needs – more cheaply ...

The International Energy Agency (IEA) says offshore wind power has the capacity to meet all of the world's electricity demand, and is set to be a "game-changer" for energy systems..

The latest report from the energy watchdog says that the falling costs of offshore wind would make it competitive with fossil energy within the next decade, forecasting that the global average cost of power generated by offshore wind would drop 40% by 2030. The IEA also says that renewables replacing fossil fuel is crucial to meet a 2C global warming limit and the expansion of offshore wind could avoid 5-7bn tonnes of CO2 emissions from the power sector globally.

### ... [and Australia's first offshore wind farm is taking shape](#)

The 'Star of the South' wind farm off the coast of Gippsland in Victoria is a massive 2.2 gigawatts of wind capacity proposal and will be Australia's largest electricity project with reportedly \$8 billion investment.

But offshore wind projects have been slow to get off the ground in Australia, until now. "The "Star of the South" opens up the promise of local and skilled jobs, the development of a replacement industry for the Latrobe Valley, and other economic opportunities in adjacent sectors.

The investment requirements of port upgrades and logistics to support the construction of the project adds to the project establishment costs. However, offshore wind, although being a variable source of power, operates at a utilisation rate of 50-55% so this will offer greater reliability as well as supply diversity on the grid than is currently being experienced."

The penetration of variable renewable generation in Australia's national electricity market has been rapidly growing

Timely commissioning of the Star of the South will allow early decommissioning of some of the old, polluting, and unreliable units of the two brown-coal fired stations in Victoria.