CROW Newsletter

Keeping an eye on climate change

February, 2022

This is going to be my last newsletter. If there is anyone else in CROW who would like to take up the challenge that would be great.
I thought it may be instructive to start with a few quotes from an early (September, 2015) newsletter.

Quotes from an early CROW newsletter. Has anything really changed? Just the deckchairs.

"So, yes, 2015 is going to be the hottest year on record — by far.

"As the new Prime Minister, Turnbull has vowed to continue Abbott's policies. But back in 2009, he called Abbott's jumbled climate and energy policies "bullshit"

"Australia's freshly minted Resources and Energy Minister Josh Frydenberg has signalled the government's intention to use taxpayer funds to help the coal mining industry establish new projects.

"Australia's largest businesses have signalled they are expecting Australia to take a serious approach to emissions reduction at the looming United Nations climate change talks in Paris, to ensure an agreement is struck to keep global warming to less than 2 degrees above pre-industrial levels.

Goodbye metnane. The fastest way to reduce global warming – click HERE for 15 minute video

A surprising (to me) presentation that points out the quickest short term answer to global warming isn't carbon dioxide emission reductions but methane emissions.

Carbon dioxide reduction is the critical long term step which must also start urgently now.

Goodbye pro-carbon politicians - voters in coal and gas heartlands want a clean future

As the accelerating effects of climate change ravage swathes of our nation, a new poll from Beyond Zero Energy has found voters from the coal and gas heartlands of New South Wales and Queensland are ready to cash in on the opportunities of a zero carbon emissions future. The poll, released on Wednesday, reveals that the clear majority of voters believe the states' future prosperity lies in clean industries, such as renewable energy exports, critical minerals like lithium and cobalt, and manufacturing renewable products.

Voters in both states have seen the writing on the wall: The era of coal and gas in this country is ending, with only a quarter of voters in Queensland and about one-fifth in NSW saying future prosperity lies in coal and gas.
Moreover, two-thirds of voters say clean jobs, for example in renewable energy, will be the best source of future employment.
Less than a quarter overall back fossil fuels as the best source of future jobs.

Goocbye GBR. The promised billion dollars for the reef is being spent on spin, not solving the problem. ”We might as well take a dinghy out from Port Douglas and chuck the money in the sea.”

Last week, the government submitted a report to the UNESCO World Heritage Committee about the state of the Great Barrier Reef. This report was clearly designed to once again postpone the inevitable: international acknowledgement that our most precious natural icon is in danger.

The report contains very few numbers and no maps of the damage wrought by the three bleaching events in the past six years. Indeed, even the word “bleaching” is used sparingly, frequently replaced by a much vaguer “disturbance”.

A study published on the same day the UNESCO report was delivered concludes that even 1.5-degree warming could spell catastrophe for 99 per cent of the world’s reefs. This is a far more pessimistic outlook than previous estimates that this disaster would happen at 2 degrees.

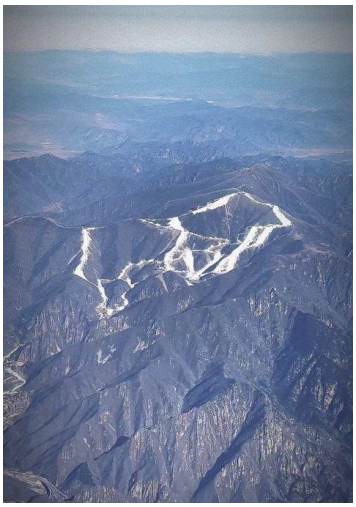
The Federal Government’s much trumpeted $1 billion of funding (timing unspecified) to improve water quality on the reef and reduce threats such as the crown of thorns starfish, will be a complete waste of our hard-earned cash unless the climate problem is addressed. We might as well take a dinghy out from Port Douglas and chuck the money in the sea.

Goodbye fossil fuel generators. Battery capacity to double this year

(This link may be behind a paywall)
Australia’s battery capacity will double this year as major projects come online, heightening pressure on the country’s fossil fuel power generators that are struggling to compete against soaring renewable energy generation.
Battery capacity in Australia during 2021 totalled about 0.4 gigawatts but it marked a year of major construction projects beginning and much of this is expected to come online this year, Rystad Energy data shows.

Batteries such as the Victorian Big Battery undercut the argument that gas is needed for grid stability.
With many large-scale projects set to be operational, utility-scale battery capacity will top 1.1 GW by the second half of 2022, Rystad expects.

Goodbye snow at the Winter Olympics.



Feb 6
This is the Winter Olympics in the era of climate breakdown. The first winter games to rely almost entirely on fake snow. The hills outside Beijing are snow-free, so 49 million gallons of water and 300 snow guns have been used to create this.

(If you are wondering what you are looking at, The white ribbons are artificial snow used to cover the various venues for the outdoor winter Olympic events. The rest is the picture is the surrounding mountains, which because of global warming, are completely snow free.

Say goodbye coal or goodbye liveable world – your choice: IEA

Exploitation and development of new oil and gas fields must stop this year and no new coal-fired power stations can be built if the world is to stay within safe limits of global heating and meet the goal of net zero emissions by 2050, the world’s leading energy organisation has said.

In its strongest warning yet on the need to drastically scale back fossil fuels, the International Energy Agency (IEA) also called for no new fossil-fuel cars to be sold beyond 2035, and for global investment in energy to more than double from $2tn (£1.42tn) a year to $5tn (£3.54tn) The result would not be an economic burden, as some have claimed, but a net benefit to the economy.

Hello solar panels on farms

From Boulder, Colorado

Byron Kominek's took over the family 24-acre farm which used to harvest only alfalfa and hay and had been in the family for 50 years. After taking over the farm, he realized that it was losing money. Despite opposition from banks he bet the farm on installing 3200 solar panels over one of his larger paddocks.

He and a solar company selected sophisticated trackers to follow the sun across the sky, and mounted them according to strategically-measured heights and spacing to allow enough sun to reach the crops below. For each row mounted 8-feet off the ground, providing enough room to drive a tractor under, two were mounted at 6-feet

Now finished, the electricity Kominek's farm generates is enough to power 300 private homes, 50 of which are now his energy clients. Underneath the panels there are tomatoes, turnips, carrots, squash, beets, lettuce, kale, chard, and peppers.

GNN has reported on some solar farms that are using agrivoltaics to grow pasture for grazing animals and native pollinators. In India, solar panels are being constructed over canals, which, as they lose water through surface evaporation, cool the panels, and increase their efficiency.

In other research solar panels were found to be kept 16°F cooler by evaporation from the crops below, enough to increase their energy generation by 2%. Underneath, the few crops tested were 100% to 300% more productive depending on the species, and the shade provided by the solar panels reduced irrigation-water use by 15%, and reduced water consumption by a whopping 157 percent. The crops are also protected from intense rain or hail from the overhead panels.

Hello. Australia's largest microgrid just went online

The Western Australian coastal town of Kalbarri can now be powered by an entirely renewable energy solution utilizing rooftop solar and wind generation coupled with battery storage with state government-owned utility Western Power confirming the state's largest renewable energy microgrid has been commissioned.

"The local wind farm, residential solar panels and a big battery power this high-tech microgrid, dramatically improving power reliability in this edge-of-the-grid town. And it's already saved hours of power outages."

Some roundabout good news

From Bill McKibben

I confess to spending more time than is mentally healthy scrolling through Twitter, and too often it's a mix of trivia, schadenfreude, and outrage—empty mental calories, usually confirming your world view. But sometimes you learn things you didn't know beforehand, and last week, I noticed a comment in passing: **forty percent of the world's shipping, one commenter insisted, consists of just sending fossil fuels around the world to be burned.**

Let's say that again**: forty percent of the world's shipping, one commenter insisted, consists of just sending fossil fuels around the world to be burned.**

It's a fact that if you add up all the tonnage, something very close to forty percent of all the shipping on earth is just devoted to getting oil and coal and gas (and now some wood pellets) back and forth across the ocean.

That's a remarkable snapshot: almost half of what we move around the seas is not finished products (cars) nor even the raw materials to make them (steel), but simply the stuff that we burn to power those transformations, and to keep ourselves warmed, cooled, and lit.

So how is that good news? McKibben explains.

Because it means that if and when we make the transition to solar power and windpower, we will not just stop pouring carbon into the atmosphere, and not just save money—we will also reduce the number of ships sailing back and forth by almost half. So if you're worried about almost anything at all that's going wrong on the high seas—piracy, say, or the hideous sonic effects of all those ships on whales—then you can cut that in half as well.