

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 1:15 • 13 MARCH 2018

Knitting Nannas marched out of Brisbane's South Bank by police and security guards

Knitting Nannas Against Gas from Lismore, Gold Coast and Brisbane travelled to Brisbane's South Bank Parklands last week, to raise awareness of the need to bypass fossil fuels.

They spent a couple of hours chatting to passers-by, and invited some kiddies to play a game of Snakes and Ladders that promoted renewables – but security took a dim view and called police.

The security guards said they had Googled the Nannas and decided they were a protest group.

Police firmly ordered the Nannas to leave the Parklands immediately, by the nearest exit.

Long March across Brisbane river

Nanna Judi said she was surprised that the police failed to appreciate the quality of the Nannas' art installation and its entertainment value.

Nanna Rosie said, "We had to do the long march across the footbridge to Santos, with our sore feet, backs and knees; and without being allowed to stop for any sustenance.

"We weren't even allowed to go to get a nice cup of tea before The Long March over the Brisbane River.

"It seems Brisbane's longstanding culture of oppressing different points of view is still alive and well, though Joh has long since departed."

The Nannas proceeded to set themselves up outside the Santos Brisbane HQ where they were well-received by people walking past.

FFB



Nanna shennagans at South Bank. Photos by: (top and bottom left) Gwilym Summers; (left) Jill Hawthorne; (below) Rosie Lee. The offending Snakes and Ladders game aims to bypass fossil fuel snakes and climb the ladders to renewables.



• P 2: PNG – did Exxon Mobil cause earthquake?

• P 3: Frack explosion – what happened in Ohio

• P 5: The week's news on coal & gas

The Gas industry: 'strictly regulated' but sometimes ...

Exxon Mobil PNG: development disaster now suspected over earthquake

Australia's closest neighbour, Papua New Guinea, was struck by a magnitude 7.5 earthquake on February 26, followed by constant, severe, after-shocks.

Over 100 people in remote communities are dead, but the exact toll may never be known.

The ABC has reported that speculation is still rife among the affected communities that the quake was triggered by the activities of oil and gas companies in the region.

"The biggest operation is the PNG LNG joint venture operated by Exxon Mobil PNG, which has gas production and processing facilities in Hela, Southern Highlands and Western Highlands provinces, all of which bore the brunt of the earthquake.

"The Governor of Hela province, Philip Undialu, called for an investigation to clear Exxon Mobil PNG of suspicion.

"A DFAT spokesperson said the Federal Government, through Geoscience Australia, had agreed to the request 'to provide advice on the scientific basis of the earthquake and seismic activity in the region.'"

Meanwhile, the Exxon Mobil gas operation remains shut down for repairs.

Seismic hazard underestimated

"Geoscience Australia told the ABC in a statement that assessment done since the quake 'indicates that the previous understanding of seismic hazard underestimated the level of risk.'"

Papua New Guinea Today says that villagers along the Okuk Highway within the Southern Highlands Province are concerned that their clean water sources for drinking and cooking have been contaminated.

"A villager along Angula River (wara Angula), Stanley Kalari said the fresh flowing water creek they use for drinking and cooking on a daily basis now smells of diesel and they are afraid to use the water ... their food gardens [are also] destroyed."

Michael Main reported in *The Conversation*, "The Papua New Guinea liquefied natural gas (LNG) project is the largest resource extraction project in the Asia-Pacific region. Constructed at a stated cost of US\$19 billion,

it's operated by ExxonMobil in joint venture with Oil Search and four other partners.

"The project extracts natural gas from the Papua New Guinea highlands where it is processed before being sent via some 700km of pipeline to a plant near the nation's capital, Port Moresby. The gas is then liquefied and transferred into ships for sale offshore.

"Construction for the project began in 2010, and the first gas shipment was made in May 2014.

"Far from enhancing development indicators, the largest development project in PNG's history has coincided with an unprecedented downgrade in the country's development status.

Danger: dire security situation

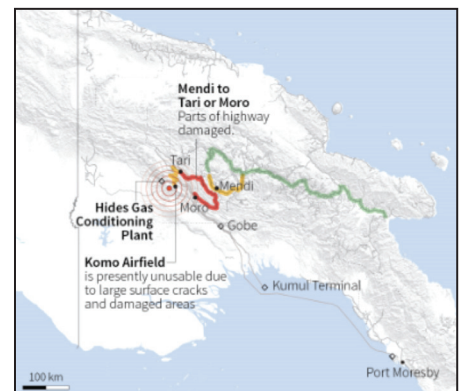
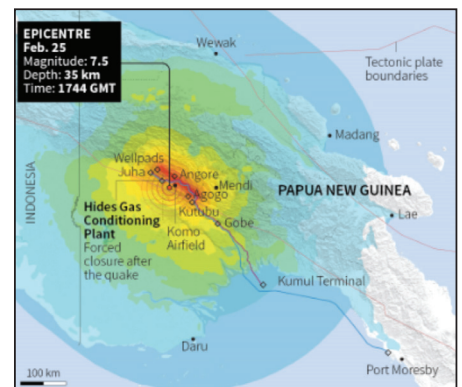
"But very little is known about the actual impact of the project on local landowners ... due to the remote location of the gas field in the mountainous Hela Province. The dire security situation in that part of Papua New Guinea also makes any investigation a highly dangerous undertaking.

"I first visited Hela Province in 2009 shortly before the project was to begin construction. I encountered a population that was bristling with anticipation and enthusiasm for a development that promised to transform their lives.

"The reality – after four years of operation and windfall profits for the project's joint venture partners – is that the project has delivered almost nothing of benefit to landowners. In fact, it has, in important ways, made life worse for the majority of people living in the project area.

"During my fieldwork with project area landowners, I saw a life of immense frustration, disappointment and palpable anger at the absence of benefits. The township of Komo, which is at the centre of operations, contained a newly built hospital that stood empty with no beds, no staff and no fuel for its generator.

"It, and its newly constructed staff houses for non-existent staff, are just two of several white elephants built at inflated prices by companies owned by Papua New Guinea's politicians. Promised road sealing and township development, including power supply



Top: The Exxon Mobil gas conditioning plant at Hides, PNG. Photo: Exxon Mobil PNG

Above: Maps show the earthquake epicentre lies immediately adjacent to Exxon Mobil's Hides drilling operation. Pics: Reuters

and schools, have all failed to materialise.

"The most terrifying aspect of life in Hela province has been the proliferation of weapons. The Huli-speaking population comprises a complex society of hundreds of individual clans with a history of disputes over land and possessions that can be traced back over many generations. This pre-existing context of intense inter-clan rivalry has been made worse by the frustrations of a population hammered by ... broken promises."

Things can go horribly wrong with drilling and fracking

US: Ohio fracking explosion sees 100 evacuated, huge pollution incident

A frack well explosion and fire in Ohio, USA, spewed uncontrolled gas and brine pollution for 21 days until the well was capped on March 7.

Fracktracker reported that officials evacuated residents after XTO Energy's Schnegg gas well near Captina Creek exploded in the Powhatan Point area of Belmont County, Ohio, on February 15.

"The well pad hosts three wells, one large Utica formation well, and two smaller ones. XTO's representative stated that the large Utica well was being brought into production when the explosion occurred. The shut-off valves for the other two wells were immediately triggered, but the explosion caused a crane to fall on one of those wells. The representative claims that no gas escaped that well or the unaffected well," Fracktracker said.

Hissing, rumbling and smoke

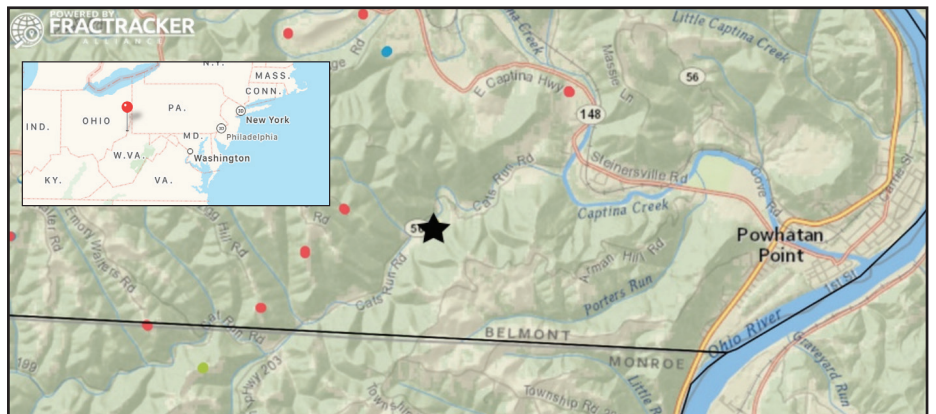
"Observers reported hearing a natural gas hiss and rumbling, as well as seeing smoke. The Powhatan Point Fire Chief reported that originally there was no fire, but that one later developed on the well pad. To make matters worse, reports later indicated that responders were dealing with emergency flooding on site, as well.

"No injuries were reported after the incident. First responders from all over the country are said to have been called in, though the mitigation team is not allowed to work at night for safety reasons.

"The evacuation zone is for any non-responders within a one-mile (1.6km) radius of the site, which is located on Cat's Run Road near State Route 148. Thirty homes, around 100 people, were originally evacuated within the one-mile zone.

"The EPA conducted a number of site assessments right after the incident, including air and water monitoring.

"Much of the site's damaged equipment has been removed. Access roads to the pad have been reinforced. A bridge was recently delivered to be installed over Cats Run Creek, so as to create an additional entrance and exit from the site, speaking to the challenges faced in drilling in rural areas. A portion of the crane that fell on the



Top: A drone photo of the burning well, with (inset) a FLIR camera shot displaying belching methane. Pics: Earthworks

Above: The location of the well explosion, near the Ohio town of Powhatan Point. Pics: Fracktracker and Apple Maps

adjacent wellhead has been removed, and workers are continuing their efforts in removing the rest of the crane.

100m cu ft/day gas escape

"An early estimate for the rate of raw gas being released from this well is 100 million cubic feet/day – more than the daily rate of the infamous Aliso Canyon natural gas leak in 2015/16."

Community group Earthworks released a FLIR video of the escaping gas.

"Similar to the Aliso Canyon disaster in California in 2015, XTO has been unable to fix the problem," said Pete Dronkers, Earthworks certified optical gas imaging thermographer, who also filmed Aliso Canyon.

"Our video provides evidence of just how bad the problem is so that nearby communities can make informed de-

isions about the health and safety of their families before returning to their homes."

The video was captured as part of Earthworks' Community Empowerment Project (CEP) as a result of a request from local community members who could see the explosion from their home two miles (3.2km) away. CEP helps protect communities and the climate by making visible normally invisible air pollution from oil and gas production, pressuring regulators and companies to reduce that pollution.

In the past four years, CEP has documented and made publicly available over 500 incidents of oil and gas related air pollution in 16 states, Mexico and Canada.

• See the FLIR video here:

<https://www.youtube.com/watch?v=h7RMzdTTcVk&feature=youtu.be>

ACF responds to Murdoch press criticism

In response to criticism in The Australian of the Australian Conservation Foundation's funding of Bill Shorten's reef and mine tour, ACF Chief Executive Officer, Kelly OShanassy, issued a statement:

"In late January ACF hosted the Opposition Leader Bill Shorten on a trip in North Queensland. On this trip Mr Shorten met with independent scientific experts who explained the threat the Adani coal mine poses to groundwater, threatened species and our climate. He also witnessed coral death on the Great Barrier Reef, the result of climate change-fuelled mass bleaching events in 2016 and 2017.

"These types of trips are not uncommon. Charities periodically take our elected representatives to areas of environmental damage, human suffering and communities of need. These are not holidays. They ensure that when our elected representatives return to Canberra to make laws and policies that affect us all they understand firsthand the high stakes of their decisions.

"ACF is funded by generous donors, ordinary Australians giving what they

can, who want our environment to have a strong voice in our country. Ensuring our elected representatives understand the breadth of environmental damage occurring in Australia is a component of our work. We have made similar invitations to Coalition and crossbench MPs and we hope they are also prepared to see firsthand the damage climate change is doing to our reef.

"ACF is confident we have complied with all relevant laws applicable to us. All ACF's activities are in pursuit of an environmental protection outcome.

"We appreciate the time Mr Shorten took to understand the damage climate change is doing to the Great Barrier Reef and the threat the polluting Adani coal mine proposes. We hope Prime Minister Malcolm Turnbull will do the same. Because the climate pollution from burning the Adani coal and the suffering of our Great Barrier Reef are issues of great national and international consequence that require leadership from all our elected representatives."

Adani this week

Queensland's LNP displayed their **coal-before-farming** attitude by mocking farmers protesting against Adani. As the farmers gathered outside Parliament House, the LNP's official account tweeted "What do these people farm? **Soy lattes?**" LNP leader and coal mining advocate, **Deb Frecklington**, claimed no knowledge of the tweet.

The obscure **Export Finance and Insurance Corporation** was revealed to be considering **loans** to Adani suppliers and has also held recent talks with **Adani** representatives.

Rockhampton Council was busy counting the benefits of the Adani mine, claiming it would inject \$8 billion into the town with 1100 construction jobs, and over 600 operational jobs, making it worth subsidising Adani's airport to the tune of \$15 million. **Townsville Council** is counting on similar benefits and throwing \$18m in the pot.

But if they got their figures from Adani, **FFB** advises them to double-check. As noted by The Australia Institute's **Richard Denniss**, Adani's claimed 10,000 jobs for the mine is an **over-estimate of 85%**.

In the **US**, resources minister **Matt Canavan** condemned anti-coal and gas activists, using a term he has become fond of – "**voodoo science**" attributed to people opposing new fossil fuel developments.

In **India**, MP Subramanian Swamy, slammed Gautam Adani on his alleged **bad loans** record, labelling him a '**trapeze artiste**' and threatened public interest litigation to recover bank loans.

During the endless debate about Federal **Labor's stance** on Adani, mine promoter the *Townsville Bully's* headline of the week was, "**Holy hypocrisy, Batman! Why backflip Bill Shorten has sold out Adani.**" Followed with the usual whinge about Melbourne greenies being more important than "dispirited blue-collar workers" of North Queensland.

The *Bully* is unconcerned about the North Queensland **farmers** who stand to lose their **water** supply to the mine – and still promotes Adani's 10,000 **zombie jobs**.

FFB

UGC: eight years later, the genie is out of the bottle

Eight years ago the resources sector was set to embrace '**a new darling**' – underground coal gasification (UGC), wrote Mathew Murphy (SMH, 09/04/2010).

He noted the technology was developed in the 19th century and encouraged in the Soviet Union under Joseph Stalin.

He quoted UGC pioneer Len Walker, who said: "I have never seen anything

like it in the 30 years that I have been involved in UGC. The **genie is out of the bottle** and it is unlikely to be put back in again."

Len got something right – the **UGC genie** has **permanently contaminated** a vast swathe of prime agricultural land. The company he founded – **Linc Energy** – is in liquidation; UGC is banned in Queensland; and the public is left with an **\$80m clean-up bill**.

Gladys chats to the big guys; community ignored

Last week in NSW Parliament, Greens MP **Jeremy Buckingham** slammed the "out-of-touch, arrogant Premier of NSW Gladys Berejiklian" for refusing to meet with community groups while having scores of meetings with the big end of town.

"She has refused to meet with the **North West Alliance** trying to stop **CSG near Narrabri**; she has refused to meet with community representatives from Broken Hill and the Barkandji Nation angry at the death of the Darling River; she has refused to meet with

residents of western Sydney opposed to a giant garbage incinerator being built near their homes and schools.

"But who has she had time to meet with recently?" This list tells the story:

- Murrumbidgee Irrigation Limited
- Murray Irrigation Limited
- The Business Council of Australia
- Origin Energy
- Nine Entertainment Co. and Fox Sports
- HSBC Bank Australia
- The Star Entertainment Group
- Lendlease
- NAB
- The Catholic Archdiocese of Sydney
- Allianz Australia Limited
- Rio Tinto

In the news this week:

This week Fossil Fool Bulletin has summarised 25,200 words of news for your convenience. Click on the [links](#) to view original articles. (\$) = subscription may be required

THE ADANI SAGA

<https://www.theaustralian.com.au/national-affairs/i-dont-support-the-adani-project-shorten/news-story/57c28700a485aaf40947d982a981a69c>

I don't support the Adani project: Shorten

Ben Packham, The Australian, 05/03/2018

Bill Shorten has intensified his opposition to the Adani coal mine ahead of a must-win fight with the Greens in the Batman by-election in just under a fortnight.

"I don't support the Adani project," the Opposition leader told reporters today.

"It has been spoken about since 2011. That's a matter of record. It has had numerous deadlines. If you believe the initial hype and boosterism about Adani, they'd have been shipping coal out of Australia for three years. \$"

<https://www.smh.com.au/politics/federal/federal-government-to-lend-money-to-adani-business-associates-20180305-p4z2uy.html>

Federal government to lend money to Adani business associates

Nicole Hasham, SMH, 06/03/2018

An obscure government agency plans to indirectly support Adani's controversial mega-coal mine by financing a business that will supply the project, it has emerged.

The Export Finance and Insurance Corporation, which provides loans to exporters, is also considering inquiries from other Adani suppliers, and held discussions with Adani representatives as recently as last month.

<https://www.themorningbulletin.com.au/news/revealed-rocky-poised-to-reap-8-billion-in-adani-r/3353398/>

REVEALED: Rocky poised to reap \$8 billion in Adani rewards

Leighton Smith, Rockhampton Morning Bulletin, 06/03/2018

The dollar value to the Rockhampton Region for the controversial coal mine succeeding continues to be overlooked while headlines are grabbed by environmental activists and an increasingly sceptical Opposition Leader Bill Shorten.

If the mine were to become a reality, Rockhampton Region mayor Margaret Strelow revealed it would be worth

a staggering \$8.1 billion to the Rockhampton region over the next three decades.

Cr Strelow said during the initial construction phase, 1100 jobs were set to be created before transforming in 625 ongoing, full-time operational jobs for the Rockhampton region.

When Rockhampton Regional Council was asked how they arrived at the magical \$8 billion figure, they said it was based on "an estimated \$90M per annum into the regional economy by direct wages spend, or \$2.7B over the next 30 years". \$"



<http://www.couriermail.com.au/news/queensland/queensland-government/lmp-leader-deb-frecklington-vows-to-look-into-mocking-tweet/news-story/21ca506aee70f743c8086921530a37d5>

LNP leader Deb Frecklington vows to look into mocking tweet

Stuart Layt, Courier-Mail, 06/03/2018

A group of farmers rallied outside Queensland Parliament House on Monday to highlight their concerns about the Adani coal mine, to which the LNP's official account tweeted "What do these people farm? Soy lattes?"

Asked today whether that was appropriate, Ms Frecklington said she wasn't aware of the tweet and would look into the matter. \$"

<http://www.abc.net.au/news/2018-03-06/bill-shorten-adani-stance-making-queensland-colleagues-nervous/9519386>

Bill Shorten's tougher stance on Adani is making Queensland colleagues nervous

Andrew Probyn, ABC, 07/03/2018

Bill Shorten's hardening opposition to Adani's proposed coalmine has unnerved his Queensland colleagues,

who fear there will be a regional backlash for the ALP.

<https://www.townsvillebulletin.com.au/news/opinion/holy-hypocrisy-batman-why-backflip-bill-shorten-has-sold-out-adani/news-story/c69783a2c9b7ae0994413e21e9eeb2d1>

Holy hypocrisy, Batman! Why Backflip Bill Shorten has sold out Adani

Damien Tomlinson, Townsville Bulletin, 06/03/2018

Greenie voters in inner-city Melbourne are just more valuable to Labor right now than the dispirited blue-collar workers of regional and North Queensland.

When I wrote last month that [The Greens had Labor "by the Shorten curls"](#), Mr Shorten's office got in touch demanding a "right of reply".

We agreed to consider the response and waited for it to arrive. But it didn't. \$"

<http://www.northqueenslandregister.com.au/story/5266128/anti-adani-petitions-presented/>

Farmers for Climate Action press government for water and land changes

Sally Cripps, North Queensland Register, 06/03/2018

The scenario of people as far afield as Sydney and Melbourne being able to influence the job prospects of young central Queenslanders was one that concerned Gregory MP, Lachlan Millar, as he reviewed Monday's anti-Adani petitions presented by graziers Angus Emmott and Will Graham.

Supported by Farmers for Climate Action, the cattle graziers distributed two petitions with a combined total of over 150,000 signatures to all 93 Queensland MPs, calling on them to protect central Queensland's grazing land and water resources.

Angus and William describe their actions as sending a clear message to Parliament to stand up for farmers and graziers and to prioritise agriculture over the expansion of fossil fuel development.

"Australia's future lies in clean energy, clean water and clean food, not in the bottomless pit of a thermal coal mine," Angus said.

<https://www.thenewsminute.com/article/adani-biggest-npa-trapeze-artist-bjp-mp-subramanian-swamy-77509>

Adani 'biggest NPA trapeze artiste': BJP Subramanian Swamy

The News Minute, 06/03/2018

BJP MP Subramanian Swamy on Tuesday dropped a bad loan bombshell on industrialist Gautam Adani, calling him the "biggest NPA trapeze artiste in PSUs", but the group clarified that it had diligently and regularly serviced all its debt.

In a widely commented and shared tweet, Swamy said Adani, believed to be close to Prime Minister Narendra Modi, should be made accountable or he would file a Public Interest Litigation in the court for recovery of bank loans from him.

The company statement said it provides direct employment to over 11,000 people and contributes "significantly to the exchequer and the economy".

The ports tycoon and his family's net worth was believed to be \$11 billion in 2017 -- making him the 10th richest man in India, according to Forbes.

<https://www.theaustralian.com.au/national-affairs/malcolm-turnbull-accuses-bill-shorten-of-being-two-faced-on-adani/news-story/60a3985406f4e910490dd26e2fa8dd7>

Malcolm Turnbull accuses Bill Shorten of being two-faced on Adani

Andrew White, The Australian, 07/03/2018

Prime Minister Malcolm Turnbull has accused opposition leader Bill Shorten of being two faced and lacking conviction over the Adani coal mine, warning that his approach posed a "enormous threat" to jobs. \$

<https://www.theaustralian.com.au/national-affairs/indigenous/adani-site-traditional-owners-demand-a-meeting-with-shorten/news-story/bbb3918ce8cfc99c9de8bed9d0ecb>

Adani site traditional owners demand a meeting with Shorten

Sarah Elks, The Australian, 08/03/2018

Aboriginal elder Patrick Malone has a message for Bill Shorten: The traditional owners of Adani's proposed coal mine site deserve your time and attention, just as much as the conservation lobby.

Wangan and Jagalingou traditional owner Mr Malone says he has been trying for weeks to arrange a sit-down meeting with the Labor leader, and was shocked to hear Mr Shorten had met with conservationist Geoff Cousins in January and reportedly promised to revoke the mine's federal approvals. \$



The Australian Conservation Foundation took Labor leader Bill Shorten on a tour of areas, such as the Great Barrier Reef, to be impacted by the Adani mine. Photo: ACF

<https://www.theaustralian.com.au/national-affairs/charities-watchdog-eyes-acf-over-bill-shortens-adani-trip/news-story/ff6ecabf69dabfe49c26f1f39f49893d?login=1>

Charities watchdog eyes ACF over Bill Shorten's Adani trip

Simon Benson & Joe Kelly, The Australian, 08/03/2018

The charities regulator has been asked to investigate Bill Shorten's \$17,000 tour of the Great Barrier Reef and Adani coalmine site funded by the Australian Conservation Foundation to determine if the lobby group broke laws governing payments to third parties.

The ACF is not the first green group registered as a not-for-profit to be referred to the ACNC over the Adani mine. In January, Mr Morton referred the climate group 350.org for allegedly encouraging protesters to break the law. \$

<http://www.couriermail.com.au/news/queensland/queensland-government/tanya-plibersek-joins-bill-shorten-in-opposing-adani-mine/news-story/43a86fdb-0818c1e5bd1f2239c4d>

Tanya Plibersek joins Bill Shorten in opposing Adani mine

Matthew Killoran, Courier-Mail, 08/03/2018

Labor Deputy leader and inner-city Sydney politician Tanya Plibersek has joined Bill Shorten in opposition to the Adani mine, repeating his claim that "it just does not stack up".

Ms Plibersek, who's inner-city Sydney electorate has average wages and employment levels well in excess of central and north Queensland, is the second Labor leader to declare the mine does not stack up. \$

<https://www.townsvillebulletin.com.au/news/opinion/adani-opposition-ignores-reality-of-worlds-energy-needs-from-coal-and-oil/news-story/3f7bcf8ab1d2cd22ebbe49bab3afab23>

Adani opposition ignores reality of world's energy needs from coal and oil

Julian Tomlinson, Cairns Post, 08/03/2018

Let's roll out the red carpet to miners and frackers. Let's establish North Queensland as the home of mining prosperity and energy security. ...

Nuclear is a dirty word but we have enough uranium in the North to be a world leader in cheap, clean nuclear power production.

Green groups' refusal to support emissions-free nuclear energy is the clearest evidence that the goal is not simply "saving the planet", it's about bashing big oil and coal while forcing poor people to cook and keep warm with choking fires of wood, dung and rubbish, including plastic. \$

<https://www.gladstoneobserver.com.au/news/christensen-holds-crisis-meeting-with-adani/3354946/>

Christensen holds crisis meeting with Adani

Troy Kippen, Gladstone Observer, 07/03/2018

Federal MP George Christensen has met with the head of Adani in Australia today after more political attacks on the Carmichael project.

Mr Christensen requested the urgent meeting with Adani's general manager corporate affairs Raj Guruswamy just days after Federal Opposition leader Bill Shorten said he did not support the project.

"Raj has expressed to me his com-

pany's concerns about the impact of these ongoing political attacks on their project," Mr Christensen said.

Mr Christensen requested the urgent meeting just two weeks after his previous meeting in Brisbane with Adani Mining chief executive officer Jeyakumar Janakaraj.

<https://www.themorningbulletin.com.au/news/big-read-adani-and-the-great-artesian-basin-water-/3354638/>

BIG READ: Adani and the Great Artesian Basin water concerns

Leighton Smith, Rockhampton Morning Bulletin, 07/03/2018

A number of people including farmers and Opposition Leader Bill Shorten have raised concerns regarding the Adani Carmichael Mine's access to the Great Artesian Basin.

The Morning Bulletin understands that the water sampling investigation was still under way, the project does not yet have all of its approvals, there are still four outstanding plans which needed to be approved by the Environment Minister before Adani can start mining, Adani's plan for managing groundwater was yet to be approved and they still needed to submit information on how the mine will impact the Great Artesian Basin.

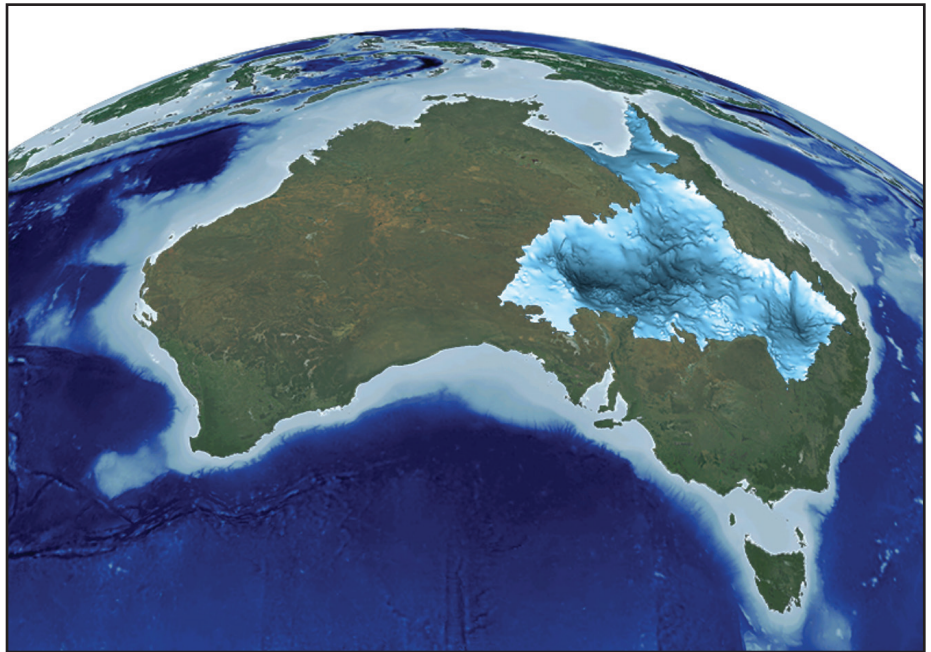
Ground water concerns are high in the mind of Queensland graziers Angus Emmott and William Graham who, supported by Farmers for Climate Action, distributed two petitions with a combined total of over 150,000 signatures to all 93 members of the Queensland parliament calling on the government to protect grazing land and water resources.

An Adani Australia spokesperson sought to allay ground water concerns saying that Carmichael Coal project undertook detailed environmental impact assessment processes over five years, open to public and government scrutiny and consultation.

"We have received 112 approvals, all subject to conditions governing environmental and social aspects of mine, port and rail construction and operations.

The spokesperson moved to set the record straight that Adani Australia in fact "does not have access to unlimited water".

"Our license only allows us to take and reuse associated water that is encountered during normal mining operations," they said.



The Great Artesian Basin could be damaged by the Adani mine, farmers fear.

Picture: Geoscience Australia

"Associated water is the water that flows into the mine from the coal seams and the ground that separates them (interburden) as the mine progresses.

"This water usage is necessary on most mine sites to achieve safe operations."

Adani said they would monitor groundwater surrounding the mine to ensure we do not adversely affect local water resources.

"We will pay \$20 million for our surface water license," the spokesperson said. **\$**

<https://independentaustralia.net/politics/politics-display/stopping-adanis-dirty-mine-our-politicians-love-affair-with-fossil-fuels.11270#.Wp-DRTn6jMw.facebook>

Stopping Adani's dirty mine: our politicians' love affair with fossil fuels

Michelle Pini, Independent Australia, 08/03/2018

IA has [published](#) a great deal about this project since it was first announced, with little evidence to suggest that the mine will benefit Australia since it threatens the environment, Queensland's water supply, the survival of the Great Barrier Reef and the tourism the Reef brings.

The Great Barrier Reef is both a natural wonder of the world and the world's largest reef, with an [estimated value](#) of \$56 billion and an annual economic contribution of \$6.5 billion.

The jobs and wealth creation it has promised to bring to Australia have been grossly overestimated at 10,000,

when Adani's [own report](#) states it will create 1,400 jobs — to say nothing of its diversion of investment in renewable energy, where thousands of jobs are likely to be created. As well, Australia's major banks have [refused to fund](#) the project.

Queensland Greens Senator and spokesperson for mining and resources, [Andrew Bartlett](#) told IA:

The fossil fuel industry has a stranglehold on our politics, via millions in donations and lobbyists who are often ex-ministers or high-level staffers. To stop Adani and future projects like it we need to break this stranglehold and kick the fossil fuel industry out of politics ...

It's a lie that politicians are supporting this mine because they're concerned about unemployment, their real concern is keeping the fossil fuel donations flowing and making sure they have a well-paid lobbyist job when they retire.

<http://www.abc.net.au/news/2018-03-09/bill-shorten-buffed-by-politics-of-adani-michelle-grattan/9530674>

Analysis: Bill Shorten is buffeted by the politics of Adani

Michelle Grattan, ABC, 09/03/2018

On present indications, you wouldn't be betting on the Queensland Adani Carmichael mine going ahead. Yet this problematic project, that may fall over for lack of private sector finance, is causing a heap of trouble for Labor leader Bill Shorten.

Adani is being seen as a test of Mr Shorten's commitment to policy integrity versus his willingness to say and do whatever is politically expedient.

<https://www.theaustralian.com.au/national-affairs/matt-canavan-takes-coalitions-adani-fight-to-us/news-story/860b941d2803da4a3333e408a0f1e31d>

Matt Canavan takes Coalition's Adani fight to US

Rosie Lewis, *The Australian*, 10/03/2018

Resources Minister Matt Canavan has warned anti-coal activists could "con-sign hundreds of millions of people to poverty", as he brought the Turnbull government's fight for the \$16.5 billion Adani Carmichael coal mine to the United States.

Addressing the Center for Strategic and International Studies in Washington early today, the Rockhampton-based senator also said mining had "never been more crucial than it is now" and hit out at the "ignorant campaign against unconventional gas techniques" in Australia, particularly in the Northern Territory.

"We need to counter the misinformation that is preventing the appropriate development of natural resources. Permanent bans on gas developments are not based on any form of scientific evidence. It is a "voodoo science" that promotes fake facts over hard data."

Senator Canavan revealed a Memorandum of Understanding was being worked on so Australia and the US could identify resources of critical minerals and share knowledge on the latest exploration techniques to secure more supply. \$

<https://www.smh.com.au/opinion/richard-denniss-sovereign-risk-econobabble-has-lost-all-meaning-20180309-h0x8r3.html>

Richard Denniss: 'Sovereign risk' econobabble has lost all meaning

Richard Denniss, *SMH*, 10/03/2018

The term 'sovereign risk' is the kind of econobabble bullshit that is destroying public debate, and indeed democracy, in Australia. Like the words competitiveness and productivity the phrase sovereign risk has been stripped of any real meaning and is simply used to dress up the self-interest of powerful groups as being in the national interest. ...

Under Australian law the federal government of the day can withdraw an approval for a project if the proponent fails to meet its obligations or relied on false, inaccurate or misleading infor-

mation to gain that approval. There is no doubt that projects whose approvals are based on flawed information face a risk that their licences will be revoked but, again, that isn't sovereign risk, that is executive risk. Like the ATO chasing back taxes, Bill Shorten isn't threatening to change the law, he is simply threatening to enforce it. And if Adani is confident that all of the information it has provided is accurate then it won't have much to worry about.

But rather than accept responsibility for the risk that it might have sought approval for the Carmichael mine on data that doesn't stand up to scrutiny, Adani and its friends in the Coalition are waving their arms around blaming governments for all of their commercial woes. Maybe that's because so many of Adani's claims have failed to stand up to scrutiny. When it first sought approval for the mine it told the public and the politicians it would create 10,000 jobs, but under oath in court it told the judge it would create 1464 jobs. Apparently while corporations 'need certainty' the public should be understanding when the proponent of a mine cuts its forecast employment levels by 85 per cent.

<https://www.townsvillebulletin.com.au/news/adani-protest-planned-for-townsville-legacy-fundraising-event/news-story/44631cd4964f6ea5e2ff9a7d1fe7b4e3>

Adani protest planned for Townsville Legacy fundraising event

Clare Armstrong, *Townsville Bulletin*, 10/03/2018

Anti-Adani activists have been criticised for plans to protest outside a fundraising event for military veterans' families in Townsville.

Galilee Blockade and Stop Adani

groups from Townsville, Magnetic Island and James Cook University have organised a protest outside a business breakfast for the Townsville Legacy branch on March 23.

The breakfast is supported by AECOM, an engineering company undertaking surveying and design work for the Adani Carmichael coal railway line.

A spokesman for Stop Adani Magnetic Island said they had "no beef" with Legacy and supported their work.

"It is just unfortunate that they chose this particular sponsor," the spokesman said.

"AECOM is aware that, because of their support of Adani's Carmichael coalmine, they are open to protest across the state." \$

COAL ROCKS ON

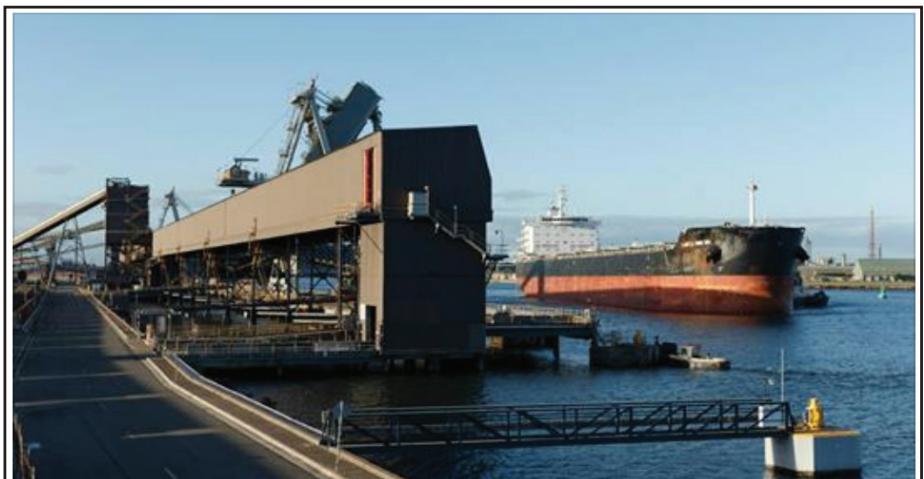
<http://www.theherald.com.au/story/5263463/hunter-needs-to-plan-for-a-life-after-coal/>

Hunter needs a plan for life after coal

Steve Phillips, *Newcastle Herald*, 05/03/2018

The world is changing. Hunter communities have sacrificed a lot for NSW's prosperity. We have a right to expect that our governments are planning to ensure we have jobs and opportunities into the future, regardless of what happens to the coal market.

Singleton and Muswellbrook residents know what it's like during a mining downturn. When coal prices fall, mines close, and thousands of local people lose their jobs. Even if you don't think the coal industry will end, it makes sense to diversify the region's economy so it's not so vulnerable to the fluctuations of the global coal market.



Hunter needs to plan for a life after coal

How prepared is the Hunter for major changes in the coal industry?

THEHERALD.COM.AU

That's why Lock the Gate is knocking on doors in Singleton and Muswellbrook to ask people what they want for the future of the region. It's why we're hosting community dinners for people to envision a life for the Hunter beyond coal. When we talk to people in Singleton and Muswellbrook about the future, it's clear that most people are thinking about life after coal. Nine out of 10 people we talk to say we need a plan for a post-coal economy in the Hunter.

Steve Phillips is Hunter Valley coordinator for the Lock The Gate Alliance

GAS, GAS, GAS

<https://www.gladstoneobserver.com.au/news/fisherman-lodge-100million-class-action-against-gp/3353430/>

Fishermen lodge \$100million class action over spill

Gladstone Observer, 06/03/2018

A CLASS action is being brought against Gladstone Ports Corporation on behalf of commercial fishermen for losses they say resulted from large-scale contamination from toxic dredge spill in 2011-12.

The fishermen are claiming losses of more than \$100million following the Western Basin Dredging and Disposal Project in Gladstone Harbour.

The dredging began in 2011 to prepare for the three Curtis Island LNG projects. \$

<https://www.gladstoneobserver.com.au/news/200-jobs-5m-splashed-on-local-business-for-aplng-s/3355689/>

200 jobs, \$5m splashed on local business for APLNG shutdown

Tegan Annette, Gladstone Observer, 08/03/2018

MORE than \$5million will be spent on Gladstone businesses within the next two months during Australia Pacific LNG's scheduled shutdowns.

Announcing the start of the shutdowns with APLNG's downstream operator ConocoPhillips, the company said of the 200 additional contractors required, 73 per cent were from the Gladstone region.

The Curtis Island LNG facility will have about 580 workers on site during the next two months for the additional work. \$

<http://www.northerndailyleader.com.au/story/5263828/narrabris-csg-opponents-almost-double-supporters/>

Narrabri CSG opponents almost double supporters

Jamieson Murphy, Northern Daily Leader, 05/03/2018

Less than one and a half per cent of the almost 23,000 submissions about the Narrabri coal seam gas development supported the project.

Locally, objections were almost double those supporting the Santos project – of the 499 submissions the government received from Narrabri, 64 per cent (319) objected to the project, as

opposed to 36 per cent (181) supporting it.

Narrabri based anti-coal seam gas group, People for the Plains, is concerned the previous information released by the NSW Department of Planning and Environment (DPE) may have misled people about the level of local support.

Group spokeswoman Sally Hunter said, "My experience from Queensland is that company-driven hype can leave a lot of people broken-hearted and financially ruined. When the bust comes, it is devastating. I do not want to see that hollowing out of the community here in Narrabri.

"What we've seen on the Darling Downs is communities left worse off than before the gas projects started and you can see that for yourself in Chinchilla, Tara, Dalby and Roma."

Santos dismissed the concerns, saying it has "great support" in and around Narrabri.

<http://www.northerndailyleader.com.au/story/5267900/conflict-of-interest-rules-independent-chair-out-of-csg-review/>

Conflict of interest rules Mary O'Kane out of Santos Narrabri coal seam gas review

Jamieson Murphy, Northern Daily Leader, 07/03/2018

The chair of the state's Independent Planning Commission will not take part in the review of any coal seam gas-related developments, including Santos' Narrabri Gas Project, due to a conflict of interest.

Mary O'Kane, who previous served as the state's chief scientist and engineer, confirmed the news to The Leader and said she was extremely conscious of upholding the integrity of the IPC.

The news comes as a complaint was made to the NSW Ombudsman, asking it to investigate Dr O'Kane's potential conflict of interest, due to a \$25 million donation she was involved in securing from Santos to Adelaide University in 2001, when she was the university's Vice Chancellor.

Dr O'Kane believes her 2014 inquiry in to coal seam gas as NSW chief scientist was a larger conflict of interest than the \$25 million donation, which went towards setting up the Australia School of Petroleum at the university.

The three Curtis Island LNG terminals: during their construction, Gladstone Harbour suffered a toxic dredge spill. Picture: Shipfinder screenshot



<https://independentaustralia.net/environment/environment-display/is-the-santos-csg-waste-water-experiment-safe.11268>

Is the Santos CSG waste water experiment safe?

Johanna Evans, *Independent Australia*, 07/03/2018

Santos began irrigating with coal seam gas-produced and treated wastewater at the [Leewood facility](#) near Narrabri in August 2017.

Over the past several months, I have come to the conclusion that environmental harm could be occurring at Leewood. There is a profound lack of testing being conducted considering that this treatment plant is a first for NSW. Despite there being a taxpayer funded [\\$5 million EPA office](#) (Gas Regulation Branch) in Narrabri, only 84 [inspections](#) were conducted in the 2016-17 financial year — the majority of these being routine inspections. What you don't test for isn't there.

<http://www.abc.net.au/news/2018-03-04/dunk-island-resort-in-ruins-seven-years-after-yasi/9502892>

Dunk Island Resort in ruins seven years after Cyclone Yasi, leaving locals in despair

Casey Briggs, *ABC*, 05/03/2018

A once internationally famous resort in far north Queensland now languishes in ruins and is a waste of potential, frustrated locals say.

After being destroyed twice over by cyclones Yasi and Larry, the Dunk Island Resort was bought cheaply by Linc Energy founder Peter Bond in 2012.

The resort is now under the control of his son Adam Bond.

Years later, the resort remains closed to the public, with much of it looking as if the storm blew through yesterday.

<https://www.transcontinental.com.au/story/5259819/leigh-creek-and-copley-in-ruins/?cs=1916>

Leigh Creek and Copley in ruins

Marco Balsamo, *Transcontinental Port Augusta*, 06/03/2018

Over two years after the closure of the coal mine, Leigh Creek and neighbouring town Copley are on the verge of becoming ghost towns.

The closure of the Leigh Creek coal mine in November 2015 came as a result of the decommissioning of the Augusta Power Stations, putting over 400 people in the Far North region out of employment.

Leigh Creek's population more than



Linc Energy's liquidators have dumped responsibility for environmental repair onto Queensland taxpayers. Photo: Google

halved in 10 years, with the 2016 census revealing that less than 250 people were living in the town – a figure that would have undoubtedly decreased further by 2018.

The same census indicated that just 72 people remained in Copley, a decrease of over 30 per cent since 2006.

Leigh Creek Energy plans to conduct in-situ coal gasification at the former coal mine site, which involves extracting gas from Leigh Creek's coal seams.

However, the process has been widely opposed by Leigh Creek residents after it was banned in Queensland.

<http://www.couriermail.com.au/news/queensland/crime-and-justice/taxpayers-may-have-to-pick-up-linc-energy-clean-up-bill-after-liquidators-appeal-upheld/news-story/57f988675e10a0c38666212607e24e72>

Taxpayers may have to pick up Linc Energy clean-up bill after liquidators' appeal upheld

Daryl Passmore, *Courier-Mail*, 10/03/2018

The State Government could be stuck with a bill of up to almost \$80 million to clean up environmental contamination after a court ruled liquidators for Linc Energy were not responsible.

The Supreme Court yesterday upheld an appeal by company liquidators Stephen Longley, Grant Sparks and Martin Ford against an earlier order holding them liable for rehabilitation of land around the former Linc underground coal gasification site near Chinchilla.

The Government has budgeted more the \$20 million over the next four years towards cleaning up the site.

But the court heard evidence that estimates provided to the department

put the cost of rehabilitation at up to \$78 million over a period of eight to 30 years. \$

<http://www.queenslandcountrylife.com.au/story/5260743/gas-farce-goes-global/?src=rss>

CSG gas market merry-go-round

Mike Foley, *Queensland Country Life*, 05/03/2018

Dwindling reserves, escalating extraction costs and large, long term export contracts are playing their part in the exorbitantly expensive gas market.

When Queensland's Curtis Island export hub linked the east coast supply to the international market and prices more than doubled overnight.

Now we have hit peak market dysfunction with not one, but two companies planning to import gas back into Australia at time when Australia is set to become the world's biggest exporter.

<https://www.theaustralian.com.au/business/mining-energy/repairs-needed-at-papua-new-guinea-lng-project-after-quake/news-story/f6851027dd24ad18c4e226bd45bf72fd>

Repairs needed at Papua New Guinea LNG project after quake

AAP, *The Australian*, 05/03/2018

Oil Search and Santos say it will take about eight weeks to repair and restore production at their earthquake-damaged liquefied natural gas project in Papua New Guinea.

Oil Search, which has donated \$US5 million to disaster relief following last week's magnitude-7.5 quake in the country's highlands, says it will revise its production guidance and estimate the likely earnings hit when it can. \$

https://www.platts.com/latest-news/natural-gas/sydney/png-lng-to-remain-shut-for-eight-weeks-of-post-27920159?utm_source=twitter&utm_medium=social&utm_term=naturalgas&utm_content=twitter&utm_campaign=news&hootpostid=4b12265d6e39a15b87ed24b482495465

PNG LNG to remain shut for eight weeks of post-earthquake repairs: Santos

Platts.com 04/03/2018

There is recovery work taking place at the Hides gas conditioning plant which is focused on restoring camp and associated facilities. While the plant is safely shut in, there has been some damage to various pieces of equipment and foundation supports that is yet to be fully inspected and repaired, Santos said.

It said that surveillance of the pipeline has confirmed it has not been damaged.

<https://www.reuters.com/article/us-papua-quake-exxon-insight/shakes-and-superstition-exxon-faces-backlash-in-papua-new-guinea-idUSKCN1G125>

Shakes and superstition: Exxon faces backlash in Papua New Guinea

Jonathan Barrett & Henning Gloystein, Reuters, 07/03/2018

A deadly earthquake that struck ExxonMobil's \$19 billion gas project in the mountains of Papua New Guinea is sparking a backlash against the U.S. energy giant that could prove harder to fix than buried roads and broken pipes.

Some spooked locals blame Exxon and its project partners of causing, or at least magnifying, the 7.5 magnitude quake on Feb. 26 and a series of intense aftershocks that continue to pound the impoverished and isolated region.

While firmly denied by Exxon and debunked by geologists, the accusations suggest that the project known as PNG LNG, one of the most successful liquefied natural gas (LNG) developments in the world, is sorely lacking goodwill from at least parts of the local population.

The concerns about the project – the country's biggest revenue earner – are even being expressed at senior levels in the Papua New Guinea government.

Exxon has previously faced resentment in PNG, which contains vast natural resources but remains desperately poor.

Martyn Namorong, national coordinator for landowner rights and governance lobby group PNG Resource Governance Coalition, said the quake had reawakened concerns raised in 2012 when a landslide tore through a quarry used by Exxon, killing at least 25 people.



At least 14 workers have died from suicide at the Inpex LNG construction site near Darwin, as a survey reveals high rates of FIFO mental health problems. Photo: Inpex

<http://www.abc.net.au/news/2018-03-08/inpex-death-sparks-union-call-for-changes-workplace-culture/9524908>

Inpex death sparks union call to change practices 'fraught with danger' for mental health

Emily JB Smith, ABC, 08/03/2018

The CFMEU has called on companies at the Inpex Ichthy's LNG plant in the Top End to change practices it claims are "fraught with danger when it comes to mental health", following the death of a worker by suicide.

The CFMEU claimed the man was the 14th worker on the Inpex project to die this way.

[A spokesman] said working four weeks on and one week off — while other construction projects used a three-on, one-off roster — and sleeping in a different bed each stint isolated workers from their colleagues and families.

A parliamentary inquiry in 2015 in Western Australia found 30 per cent of FIFO workers had mental health problems, compared with a national average of 20 per cent.

[A Western Australian study in 2015 found that FIFO workers were contracting depression](#) at more than twice the rate of the Australian population.

<https://m.ruralweekly.com.au/news/opinion-renewables-versus-shale-gas/3354921/>

Opinion: Renewables versus shale gas

Mark Ogge, The Australia Institute, Rural Weekly, 07/03/2018

Shale gas is a dirty, dangerous and expensive fuel ... the dregs of the gas industry.

It is deep and dispersed. It requires

tens of thousands of wells transforming vast areas into industrial gasfields and a massive increase in truck traffic. Every frack requires hundreds of trucks of chemicals, sand and water. It then has to be piped vast distances to get it to processing facilities, then even further to get it to market. It is extremely combustible, requiring extraordinary efforts to handle it safely.

Renewable energy, on the other hand, requires none of this. Wind and solar are modular systems that can be built close to where the energy is used. They are simple, clean and virtually risk free.

Gas is a 19th century fuel whose days are numbered. This is the last gasp of an industry trying to monetise its licenses before they are worthless. Unfortunately, it may just wreck the Territory in the process.

http://news.pngfacts.com/2018/03/villagers-in-earthquake-affected-areas.html?utm_source=dlvr.it&utm_medium=twitter#ixzz59F7ce5dY

Villagers in earthquake affected areas raise concerns on contaminated water

Staff reporter, Papua New Guinea Today, 09/03/2018

Villagers along the Okuk Highway within the Southern Highlands Province are concerned that their clean water sources for drinking and cooking have been contaminated as a result of the 7.5 magnitude earthquake last week.

A villager along Angula River (wara Angula), Stanley Kalari said the fresh flowing water creek they use for drinking and cooking on a daily basis now smells of diesel and they are afraid to use the water.

He and his fellow villagers want the

News this week ... from previous page

water tested immediately by the authorities before they can start using it again.

He said with their food gardens destroyed as well a water sources polluted, they want to be relocated temporarily to some place where they can have access to clean water supply and food as they are afraid to remain in their village which is at the foot of the mountain.

<https://theconversation.com/papua-new-guinea-gets-a-dose-of-the-resource-curse-as-exxonmobil-natural-gas-project-foments-unrest-70780>

Papua New Guinea gets a dose of the resource curse as ExxonMobil's natural gas project foments unrest

Michael Main, *The Conversation*, 09/03/2017

The [Papua New Guinea liquefied natural gas \(LNG\) project](#) is the largest resource extraction project in the Asia-Pacific region. Constructed at a stated cost of US\$19 billion, it's operated by ExxonMobil in joint venture with Oil Search and four other partners.

Construction for the project began in 2010, and the first gas shipment was made in May 2014.

In the years since construction began, Papua New Guinea's ranking on the United Nations Development Program's Human Development Index has [fallen by two places to 158](#), having been overtaken by Zimbabwe and Cameroon. Far from enhancing development indicators, the largest development project in PNG's history has coincided with an unprecedented downgrade in the country's development status.

Papua New Guinea now faces a situation where it's compelled to send its army to an area where a major resource extraction project has failed to deliver on its promises to landowners. It may be time for all parties involved – both state and corporate – to consider development as a more effective path to peace.

<http://www.abc.net.au/news/2018-03-10/calls-for-inquiry-into-cause-on-png-quake/9534898>

PNG earthquake: Calls for formal inquiry into cause as more aid arrives, ADF sends Globemaster packed with supplies

ABC, 10/03/2018

As authorities in Papua New Guinea start to get a clearer picture of the scale of the destruction caused by [February's magnitude-7.5 earthquake](#), there have been growing calls for the government to order a formal inquiry into what caused the quake.

The exact death toll is unknown, but the number of reported deaths has climbed above 100.

Speculation is still rife among the affected communities that the quake was triggered by the activities of oil and gas companies in the region.

The biggest operation is the PNG LNG joint venture operated by Exxon Mobil PNG, which has gas production and processing facilities in Hela, Southern Highlands and Western Highlands provinces, all of which bore the brunt of the earthquake.

FOSSIL POLITICS

<https://theconversation.com/revealed-the-extent-of-job-swapping-between-public-servants-and-fossil-fuel-lobbyists-88695>

<https://www.michaelwest.com.au/revealed-revolving-doors-public-servants-fossil-fuel-lobbyists/>

Revealed: the revolving doors between public servants and fossil fuel lobbyists

Adam Lucas & Rosenzweig Holland, *Michaelwest.com*, 05/03/2018

Last month Australia slipped further down the rankings in the [international corruption index](#). Among a wide range of factors cited by Transparency International was Australia's "inappropriate industry lobbying in large-scale projects such as mining", as well as "revolving doors and a culture of mateship".

Several prominent public figures and



Revealed: the extent of job-swapping between public servants and fossil fuel lobbyists

More than 180 individuals have moved between senior public service roles and the fossil fuel industry in Australia over the past decade - providing a golden...

THECONVERSATION.COM

NGOs, including [The Australia Institute](#) and urban planner [Julie Walton](#), have argued that the mining, energy, property and gaming industries enjoy favourable treatment in exchange for their [generous political donations](#), or at least are [perceived to](#). There's also widespread public acceptance that the [resources industry was instrumental in removing Kevin Rudd](#) from the prime ministership in 2010.

What is less well known is the extent to which big business has sought to bend the will of the body politic by directly influencing the formation of government policy.

We have compiled a database of more than 180 individuals who have moved between positions in the fossil fuel and/or mining industries and senior positions in government, or vice versa, over the past decade. This includes senior political staffers working for prime ministers and state premiers. We have also found examples of key ministers hiring individuals straight from the fossil fuel and mining industries, who then return to those industries straight after leaving government. This revolving door might be better dubbed a "service elevator", ensuring that "delivery of the goods" happens away from public scrutiny.

FFB

SEE ALL ISSUES OF
FOSSIL FOOL BULLETIN

www.facebook.com/Fossil-Fool-Bulletin-1099502903513222/

Fossil Fool Bulletin is emailed to subscribers every Tuesday.

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

SIGN UP for your FREE subscription
Past issues available to download

CONTACT FFB: Email
fossil.fool.bulletin@gmail.com
with your comments & tips

SAVING THE LAND, AIR AND WATER
FOR THE KIDDIES

www.knitting-nannas.com

