

# Fossil Fool Bulletin

Fossil fools in the spotlight this week: A resource for people working to end the fossil fuel era in Australia

Published by Eve Sinton • fossil.fool.bulletin@gmail.com

FFB 2:9 • 1 FEBUARY 2019

# Fracking industry's flaring problem may be much worse than thought

By Justin Miluka, Desmog Blog

In 2018, the oil and gas industry operating in North Dakota's Bakken Shale burned off record amounts of natural gas, largely obtained via hydraulic fracturing (fracking). This process, known as flaring, costs the industry money – it literally burns one of the products being pumped out of the ground – but more importantly, the resulting release of globe-warming emissions of carbon dioxide and methane spells disaster for the climate.

And a new analysis of satellite evidence indicates the industry is likely underreporting how much gas it is actually flaring in the Permian Shale, with implications for other oil fields.

According to the *Bismark Tribune*, the amount of gas flared in North Dakota in October was enough to heat 4.25 million homes in America. And while the fracking industry in North Dakota is flaring the most gas in the nation, it's not the only place this is a growing issue. Flaring reportedly also doubled in 2018 in the booming Permian Shale in Texas and New Mexico, with an estimated US\$1 million a day of gas burned off.

In addition, the Environmental Defense Fund (EDF) recently analysed satellite data and concluded that the industry is likely underreporting the actual volumes of gas flared in the Permian. EDF says that the real numbers are closer to double what the industry reports.

This increase in flaring is just one more example of how the oil and



gas industry has recklessly pushed forward with the so-called "shale revolution," producing record amounts of oil while losing money and showing blatant disregard for the environment and climate along the way. It is also an excellent example of how federal and state regulators are allowing this to happen.

#### Fracking oil means flaring gas

Flaring has alway been a part of oil production, conventional or otherwise. Natural gas often is found with oil reservoirs and when adequate infrastructure doesn't exist to capture both the oil and gas, the gas is flared, or burned, while the oil is captured and sold. (Natural gas is primarily methane, a powerful greenhouse gas, and burning it transforms the methane to water and carbon dioxide, which is perhaps

the best-known greenhouse gas.)

Flaring did not begin with fracking's modern introduction to oil and gas fields, but the rush to develop shale fields via fracking seems to have encouraged the practice in recent years. For comparison, let's look at Iraq.

In Iraq, where the oil industry has been rebuilding after the damages of the Iraq War, production currently falls between four and five million barrels of oil per day, using conventional drilling methods. Compare that with the approximately four million barrels per day of oil produced via fracking in the Permian Basin.

Iraq's industry has been flaring billions of dollars of gas because there is no infrastructure to capture it, a situation companies there are moving to remedy

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 P3: 100 people to speak about mine • P4: Resistance to Adani invasion continues

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## Fracking industry's flaring problem may be much worse than thought

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but one which will require large investments in gas processing facilities. Iraq is working with several foreign corporations to construct the infrastructure and aims to end flaring by 2021, a move projected to save over US\$5 billion in the next four years.

However, the companies fracking for oil in America's major shale plays appear less interested in building adequate capacity, which hasn't been built in the first place, to capture the gas they currently flare. This isn't a technological problem.

A new report from the Energy and Environmental Research Center (EERC) at the University of North Dakota suggests that North Dakota should capture the gas and store it underground, a common method of storing gas.

But as the Aliso Canyon disaster made clear when an uncontrolled leak spewed methane from a gas storage facility in southern California for several months, the approach is not without its risks. However, it is the cheapest option.

John Harju, vice president for strategic partnerships at the EERC, told the Associated Press that capturing the gas and using pipelines to move it to processing facilities is always the ideal way to handle it. However, the best option is often the most expensive option.

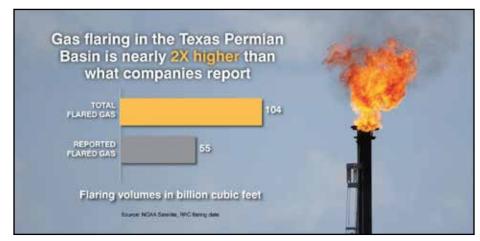
"The economics aren't great, but it is economic under the right circumstance," Lynn Helms, the director of North Dakota's Department of Mineral Resources, said of the proposed underground gas storage plan, according to the trade publication *Natural Gas Intel*.

If the industry can make money capturing the gas, it will. If not, it will continue flaring.

#### **Guidelines do little to reduce flaring**

In April 2018, North Dakota updated its flaring regulations based on changes "submitted by an industry group" that were supposed to result in reduced flaring. The state's main oil and gas industry lobbying group is the North Dakota Petroleum Council (NDPC), which is supported by the American Petroleum Institute.

According to The Associated Press, Kari Cutting, NDPC vice president, reportedly told the newspaper that the



Differences in reported versus unreported flaring in the Permian Basin, Texas. Graphic: Environmental Defense Fund

"oil industry is committed to meeting the flaring targets, even if it means cutting back on crude production."

"We'll do what we have to do," Cutting said.

However, the language in the new guidelines actually gave the oil companies more options to flare. For example, according to the guidelines: "The initial horizontal well drilled ... should be allowed to produce at its maximum efficient rate, regardless if the well is connected to a gas gathering system."

Predictably, North Dakota set records for oil production and flaring in 2018, after the new flaring guidelines were announced. So much for the oil industry's commitment to reducing flaring even if it requires reducing oil production.

North Dakota oil production may decline in 2019 but that would be tied more to the drop in oil prices in late 2018.

And with an estimated US\$10 billion more in infrastructure needed to address the North Dakota flaring issues, the fracking industry, which continues to lose money, especially with current low oil prices, appears unlikely to address flaring on a significant scale any time soon.

Ron Ness, president of the NDPC, confirmed this in remarks to the Bismarck Tribune, saying the necessary investment wasn't going to come "right away" because "[o]ur productivity has just outpaced the expectations on gas so much."

And so flaring will continue on the Great Plains.

#### Federal regulations repealed

At the end of the Obama administration in 2016, the Bureau of Land Management released new regulations "to reduce waste of natural gas from venting, flaring, and leaks during oil and natural gas production activities on onshore Federal and Indian leases."

After Trump took over, however, the agency decided to review this new rule and in October 2018 released a revised, relaxed form of those regulations

At the time of the release, David Bernhardt, now the acting Secretary of the Interior, explained the purpose of the changes: "We're fulfilling a commitment to a policy vision the president established to promote clean development of our resources without regulation that encumbers business, restrains growth, and prevents job creation."

The Midland Reporter-Telegram, a newspaper in the heart of the Permian, summarized the gutting of the Obama-era regulations, which included the removal of "requirements pertaining to waste minimisation plans, gas-capture percentages, well drilling, well completion and related operations, pneumatic controllers, pneumatic diaphragm pumps, storage vessels, and leak detection and repair."

Or as Matt Watson of the Environmental Defense Fund explained to *The New York Times*: "This is a complete dismantling of federal methane regulation in the United States."

One of the main arguments for weakening these natural gas and methane regulations was that implementing

## **Fracking and flaring**

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them would have been cost prohibitive for some small oil and gas producers and would have caused them to stop operations.

#### Fracking's many climate impacts

'Drilling Towards Disaster', a new report by Oil Change International, outlines how fracking is driving oil and gas production in America (and being exported to the rest of the world) and the dangers this poses by driving future climate impacts at a time when rapid decarbonization of the global economy is required.

By essentially providing no real limitations on flaring, state and federal regulators are allowing the oil and gas industry to produce record amounts of oil, which accelerates climate change when the oil is burned. However, the situation also releases additional carbon dioxide when the gas is flared, without providing any economic benefit, such as powering millions of American homes.

Additionally, the methane that is leaked in the supply chain, and in some cases intentionally vented into the atmosphere, adds to global warming. Methane traps more heat than carbon dioxide in the short term.

And even with the Trump administration rolling back a number of environmental regulations like the rules for methane flaring and venting, the oil and gas industry is looking for still more deregulation from the federal government.

With the federal government now open after a 35-day-long shutdown, it's back to business as usual.

#### • Originally published in Desmog Blog:

 $\frac{https://www.desmogblog.com/2019/01/29/fracking-industry-gas-flaring-problem}{}$ 

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## **3CR Community Radio Earth Matters**

'Knitting Nanas against gas, coal and greed', and other podcasts about coal, oil and gas can be found at:

https://www.3cr.org.au/earthmatters

## 100 people to speak on Vickery mine expansion

A groundswell of community concern over water and farming will be be vented at a public hearing for Whitehaven's proposed Vickery coal mine expansion in Boggabri and Gunnedah next week.

About 100 people have registered to speak at the hearings.

The NSW Independent Planning Commission will hold a two-day public hearing on the expansion on Monday and Tuesday after a rush of public registrations caused the NSW Government to delay the single meeting planned last year.

#### Listen to deep concerns

Lock the Gate spokesperson Georgina Woods said the Commission needed to listen to people's deep concerns about the mining proposal.

"The Planning Minister tried to blindside the people of north west NSW by fast tracking the public consultation and imposing an impossible timeframe on the Commission," she said.

"At a time when farmers are struggling against a crippling drought and brutal heatwaves, the effect of this mining proposal on water, and the amount of water it will consume, will be front of mind for many.

"We are expecting large numbers of concerned locals to attend these public hearings, despite the drought."

Ms Woods said 18% of the water supply for the mine over its 26 years of operation was expected to come from

the Namoi River itself and close to 60% would be captured as run-off on the site, and prevented from entering the river system.

"We are also now seeing fish deaths at Lake Keepit on the Namoi River, upstream of where Whitehaven plans to build their mine extension, which is virtually dry and will not be releasing any more water until rains come.

"The latest NSW regional drought report says there are cease to flow conditions extending from Keepit to Narrabri," she said.

#### Historic Mackellar home threatened

"In addition, Vickery would have an unpredictable impact on nearby Kurrumbede, the former home of renowned Australian poet, Dorothea Mackellar.

"Australian champion swimmer Boy Charlton also used to train in the Namoi River near the proposed mine. This region is rich in Australian history, yet the NSW Government appears ready to ignore these priceless values in return for a quick buck from mining royalties."

The Vickery public hearings will take place over two days, at Boggabri RSL Memorial Club on Monday, February 4 and at Gunnedah Town Hall, on Tuesday, February 5, with both starting at 9am.

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## Traditional Owners continue to resist Adani's 'invasion'

The Federal Court appeal against Adani's 'sham Indigenous Land Use Agreement' will go ahead after the Traditional Owners secured financial backing. The security of costs for the hearing in May will now be covered by public interest litigation group the Grata Fund.

The Grata Fund, whose patron is former federal court judge and corruption fighter Tony Fitzgerald AC QC, and whose board includes former Victorian judge Marcia Neave and human rights lawyer Jennifer Robinson, has stepped in to guarantee the bond for the five appellants.

The W&J Council says the Traditional Owners and their community refuse to back down, and the Council will continue its campaign to defeat Adani and its political and industry barrackers.

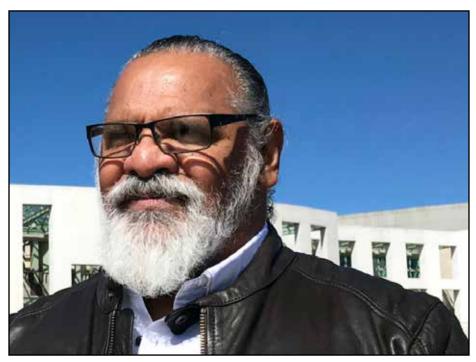
The Council is also grateful that the United Nations Committee on the Elimination of Racial Discrimination (UN CERD) has stepped in to demand Australia consider suspending the Adani project over apparent Indigenous rights breaches.

W&J Traditional Owner and lead spokesperson Adrian Burragubba said, "Adani is attempting to invade, occupy and plunder our land, contravening our human rights and denying us our property, under the cover of a bogus land use agreement. Their rent-acrowd ILUA is not supported by the legitimate W&J Traditional Owners from the Carmichael Belyando native title claim area.

"We have made sure our Federal Court appeal can proceed because we are determined to prove that Adani does not have our consent for its mine, and to ensure it is never allowed to destroy our country and our future.

"Our people have survived 231 years since the start of colonisation in this continent, and we can survive this onslaught from Adani. We are determined to defend our country from destruction", he said.

The confirmation of the appeal comes as the United Nations (UN) has intervened under its early warning and urgent action provisions to demand Australia answer concerns about breaches of the W&J People's internationally protected rights. The UN expressed concern over the 'Adani amendments' to the Native Title Act in 2017, as well as alleged breaches of the Internation-



Adrian Burragubba, a W&J Traditional Owner who has been targeted by Adani. Photo: W&I

al Convention on the Elimination of All Forms of Racial Discrimination, and the failure to obtain the genuine "free, prior and informed consent" of the relevant Traditional Owners.

Ms Linda Bobongie, Chairperson of the W&J Council said: "We have called on the UN CERD to highlight our plight and to bring pressure onto the Australian and Queensland Governments to prevent these threats from Adani to our people and to our traditional lands and waters.

#### **Discriminatory legislation**

"The legal system is being used as a weapon against us because we have chosen to stand up to defend our lands and waters, and our rights. Discriminatory legislation, such as the Native Title Act, and punishing costs, are allowed to override our rights and leave us open to ruthless suppression by an increasingly desperate and farcical Adani", she said.

Ms Bobongie, is writing on behalf of the Council to Mr. Michel Forst, United Nations Special Rapporteur on the Situation of Human Rights Defenders, and Ms. Victoria Tauli-Corpuz, United Nations Special Rapporteur on the Rights of Indigenous Peoples, over ongoing abuses in relation to the Carmichael project and Adani's recent move to bankrupt W&J leader, Adrian Burragubba.

Ms Bobongie said: "We are requesting interventions from the UN Rapporteurs, and we will be calling on social justice groups and our hundreds of thousands of supporters around Australia to back our demands.

"We ask the Queensland Government to provide protection from bankruptcy to Mr Burragubba and the other appellants. We demand Adani cease its harassment and undermining of Mr. Burragubba and cease its bankruptcy proceeding. And we call on the Commonwealth Government and Opposition to ensure that access to equal justice to defend our rights is not undermined by punitive cost orders and the kind of aggressive corporate conduct Adani is allowed to engage in.

"UN Rapporteur Tauli-Corpuz has reported that 'a global crisis is unfolding. The rapid expansion of development projects on indigenous lands without their consent is driving a drastic increase in violence and legal harassment against Indigenous Peoples," she said.

Mr Burragubba concluded: "Adani will not stop us by trying to silence our voice with their awful bankruptcy tactic, which is intended to intimidate us. They will not succeed. They cannot have our lands, our heritage and our children's futures, which are worth far more than they could ever compensate us from their ill-conceived mine."

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David Rowe reproduced with permission: https://www.facebook.com/david.rowe.5070



## **Dartbrook mine creeps onto Hunter farmland**

A mine modification recommended for approval by the NSW Department of Planning this week is the thin end of the wedge for mining to creep into the productive Upper Hunter Shire and the region's strategic agricultural land, which has no protection from coal mining.

The recommendation, if approved by the Independent Planning Commission, would mean the Dartbrook coal mine would be reopened, extending mining into the Upper Hunter Shire and under land mapped as strategic agricultural land.

Lock the Gate Alliance spokesperson Georgina Woods said the recommendation was in direct contrast with what the local council and landholders wanted, and demonstrated a failure of planning law to achieve balance.

"The Hunter Valley has already lost considerable good quality farmland to coal mining. Upper Hunter Shire has so far remained relatively unscathed, but there are fears this proposal is the thin end of a fat wedge of coal mining pushing into the Shire.

#### Call for coal to be excluded

"Our planning laws are frankly not up to the task and we need to make the strategic farmland of the region off-limits to coal mining once and for all."

Ms Woods said mining had ceased on the Dartbrook site in 2006, but the

modification would allow the company, Australian Pacific Coal, to undertake new "bord and pillar mining."

"The community sees this as a stalking horse for an open cut mine, which the company has previously said it wants. There's nothing in the law that would prevent this site and the farmland that surrounds it from being open cut." she said.

"Lock the Gate Alliance stands with the residents of Aberdeen and the Hunter Valley who want farmland to be off-limits to open cut coal mining."

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# STOP WATER MINING THE NEXT RESOURCES BATTLE



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https://knitting-nannas.org/bulletins.php

#### Inside the news

Adani is embroiled in a finch fight, grabbing headlines as it seeks to discredit scientists appointed by the Queensland government to review its finch conservation plan (p6). The company has its own anonymous ecologist defending the plan, and claims the finch is doomed unless the mine goes ahead. Their ecologist won't provide a name, in case greeny-lefties follow the individual home.

Adani is playing the **job numbers** game again, claiming its new slimmed-down version of the project will create **1,500** jobs (p7). The original version boasted 10,000 direct and indirect jobs, but in court it was admitted the real number was only 1,464 direct and indirect jobs spread over 30 years. FFB is sceptical that a much reduced project could provide 1,500 direct jobs - let alone more than 6,000 indirect jobs the company says will be created. Adani is using a discredited **job generation formula** provided by the Queensland Resources Council (ORC).

Adani says 14,500 hopefuls have applied for jobs – but their 'jobs portal' only invites expressions of interest. A mere handful of actual Adani jobs appear on it.

Mining's **public image** was blotted as an iron ore **tailings dam collapsed** in Brazil, with over 300 people thought to have tied (p7-8). This is the second collapse of its kind in Brazil, with 19 people having been killed less than four years earlier. Both collapsed dams belonged to **Vale**, which partnered with **BHP** at the site of the first dam collapse.

The **climate crisis** was on front pages everywhere, as yet another **heatwave** broke temperature records (p9). **Bushfires** raged in Tasmania while around a million **fish died** in the fetid waters of the Murray-Darling river system.

Climate and energy policy is guaranteed to be a hot topic until the federal election, as a number of independent candidates emerge to challenge the Coalition (p10-12). Groups such as ICAN (Independents for Climate Action Now) and Grey Power Climate Protectors (p10) are also powering up, although the miners are hitting back (p11).



## <u>In the news this week</u>

This week Fossil Fool Bulletin has summarised 26,570 words of news for your convenience.

Click on the links to view original articles. (Subscriptions may be required)

#### THE ADANI SAGA

https://www.couriermail.com.au/news/queensland/adanithe-only-hope-for-endangered-blackthroated-finchs-survival/news-story/8f83dce912a55ac040fce97edfb44030

## Adani the only hope for endangered black-throated finch's survival

Des Houghton, Courier-Mail, 27/01/2019

The endangered black-throated finch faces extinction if the Adani coal mine does not go ahead, ecologists warned yesterday.

Adani Mining CEO Lucas Dow confirmed that a massive conservation protection zone around the finch planned by the mining giant would be scrapped if protesters succeeded in stopping the mine.

The vulnerable finch would then be at the mercy of packs of feral cats that feast on the birds while wild pigs would further destroy its habitat.

"Ironically these kind of mining projects create security of habitat that otherwise would not exist," said an ecologist who asked not to be named for fear of Green-Left reprisals.

He said proponents of the mine had been threatened and Adani contractors followed home. The finch had everything to lose if the State Government succeeded in blocking the mine. ...

https://www.townsvillebulletin.com.au/news/townsville/regional/adani-ceo-spruiks-trickle-down-benefits-in-towers-laments-state-government-woes/news-story/10698e97398611b53f126f2286390c1f

#### Adani CEO spruiks "trickle down" benefits in Towers; laments State Government woes

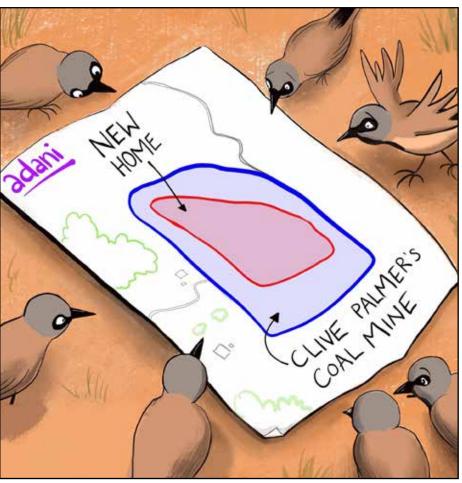
Marcel Baum, Northern Miner, 27/01/2019

Charters Towers is set to also reap the benefits from Adani's Carmichael megamine, Adani Mining chief executive officer Lucas Dow said during a visit.

Mr Dow spoke fondly of his time in the city as he was introduced to the area while spruiking the secondary benefits of the project. ...

The CEO spruiked mining's "trickle down" benefits, citing the Queensland Resources Council's economic modelling, which states for every one direct job in the

Queensland resources industry, 4.5 additional indirect jobs are supported.



Cartoon by Jess Harwood Art and Illustration, Stop Adani, Facebook

There will be approximately 1500 direct jobs during the initial construction and ramp up of the Carmichael Project, which an Adani spokesman said will support 6750 additional jobs. ...

[Editor's note: QRC's economic modelling has been discredited by The Australia Institute.]

https://www.townsvillebulletin.com.au/news/townsville/ us-and-them-which-side-are-you-on-in-adani-debate/ news-story/18b73252527ceac60dc2a984307806fd

## Us and them: Which side are you on in Adani debate?

John Andersen, Townsville Bulletin, 27/01/2019

It's Australia Day.

A lot of us will sink a few coldies around the barbecue while watching perfectly good steak turn to charcoal. ...

There's "us" who want to see the Adani mine start so that jobs and wealth are created for at least a couple of decades to come.

There's "us" who believe that coal

should be mined and burnt until the world finds a way to run homes and industry on cheaper power. ...

Then there's "them" who hate coal, hate farmers, hate business and who probably, when it's all said and done, hate a lot of the things that provide them with so much of their everyday comfort and convenience. ...

This leads us to the Black Throated Finch ...

And now the Queensland Environment Minister Leeanne Enoch has appointed Professor Brendan Wintle to lead the review of Adani's Black Throated Finch management plan.

If you were in the bunny hugging business and were hiring you'd look at Prof Wintle's resume and say "impeccable". ...

https://www.northqueenslandregister.com.au/sto-ry/5873157/adani-starts-road-works-as-finch-debate-rages/

## Adani starts Carmichael mine road works amid black-throated finch fight

Nth Qld Register, 28/01/2019

Adani has started road works at its controversial Carmichael mine project as debate continues to rage over groundwater management and conservation at the site.

The Queensland Environmental Defenders Office recently released analysis showing 2000 hectares initially reserved for conservation of the black-throated finch at Carmichael has been shaved away because it overlaps a separate mining lease set aside for China Stone. ...

Adani chief executive Lucas Dow said the company was focused on completing whatever work it could under current planning approvals. ...

https://www.theguardian.com/environment/2019/jan/30/adani-mine-environmental-laws-designed-to-protect-black-throated-finch-led-to-birds-decline

#### Adani mine: environmental laws designed to protect black-throated finch led to bird's decline

Ben Smee, The Guardian, 30/01/2019

Environmental laws that formally protect the endangered black-throated finch have also sanctioned the broadscale destruction of its natural habitat, leaving the species at risk of extinction, a new study says.

The study, led by University of Queensland research fellow April Reside, and published on Wednesday in the journal Environmental Science and Policy, charts the exile of the black-throated finch from more than 80% of its former range.

It reveals that 775 projects overlapping the finch's habitat were referred to the federal government for assessment under the Environment Protection Biodiversity and Conservation Act since 2000. Only one was refused because of an unacceptable impact on the finch.

"All these projects proposed for the finch's habitat were assessed independently, so the cumulative impact is not properly considered. It's death by a thousand cuts," Reside said. ...

https://www.brisbanetimes.com.au/national/queensland/adani-threatens-largest-known-flock-of-endangered-finches-20190129-p50uer.html

#### Adani threatens largest known flock of endangered finches

Stuart Layt, Brisbane Times, 30/01/2019

Adani's proposed Carmichael Coal Mine in central Queensland could destroy the last major habitat of the endangered black-throated finch, a new report has warned. ...

A report in the journal Environmental Science and Policy, published on Wednesday, called 'How to Send a Finch Extinct', found there were two main areas where the finches still have a viable habitat – in the Galilee Basin and near Townsville. ...

https://www.couriermail.com.au/news/queensland/digit-and-they-will-come-more-than-14000-hopefuls-applyfor-adani-jobs/news-story/1249dfa104c44dec39a51958ffce80a9

## Dig it and they will come: More than 14,000 hopefuls apply for Adani jobs

Steven Wardill, Courier-Mail, 30/01/2019

Almost 14,500 people have lodged interest in working at Adani's Carmichael coal mine which remains in limbo after the Palaszczuk Government ordered an 11th hour review. ...

"When you get 14,500 people wanting to work for you and most of these people come from Queensland, you would hope the Queensland Government would take notice," Adani Australia Mining chief executive Lucas Dow said. ...

[Editor's note: Adani's jobs portal encourages expressions of interest, but only a handful of actual jobs have ever appeared on it.]

https://www.townsvillebulletin.com.au/business/1500-townsville-residents-want-in-on-adani-jobs/news-sto-ry/388d371ffde1555208b94adcae03b94a

#### 1500 Townsville residents want in on Adani jobs

Clare Armstrong, Townsville Bulletin, 30/01/2019

One in ten jobseekers who have registered interest in working at Adani's coal mine and rail project are from Townsville. ...

The mine and rail projects are expected to create about 1500 direct jobs. ...

### COAL ROCKS ON

https://www.couriermail.com.au/questnews/logan/artc-accused-of-dirty-coal-train-secret/news-story/3f0825df-3977da830fa74b31e5675f98

#### **ARTC** accused of dirty coal train 'secret'

Judith Kerr, Quest Newspapers, 31/01/2019

A campaign to stop coal trains running on a proposed inland freight line has

been ramped up, after the federal government was attacked for withholding information.

The government's Australian Rail Track Corporation was in the firing line when Logan City councillors Laurie Smith and Trevina Schwarz took up the plight of residents living along the proposed Kagaru to Acacia Ridge section of the Inland Rail line. ...

"This seems to be flying under the radar and the federal government is certainly not raising the coal issue," Cr Schwarz said. "They are not attending to the residents, they are not letting them know details, they are not raising the alarms. ...

"We were basically told that it was not going to be consultation and engagement and basically, we are going to be told when they start building it."

Cr Schwarz said residents wanted a passenger line and could live with a busy freight line but were opposed to coal trains.

Cr Smith said households using tank water would also suffer and residents living along the line faced a life breathing in toxic coal dust while watching their property values slump, if the plans went ahead without an environmental impact assessment. ...

Currently there are 30 to 40 trains a week on the line.

But, Cr Smith said, that would jackpot to 45-64 trains a day by 2040, which equated to one every 32 minutes.

"And we're not talking about a normal goods trains, these are 1.8km in length and by 2040 could even be 3.6km in length — that's a lot of dust." ...

#### MINING MAYHEM

https://www.theguardian.com/world/2019/jan/25/brazil-dam-collapse-news-latest-mining-disaster-brumadin-hoZCMP-share btn fbsfbclid=lwAROV\_WmAOrNHvdmjuMEPhhY3nXB9whMoeVXRhectvR\_keTyk-yHe1bW7w

## Brazil dam collapse: hundreds missing after mining disaster

Dom Phillips, The Guardian, 26/01/2019

As many as 200 people are missing after three dams operated by the mining giant Vale collapsed in the Brazilian state of Minas Gerais, releasing a wave of red mining waste and prompting fears of widespread contamination. ...

Among those missing were 100 mine workers who were having lunch in an administrative area when it was hit by a torrent of sludge and water, said a fire brigade spokesman, Lieutenant Pedro Aihara. ...

The dam collapse came less than four years after Brazil's worst environmental disaster was caused by the failure of a tailings dam at Mariana in the same state. That dam was operated by Samarco, which at the time of the disaster was half-owned by Vale. ...

Environmentalists said Brazil had failed to learn from the Mariana disaster, in which 375 families lost their homes, and are yet to be rehoused. The three companies which operated the Mariana dam – Samarco, Vale and the Australian mining giant BHP Billiton – spent more than \$1bn on a huge clean-up and relief operation and paid millions of dollars in fines over the disaster. But no individual has been convicted. ...

https://www.smh.com.au/world/south-america/search-for-300-missing-after-deadly-brazil-dam-collapse-20190127-p50tw2.html

## Search for 300 missing after deadly Brazil dam collapse

AP, SMH, 27/01/2019

Sao Paulo: Rescuers in a helicopter on Saturday searched for survivors in a huge area in south-eastern Brazil buried by mud from the collapse of dam holding back mine waste, with at least ten people dead and up to 300 missing.

Nearly a full day since the disaster happened, finding many more survivors was looking increasingly unlikely. ...

https://www.theguardian.com/world/2019/jan/27/freshwarning-at-brazil-mining-site-where-dam-collapsed

## Fresh alert over Brazil dam collapse as relatives' anguish intensifies

Dom Phillips & Seth Jacobson, The Guardian, 28/01/2019

Fading hopes for survivors of a deadly dam collapse in Brazil were further dashed on Sunday when rescue efforts were temporarily halted because of concerns that another dam operated by the same company was also at risk of rupturing.

As the search was paused authorities began evacuating several neighbourhoods in the south-eastern city of Brumadinho that were within range of the B6 dam owned by the Brazilian mining company Vale. ...



Aerial photo of the Vale mine area before and after the tailings dam burst. Graphic: DigitalGlobe

https://www.abc.net.au/news/2019-01-30/brazil-arrests-five-over-dam-as-vale-offers-compensation/10760826

## Brazil mining dam collapse sees five people arrested as Vale SA offers compensation

ABC, 30/01/2019

Brazilian authorities have arrested five people in connection with a dam collapse that killed at least 65 people as it plastered part of a city with reddish-brown mud and mining waste.

The arrests came as rescue crews worked for the fifth day and searched for survivors or bodies of the hundreds missing. Three employees of Brazilian miner Vale SA and two other engineers working on behalf of the company have been arrested, deepening a crisis for the company after another deadly disaster at one of its mines. ...

## GAS, GAS, GAS

https://thewest.com.au/business/ mark-mcgowan-tempts-east-coast-businesses-with-was-low-gas-prices-ng-b881078243z/Tbcild=lwAR0eQ4a5UOThCk31qwwnEtLb 1KmxYSBk-sFQjnS7wh0El5mytoePVEprq8

## Mark McGowan tempts east coast businesses with WA's low gas prices

Daniel Mercer, West Australian, 26/01/2019

State Government ministers including the Premier are pitching to east coast businesses to relocate to WA to capitalise on the State's "embarrassingly" low gas prices.

As the Eastern States grapples with a gas supply crisis that is sending manufacturers to the wall, the Government and industry say prices for domestic gas in WA are the lowest on record. ...

Alinta chief Jeff Dimery, who runs WA's biggest gas retailer, said the gas bonanza was not only a boon for consumers enjoying discounts off their bills of up to 30 per cent but was a potential industrial drawcard. ...

"If they're prepared to move offshore and they've got \$3gj gas in WA why wouldn't they move to WA. It just makes sense."

Premier Mark McGowan said WA had the lowest wholesale gas prices in the country and credited the State's strong position on the domestic gas reservation policy, which was introduced by Alan Carpenter as premier.

Mr McGowan said the Government was "proactively working to attract new investment based on the availability and price of domestic gas" and cited Coogee Chemicals' proposed methanol plant in Karratha as an example of the type of project he hoped would set up operations. ...

https://www.smh.com.au/business/the-economy/the-gas-hunger-games-four-predictions-for-gas-in-2019-20181221-p50nrx.html

## The 'Gas Hunger Games': Four predictions for gas in 2019

Cole Latimer, SMH, 28/01/2019

LNG and gas were the fastest growing commodities in Australia in 2018, putting the country on the path to become the world's number one LNG exporter this year, but the 12 months ahead looks less rosy for the industry than 2018.

Analysts at KPMG, Wood Mackenzie and Credit Suisse have outlined their top four predictions for gas and LNG in 2019, forecasting the highs and lows ahead for the industry this year. ...

- Australian LNG dominates, but not for long
- New government, new policy
- An exporter and importer
- · More mergers

https://www.nzherald.co.nz/world/news/article, cfm?c id=2&objectid=12197076&fbclid=lwAR0 kT59UC-10QI1kiznNtv8dS7i Cpx4seGa3L aRCbKjU3A N8ym1XP3ds

#### China plans to use a nuclear bomb detonator to release shale gas

NZ Herald, 27/01/2019

China is planning to apply the same technology used to detonate a nuclear bomb over Hiroshima during the second world war to access its massive shale gas reserves in Sichuan province. While success would mean a giant

leap forward not only for the industry but also Beijing's energy self-sufficiency ambitions, some observers are concerned about the potential risk of widespread drilling for the fuel in a region known for its devastating earthquakes.

Despite being home to the largest reserves of shale gas on the planet – about 31.6 trillion cubic metres according to 2015 figures from the US Energy Information Administration, or twice as much as the United States and Australia combined – China is the world's biggest importer of natural gas, with about 40 per cent of its annual requirement coming from overseas. ...

But all that could be about to change, after a team of nuclear weapons scientists led by Professor Zhang Yongming from the State Key Laboratory of Controlled Shock Waves at Xian Jiaotong University in Shaanxi province, released details of a new "energy rod" that has the power to plumb depths never before thought possible.

Unlike hydraulic fracturing, or fracking as it is more commonly known, which uses highly pressurised jets of water to release gas deposits trapped in sedimentary rock, Zhang's torpedo-shaped device uses a powerful electric current to generate concentrated, precisely controlled shock waves to achieve the same result. ...

https://smallcaps.com.au/real-energy-flows-gas-cooper-basin-well-lodges-pipeline-application/

#### Real Energy flows gas from its latest Cooper Basin well, lodges pipeline application

Lauren Barett, Smallcaps, 29/01/2019

Emerging gas developer Real Energy has continued its winning streak in the Cooper Basin after recording strong initial flow rates at its Tamarama-3 well, prompting the company to move forward with its commercialisation plans for the area.

Providing shareholders with an update on the well, the company announced a flow rate of 2.5 million cubic feet a day from initial testing conducted over the weekend.

Real Energy completed a four-stage fracture stimulation program at Tamarama-3 last October, to a depth below 2,300 metres. ...

Based on the positive flow rates, the company has acted quickly in moving ahead with its commercialisation plans, lodging an application for a pipeline licence between its Tamara-



Real Energy's Cooper Basin operation. Photo: supplied

ma wells and the Santos-operated Mt Howitt gas gathering facility. ...

https://www.couriermail.com.au/news/national/origin-energy-begins-drilling-work-in-the-beetaloobasin-600km-south-of-darwin/news-story/86ac5b-157fed946ff62ce7b3by8be406?csp=5a2e33feb6a4fa-6650c8eaebe45748b4

#### Origin Energy begins drilling work in the Beetaloo Basin 600km south of Darwin

Gary Shipway, NT News, 30/01/2019

Origin Energy has begun drilling work at some well sites in the Beetaloo Basin 600km south of Darwin.

Falcon Oil & Gas Ltd said its joint-venture partner and operator of the Beetaloo project Origin had now signed a rig contract with Ensign Australia for Rig 963 for the 2019 Stage 2 Beetaloo drilling program, with an option to extend the contract into 2020.

Work has already started at some well sites. ...

If proven the gas could supply the east coast via the Amadeus pipeline from Alice Springs to Tennant Creek and the NGP from Tennant Creek to Mount Isa.

### CLIMATE CRISIS

https://theconversation.com/heres-how-a-100-renewableenergy-future-can-create-jobs-and-even-save-the-gas-industry-110285

# Here's how a 100% renewable energy future can create jobs and even save the gas industry

Sven Teske, The Conversation, 24/01/2019

The world can limit global warming to 1.5°C and move to 100% renewable energy while still preserving a role for the gas industry, and without relying on technological fixes such as carbon capture and storage, according to our

new analysis.

The One Earth Climate Model – a collaboration between researchers at the University of Technology Sydney, the German Aerospace Center and the University of Melbourne, and financed by the Leonardo DiCaprio Foundation – sets out how the global energy supply can move to 100% renewable energy by 2050, while creating jobs along the way.

It also envisions how the gas industry can fulfil its role as a "transition fuel" in the energy transition without its infrastructure becoming obsolete once natural gas is phased out. ...

In our scenario, the conversion of gas infrastructure from natural gas to hydrogen and synthetic fuels will start slowly between 2020 and 2030, with the conversion of power plants with annual capacities of around 2 gigawatts. However, after 2030, this transition will accelerate significantly ...

Our analysis shows how the various technical and economic barriers to implementing the Paris Agreement can be overcome. The remaining hurdles are purely political.

 $\label{lem:https://www.smh.com.au/national/victoria/blackout-ahead-for-130-000-homes-as-power-system-falters-20190125-p50tn7.html$ 

#### 'Just nightmare stuff': blackout for 130,000 homes as system falters

Cole Latimer, Simone Fox Koob & Rachael Dexter, SMH, 25/01/2019

Up to 130,000 Melbourne households have been hit with power outages on Friday for as long as two hours as the energy market operator tries to stave off larger blackouts.

The deliberate move to cut power to Melburnians came as two of the state's major power generators suffered major breakdowns as Victoria sweltered through a heatwave, pushing the system to its limits. ...

https://www.theguardian.com/commentisfree/2019/jan/28/what-would-australia-look-like-powered-by-100-renewable-energy

## What would Australia look like powered by 100% renewable energy?

Nicky Ison, The Guardian, 28/01/2019

This week, Liberal party donor and coal plant owner Trevor St Baker is proposing with the help of his mates in government to build two new coal power stations in Australia at the expense of taxpayers. ...

There are now at least nine studies conducted during the decade that have analysed how Australia can move from an electricity system based on polluting coal and gas to one powered by the sun, wind and waves. ...

So how would it work? If we get our policies and regulation right, the electricity system of the future could look something like this:

- 1. Big on wind and solar
- 2. Lots of different technologies in different locations
- 3. Small, so everyone can benefit
- 4. Demand is as important as supply
- 5. Poles and wires we'll build them only when we need them
- 6. Industry and transport go renewable too, and not just in Australia
- 7. Resilient to extreme weather
- Nicky Ison, founding director of the Community Power Agency and research associate at the Institute for Sustainable Futures at the University of Technology Sydney.

#### FOSSIL POLITICS

https://www.theguardian.com/environment/2019/ jan/27/warming-world-gets-older-wiser-richer-activistshot-under-the-collar

## Warming world gets older, wiser, richer activists hot under the collar

Ben Smee, The Guardian, 27/01/2019

When Audrey Cooke first spoke to her family about her retirement plans, they had one condition: "Don't get arrested." ... And she is now a full-time climate activist. ...

Cooke is one of a growing number of older protesters using their retirement to help the climate movement. Her tiny



Hot front pages all over Australia during the last week.

1.5 metre (4ft 11in) frame has become familiar at protest marches and demonstrations.

Miriam Robinson, 58, is the spokeswoman for the Grey Power Climate Protectors. She says one of the group's first aims is to encourage grandparents to attend the next school strike on 15 March....

"Heatwaves can be deadly for the elderly and infants. Older people will change their vote for their own sake but also [for] their kids and grandkids."

A former Greens leader, Bob Brown, says older Australians look at the world "with mixed feelings of amazed horror".

"They come equipped with unprecedented amounts of time, money and motivation. This is a cauldron of untapped civil action from vote-changing to direct protest, and climate change is the major target.

"The money-driven absurdity of Adani is on a collision course with thousands of environment-alarmed older Australians who are prepared to give up time, money and comfort to help save the planet."

Brown plans to lead a convoy of vehicles – appealing to grey nomads – from Tasmania to Bowen in Queensland later this year. ...

 $\label{lem:https://www.theguardian.com/australia-news/2019/ian/27/tony-abbotts-worst-fear-as-zali-steggall-gets-off-to-flying-start-in-warringah$ 

## Tony Abbott's worst fear as Zali Steggall gets off to flying start in Warringah

Anne Davies, The Guardian, 27/01/2019

If enthusiasm and grassroots support are the keys to a successful political campaign, Zali Steggall got off to a flying start in her quest to wrest Warringah from former prime minister Tony Abbott and the Liberal party.

More than 400 supporters wearing striking turquoise "Vote 1 Zali Steggall" T-shirts assembled under a Moreton Bay fig in a park in Balgowlah ...

Steggall said [climate change policy] would be a focus of her campaign. ...

Later in the day, asked about Steggall's attack on his record on climate change, Abbott said he would "not get into tit-for-tat arguments with any particular candidate", but argued Australia only contributed 1.3% of global greenhouse gas emissions. ...

https://www.theguardian.com/australia-news/2019/ jan/27/shenhua-coalmine-planning-works-could-desecrate-indigenous-sacred-sites

#### Shenhua coalmine planning works 'could desecrate Indigenous sacred sites'

Gabrielle Chan, The Guardian, 27/01/2019

A quiet change to Shenhua's New South Wales planning conditions for its open-cut Watermark coalmine could desecrate sites of Indigenous cultural significance before the federal environment minister decides whether they should be protected.

Gamilaraay man and native title applicant for the Gomeroi people, Raymond Weatherall, has warned successive failures to protect sacred places on the development site in the Liverpool Plains in north-west NSW, could lead to direct conflict between the Gomeroi, the state government and the Chinese state-owned company Shenhua.

He is one of the approximately 190 Gomeroi applying to the federal government for permanent protection of their sacred sites ...

https://www.theaustralian.com.au/national-affairs/state-politics/we-can-determine-who-wins-miners-poll-warning-to-parties/news-story/1be5ceed5189f715ee-ec71063dd18dc7

## 'We can determine who wins': miners' poll warning to parties

Joe Kelly, The Australian, 28/01/2019

The NSW Minerals Council is issuing an election manifesto ahead of the March 23 poll to demand greater support for the coal sector and a new energy strategy, warning that mining communities could determine who wins government.

NSW Minerals Council chief executive Stephen Galilee will release the manifesto today, noting that coal is the state's largest export and responsible for tens of thousands of direct jobs in the state.

He will seek a commitment from both major parties that coal projects will "continue to be assessed on their merits" and new coal exploration licences "will be issued in accordance with the strategic release framework". ...

The policy manifesto was delivered to the Liberal, Labor, Nationals and Shooters and Fishers parties on Wednesday, with the NSW Minerals Council warning that several seats with large mining communities were in play. ...

Several other commitments are being sought, including development of a minerals strategy, a pledge not to impose new regulatory costs on the resources sector and industry consultation on new policy proposals.

The NSW Minerals Council is also looking for a commitment from both major parties that they will not enter into any power sharing arrangement with the Greens.

 $\label{lem:https://www.smh.com.au/world/europe/german-plan-to-phase-out-coal-would-cost-a-cool-64-billion-20190127-p50tx5.html?csp=4a65df599980f87b41dc9c60cf7e1b93$ 

## German plan to phase out coal would cost a cool \$64 billion

Melissa Eddy, SMH, 27/01/2019

Berlin: Germany will spend tens of billions of dollars to end its use of coal power within two decades, if a plan agreed to by representatives of the power industry, environmental movement, miners and local interest groups becomes official policy.

The deal, hammered out on Saturday after more than 20 hours of intense, often fractious negotiating among a 28-member commission appointed last year by Chancellor Angela Merkel, would be one of the most significant

energy transformations a nation has yet attempted in the face of climate change.

Thirty countries have already set out proposals to cut their carbon emissions by eliminating coal, the dirtiest and cheapest fossil fuel, including Britain, Canada and Sweden. But none of those plans are of the scale laid out in Germany, an industrial giant that currently relies on coal for almost a third of its energy needs. ...

https://www.crikey.com.au/2019/01/29/institute-of-public-affairs-climate-change-denialism/?ins=TklibnJoUzd-NZFFiZ1VjZExMT3piUT09

## How one think tank poisoned Australia's climate debate

Kishor Napier-Raman, Crikey, 29/01/2019

In the 1980s, long before there was widespread public awareness of the proximity of imminent environmental apocalypse, before climate change became a wedge issue that toppled Australian prime ministers and divided politics, free market think tanks like the Institute of Public Affairs were busy sowing the seeds of doubt.

Today, those seeds have grown into vast tendrils which have a stranglehold on politics. The IPA exists as a conduit between the respectable mainstream right, represented by the Liberal Party, and fringe climate deniers, whose marginal views are largely rejected by the rest of the scientific community. Their greatest success, mirroring that of other free market think tanks in the United States, has been to stitch climate denialism into the very fabric of the conservative political identity. ...

The IPA is the most visible face of a labyrinthine network of smaller, more obscure organisations with which it remains indirectly connected. [The Eureka Forum, the Australian Environment Foundation, the Australian Climate Science Coalition.]

While the IPA is notoriously coy about its finances, court documents reveal Gina Rinehart's Hancock Prospecting donated \$4.5 million to the organisation in 2016 and 2017, amounting to about half of its income. There is also evidence that Exxon Mobil, Shell, Caltex and Esso have all funded the IPA.

The IPA and the AEF give substantial airtime to the renegade scientists and glorified lobbyists who make up the intellectual core of the Australian denier movement. [Jennifer Marohasy, Alan Moran, Peter Ridd, Ian Plimer.]

https://theaimn.com/will-abbotts-legacy-be-the-destruction-of-his-own-party/

## Will Abbott's legacy be the destruction of his own party?

Kaye Lee, Australian Independent Media Network, 29/01/2019

Tony Abbott's relentless campaign to "axe the tax" marked a turning point for the Coalition. They put all their efforts into ignoring or denying the potential catastrophe awaiting us unless we take urgent action to reduce our emissions and now, they can't back away from it despite the growing concern in the community.

The community wants renewable energy but the Coalition are stuck with the line that "the sun doesn't always shine and the wind doesn't always blow", seemingly deliberately ignoring the storage options that are being developed. And all the other suggestions about interconnectors or small-scale local grids etc. ...

https://thenewdaily.com.au/news/national/2019/01/29/ oliver-yates-coal-frydenberg/?utm\_source=Adestra&utm\_ medium=email&utm\_campaign=Morning%20News%20 -%2020190130

#### Oliver Yates slams Coalition's "repulsive" Coal antics

Samantha Maiden, New Daily, 29/01/2019

Scott Morrison's "repulsive" embrace of a lump of coal on the floor of Parliament will go down in history as no different to brandishing "a pile of asbestos", according to the Liberal renegade challenging Treasurer Josh Frydenberg.

Oliver Yates, the former Clean Energy Foundation chief who quit the Liberal Party on Tuesday in preparation to run as an independent candidate for the seat of Kooyong, has slammed the Coalition for its "disgraceful" climate change policies. ...

Mr Yates was ejected from a Liberal fundraiser two years ago after he expressed his "repulsion" at Mr Morrison's "coal antics".

"Well, at the end of the dinner Jane Hume, who was the senator who is sitting next to me who is generally quite sensible, decided to give a vote of thanks to Scott Morrison and decided the best way to thank Scott Morrison for his service to Victoria was to give him a fake lump of brown coal," Mr Yates said.

"And they considered that as funny. I was quite offended by that because effectively you might as well just be giving someone a pile of asbestos and saying, 'Why don't you play around

## News this week ... from previous page

with that for half an hour?' And it's disgraceful. I took umbrage at that and made my views known." ...

Mr Yates has also dismissed Mr Frydenberg as a careerist, who stands for nothing when it comes to the environment. ...

 $\label{lem:https://www.theguardian.com/commentisfree/2019/jan/30/the-liberal-party-has-lost-the-plot-thats-why-imrunning-as-an-independent$ 

## The Liberal party has lost the plot – that's why I'm running as an independent

Oliver Yates, The Guardian, 30/01/2019

The environment in Canberra within the Liberal party is toxic. We have to change the way politics is done in Australia. ...

The time has come when I'm compelled to act as the situation we face is so dire, and the quality of the actors so poor, and the unwillingness of the Liberal party to reform is so evident that the right question is "how can you just sit there and not stand?"

We have to change the way politics is done in Australia so we can address climate change, restore political integrity and ensure business operates within society's expectations and not as an entity unto itself. ...

https://www.theaustralian.com.au/national-affairs/ener-gy-apostle-oliver-vatess-ties-to-fossil-fuel-company-adani/news-story/7a5461be3cbb57517702a1e00ed1391

## Oliver Yates's served on board of company that sold coal tenements to Adani

Joe Kelly, The Australian, 30/01/2019

The renewable-energy advocate challenging Josh Frydenberg in the Liberal stronghold of Kooyong will campaign on government inaction on climate change, despite serving on the board of a company that previously sold coal tenements to Indian mining giant Adani.

Former Liberal Party member Oliver Yates was acting chairman of Linc Energy from October 2010 to November 2011 when it acquired substantial fossil fuel assets, including 14 oilfields in Texas and Louisiana through a subsidiary and a controlling interest in three Alaskan oilfield leases. ...

Mr Yates – a former chief executive of the Clean Energy Finance Corporation and senior executive at Macquarie Bank – said last night he was not responsible for "activities that occurred after I had left the company and had a limited association with".

"I was director for less than a year, attending only two board meetings, beginning in 2010 and ending in 2011," Mr Yates said. "I refuse to comment on matters before or after my involvement. This includes the sale to Adani, which I played no role in. I strongly oppose the Adani mine." ...

https://www.theage.com.au/business/companies/watershed-bhp-rio-urge-constitutional-recognition-of-indigenous-australians-20190131-p50us6.html

## 'Watershed': BHP, Rio urge constitutional recognition of Indigenous Australians

Darren Gray & Hamish Hastie, The Age, 31/01/2019

Indigenous leaders say a push by mining giants Rio Tinto and BHP for Indigenous Australians to be recognised in the constitution is a "watershed" moment and have urged other businesses to pledge their support.

The two miners, who between them employ thousands of indigenous workers, released a joint statement on Thursday backing the Uluru Statement from the Heart released in 2017 calling for a special Indigenous body to advise Parliament.

But the agreement did not win over Prime Minister Scott Morrison, who said the miners were well-intentioned in backing a constitutionally-enshrined Indigenous "voice to Parliament" but reiterated his own scepticism about the proposal.

https://thenewdaily.com.au/news/national/2019/01/31/murray-darling-authority-river-management/?utm source=Adestra&utm medium=email&utm campaign=PM%20Update%2020190131

#### Murray-Darling Authority slammed for 'indefensible' river management

New Daily, 31/01/2019

A scathing report into Australia's Murray-Darling Basin Authority has found it acted unlawfully and called for water allocations to be completely overhauled.

The royal commission report, released on Thursday, found river allotments in the multibillion-dollar deal across Australia's largest river system were driven by politics.

It accused the basin authority board of maladministration with its disregard for science. The report said water levels must be made on a scientific basis and in accordance with reconstructed water laws.

Commissioner Bret Walker SC's 736page final report includes 111 findings and 44 recommendations aimed at improving the effectiveness of the Murray-Darling Basin Plan.

Prominent among them are its finding that the Murray-Darling Basin Authority acted unlawfully when it "completely ignored" climate change projections for the determination of water allocations.

"The [sustainable diversion limit] ignores the best available scientific knowledge," it said.

"As an administrative decision, it is indefensible."

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