

MR O'CONNOR: Good morning. Welcome to the public hearing of the Narrabri Gas Project. My name is Steve O'Connor, and I am the chair of this IPC panel. Joining me are my fellow commissioners, Professor Snow Barlow, Mr John Hann and counsel assisting, Richard Beasley SC. Before we begin, I would like to
5 acknowledge the traditional custodians of the land on which we meet and pay my respects to their elders past, present and emerging and to the elders from other communities who may be participating today.

10 In line with COVID-19 regulations, we have moved this public hearing online with registered speakers provided the opportunity to present to the panel via telephone, video conference or the studio we have set up in Narrabri. In the interests of openness and transparency each day we are livestreaming this electronic public hearing via our website. As always, this public hearing is being recorded and a full transcript will be made available and placed on the commission's website.

15 Before we hear from our first registered speaker today, I would like to outline how today's hearing will proceed. Each speaker will be introduced when it's their turn to present to the panel. Each speaker has been advised how long they have to speak. We have received a record number of registrations, and it's important that everyone
20 registered to speak receives a fair share of time.

I will enforce the time keeping rules as the chair. I reserve the right to allow additional time for provision of further technical material. You will hear a warning bell at one minute before your allocated time expires, and two bells when your
25 allocated time is finished. I also ask that the speakers today refrain from making offensive, threatening or defamatory statements as per the guidelines available on the commission's website.

30 It is important that all speakers understand that today is not a debate and the panel will not be taking questions. If there is something you would like the panel to consider and you don't get the opportunity to raise it, the panel will consider any written submissions made up to the extended deadline of 5 pm on Monday the 10th August 2020. All written submissions are weighed in the same way as verbal submissions made during this public hearing.

35 It's important to understand that any person can make a written submission, irrespective of whether they have been allocated time to speak at the public hearing. If you have a copy of your speaking notes or any additional material to support your presentation, it would be appreciated if you would provide that information to the
40 commission. Please note any information provided to us may be made public. Thank you. I will now ask Richard to call the first speaker.

MR BEASLEY: The first speaker is Caroline Alcorso from the Wilderness Society Inner West Group. Are you there, Ms Alcorso?

45 MS ALCORSO: Yes, I am.

MR BEASLEY: Please go ahead with your submission.

MS ALCORSO: Hello commissioners and counsel. Thank you for having me here today. Before I start, I would like to acknowledge the Gomeroi People, the
5 traditional owners of the land we're concerned about in this inquiry, and pay my respects to all Aboriginal and Torres Strait Islander people listening today. For most of my life I've been a campaigner, working in some small way to defend Australia's natural environment, animals and heritage, both in my home State Tasmania, and my adopted State of New South Wales. I've been a Wilderness Society member for 40
10 years.

Wherever I've lived, I've found that people draw immense pleasure, as well as health, wellbeing and mental resilience from natural and wild places. Unfortunately, Australia has not, on the whole, had governments prepared to consider this a thing
15 important, and governments, I believe, have preferred to protect the interest of developers and miners, and I know this all too well from Tasmania where we have lost many important ecosystems. River have been polluted and animal species destroyed. That's why I'm here today to raise my voice against the Santos coal seam gas development, because we can't rely on governments to protect our own interests.
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Now, there are many reasons why the IPC, consistent with its risk based approach, should reject this development. I'd just like to highlight three. The nature of coal seam gas, the environmental risks and Santos' lack of a social licence to operate. More and more evidence that methane leaking from coal seams makes coal seam gas
25 a dirtier fossil fuel than we once thought, possibly, some studies say, dirtier than coal. Two factors are important. The higher than previously thought fugitive emissions and the greater strength of methane as a greenhouse gas. Now, more research about coal seam methane is definitely needed, as Santos would say, but the independent studies throw plenty of doubt about Santos' claim that CSG is a clean
30 form of energy.

So the objective of intergenerational equity that the IPC operates under means we shouldn't leave a mess for future generation, therefore governments have an imperative and, I believe, the IPC has an imperative to avoid reckless, needless risks
35 when it's within their power to do so, as in the case of this gas fields development. I'd like to now turn to the ecosystem harm the project is likely to cause. As we know, the Santos project covers 95,000 hectares of the iconic Pilliga Forest, which is the last remaining large native woodland in eastern Australia. It contains many threatened species and plants, including Pygmy Possums, koala and the Pilliga
40 Mouse.

Given the increased impact of climate induced disasters now affecting Australia, we should be treating this native woodland as precious, seeing it as a haven for threatened species, a potential recovery site for the koala population so damaged by
45 the recent summer fires, and doing everything we can to enhance its ecological health. Instead, the Santos project brings new risks, but the area is already dotted with polluted kill zones from gas well spills, which include the notorious 2015 spill

of water contaminated by uranium, arsenic and cadmium, which killed thousands of trees and polluted waterways. Given this appalling record – am I still being seen?

MR BEASLEY: Yes.

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MS ALCORSO: Yes. Given this appalling record, no one believes Santos could or would put safeguards in place to prevent further damage, or that offsets in another region could compensate for the area's destruction. For these reasons and others, opposition to the proposed project is overwhelming and the IPC should listen to it. Santos has no such social licence to operate. IPC members will be well aware that 98 per cent of the 23,000 submitters to the original DA objected, which is the largest opposition to any project in the history of New South Wales. People believe the likely damage to farming, the water table and environment is too large for just 150

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In closing, I'd like to ask IPC members to consider is this dirty project with all its likely harms and damage worth it; is it taking us, as Australians, in a new direction, one where we don't just see our environment as something to be exploited, or is it simply part of the same old problem where treasure chests of dollars for a global corporation are more important than the wellbeing of local people. Thank you.

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MR O'CONNOR: Thank you, Caroline, for that presentation. Next speaker, please.

MR BEASLEY: Next speaker is Professor James Goodman from the UTS Climate Justice Research Centre. Are you there, Professor Goodman?

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PROF GOODMAN: Yes, I am. Yes.

MR BEASLEY: Please go ahead.

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PROF GOODMAN: I would like to share the screen. I have a slightly unstable internet, but this is a PowerPoint I can send in. I've addressed all of the grounds for approval, one by one, and I just outline them now. First, on the question of energy security and liability and the need for the project to address shortfalls. The AEMO Gas Statement of Opportunities this year projects declining New South Wales gas demand. There is no shortfall predicted. Demand for gas is projected to fall due to renewables growth and the diversification of renewables and storage. So that first ground is – does not hold.

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The second ground, the pipeline network. The project can't be assessed on whether it justifies new pipelines. This is irrelevant. Third, that there will be need for dispatchable energy or firming power into the National Energy Market with the transition to renewables. The 2020 from AEMO actually predicts 50 to 75 per cent renewables by 2025. We've reduced gas. They predict reduced gas to mine in the NEM for the next five years. It only returns back to the level currently when all of the coal-fired power has been retired, and even that's doubtful given the extent to

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which technology is moving on this, and removing the need for firming. So that's not supported.

5 Putting down pressure and gas pipes. There's no evidence of this. Santos says they will increase supply of gas onto the market, but the gas is likely to be more expensive than other gas sources, and assume that benefit of the project relies on gas prices not falling, and if gas prices fall, of course, our experience is that the exports will increase in order to keep the price up. There's no evidence of this.

10 Take economic benefits. Stimulating the post-COVID recover. Is not relevant. Gas won't flow for several years. There's no pipeline at the moment, and in any case, a gas-led recovery would distort the economy away from much cheaper renewables. Creating jobs. Yes, to an extent. Up to 200 jobs for 25 years. This compares with 1300 ongoing jobs in farming. That's ongoing jobs, not just for 25 years, and this is
15 – it is stable. It's unchanged over the last decade. It still doesn't attract investors itself. This will actually encourage investment in farming, which is a key employment sector for the area.

20 Providing – sorry. Providing and a half million dollars to Narrabri Shire Council. This is partly compensation for the impact of the project, and is minimal. It's only \$600,000 setting up Community Benefit Fund for 120 million. That's five million a year, at about 0.3 per cent of the project revenue. It's unclear how it's going to be run. Such funds often deliver more for public relations for the companies, rather than for local people and, in any case, Santos would have an
25 interest in smoothing their way to an extension to gas fields, so this is of questionable benefit.

30 You see here economic development, and then the industrial state, that's not clear at all what benefit this would bring. Overall, there's a statement that there will be reduced impacts, but there's serious uncertainty about those impacts, and for Aboriginal heritage at least 40 per cent of land is high sensitivity. Santos is to be trusted to avoid impacts for a reasonable and just time. "Will comply with requirements", well, of course that's irrelevant. Compliance should be a given. "Would not result in significant impacts on people and environment". Greenhouse
35 gas is significant.

40 The emissions that they acknowledge is significant, and it's claimed this will substitute for coal-fired power, but, in fact, of course, as I've said it will substitute for renewable energy. So these are real, additional emissions and are likely to be higher because of future emissions, and the CO2 content in wells, which companies refuse to release, invoking commercial confidence, which, of course, is against public interest. Residual impacts, again, loss of water risk of water, land contamination and long-term risk assuming the benefit is only 25 years. Overall, the project appears to be like a tail wagging the dog. It creates supply, requires a
45 pipeline, power stations to burn it and government support and appears to be mainly geared to reversing fortunes for Santos, that is saving Santos in the public interest.

MR BEASLEY: Can I just ask you a couple of questions, Professor?

PROF GOODMAN: Yes.

5 MR BEASLEY: Mr Kitto, in relation to asserted downward pressure on gas prices, Mr Kitto for the department didn't really emphasise that, but I'd like your response to this. What he said was that it's the project's critical for New South Wales energy needs to provide gas to New South Wales industries. Do you have a response to that?

10 PROF GOODMAN: Well, the previous AEMO report did suggest that, this was a year ago, but the current one doesn't. The current one says that there's declining demand for gas, both for industrial and household uses, and yes. So that doesn't hold in – for the current figures, no.

15 MR BEASLEY: All right. Santos have also, in response to a question posed by the commissioners, quoted Mr Sims, the chairman of the ACCC, saying that if there is additional gas from a project like this, then it's likely to result in better pricing outcomes for domestic gas users, that is New South Wales gas users, than
20 transporting gas from Queensland or importing it through a port terminal. Do you have a response to that?

PROF GOODMAN: The gas in this case, as I said, there is – is known to be of higher cost. Less economic than other sources of gas, whether imported or interstate.
25 The assumption that increased supply onto the market will – from Narrabri will reduce price is uncertain, to say the least, as there's other players in the gas market and it's likely that if the price falls, they will simply seek greater returns offshore, and, in any case, demand appears to be falling off quite considerably, certainly in recent years and in terms of the projections for the next five years.

30 MR BEASLEY: All right. Just in relation to demand falling off, I think one of the points you sought to make was that this project wouldn't be a substitute for coal, it'd be a substitute for renewables. I'm just wondering if you could slightly expand on that as to why that's the case, given that renewables, at least at the moment, have
35 limited or no storage capacity, whereas coal and gas can be flicked on and off. Why do you say this is a substitute for renewables, rather than for coal?

PROF GOODMAN: Because it's become clear that such dispatchable power, or firming power, is not necessary with a diverse base of renewables, and with new
40 technologies, such as batteries and so on, for storage. So, in fact, it's reflected in the AEMO report. It says that there's only need for firming in the system after the full phase out of coal, but even that's questionable as technology improves. In the South Australian case, the diesel generators that were brought on provide firming and dispatchable power in South Australia, and they have about 50 per cent renewables,
45 were only used a couple of times. So this notion of the necessity very questionable.

MR BEASLEY: All right. And just finally, did I understand that your submission about jobs is that whilst you take into account the jobs this project is predicted to create, you've got to factor in any risk to reduction in agricultural production and, hence, a risk to the number of – a lowering of the number of the jobs in that industry; is that right?

PROF GOODMAN: That's exactly it. That the risk to farming to get 200 jobs into this area is too great and, in any case, that risk is long term. These jobs are short term, and uncertain, as well. I think the company only commits to up to 200 continuing jobs, so yes. Exactly that.

MR BEASLEY: Thank you.

MR O'CONNOR: Professor, I've got one supplementary question which relates to the comment you made about this being expensive gas, the Narrabri Gas Project. That comment has been made to us a number of times. Can you just briefly outline why this is an expensive project?

PROF GOODMAN: This has come from people who've reported this to me, so I'm not an expert on the cost of gas. It's just simply that the capital required, investment capital required to secure this gas makes it expensive in terms of bringing it to market but I'm not, you know, saying this will be necessarily reflected in the price of gas. There's also, obviously, the cost of infrastructure to bring it to market.

MR O'CONNOR: Thank you. Thank you for your presentation.

PROF GOODMAN: Thank you very much.

MR O'CONNOR: Next speaker, please.

MR BEASLEY: I think we have Philip Spark from North West Ecological Services. Are you there, Mr Spark?

MR SPARK: Yes, I am. Can you hear me?

MR BEASLEY: We can. Please go ahead.

MR SPARK: Yes, hi. I'm a second generation farmer and ecologist. I live at Tamworth. Thanks for the opportunity to present to you today. I worked as an ecologist in the north west for 24 years, largely with wildlife and research and conservation projects. I've written a submission detailing my concerns about the Narrabri Gas Project, and this summary – this presentation is a summary of those. I will just share my screen with you.

So these are the issues that I believe should stop Narrabri gas getting through. The EIS has not considered the indirect impact of multiple mines seeking approval if Narrabri gas is approved. The pipeline impact must be considered simultaneously in

the same approval. The EIS still hasn't fully identified the risk to aquifers. The EIS still has no proper waste management plan. The risks to agriculture are too great. Impacts to aquifers cannot be remediated. Narrabri gas is not essential. New South Wales has two other gas source options. Greenhouse gas emissions are understated, not in line with the 2050 zero target. The economic benefit analysis is overstated. It won't lower gas prices. The gas market is declining. Gas is no considered a transition fuel. Offsets are not likely to deliver no net loss, it is only assumed. The EIS fails to consider the irreplaceable value of Pilliga Forest. It fails to consider climate change impacts of the operations on the environment. I'll just take that off.

So the EIS does not give me any confidence that Santos knows what it is doing. Important parts of the projecting were missing or yet to be decided that are vital to making an informed decision about how potential impacts will be identified and managed. I was shocked that the department of planning granted conditional approval based on outdated information. The fact it did shows it is blinkered to meet a political agenda.

From experiences where CSG is used in Queensland and overseas, we know there are a lot of risks associated with it. The fact that insurance companies consider it a high risk is further confirmation. It would be blind faith to hope that the same problems don't occur with this project. There's so much at stake. I am not willing to gamble on a company and technology that I don't trust. I don't trust Santos at all. What they are planning behind the scenes and what they are saying to the public are very different.

Sorry, I'm just having some trouble with some slides. So I'm deeply concerned that my worst fear of runaway expansion of coal seam gas will eventuate if the Narrabri Gas Project gets approved. Santos has been concealing their intentions for a much larger operation across the north west with partners Comet Ridge and Carbon Minerals. The Santos CEO and other Santos spokespersons have stated in the media that Santos has no planned activities beyond Narrabri Gas Project. They say, "We have no plans to drill wells in the Liverpool Plains. The Narrabri Gas Project is contained. Our plans are simply not to drill in the Liverpool Plains".

So there is strong evidence that behind the scenes, Santos is partnering with Carbon Minerals to open up mines and PELs 1 and 12 that include the Gunnedah Basin and Liverpool Planes, and is partnering with Comet Ridge to open up wells to the north and the wets of the Narrabri Gas Project in PELs 428, 427 and 6. The yellow and red stars show those PELs cover a huge expanse of the north west that is regarded as prime agricultural land and they cover a large area of bushland, including a larger area of Pilliga Forest surrounding the Narrabri Gas Project.

So the evidence is obvious that Narrabri Gas Project is the Trojan Horse for the rollout of the CSG industry throughout New South Wales. If CSG is allowed to expand, every risk and potential impact identified in the EIS could be multiplied by 50 to 100 times, as the scale – as the real scale will be millions of hectares of prime agricultural land. A huge expanse - - -

MR BEASLEY: Mr Spark.

MR SPARK: - - - of bushland area, including the Pilliga Forest - - -

5 MR BEASLEY: Mr Spark, can I just stop you there.

MR SPARK:

MR BEASLEY: Mr Spark.

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MR SPARK: Sorry. Yes?

MR BEASLEY: Can I just stop you there, because you're going onto a point where
- I think I'd better point this out, in case you want to tell me I'm wrong or someone
15 else wants to tell me I'm wrong as a matter of law, but you've made a number of
points that I'm sure the commissioners understand, but in relation to as a matter of
planning law, I don't think it's a lawful approach to assess a project application on
the basis of speculation there might be future project applications. That's my
understanding of the law. I'm happy for you to tell me I'm wrong, and happy for
20 future presenters if they're listening to tell me I'm wrong, but I understand your
concerns, but I don't think the commissioners can assess this project by speculating
there might be further gas projects applied for in the future.

MR SPARK: Yes, look, I think it's a lot more than speculation. There is evidence
25 that we're seeing where there's been communications to stakeholders at AGMs
where this information has come out. I would like to have actually put that on the
screen, but it would have taken too much time to show it to you, but - - -

MR BEASLEY: Yes. I think the point is still made.

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MR SPARK: Yes.

MR BEASLEY: Yes. Thanks.

MR SPARK: So it's clear that the EIS for the Narrabri Gas Project is the tip of the
35 iceberg in terms of the scale of the impacts that will eventuate if its granted approval.
I believe that fact alone is justification enough to say the project is not in the public
interest and should not be approved. The 98 per cent of landholder objections is also
enough to say Santos does not have social licence. Narrabri won't be a loser. There
40 are numerous sustainable projects planned that will bring jobs and growth to the
region. This decision, at this point in time, is truly a pivotal point in the history of
how Australia addresses the climate crisis. We must transition all the way.

MR O'CONNOR: Can you please wrap up now. Thanks for that.

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MR SPARK: Pardon?

MR O'CONNOR: Can you please wrap up now. Your time has expired.

MR SPARK: Yes. We must transition all the way and not be locked into fossil
5 fuels to 2025. If approved, there will never be another opportunity to stop the
accumulative impact of CSG in this region. Please, place the precautionary principle
and the interests of those who will be affected ahead of those who want to profit
from CSG. Thank you.

MR BEASLEY: Thank you.
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MR O'CONNOR: Thank you for your presentation, Philip. Our next speaker,
please.

MR BEASLEY: Next speaker is Ian Tanner from the – I better wait. Ian Tanner
15 from the Colong Foundation for Wilderness. Are you there, Mr Tanner?

MR TANNER: Yes, I'm here.

MR BEASLEY: Please go ahead.
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MR TANNER: I'm opposed to the extraction of coal seam gas anywhere, really.
The majority of people that rely on the Great Artesian Basin and draw on this
groundwater in dry times are opposed to the 900 well Santos coal seam gas Narrabri
project. They live on the Liverpool Plains or the Moree Plains, which are fertile
25 when irrigated, but in a Local Government area. Now, I visited Merriwa in 2014 and
92,000 people had petitioned the New South Wales Government on keeping these
farms and not gas, so I found that on all the farm gates in the area Merriwa had
farms, not gas on it, and there was a tall drill rig in the main street. I inquired and the
rate payers paid for an independent check on the Great Artesian Basin because no
30 one else could be trusted. So there is a trust problem in this whole area.

The Gomeri People have opposed signing any land deal, because the Pilliga State
Forest is a Great Artesian Basin recharge area and a sacred land. 95,000 hectares
required for 20 years by Santos, who wish to clear fell the north east Pilliga Forest,
35 there are 90 cultural heritage sites in the area and, of course, there has been no
consultation. Eastern Star Gas, acquired by Santos about 2010, inherited 50 wells,
some of which had experienced spills that still damage the landscape. There's a
worldwide problem with the by-product salt. It's unresolved.

40 7.5 million litres of water will produce 840,000 tonnes of solid salt, dangerous
methane gas CH₄ and fugitive emissions. So there's gas leaks going into the
environment. Eastern Star Gas infrastructure is poorly constructed. Santos
employees and contractors appear derelict in their duties, incurring fines. In 2014, an
aquifer at the Bibblewindi water storage site was contaminated. Heavy metals,
45 including uranium, at 20 times higher than safe drinking water guidelines.

Santos say that they will drill deep for the Maules Creek coal seam 800 metres below the ground and that there will be no noxious and toxic spills. Spills after Eastern Star Gas continued, therefore these claims cannot be trusted, nor that the Great Artesian Basin aquifers will not be breached or contaminated, but if they are contaminated or breached they cannot be fixed.

Queensland farmers experience trauma from coal seam gas exploration and operation, and New South Wales must learn from this and declare a moratorium on coal seam gas or unconventional gas. This would avoid farms becoming uninsurable and no crops. Non-compliance facts. New South Wales Chief Scientist made 16 recommendations to be implemented before coal seam gas is developed in New South Wales. Only two have been fully implemented by Santos. They've remained ignored. Santos has written the project costs off. So why would I simply walk away, or that the panel recommend revocation of their application.

I feel passionately that the Pilliga State Forest, home of endangered koalas, birds and animals should not be replaced by an industrialised gas project. I'm the former director for Colong Foundation for Wilderness. I was there 15 years on the board, and I stand up for the conservation of nature. Only eight per cent of soil in Australia is excellent, and that excellent soil is where these valuable adjoining farms are. So the farmers should be kept where they are doing something for national interest. So it's not in the national interest for Santos to be supported. Thank you.

MR O'CONNOR: Thank you, Ian, for your presentation. Our next speaker, please.

MR BEASLEY: Next speaker is Ian Maloney from Climate Action Pittwater. Mr Maloney.

MR MALONEY: Thank you, Commissioners. Thank you for the opportunity. Climate Action Pittwater members have significant concerns about the local, environmental and global climate impacts of the project. It undoubtedly has major environmental risks. My own experience is in the gas industry, and this presentation focuses on the strategic aspect: is the project necessary. Is there a better way to maintain energy supply to New South Wales.

The commission that Steve has correctly identified that the DPIE assessment and Santos' submissions lack credibility and substance on the project's impact on natural gas supply and price. The DPIE assessment has failed to address the impact of the New South Wales Government's Net Zero Plan on demand for natural gas. In assessing gas demand, DPIE states current forecasts predict a small decline in demand over the next two decades as domestic users adjust to higher gas prices; however, the New South Wales Government's Net Zero Plan would necessitate natural gas demand declining substantially through a managed transition to renewables. Will this be offset by gas required for power generation firming. Not significantly.

AEMOs ISP projects that renewable energy will be the lowest cost way forward. DPIEs project assessment is based on an overstated view of gas demand. On gas supply, the real problem is energy exports Gladstone, which are prioritised over domestic supply. There are very large reserves of coal seam gas in Queensland in production. Three energy export projects were approved based on these reserves. They export 70 per cent of east coast production. The Queensland energy producers assured governments domestic markets would not be disadvantaged. These assurances have proved to be false. In a major policy failure by the Federal and Queensland Governments no obligation to supply the domestic market was included in the approvals. The New South Wales Government did not act to protect New South Wales access to gas supply.

By comparison, the WA Government implemented a successful domestic reservation policy. Now, Santos' LNG project has been the most spectacular failure. Santos' Gladstone LNG EIS stated that the gas will come from newly developed CSG fields. It is therefore unlikely to contribute to a future shortage of gas in the domestic market. Santos has not met that undertaking. In its Narrabri EIS, Santos acknowledges it has diverted gas to export, and I quote:

From 2017 the majority of the gas that was previously contracted to the Cooper Basin will no longer be available to supply New South Wales.

Despite all this, Santos' second LNG train is yet to reach full production. Their production capacity is seven million tonnes per annum and Santos is targeting 6.2 million tonnes per annum in 2020. Is it a coincidence that projected Narrabri production is about the same as Santos' LNG supplier shortfall.

The logical supply alternative to Santos Narrabri is that Gladstone gas be diverted to the domestic market. A simple concept that should've been done. Reserve enough gas for the east coast domestic market. No other country prioritises export and short supply to its own citizens. The Federal Government has already established the Australian Domestic Gas Reservation Mechanism. As gas demand reduces, as part of Net Zero, and with minimal requirements from our generation, the amount of diversion will not be large. The economic penalty to LNG producers could be minimal or zero, as the domestic price could well be above their LNG net back. Diversion should be by pipeline.

What should the IPC conclude in this scenario. The DPIE assessment has serious shortcomings. It ignores the New South Wales Net Zero Policy and overstates gas demand. It pays no attention to the major driver of gas supply and price, LNG exports. It is naïve in believing that Narrabri will increase domestic supply and put downward pressure on price. It ignores Santos' need to produce more gas for export. IPC should consider the likelihood that Santos' objective for Narrabri is to free up other gas for export.

Santos' Mr Gallagher answering a question on Monday explained clearly how gas is switched between the export and domestic markets. While Narrabri gas will

obviously be in New South Wales, other gas in our supply in New South Wales could well be diverted to export. There is no supply shortfall. Federal Government action can assure supply for New South Wales. IPC should not conclude that this project is necessary to provide gas supply for New South Wales. Thank you.

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MR O'CONNOR: Thank you for that presentation, Ian. Our next speaker, please.

MR BEASLEY: Next speaker is Peter Small. Mr Small.

10 MR SMALL: Good morning. You can hear me?

MR BEASLEY: Yes.

15 MR SMALL: Okay. My submission will be in more detail than this speech. I object to the Narrabri Gas Project. I believe the influence of very large donations and the practice of revolving doors between government positions and mining jobs has made this current job beholden to the gas industry and as such has made the decision not in the interests of New South Wales, but to themselves and their donors. They have ignored the reams of evidence and pushed this ahead to the IPC without
20 due diligence for approving the project.

Decisions such as not implementing chief scientist's 16 recommendations, having six years to do so, not following their own official gas plan document from 2014 of 17 actions, which included removing unused licences, not enforcing their own official
25 gas plan document, banning of ponds, such as the renamed holding ponds at the Leewood waste site, giving Santos over 10 years of royalty free gas to generate money at the Wilga Park Power Station. This is a misuse of New South Wales assets. Royalties that should have been going towards schools, hospitals and roads, etcetera.

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Creating the Santos anti-protest law, which increased violence by 10 times the amount and a seven year jail time for opponents, while reducing crimes for mining companies from 1.1 million dollars down to \$5000. The excessively low fines means no incentive to stop polluting. It's cheaper to pollute than to change practice. An
35 example is when Santos polluted the aquifers in Narrabri, which is still polluted today failing rehabilitation. They were only fined \$1500 and were allowed to continue polluting those aquifers for a further 18 months until the evaporative ponds, they were leaking, were shut down.

40 Also decisions such as continuing the Narrabri Gas Project, when they have already approved an import terminal for New South Wales bringing cheaper gas into the market and years sooner than Santos could develop their gas field. Approving this without a valid pipeline access to the New South Wales market. Apparently, the project is a stranded asset and the route they propose has no land approvals and
45 the pipeline they are choosing to connect to is bidirectional, meaning no guarantee it will stay in the New South Wales market, which is why Santos loosely state it will be available for New South Wales.

Ignoring the AMEO reports that the Narrabri Gas Project cannot bring down gas prices due to the expensive nature and the type of project and access to the reserves. Even Santos have publicly admitted that they can't get profit from a low-cost price. Not stopping this project due to no real management to clean up the huge toxic salts
5 that need to be dumped and no clear dumping area willing to accept this dangerous mix. Approving this without an accurate, detailed map. How can you have a – approve a project of 850 different gas wells and have no clear map on where that involves.

10 We have been asked for, which has been ignored, independent testing, including testing for radioactive material in water and salt and other sources, independent testing of fugitive gas leaks from areas such as evaporative ponds, compressor stations and infrastructure. Spill sites to be rehabilitated before progressing. All sites have been tried multiple times and have failed. A gas reservation policy, as
15 there is no shortage of gas in the Australian market, just three days of export on the eastern market is what Santos could up to provide yearly.

An effective EPA, who did not rely on self-reporting, and to stop Santos from misusing words such as “safe and sustainable” when promoting this project. By
20 clear definition of the dictionary, they do not meet this. To continue doing so is openly lying to you and the public. To stop claiming that it will impact only 1000 hectares, when in reality it's 95,000 hectares just from the project alone, not counting pipelines to the market and transport of waste.

25 To not use waterways, such as Bohena Creek, to dump polluted coal seam water, even if the water flows are high. Under three key headings, this project has no social licence, 98 per cent of submissions from 23,000 people against this project. A record-breaking number in the history of New South Wales. Considering that other projects, such as Badgerys Creek Airport, only received 5000, a 64 per cent majority
30 of submissions from the Narrabri postcode are against this project. So many people, both local to the project, and elsewhere have protested against this project, including many chaining themselves to stop the damage from going ahead. So many that the current government created the Santos law to protect gas mining businesses.

35 Localised doorknocking surveys covering 3.2 million hectares around the north west, including the town of Pilliga, have given an overwhelming 97 per cent not wanting to live in a gas field, a clear result of this project. It's unwelcome and unwanted. This project has no science licence. Not being able to implement the 16 scientific
40 recommendations, including two large insurance companies pulling company and not having an independent analyser for testing and baseline data. Results from Santos testing are highly questionable and it's the same from gas

This project has no political licence. Considering the joint support from most parties to support the CSG moratorium bill that passed easily in the Upper House and only
45 narrowly missed passing by two votes in the Lower House - - -

MR O'CONNOR: Could you wrap up now, please, Peter.

MR SMALL: Yes. Last sentence. It clearly has no joint political support from major or minor parties. Based on what I have talked about, there is reason enough for the panel not to approve this project. Thank you for your time.

5 MR O'CONNOR: Thank you, Peter, for your presentation.

MR SMALL: Thanks.

MR O'CONNOR: Next speaker, please.

10

MR BEASLEY: We have Robert Nicholls. Mr Nicholls, can you hear me?

MR NICHOLLS: Yes.

15 MR BEASLEY: Please go ahead.

MR NICHOLLS: Yes. I'm a member of the Aboriginal Land Council for Pilliga. I'm a Kamilaroi man. I've lived here all my life. There's no elder or anybody that wants this project to go through. To me, if this goes through, it's a declaration of war, and I will take it to you. I don't want to see my land destroyed. That's all I've got to say.

20

MR O'CONNOR: Thank you, Robert.

25 MR BEASLEY: Thank you.

MR O'CONNOR: Thanks for your presentation.

MR NICHOLLS: Yes.

30

MR O'CONNOR: Our next speaker, please.

MR BEASLEY: Kathryn Dolphin is the next speaker. Can you hear me, Ms Dolphin?

35

MS DOLPHIN: Yes.

MR BEASLEY: Please go ahead.

40 MS DOLPHIN: Yaama. I'm sorry. I speak in honour of the original guardians of this land we are seeking to protect today. I am Kathryn Dolphin, a semi-retired physiotherapist and three times a grandmother. 10 years ago I discovered the Pilliga Bore Bath and made the Pilliga my home, where people now come to me for hydrotherapy healing holidays. Stepping into the warm waters of the Bore Bath is such a blessing, an experience I recommend for you, members of this IPC panel. For
45 over 100 years people have stepped into these waters in full faith that the water is safe. If this coal seam gas project goes ahead, we can no longer be sure of this.

Previous speakers, impressive men and women from our community who spend their lives studying the science and outcomes of coal seam gas extraction outlined so many studies that reveal the perils. We have seen the consequences of bore failure right now in the village of Pilliga. For the past two months water has been running
5 down the main street, because the casing of the town's water supply, in spite of attention, still hasn't been fixed.

The bore failures in coal seam gas operations have far reaching consequences. I am concerned for the underground water that sustains our community, but beyond that I
10 see this decision as pivotal in our relationship as humans with our environment that sustains us. We have seen the destruction our colonial exploitative mindset has caused with the devastating cascading effects of the recent droughts and fires. Surely it is time for a new reasoning in considering projects such as the Pilliga gas field. We can see the destruction our way of life has caused on the surface, but drilling
15 through layers, disturbing the underground and its waters have been shown to have unexpected consequences.

New technologies offer ways to utilise sun, wind, tides, etcetera, to provide us with the conveniences of modern life we are accustomed to. Developing nations are
20 leading the way using renewables to bring social advances like lightbulbs so people can study after dark. The coal seam gas industry promises prosperity for our region, but this has not been the experience of the people in Queensland's gas fields where towns are now dead, along with the landscape. There is no economy on a dead
25 planet.

The Pilliga Forest is a rare remnant, deliberately restored after the ravages of the sheep and timber industries of our colonial past. You also can leave a legacy of hope for future generations in the outcome of this pivotal decision by showing we do care for the needs of future generations over short term political agendas. Gas is not
30 needed to transition to a sustainable future. Cold countries, like Germany, put our sunny country to shame how they have implemented solar technologies.

It is time we stop being an embarrassment on the world stage and lead the way into a renewable future for generations to come. Our fragile country needs us to work
35 together to restore the destruction we have already caused, not make decisions that will endanger the basic needs of future generations, like clean water, soil and air. Coal seam gas endangers all of these, as well as the nature and wildlife of the Pilliga, and contributes significantly to global warming by the escaping methane. Thank you for your considerations.
40

Independent of any political agendas, I do hope you take the opportunity to experience the many wonders of the Pilliga and partake of the healing waters at the Pilliga Bore to inform your momentous decision. Especially consider the future generations who are already learning at school we must move beyond fossil fuels.
45 Let them also learn we can trust our leaders. Thank you for this opportunity to speak and hear from other well-informed citizens. I hope the concerns they have raised are triggering your caution regarding this project, and as an aside I just heard that a

speaker – Maria from Pilliga Pottery suffered a heart attack last night and is now in Tamworth Hospital. I just heard that as I was waiting, and I thought I would pass that onto you about the stress that this is causing in our region. Thank you.

5 MR O'CONNOR: Thank you, Kathryn.

MR BEASLEY: The next speaker is Ron Campey. Mr Campey.

10 MR CAMPEY: Good morning. I acknowledge I live in Kamilaroi country. My name is Ron Campey. I was born, educated and have lived in Narrabri all my life. I have a diploma of automotive engineering. I'm a Vietnam veteran, a shire councillor and a down to earth person. I totally and unequivocally don't support this project. During my farming time, I bought a large holding of Eastern Star Gas shares and at some stage was asked to join the Eastern Star Gas CCC. When Santos bought
15 Eastern Star Gas, I was asked to join that CCC. At the first meeting, Peter Mitchley, then Santos Eastern's manager, told the CCC that Santos had 15 million to upgrade the gas field facilities, and five million dollars to buy the community.

20 As time went on as a member of the CCC I could see that I wanted no part in helping Santos pursue their agenda and soon sold my shares. Santos never, ever tells the whole story. It leaves room for wriggle. If you tell the same story often enough, eventually people will believe it. This is part of Santos' slick agenda. This project is to supply 50 per cent of New South Wales gas needs. Now, New South Wales is getting 100 per cent of its gas. So where is the extra 50 per cent going. It will, no
25 doubt, go to Gladstone for export. So, basically, this project is for export gas.

Then I ask the question, what about the new gas import terminal at Port Kembla. This terminal is expected to meet all of New South Wales' gas needs when ramped up. So 150 per cent of the current and expected New South Wales gas will go
30 overseas. It's simple. The maths are there. As I have said before, Santos throws trinkets to the community, as the Europeans did to the American Indians. They threw a few trinkets to the people to buy their support and look where that has left the American Indians.

35 As for the Community Benefits Fund, it starts off at 300 million, then decreased to 170 million, then 120 million. So will the community end up with anything. Santos does not have community licence. Buying the community is different to having community licence and being a good corporate citizen. Santos, in my opinion, is not a good corporate citizen. Check out how many dollars in royalties they haven't paid
40 over the last five years. Check how many tax dollars they've paid over the last five years, and don't confuse royalties with tax. How many write-offs are on the books, with so much borrowings, tax deductions, write-offs, tax minimalization schemes and low oil prices, it's a wonder the company is even viable.

45 As for Santos' partner, Energy Australia, in this project out here in the Pilliga, a Chinese company. Their income, according to Google, is between six and eight billion dollars annually and, to my knowledge, have never paid any tax in Australia.

Does this make them a good corporate citizen. I cannot believe we are here to support such a company. Serious investigation of six wells in 19,000 wells in Queensland for fracking data is a farce, and totally sums up GISERAs support for the industry. Towns west of Narrabri like Wabbaga, Pilliga, Coonamble and Walgett
5 rely on 100 per cent of groundwater. No coal seam gas company can guarantee water safety.

Mitchley said he is quietly confident that there would be not a problem. What a joke. What does quietly confident mean. Now, this is the guy that was in charge of Santos
10 Eastern. This project does not pass the pub test, let alone the precautionary principle, the triple bottom line test. Far from it, and in the summing up – I’ve got a few more lines – this project is not needed, not wanted and will severely damage our greatest treasures, the Pilliga Forest and Artesian Basin. If this goes wrong, whose head is on the chopping block. I would suggest everybody, from the Prime Minister, Santos,
15 Mr Gallagher, down through the government to the people that approve it.

Last lines. At last, people – a lot of people would have seen the TV series Mad Men. This whole debacle is for the – sorry, for this whole debacle for the last nine years reminds me of this movie. Thank you for your time.
20

MR O’CONNOR: Thank you, Ron, for your presentation.

MR BEASLEY: Next presenter is Jack Campbell. Mr Campbell.

25 MR CAMPBELL: Hello.

MR BEASLEY: Please go ahead.

MR CAMPBELL: Good morning, panel chair and panel members. First of all, I
30 would like to thank the Independent Planning Commission for giving me the opportunity to share my views on the Narrabri Gas Project. My name is Jack Campbell and my family has been local to the Narrabri Shire for generations. I work together with my father to run our family business Namoi WasteCorp, which he started in Narrabri 19 years ago. Prior to moving back to my hometown of Narrabri I
35 was working for a subcontractor on Santos sites Fairview and Roma fly-in, fly-out based in Brisbane. I moved home to work in the family business to help take advantage of the opportunities at hand when Santos first took over the Eastern Star Gas operation in the Pilliga Forest.

40 Since then, I’ve been heavily involved with our business, Namoi WasteCorp, who provides waste service to Santos Narrabri. All up, I’ve had about seven years experience working for Santos contractors. I’ve worked at many different levels, from conducting physical work onsite to designing infrastructure, planning jobs, managing safety and environmental compliance all based on the high level of policy,
45 procedure and aptitude required to work for Santos.

Ever since my first Santos induction back in 2013, I was blown away by the extent of the measures in place to mitigate workplace and environmental health and safety risks. Even the tough old Aussie blokes were comfortable to speak up with concerns for the safety of their workmates. This was a stark contrast from my previous
5 experiences working for companies where showing concern for your safety was frowned upon. It was all about getting the job done.

My awareness of workplace health and safety and environmentally friendly business practices has improved drastically since working with Santos. I used to resent the
10 extreme measures taken to mitigate businesses conversation continues about work health and safety. The majority of people who speak publicly against the Narrabri Gas Project have had no direct involvement with Santos, no direct involvement with the Narrabri community and are often misinformed on the
15 situation.

They seem to have an image of a faceless corporation riddled with greed who recklessly disregards the environment for shareholder profit, but this could not be further from the truth. Having observed the culture within Santos over the years, I
20 have complete faith in their genuine concern for the social and environmental impacts of their projects. I've dealt with many different people in Santos, from tradesmen and enviros to middle and upper management, and I've even had conversations with Kevin Gallagher, the CEO.

Everyone has the same positive outlook. They all just seem to be trying to provide a
25 service, minimising risk and maximising benefits to the communities surrounding them. Narrabri is on the cusp of great economic growth. The combination of the Narrabri Gas Project, the inland rail and the Narrabri Shire Council's Northern Inland Port create a federally significant opportunity for manufacturing in Narrabri.

30 The need for manufacturing in Australia has become more and more apparent since the current crisis in the waste and recycling industry where China has stopped accepting the majority of our recyclable material, as well as the national supplies shortage we've seen from many retailers during the COVID-19 pandemic. The trouble is that manufacturing is not often viable in Australia commercially.
35

The supply of cheap energy from Santos, combined with cheap land, access to an efficient logistical rail link to all major Australian ports in close proximity to primary production make for a solution to that issue. This is proven by the amount of
40 commercial interest shown from manufacturers, such as Perdaman and Natural Soda, in the development of factories in Narrabri. These companies are just a small taste of the potential businesses that will want to jump onboard. All this development would see Narrabri's population grow by the thousands and would see local business grow with it. It would go as far to contribute towards diversification of the Australian economy so that it is not so reliant on fossil fuels, which as renewable technologies
45 progress will lose their value.

This whole situation is reliant on the approval of the Narrabri Gas Project. Without the supply of cheap energy to manufacturers the Northern Inland Port of Narrabri will be no better than any other along the Inland Rail line. Manufacturing in New South Wales will lose a big chunk of commercial viability. Based on scientific
5 evidence and expert advice, the Department of Planning have stated in their assessment report that the Narrabri Gas Project, and I quote:

Would not result in any significant impacts on people or the environment.

10 In a modern, civilised society we cannot rely on emotion based on misinformation to guide our decisions. We must rely on scientific evidence and expert advice. Thank you.

MR O'CONNOR: Thank you, Jack, for your presentation.

15 MR CAMPBELL: No worries.

MR O'CONNOR: We'll go now to the next speaker.

20 MR BEASLEY: The next speaker is Mary Whitehouse. Ms Whitehouse, can you hear me?

DR WHITEHOUSE: Yes. I can hear you.

25 MR BEASLEY: Please go ahead.

DR WHITEHOUSE: Good morning, members of the Independent Planning Commission, Chairman O'Connor. My name is Dr Mary Whitehouse and I have lived in Narrabri for nearly 20 years, with my kids have been born and raised here.
30 As a small landholder on the outskirts of Narrabri, I object to the Narrabri Gas Project. My first concern is water – this is water from a bore on our land. It is beautiful water and we think it is better than the town water. I am concerned that the Narrabri Gas Project will affect our water.

35 The aquifers within the Great Artesian Basin are complex and the connectivity is poorly understood, but we do know that the location of the planned gas fields includes one of the main recharge areas of the Great Artesian Basin, and one of the very few locations which in total make up only about .2 per cent of the whole basin where the recharge is greater than 30 millimetres per year. Drawdown at this
40 location has the potential to stop free flow of water to surface springs and bores. Not only would water be effected – the access be effected, but the quality would be effected. Gas wells can contaminate aquifers they pass through via leakage, and water removed from the is contaminated with salts and heavy metals, which then contaminate surface water. I saw the contamination of surface water in from an
45 exploratory bore and it was sickening. The potential of water contamination at a critical recharge area of the Great Artesian Basin is very concerning.

When I watch the weather on the news I look to the Pilliga Scrub. 20 years ago when I arrived in Narrabri it was a dark, clear but now sections have been removed. I worry how much more will be destroyed by the gas wells. The Pilliga Scrub is a large native forest west of the Great Dividing range. It is home to over
5 200 species of birds, nearly 40 species of 17 species of frogs. It is also home to important Gamilaroi sites, which I enjoy visiting. The Narrabri Gas Project will fragment the Pilliga, and the Pilliga currently, as a large forest, has a mitigating effect on climate change. I will keep looking for the Pilliga when I watch the weather and hope for its protection.

10 Narrabri doesn't need the gas project. The arrival of coal mines shops closing in our main streets. Coal seam gas will not stop this. Gas is argued to be an interim fuel to overcome climate change, but there's no need because renewable energy is at the stage where energy can be stored as hydrogen in batteries or as compressed air.
15 We in Narrabri can develop our renewable resources in this region, particularly solar, and use this to supply energy to develop our local industry and look to the future. The gas mine will contribute to climate change and Narrabri is already effected by climate change.

20 In the past 10 years we have had two millennial droughts, our temperature has increased and key agricultural industries are moving south. Each summer on 40 degree days I look to Mount Kaputar and I worry if fires will sweep down to my house this season. Our current CO2 levels are higher than humans have ever experienced. Coal seam gas is methane, which is 84 times more potent than CO2
25 and has caused about 25 per cent of manmade global warming. Methane leaks out of gas wells and contaminates water supplies. The Narrabri Gas Project will contribute to climate change and, therefore, add to the jeopardy faced by our agricultural industries.

30 In summary, the full impact of this gas mine is unknown because of the aquifers complexity. Once the mine is in operation, constraints are relaxed and accidents happen there'll be no going back. A compromised aquifer will impact badly on our quality life, our main industry here – agriculture. Likewise, there is no need for the gas mine. We can use renewables to develop our town, and a gas mine will add
35 greenhouse gas burden, enhancing climate change, which is already impacting our town. I hope our bore water is as good in the next 20 years as the last. Thank you.

MR O'CONNOR: Thank you, Doctor, for your presentation.

40 MR BEASLEY: Next speaker is Scot MacDonald. Mr MacDonald - - -

MR MacDONALD: Thank you. Thanks to the IPC for letting me have five minutes. My background quickly, I was a member of the State Upper House until March last year. I sat on two coal seam gas inquiries, one back, I think it was 2013,
45 and then the second one regarding price. I also went on a Commonwealth Parliamentary Association study tour to the United States looking at their gas industry and I continue to have interest in this industry. I go up to Queensland and

talk to the farmers in the industry up there. Look, the only rational decision here is to proceed. And I'd just like to address that on three levels: social, economic and environmental.

5 As I say, I sat on that committee back in 2013 when Professor Mary O'Kane gave us her report. We visited a number of communities from Camden, places across the Narrabri, Queensland, and as I mentioned before, I also went to the United States looking at their communities. In Camden there was no problems. In Queensland there was certainly some issues when the industry ramped up – when it settled down.
10 I believe the industry does have a social licence, and we spoke to the people on the ground there in those places and it wasn't I think it is important to have regional development and the gas industry can provide that. Agriculture is employing fewer and fewer people. A resources industry has the capacity to step up there. It's important to have that diversification in communities.

15 Economics, I was disappointed to hear someone say, "Only 40 jobs, we can get that at Bunnings." Every job's important and this would be a good contribution. There are fewer jobs in agriculture. It's important that we look to other industries. The Victorian fields – gas fields are declining, so New South Wales will be increasingly
20 challenged with its gas supplies. I don't believe that the end point of gas is – is desirable. Gas is a tradeable. That means you've got to buy other goods and services to buy imported gas. I don't think that's desirable. If we are putting – we're putting this into the local domestic gas industry as an industry, a source – feedstock source that's incredibly important for our manufacturing jobs across New South
25 Wales, and of course also as a electricity generating fuel.

Environmentally, I mentioned that the New South Wales chief scientist said, "Can proceed with the right regulatory framework", and that's proven to be the case in Queensland. I've mentioned you go up there – and, look, it's certainly evolved over
30 the last 15 years or so, but I think the industry is in – is well regulated and a good corporate citizen up there. I mentioned I went to the United States industry is different – it's deeper and tighter, but it's CH₄. There's a million gas wells sunk into the continent up there with, as the studies show, no impact on ground water. It's a safe industry. It's been conducting itself well for about the last 60, 70 years.

35 I'll make the point that the New England north-west area has been announced as an environmental zone, but if you read the documents, it – it acknowledges that it needs firming and to backup that renewable source, and that will be the case for 20 to 30 years more. Storage is not up to the technical capacity to service our industrial
40 society – Sydney train network, our hospitals, our large grid, so we need that dispatchable. As the coal fleet retires the gas industry will become even more and more important. I think it's important to acknowledge that the greenhouse gases in the United States are back to the levels when President Clinton was president, and that's largely attributed to the gas and shale industry there. So it's an important
45 social and important environmental positive there.

So, look, we need to follow the science. It is – it is challenging when change comes, but we're seeing it in Queensland, we saw it in Camden, we saw it in Victoria, when this industry is rolled out properly, it's regulated properly, it can do incredible benefit to the community. I would like to see Santos contribute to infrastructure. I'd like to see it – feedstock made accessible to local industries so that we can develop fertilisers. You can use that feedstock for a range of manufacturing sources. I strongly urge the IPC to look further afield, look to the United States, an important industry that can make a great contribution to the New England north-west, New South Wales and Australia. Thank you very much.

5
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MR O'CONNOR: Thank you. I just have a question: you mentioned the benefit you had of going to North America and seeing the experience over there and you referred to the greenhouse gas emissions being reduced in the US back to levels - - -

15

MR MacDONALD: Mid-90 levels.

MR O'CONNOR: - - - seen in the Clinton administration.

20

MR MacDONALD: Mid-90s. Yes.

MR O'CONNOR: Yes. How did the – you seem to think that was mostly as a direct response - - -

25

MR MacDONALD: Yes.

MR O'CONNOR: - - - to the coal seam gas industry.

30

MR MacDONALD: Yes.

MR O'CONNOR: Can you just explain how that worked?

35

MR MacDONALD: Yes. Yes. Look, there's a number of industries. I will send to the committee my report I did study. There's a number of studies. It doesn't attribute all of that reduction of greenhouse gas levels to the shale industry, but they attribute it most. So if you go to the scientific literature, it attributes most of that reduction – as their coal fleet has retired, they've introduced more gas, the nuclear is about the same levels, so it's largely down to greater generation from the shale industry, and that is attributed largely to – the greenhouse gas emission reduction has been largely attributed to the shale industry. It's important and useful to look at what's happened in the United States.

40

MR O'CONNOR: If you can provide that in your submission, that would be much appreciated.

45

PROF BARLOW: Can I ask - - -

MR MacDONALD: Thank you.

MR O'CONNOR: Yes.

PROF BARLOW: - - - a supplementary question?

5 MR O'CONNOR: Yes. Certainly, Snow. Go ahead.

UNIDENTIFIED MALE: Yes.

10 PROF BARLOW: Just to supplement the question, did I understand it correctly that you'd said that the decrease – the net decrease in the US emissions over the last 20 years - - -

MR MacDONALD: Yes.

15 PROF BARLOW: - - - is largely due to the substitution of shale gas for coal?

MR MacDONALD: Yes. I go to that in my report and the gas emissions were – were dropping about 2.6, so they're back to those mid-90 levels. And I quote – I think I quote in the report:

20

Scott Waldman, Scientific American, November 2016.

I did that study tour back in 2016, so – so those reports are about four or five years old, but there's pretty good evidence the correlation is as – as the – as the coal fleet
25 was retired in America, substituted by the shale – the gas industry over there – incredibly important. When you go over to the United States you see the shale industry and the catalyst it's been for manufacturing in regional America. And can I just finish by saying one of the motivations to go there – I went to Dimock. I looked at the site of that movie of Gaslands, so looked for the wastelands they described.
30 It's just – it wasn't there. The greens had lied about the impact on – on – on Dimock in Pennsylvania. It was just a rural community that was getting on with its life. You couldn't see the impact on the community. They were getting on with their world. There was no environmental degradation.

35 MR O'CONNOR: Thanks for your presentation.

MR MacDONALD: Thank you.

40 MR O'CONNOR: Next speaker, please.

MR BEASLEY: I think we have Mr Baker – Cyril Baker.

MR RUSS: David Russ.

45 MR BEASLEY: Sorry, David – Mr Russ. Are you there, Mr Russ?

MR RUSS:

MR BEASLEY: Can you hear me?

MR RUSS: Yes, I am.

5 MR BEASLEY: Please go ahead.

MR RUSS: Good morning, Commissioners. My name is David Russ. We're a mixed farming family at Warren. We produce sheep and wool, cattle and crops with two full-time employees as well as myself working in the business. Over 1 million
10 meals of beef, lamb and mutton produced each year in addition to the above employees, we employ up to 35 other contractors and casuals for jobs such as shearing , hay baling, sheep scanning, preg testing and so on. Even after the setbacks of the last two and a half years of severe drought – and it was severe at Warren – we – there are still many young people with passion and commitment
15 making careers in our industry. A report states for every one job created in mining 1.8 or 1.5 – I've heard both numbers – are lost in agriculture.

For the previous drought we relied totally on underground water for 18 months. The surface water was all gone and we still kept people employed and produced, at a
20 reduced capacity, because of that underground water source. We're approximately 170 ks where the wells are in the Pilliga with the proposed Western Slopes Pipeline petroleum exploration licence 25 ks from our eastern boundary. If Narrabri Gasfield goes ahead, Santos will push for the Western Slopes Pipeline to be built and then open up gas wells in the PELs along its length. We don't believe Santos will
25 stop in the Pilliga, despite assurances given. Once they gain a foothold they just spread.

I won't go into the possible risks associated with going through GAB – Great Artesian Basin or other aquifers to the coal seams below. It is suffice to say we don't
30 believe governments are listening to independent reports in regard to the risk to our precious underground water. There is too much known about this finite resource and too many people rely on it for it to be put at risk. The vast amount of land in the west of the state, and towns included, would have been uninhabitable through the last if not for this resource. I will mention again, we – we were out of surface water for
35 18 months but we kept people employed and kept producing because of the underground water.

One of our other major concerns is public liability insurance. The IAG group has stated it will not insure public liability risk on land where there is coal seam gas
40 infrastructure or mining. We cannot operate without this. I understand governments and other companies are working on this issue. Let's see the detail. When you have mining infrastructure on your farm you lose control with who comes on, when they come on and what they do while – while they are there. This should be ringing alarm bells for all farms in the seven PEL areas and governments alike. As I mentioned
45 before, Santos will not stop in the Pilliga. If the pipelines or the Western Slopes Pipeline is built, other PEL areas open up for coal seam gas. We have to stop this before it gains a greater foothold than what it already has in the Pilliga.

Who will compensate us for unacceptable chemical residues in meat and who would want to consume it anyway? When we complete a vendor declaration for stock we sell this is a legal document. Question 5 on the 2013 versions states, and I quote:

5 *Have any animals been on a property listed on the ERP database or placed under any restrictions because of chemical residue – yes or no?*

Consumers are demanding more traceability and a safe product free of chemicals. Can Santos guarantee no contamination of aquifers or no waste products entering
10 waterways in the Murray-Darling Basin?

In summing up, how could you choose a coal seam gas industry that has no social licence, has a negative effect on jobs, cultural heritage, environment, climate change
15 emissions, people's mental health, people's livelihoods and quite possibly food production and our precious underground water? How could you choose coal seam gas over agriculture that is so vital to our nation's food security and economic wellbeing? How it has come to this simply beggars belief – how 400 Australians panel for you to deliberate on? Surely we owe a duty of care to future generations to look after these valuable resources. Thank you.

20 MR O'CONNOR: Thank you, David, for your presentation this morning. Our next speaker, please.

MR BEASLEY: Our next speaker is Janet Thompson. Can you hear me, Ms
25 Thompson?

MS THOMPSON: Yes, I can.

MR BEASLEY: Please go ahead.
30

MS THOMPSON: Thank you. I'm Janet Thompson from Sydney and I'm asking the commission to reject this proposal. I wish to acknowledge the traditional owners of this land, the Gamilaroi people, and pay my respect to their elders, past, present
35 and emerging. I want to talk about Santos in the Pilliga and then the bigger climate picture. The local issues are: water. Santos plans to turn clean water into dirty contaminated water. The wells will effect river flow, alter local hydrology and lower the water table. To give a private company our future water that is needed by a whole community is irresponsible. Farms: farms will be impacted not only by water loss, but also by productive land being turned into an industrial landscape of noise,
40 heavy vehicles, bright glaring lights at night, traffic, new roads, rail and pipelines being constructed and expanded.

The air quality would become unhealthy with particles damaging to local's, especially children's, lung, skin and brains. This occurs from leaks of methane or
45 fugitive emissions during every stage of the gas extraction, liquefaction, storage and transportation. The forest will be impacted: land cleared, habitat of wildlife destroyed, for example, 1000 hectares of koala habitat would decrease biodiversity,

including loss of endangered species. The dead zones that gas mines have already abandoned in other locations would be replicated, where toxic sludge from produced water, full of toxins and heavy metals, is left in plastic lined ponds until heavy rain spills it and washes it into soil and waterways. Nothing grows where they've been.

5

The problem with what to do with a huge amount of waste salts – 840,000 tonnes of dodgy chemicals, has recently resulted in a ludicrous suggestion of a baking soda industry being set up, and Santos has a understanding with a hopeful company for this, but would you eat anything that started as toxic sludge? The heritage sites of the local Gamilaroi people will be disrespected, dug up or blown up, as we've seen before. Flares: part of the gas extraction process involves methane gas being released to relieve pressure. This is ignited to change the very damaging methane to less damaging CO₂, but flame flares several metres high then occur. This is obviously dangerous in a forest, especially in a drought. When asked about safety procedures miners say they will rescue their men and machinery, then call the Rural – the Rural Fire Service or perhaps local volunteers.

Fracking: Santos has said we have no plans to frack at this time. And once conventional gas has been taken they are likely to want to get more from that well by fracking. This could have disastrous consequences for our huge freshwater aquifers. The Great Artesian Basin, which underlies 22 per cent of the eastern side of Australia, formed in sandstone basins and vulnerable to leaks and pollution. This is hugely significant to the future of Australia and should not be left to a private company to risk for short-term profit for a few. Santos has had years to act on the requirements of the chief scientist's report of 2014 and has failed to implement the required environmental protections. Institutional investors are baling out of coal, gas and oil all over the world. We have a gas glut and will have stranded assets in a damaged landscape to show for it if this proceeds.

Climate: my main concern in talking here though is to emphasise the dreadful effect of the burning of fossil fuel on our world's climate. Australia has ratified the Paris Agreement in 2016. Currently we are not on track to meet this international obligation to keep warming under 1.5 degrees. There's a tipping point we are now close at where irreversible cycles are begun, such as melting arctic permafrost releasing methane; that will cost the Earth. This dreadful project puts at risk two Australian treasures: the GAB and our farms. It would pollute our air, endanger our forest and wildlife, poison our soil, spoil waterways, hinder the significant scientific work of the observatory, insult traditional owners, increase the threat of bushfires and add to global warming, which threatens our very survival. It would produce unmanageable amounts of waste and a product we don't need. It puzzles me the project has got this far. Please do not approve it. Thank you for this opportunity to speak and thanks to your support staff also, who have been unfailingly kind and helpful. Good – good morning.

MR O'CONNOR: Thank you, Janet. Our final speaker before we take a break is next.

MR BEASLEY: David Watt. Mr Watt, can you hear me?

MR WATT: Certainly.

5 MR BEASLEY: Go ahead.

MR WATT: Thank you, Commissioners, for allowing me to present here today. I object to this project, not on principle or idealistic reasons, but for genuine concerns I still hold about the project on local farming land and groundwater, the increase fire risk of the project and it's contribution to climate change. My wife and I own and operate the property Blairmore, located on the eastern boundary of the Pillaga State Forest. I have outlined it in red here on this map of the project. Based on the scale from this map, the project boundary's approximately 1500 metres from our back fence. As you can see, we're the closest property on the eastern boundary of the project. Despite our proximity to the project, we have not once been contacted by the proponent for any sort of consultation.

As Commissioner Hann would well be aware, our other property is in close proximity to Whitehaven Coal's proposed Vickery Mine. Whilst the consultation with Whitehaven over its project has been disappointing to say the least, Santos's has been non-existent. I would have expected that consultation with landowners to explain and identify impacts from the project would be an essential element in the development of any project let alone one of this scale. To me, this just exemplifies Santos's disregard for the community they are claiming to be working with and supporting.

We purchased Blairmore in 2014 with the understanding that there was gas exploration in the Pilliga, but with no idea of the scale and exact location of what is now proposed. Blairmore is not the low quality grazing land that the DPI referred to on Monday. It is highly productive farming land. In the six years we have owned it, many of which have been in drought, we have achieved wheat yields in excess of six tonnes to the hectare, canola of 2.9 tonne to the hectare, and we've topped the market with heavy steers at the Gunnedah Saleyards.

To put it in terms for those not familiar with the industry, on this farm alone, in an average year, we will produce enough wheat to make over 2 million loaves of bread, enough barley for over 10 million schooners of beer, enough canola for over 200,000 litres of canola oil, plus 21,000 kilograms of prime beef. Two bores on the property provide the water essential for this production. Without it, especially in dry years, our farm would grind to halt. This is what I fear could eventuate with the drilling and dewatering of 850 new bores in this project area.

Whilst Santos claims the aquifers we use will not be affected, I remain unconvinced that depressurisation and faults in aquitards will not lead to either leakage from the higher aquifers or contamination of them. David Kitto in his presentation on Monday made the concession that more work needed to be done around the issue of faults. For us, this is not acceptable. Field development plans post-approval are not

the answer. It is a cop out. The risk is either there or it isn't. And if it is, well, this project is not approvable.

5 Yesterday, Anna Christie from the Leard Forest Research Node raised the issue of drill cuttings being left on the surface of the site, potentially, containing toxic substances including radioactive material. I also have concerns about this. Our main bore is very shallow with a standing water level at around only seven metres. If this aquifer sits below any of these drill cuttings, it is highly likely that leachates from them could contaminate this supply.

10 For those living and farming on the eastern side of the Pilliga, fire is an inherent risk. We are constantly aware of it and do our best to manage against it. But the predominant wind direction is from the northwest, and fires that start deep in the Pilliga, generally from lightning strikes, can be on our doorsteps within hours. Some
15 of our neighbours simply will not leave their properties during the summer, such is the risk and losses that fire poses to them and their businesses. This slide shows a bushfire in the Pilliga at the back of our place in November 2015. The next slide is of burnt eucalypt leaves that we picked up from our other property some 30 kilometres away from that same property.

20 I am a Deputy Captain of the Wynella Rural Fire Brigade. Our brigade is responsible for the area east of the project, through to Boggabri and beyond. I see the fire risk of this project as twofold, firstly, the potential to start a fire. The Pilliga over summer is a tinderbox. There are two likely sources of ignition due to the
25 project which have been identified: construction and increased human activities, and ignition from flares. Risks from construction activities in my opinion are fairly obvious and undeniable. Ignition from welding, grinders, heavy machinery, vehicles, cigarette butts etcetera. Santos claims that these risks can be managed through management plans, and in a perfect world, this would be the case, but we are far
30 from perfect.

The naked flames that will burn 24 hours a day, seven days a week, through all seasons including the most extreme fire days are what Santos refers to as pilot flares and safety flares. Pilot flares have a stack height of six metres and a flame height of
35 four metres. Safety flares have a stack height of 50 metres, a flame height of 1.5 metres extending to 30 metres when triggered. Consider a whirly wind depositing combustible material in these flares. It is absolutely plausible that partially combusted material could be carried down to nearby vegetation, outside the vegetation free zone of 40 metres and 130 metres, respectively.

40 Santos, in its correspondence to DPIE, has attempted to quantify the risk of the project starting a bushfire by stating that it is likely to occur once every 70 years. A recently released report which will be submitted to the IPC by the group, Climate Risk, states:

45 *That if climate change were considered in this modelling, that the figure would be more like one in 28 years.*

In fact, in the whole of the appendix S of the EIS, which examines the bushfire risk, climate change is not mentioned once. The second fire risk of this project is the heightened risk of – the project poses during a fire, especially to firefighters charged with the responsibility of fighting it. The hazard and risk assessment in the EIS
5 states that the pipe standard to be used is that the pipe must withstand 650 degrees Celsius for 30 minutes and maintain its integrity. The CSIRO published article in 2015, titled Bushfire in Australia: Understanding Hell on Earth, describes the temperature of the reaction zone of a bushfire reaching in the order of 1600 degrees Celsius. I understand that these conditions will not be sustained for 30 minutes, but
10 the question must be asked will the infrastructure stand up to this kind of exposure? After all, steel melts between 1300 and 1500 degrees Celsius.

The same article also cites the radiant heat flux of Australian bushfires reaching in excess of 150 kilowatts per square metre. Santos claims that the project complies
15 with HIPAP 4 risk criteria which includes the condition that the heat flux radiation at residential and sensitive areas should not exceed 4.7 kilowatts per square metre, at a frequency of more than 50 chances per million per year or 0.005 per cent. Give the potential of this project to start a fire, that Santos, itself, identifies to be once in 70 years, which could devastate the surrounding environment and residences, potentially
20 burning in excess of 150 kilowatts per square metre, I just can't comprehend how they claim this.

Will Santos's insurance cover extend to my crops and property or, God forbid, the loss of life, especially if they have understated the risks and failed to factor in climate
25 change. Will our insurance companies be unwilling to continue to cover us for fire or will we just pay for it in the premiums? Santos has assessed the bushfire risk as medium, and further, that the risk to firefighters/emergency responders has been evaluated and can be well managed through the multi-agency bushfire management plan. I won't harp on about last summer's bushfires and the tragic loss of life,
30 including firefighters, but to say given what we have just experienced, our commission is can anyone see this as acceptable? If this project is approved with another 850 gas wells and interconnecting pressurised gas pipes, I will not be further risking my life or those of my team by entering the Pilliga to fight a fire. Thank you.

35 MR O'CONNOR: Thank you, David. Just on that last issue of the bushfire risk, I've heard previous submissions talk about the risk of methane which adds to the risk of fighting a bushfire in an area that's got gas wells; would you like to comment on that at all?

40 MR WATT: Well, whether the methane or the gas, whatever, it's an explosive substance. And this is why I say I won't be in there. I'm not going to be guinea pig to test their infrastructure. I just think – we're a rural firefighters. We're not industrial firefighters, so I think it's just a big ask for them to say that they'll get their men out and pass it over to the Rural Fire Service because there's going to be a hell
45 of a lot us that won't be going in there.

MR O'CONNOR: Thank you, David.

MR HANN: David, just – you mentioned earlier in regard to insurance related to the fire risk, do you have any comment in regard to other insurances and any concerns you might have in terms of insurances, being you're a neighbour in proximity to their development?

5

MR WATT: Yes. Well, as other people have mentioned, I have concerns about liability insurance. As far as I'm aware, because I won't be having any CSG infrastructure on my property, at the moment, I don't think that is an issue, but who knows what is down the track and that. And this is what I say with the fire risk, I don't know whether my insurance company will continue to cover me for fire risk, you know. It depends on their assessment of the risk of the project, whether we'll be still insurable for fires.

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MR HANN: Okay. Thank you.

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MR WATT: Thank you.

MR O'CONNOR: I think that finishes our questions. Thank you, David. And we'll now take a break and we will resume at 11.20. Thank you.

20

ADJOURNED

[11.06 am]

25 **RESUMED**

[11.20 am]

MR O'CONNOR: Welcome back. We're ready to resume with our next speaker.

30 MR BEASLEY: Next speaker is Jill Hawthorn. Ms Hawthorn, can you hear me?

MS HAWTHORN: I can indeed.

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MS HAWTHORN: Good morning. Here in Narrabri I'm standing on Gamileroi Country and it was never ceded and I pass my respects to the present Elders, to those of the ancestors and those of the young ones coming up. My name is Jill Hawthorn, but my friends call me Jally. And I would like to give you a slightly different perspective on this issue because I'm a visitor to this country. I come from Bunjellen Country and I like to go on adventures and I see myself as a grey nomad. And I also need to declare a conflict of interest because I'm also a Knitting Nanna.

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I've visited this area a number of times and I've seen the treasures in this area. And I learnt a lot about the history of the Pilliga Forest when I went to the Discovery Centre out at Baradine. And from there I like to go through the forest and one of my very favourite places is the Sculptures in the Scrub. And I don't know whether

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you've seen them, but they're – indigenous communities made these fantastic sculptures that tell wonderful stories and then you can walk down from the plateau area down into the Dandry Gorge and that's a very, very special place. Coming through the forest I often go bushwalking around the sandstone caves and there I can
5 really get a feeling of how long the Gamilaroi People have been here and how they've protected that area because in the spring time the wild flowers around there are just amazing. There's so many varieties of flowers and in the spring they all burst out.

10 I've done a number of the bird routes around here and camped out at Lake Yarrie. And I did notice on Monday one of the folk from Santos said that they wouldn't have a well within 200 metres of Lake Yarrie, so that's a good thing. And I'd like you to listen to what the local tourist office says about the Pilliga Forest. It says that it's the largest native cypress forest and it's long been recognised as one of the most
15 important areas of biodiversity in eastern Australia. The diversity of habitats from the open forest to the heathlands and its geographical location on the border between the coastal area and the dry country, the biodiversity of these plants and animal species cannot be overstated.

20 And so we're told by Santos that they will – two-thirds of their 850 new wells will be in that Pilliga Forest and 20 per cent of it is going to be fenced off. Now, what does that actually mean? You know, like, those pads are 45 metres by 45 metres, if you can imagine how big a piece of concrete that is. But Santos say that they will be respectful about where they put those pads. You know, they will be mindful of
25 what's happening around the pads. But between those pads there's pipes, there's roads – connecting roads and do you reckon they're going to divert a road around a habitat tree? Do you reckon that the animals will be able to cross that road?

I've seen the gasfields up in – around Chinchilla in the forest and I've seen the
30 destruction that they've done up there. And I've seen – I've smelt the leaks. I've talked to distressed farmers and I've heard of the pressure on the people and on the community up there. So as a grey nomad I ask you please to consider the impact that this is going to have on the local residents, on the local wildlife, and also on the visitors to this area because we're not going to be wanting to go through the forest
35 when all we see is the dead animals on the roads and smell the gas leaks from the pipes. Thank you. Please don't allow this to happen.

MR O'CONNOR: Thanks for your presentation, Jill. Next speaker, please.

40 MR BEASLEY: Next speaker is Sam Connelly. Mr Connelly.

MR CONNELLY: G'day.

MR BEASLEY: Please go ahead.
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MR CONNELLY: Yaama everyone. I'm Sam Connelly, Kamilaroi Warrior, proud of this land. You know, we don't want this gas. Think of the future of our children.

Think of our land, our water, our culture, our native animals and our native food. If Santos goes ahead with this, what is our future children going to do? They weren't able to learn about their culture. We don't want this gas anywhere around Narrabri, Pilliga, Gwabegar, Coonamble, Spring Ridge, all that. We don't want it anywhere.

5 Like, I was a part of the Pilliga push; me and my mother, Elizabeth Humble, they call Aunt Mimmie. She passed away two years ago fighting for her grandchildren and for her land and she wants me to go ahead and keep on fighting.

We don't want this on the Kamilaroi/Gomeroi land. If it goes ahead, we're going to fight and fight and fight. One of our beautiful people from Pilliga Pottery, Maria, yesterday she fell ill after her speech and that. She had a mild heart attack and that – like, all the stress on us Aboriginal people and the farmers and that – you're putting that much stress on us and that. We don't want it out here. We say no to Santos. And I will have to finish with it there. Rightio. Yawu. Bye.

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MR O'CONNOR: Thank you, Sam. Next speaker, please.

MR BEASLEY: Next speaker is Cherie Robinson. Ms Robinson, are you there? Can you hear me?

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MS ROBINSON: Yes, thank you. Yes.

MR BEASLEY: Please go ahead.

25 MS ROBINSON: Hello. My husband and I own a property between Coonamble and Pilliga. We strongly oppose the Narrabri Gas Project. We have recently lived through the worst drought in 100 years. Without rainwater we have to rely solely on groundwater for our business and ourselves. We cannot live, we cannot survive without groundwater. Any contamination and drawdown of the Great Artesian Basin will make our property unviable, uninsurable, unliveable and unsaleable. Santos have said many times the Narrabri Gas Project will drought-proof the region. We haven't been told how. Of course it is impossible and it's ridiculous to even suggest it.

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35 Santos have also told us many times they will make good any damage or contamination that may occur. Just more spin without any explanation or independent scientific evidence. We know it is impossible to make good contamination of land and the Great Artesian Basin. At the Santos AGM in Adelaide in 2014 in front of 800 shareholders and the Board, I asked the then CEO of Santos, David Knox, if he would give me a guarantee Santos will not poison our water. He refused. We have no confidence in Santos. People who are employed by Santos, or local business, or those who have a financial interest in this project are the only ones who support the Narrabri Gas Project. Community led surveys exposed 96 per cent of people in over 100 communities surveyed clearly rejected coal seam gas and wish to remain gasfield free.

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This project is short-term profit for Santos and shareholders yet will destroy lives. The negative social impacts and environmental damage will be with us for generations. Our property borders the Pilliga West State Forest. We love the Pilliga Forest and we fear for the Pilliga East where this project will spread from. I ask you,
5 is it really worth the risk? Thank you for the opportunity to voice my objection today.

MR O'CONNOR: Thank you, Cherie.

10 MR BEASLEY: Do we have the next speaker there? Next speaker is Louise Kirumba. Can you hear me?

MS KIRUMBA: Yes, I can.

15 MR BEASLEY: Please go ahead.

MS KIRUMBA: Thank you. Thank you for the opportunity to express my objection to the Narrabri Gas Project. This unconventional gas project is completely unnecessary. Australia is fast moving towards renewables that are safe, cheap and
20 reliable. Gas is not a transition fuel. A report by Pegasus Economics published in 2019 showed this project would not reduce gas prices and that this gas would be the most expensive in eastern Australia. This project is not only ecologically – an ecological disaster, but there is no economic reason to jeopardise the health of the planet, the environment, our commitment to the Paris Accord, agricultural land, the
25 Pilliga State Forest, surface water and the Great Artesian Basin.

I first learnt about the Great Artesian Basin at primary school. I imagined it as a great lake under a quarter of Australia. I was fascinated that the water was tens of thousands years old and that it was the largest and deepest in the world. Australia is
30 the driest continent on the planet. The GAB sustains pastoral and agricultural industries and whole towns. It sustains a range of groundwater ecosystems. The main recharge area of the Great Artesian Basin – sorry – the main recharge system is in the eastern Pilliga between Narrabri and Coonabarabran. Santos says little of the project is over the recharge area, however, a glance of the map disproves this.

35 CSG is found in coal seams in deep ecological layers well under the GAB. Wells are drilled through the rocks and sometimes horizontally. The deep layers are dewatered to allow the gas to flow to the surface. Santos maintains the impermeable rock above the deep layers prevents contamination of the aquifers. However, research shows
40 there is much greater interconnectivity between the deep layers and the overlying strata than previously thought. Exploration wells drilled by Eastern Star indicate this, but they were not further researched.

A dewatering – the dewatering causes bores and springs to fail. It causes
45 depressurisation. In the recharge area crucial pressure heads keep the artesian water flowing to the surface over the great massive area that is over the GAB. The slightest pressure – the slightest chance of depressurisation of the crucial pressure

heads must be avoided at all costs to protect the GAB. Santos reassures us these wells are safe and even the government's own – but even the government's own water agency has admitted the Santos underground model has a high level of inaccuracies. The Department of Planning is concerned the model may have poor predictive capacity in relation to the surrounding impacted water sources.

The water expert panel identified uncertainties and recommended Santos monitor the wells. Yet, the DPIE comments on the inadequacy of the Santos proposed monitoring. This is not good enough. A damaged, polluted aquifer cannot be cleaned or rehabilitated. The wells puncture many geological layers including aquifers – including aquifers. Santos is required to plug abandoned wells and make them safe in perpetuity. There is concern about the efficacy and the longevity of the material used to plug these wells. Examples in the US give credence to these concerns. Scientists, hydrologists, climatologists, economists, farmers, business people and health professionals have objected to this CSG project.

A community survey shows 96 per cent wish to remain gas free. 22,700 submissions by New South Wales citizens objected to this project and yet the NSW Government approved it. To the naive amongst us, this is bewildering. You, the commissioners, now have the responsibility to stop this damaging, unnecessary, uneconomic project. Please reject this project. Thank you.

MR O'CONNOR: Thank you, Louise.

MR BEASLEY: Next speaker is Rosemary Nankivell. Please go ahead, Ms Nankivell.

MS NANKIVELL: Good morning and thank you for the opportunity to present my submission. My family and I farm on the Liverpool Plains in PEL 452 south of the proposed project. Our property produces over 350,000 tonnes of beef, around 5000 tonnes of wheat, barley and sorghum. We also grown dryland cotton, mung beans, sunflowers, canola and honey in some years. We currently employ two full-time workers, two casuals and extras over harvest. Our money is spent locally and we are typical of medium to large size farmers on the Liverpool Plains. I strongly oppose this project on environmental, economic and social grounds.

In September 2008, Santos arrived on the Liverpool Plains to explore for coal seam gas. They hosted small community meetings in local halls. It became clear that Santos had either hired ill-informed consultants, or those who were instructed to tell us on a need to know as little as possible basis. Questions were answered vaguely, if at all. For example, the number of wells, their depth, construction and use of drilling fluids resulting in a probable contamination of aquifers concerned us all. Drilling a well involves at least the use of around 450,000 litres of drilling fluid per well depending on the topography. The following question was asked:

How much drilling fluid do you recover from each well?

Santos – long pause:

We recover between nought and 100 per cent.

5 Clearly not good enough. Santos had very much underestimated their audiences.
Typical in many family farming communities, we are well educated, have travelled
widely and love farming. Our group even included a retired Supreme Court judge.
Santos' inadequate performance meant we had to find out more. We travelled to
10 Queensland many times to see the expansion of the gasfields around Roma and
Chinchilla. The resulting industrialisations of those pastoral lands left no doubt that
such expansion on the Liverpool Plains would destroy farming as we know it. A
thorough examination of the Environmental Impact Statements of five different PELs
found that each one was nearly identical. Goran Lake did not exist.

15 Our soils and vegetation had large cut and pasted sections which one could attribute
either to the Pilliga rather than the rich black soils of the Liverpool Plains. In one
such EIS I found comments like these:

Ken, can you check this section, please?

20

It is unacceptable that this allegedly well respected Australian company could not cut
and paste, let alone undertake proper flora and fauna studies to responsibly manage
their projects on our land. Comments overheard in an airport lounge included that it
was a pity that we farmers had seen the Google images of gasfields in Queensland.
25 These images showed the crisscrossing of wells, roads and other infrastructure.
Santos' idea of consulting was very different to ours. Our farms and community rely
almost solely on the shallow aquifers of the Gunnedah-Oxley Basin under the
Liverpool Plains. Santos has admitted that there will be drawdown on these aquifers
and are unable, or unwilling, to calculate the extent of such a drawdown.

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The deep black soils of Liverpool Plains are famous for their water retention quality
and produce crops yielding 40 per cent above the national average as well as
protection in droughts. However, these same soils are constantly moving and
pipelines laid across the plains have caused severe erosion. Farmers have farmed in
35 specific ways to limit erosion and maintain ground cover to protect the soils. The
traffic, drilling and construction of wells and pipelines and other infrastructure would
alter irrevocably normal farming practices, cause considerable financial loss to
farmers and devaluation of property. Should contamination of beef occur through
chemicals and contaminated water spills, as evidenced by spills in the Pilliga, it will
40 be a disaster for our food chains and our overseas markets. This cannot be insured
against as with the devaluation of property. Even if a farmer is successful in denying
Santos access, these issues will still be felt if a neighbour has cooperated with them.

45 Drawdown upon the aquifers, migration and methane can affect water bores many
kilometres away. The onus of proof is on the farmer. Farming country on Liverpool
Plains is valued at between 4000 and 6000 dollars per acre, irrigated and non-
irrigated and increases in value of an average of around seven per cent per annum.

These values are based on an agricultural industry that will be needed forever and the increasingly scarcity of productive agricultural land. I attended the AGMs of Eastern State Gas and Santos. The Santos AGM was characterised by long-term investors, senior Adelaide people who have held shares for many years demanding why they
5 were not paid dividends. The current CEO of Santos draws a salary of over \$11 million.

The Eastern State Gas meeting, interestingly, had ex-deputy PM John Anderson announcing loudly and authoritatively that ESG had never fracked and would never
10 frack despite ESG having conducted three of the biggest fracks in Australia. He was corrected publicly by the managing director, David Casey. Are these companies run by ignorance or enormous greed and dishonesty? Rod Sims, head of the ACCC has accused gas companies of misleading government which is further evidenced by the gas companies' approach of get it done no matter what the cost. It is not such a
15 gigantic step to suggest that Santos has wilfully mislead farmers and investors. Santos is a major donor to both sides of the political – politics. These donations are not gifts; much is expected in return.

Politicians wilfully ignore climate change and global warming in order to ease the
20 way for resource companies acting as lobbyists rather than representing the people who elected them. Ex-liberal politician Scot MacDonald is here today to make a case for this industry. While under an ICAC investigation for accepting gifts in the form of flights from Santos, Scot was actively promoting CSG in Tasmania. CSG is not the low emission fuel to be used in conjunction with renewable energy. Last
25 weekend – last week, ex-premier Bob Carr wrote an opinion piece in the Sydney Morning Herald about the results of satellites 600 kilometres above earth mapping methane plumes. Pipelines are showing unacceptable leakages.

Much research has shown that gas wells will fail over time, many in early years of
30 construction. Orphan wells, supposedly those decommissioned and generally not maintained, leak methane as do ordinary water wells in adjacent gasfields. British Petroleum has said that should leakages exceed three per cent gas is on a par with greenhouse gas emissions and coal extraction. Yesterday Santos took a write down of an asset value of \$1.13 billion blaming it on the COVID-19 epidemic. However,
35 there is also a global gas glut. Renewable energy is now cheaper than gas and already makes up 24 per cent of the energy composition. Gas sits at nine per cent and requires subsidies for it to compete. Narrabri gas costs \$7 to extract and that does not include the pipelines. It is already an outdated, unacceptable form of energy.

40
In closing, I have met and been entertained by two of four of the most recent Santos CEO meetings – sorry – I have met two of the four most recent Santos CEOs. We have met in glamorous board rooms and rented office space in Sydney overlooking the Sydney Harbour. We have been flown in very smart helicopters over the
45 Liverpool Plains at our insistence. The outcomes of these meetings have been the same. While the CEO – they collectively have no idea or refuse to recognise the importance of water and agriculture. While the CEOs and governments have

changed several times, we farmers with very few exceptions are the same as those who were at the initial meeting with Santos in 2008. We are the same farmers who blockade for over 600 days against BHP and won. We are the same farmers - - -

5 MR O'CONNOR: Rosemary, if you could please wrap up now.

MS NANKIVELL: sorry?

MR O'CONNOR: If you could please wrap up.

10

MS NANKIVELL: I'm on my

MR O'CONNOR: Yes.

15 MS NANKIVELL: Yes, doing it right now, thank you. Blockade successfully against Santos in 2011 for 32 days and forced Santos to withdraw from the Liverpool Plains under completion – until completion of the Namoi Catchment Water Study. Blockading has always come as our last resort. In both cases it was necessary and resulted in successful outcome. We will do so again.

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MR O'CONNOR: Thank you, Rosemary.

MS NANKIVELL: Any questions?

25 MR O'CONNOR: No, not at this stage.

MS NANKIVELL: Thank you.

MR O'CONNOR: Thank you.

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MR BEASLEY: Steven Fordham is the next speaker. Mr Fordham, can you hear me?

MR FORDHAM: Yes, I can. Can you guys hear me?

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MR BEASLEY: Yes. Please go ahead.

MR FORDHAM: All right. Look, today I've heard a lot of different points and a lot of people that are, sort of, against what's, sort of, currently the industry. My background – I was actually born in Gunnedah and I actually left the regional area after the advance of technology in farming it, sort of, cut a lot of opportunities for farmers and that and we – my parents – we had to chase the mining industry. I've been based in the Hunter Valley and throughout the time I've actually seen a lot of amazing opportunities that do actually come from infrastructure projects into rural and regional areas.

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Myself, I'm an indigenous person. I actually created my business with \$20,000 and a little old timber truck and what we've done, we've been able to create huge amounts of opportunities for infrastructure projects into our local area to provide those chances for mob and help that success rate of all that extra spend that has come into
5 the community because in our thought process it's not just the money that the organisation spends. It's the wages in which it creates that's made and spent into the shops in the area and it helps to do – be more advancement into future opportunities. One thing I can see, especially in our rural and regional areas, we're running out of opportunities for apprenticeships, traineeships and to provide those long-term skill
10 sets.

A lot of our kids are actually growing up now and finding better opportunities to go to Sydney than actually staying home because those jobs that once were there into heavy dairy industries and into farming industries are starting to be took up by more
15 autonomous opportunities and new roles. I've actually reached out to Santos a fair few times to actually see if there's any opportunities in the future for work or for local indigenous businesses, but also to other indigenous businesses that are in the area and other small companies within the local zone to help provide those opportunities for some – bit of assistance to go on forward.

20 And – look, I do see both sides and this is not the first time I've sat in front of a pack, especially with the mining sector, and we do get a lot of people and I do understand the frustration that does come in on it because it's the what if. It's something new into the area and it's something that could have an effect. But at the same time too, I
25 don't think it's worth completely cancelling out what some of the positives which are into any infrastructural projects coming to an area. It's those longevity – it's that overall position to be able to help advance small businesses and give them an opportunity to succeed, start new businesses. But as long as those opportunities do stay into that local regional area it does help advance onto a large scale. So, yes –
30 look, that's mainly what I would like to just say today.

MR O'CONNOR: Thank you, Steven. Our next speaker, please.

MR BEASLEY: Next speaker is Roslyn Druce. Ms Druce, can you hear me?
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MS DRUCE: Yes, thank you.

MR BEASLEY: Please go ahead.

40 MS DRUCE: Rightio. Thank you for this opportunity. I just have a short slideshow and I hope you really won't be too distracted by the beauty of the Pilliga native fauna and flora while I do my speech behind the slideshow. So first of all, I would like to pay my respects to the traditional Gomeroi owners of this land, past, present and emerging. Thank you. So this project is not just about 850 gas wells in
45 the Pilliga Forest. This project has stages with localised uncertainties and risks. And you can't find out about all these risks unless you do the drilling. These are David

Kitto's words, not mine. The project has promises, not concrete scientific solutions that should have been implemented, just MOUs and pipedreams.

5 These gas pipelines threaten to impact more rural lives and businesses. This is a dark
secret that will be uncovered if the NGP gets its tick. But which pipeline? And there
must be a pipeline otherwise where and how is the gas going? And there's the
question of ongoing approvals. In the unexplained gas – unextinguished gas PELs
that hang over my community at Maules Creek and many other districts, I'm already
10 impacted by three State significant developments open coal seam gas mines in my
area. I don't believe the department has totally been upfront with the community. If
there is a gas project to be approved, then all the infrastructure should be included as
well as the pipelines for this approval, not a separate approval after the fact. No
State significant development should be approved with such ongoing uncertainty.

15 There are 27 threatened plant species, 35 threatened fauna species and 22 plant
community types in this area. Four of these PCTs are endangered ecological
communities. The unique flora and groundwater dependent ecosystems rely on clean
water. They don't need polluted castoff waste water disposed of down Bohena
Creek by a company that has no other way of disposing of it. As a bird watcher that
20 has visited the Pilliga many times I've had the pleasure of seeing flocks of vulnerable
glossy black cockatoos drinking at dusk; just one of the many species that will be
impacted if this project is approved.

As a wildlife WIRES volunteer, I can tell you that there was a male koala rescued in
25 January in the project boundary. Fortunately, he was healthy, just very, very hungry.
He was returned the next day to a site that was close to the rescue area where there
were suitable food trees. The report states the project area contains koala habitat, but
not core koala habitat as a resident breeding population of koalas was not identified.
Consequently, a koala plan of management is not required for this project. Sorry, but
30 I don't think that we can presume that the male koala didn't have a breeding partner.
We know by this rescue that there are koalas in the project area and not totally
verified that there isn't a breeding population. So I believe that there should be a
koala plan of management. And by the way of interest, I don't believe that the
Narrabri Shire has any koala plan of management either.

35 So instead of protecting our iconic species that is on the verge of extinction on our
watch, are we just going to destroy this habitat and give them species credits?
Santos, Narrabri Shire Council and the department appear to have economics above
the protection of our beautiful koalas. The Eastern Pygmy Possum, Squirrel Glider,
40 Pilliga Mouse and koala will all have their habitat impacted or removed completely;
again, just given species credits. Species credits won't feed or support the already
existing fauna within the Pilliga. In Queensland people have been physically and
mentally affected by the unconventional gas industry. Children with nose bleeds and
health impacts and a suicide that should never have happened. We don't want this
45 replicated in New South Wales.

Community members have given up years of their lives to persuade the government that this unconventional gas is not just in the wrong place, but shouldn't be considered at all when there are safer, greener and sustainable alternatives to drive the Australian economy. I believe that the majority of people want a better future.

5 In fact, 98 per cent of submissions said no to this project. We have suffered from drought in our local district while our wildlife and many communities have suffered from wildfires due to human induced climate change. So in conclusion, we cannot afford to continue down this path using coal and gas to satisfy our energy needs. We don't - - -

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MR O'CONNOR: If you could wrap up now, please, Roslyn.

MS DRUCE: I'm almost finished. We don't need to destroy a forest and pollute the very earth and water we rely upon for our energy needs. As a determining body you have a great opportunity to change directions from a short-term destructive resource industry to a long-term renewable safe and clean power generating industry. This project has no integrity and assurances that it will not harm the environment and therefore should not be approved. So please reject this project and build a better future for all Australians. Thank you.

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MR O'CONNOR: Thank you, Roslyn.

MR BEASLEY: The next speaker is Sharon Kinnison. Ms Kinnison, can you hear me?

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MS KINNISON: I can. Can you hear me?

MR BEASLEY: Please go ahead.

30 MS KINNISON: Thank you. First of all, I'm honoured to speak and I acknowledge our first nations people. I immigrated from the USA to rural Victoria in 1971. Over time my understanding and love of the unique Australian landscape has grown. Since my arrival I have taught science and environmental education in Victoria, New South Wales and the ACT. Through the Sustainable Schools Program, Coastcare, Landcare and Streamwatch I have worked to facilitate appreciation and care of the Australian environment. I speak today as a citizen concerned for sustainable management and planning in my island community north of Sydney and also throughout New South Wales. I also speak as a nanna on behalf of my grandchildren, Aiden and Matoubu, who I hope shall enjoy the same opportunities as I.

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Coming from Sydney to Narrabri you travel through the Hunter Valley famous for wine, horses and the fertile farmland of the Liverpool Plains and now, coal. Leaving the coast numerous coal mines scar the landscape. Soon in the distance appears the distant haze of Muswellbrook, perhaps the most polluted town in New South Wales, reported online as a boom town reliant on the coal industry. With that comes dust, higher cost of living and large trucks. Crossing the Liverpool Plains one passes

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sights for proposed coal mines. To the west Shenhua, Vickery to the east adjacent to the Vickery Forest, and then to the west Santos proposed site for 850 coal seam gas wells in the Pilliga Forest. It appears this is destined to be the sacrifice zone of New South Wales.

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I'm wondering, are communities being brought onboard by company financing, a promise of 150 local jobs and about 25 years of growth in a dying industry? Profits in the fossil fuel industry are falling. Worldwide, projects are being abandoned and alternative industries embraced. Economically, this coal seam gas project does not make sense. The gas well costs more than east coast supplies. Australia has an adequate supply. Each new job comes at a loss of 1.8 jobs in existing industries including farming and tourism. This project seems a quick fix but without long-term benefits required to build resilient, vibrant and healthy communities.

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Is New South Wales really willing to sacrifice the Pilliga Forest last large temperate woodland in New South Wales, biodiversity hotspot and critical quoll habitat, floodplain and recharge area for the Great Artesian Basin that spans three States and the Northern Territory, the Dark Sky for the Siding Spring Observatory, the cultural heritage of the Gamilaroi people, one of the most fertile farmlands in the world, health and livelihood of over 1000 landholders? We are told every project is different, but they do share things in common. Think of the word "wise". W for water, a precious and limited resource for the driest continent on earth. I for inadequate baseline data and monitoring. S for salt, 850,000 tonnes and other toxic waste. E, enforcement of conditions.

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Six years and still 14 unfulfilled recommendations from the NSW Chief Scientist. Those who do not heed the learnings of others are destined to repeat them. I note the impacts on health and loss of bores in Queensland, the bankruptcy and abandoned coal seam gas projects in the USA leaving behind wells and old leaking infrastructure, increased unanticipated methane leaks identified by satellite tracking. The COVID virus has demonstrated our government and citizens can listen to scientists, can respond quickly to crisis, can change course. I urge the IPC to listen to the scientists and to the submissions about 25,000 informed and concerned New South Wales citizens to act to protect our shared national assets for the long-term, to say no to this project and thereby encourage our government to embrace alternative sustainable opportunities. I really am honoured to speak and I do appreciate the sincerity of every speaker that has come before. Thank you very much.

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MR O'CONNOR: Thank you, Sharon. Next speaker, please.

MR BEASLEY: Mr Bragg, are you on the phone?

MR BRAGG: Yes, I am.

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MR BEASLEY: Good. The next speaker is Sam Bragg. Please go ahead, Mr Bragg.

MR BRAGG: Thank you for the opportunity to speak at this very, very important meeting. I'm a local landholder in the southern end of the Pilliga. My brother and my mother also hold land in the area. All of our properties are groundwater and surface water dependent. I've gone to the personal expense of getting full CSG testing done on our bores – very costly I'll add – and it turns out we've got the second cleanest water that's ever been through the lab. The only other cleaner test is from the Gular up, not far away. This is so I have a baseline done prior to the potential CSG invasion of our district.

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10 Santos have earmarked a pilot test well pad upstream just 900 metres from my neighbour's bore and 1800 metres from my mother's bore. Santos has never contacted any one of us at any point to discuss this site or any part of the project. And I would point out that it is their social and civil duty to open this conversation, but to date not a word. As stakeholders, residents and neighbours, it is not up to us to chase them to find answers as they are the ones that will be impacting our lives, properties, water; no contact whatsoever. Santos know full-well they have no social licence. If this project goes ahead it is very likely our properties will be uninsurable.

20 When – not if – there is another toxic spill such as the 20 times the acceptable dose of uranium that has killed a vast of forest and polluted ground water that can't be rehabilitated, our properties, bores, soil, forests will become worthless and uninhabitable by us, our children, their descendants, all the wildlife we value and cherish. Whilst I'm not a geologist, a professor or a doctor, I am an advanced rigger and have worked all over the world in construction and I'm willing – I'm all too familiar with the reaction salt has on steel and concrete. All wells will fail eventually. An impermeable layer of rock is no longer impermeable when you drill a hole through it. Migration will occur between aquifers and coal seams eventually.

30 I would also like to point out that our RFS volunteers are not trained to fight fires within a gasfield and should never be asked to. Our properties will become undefendable. The Pilliga Forest will also be undefendable. With flaring occurring 24/7 even on catastrophic fire days one of the most combustible – in one of the most combustible forests in New South Wales, I fail to see how Santos can mitigate this risk. Methane is a dangerous gas. Fugitive methane from fossil fuel production and use reached 108 million tonnes globally in 2017, up nearly 15 per cent from 2006 according to Stanford University scientist, Rob Jackson. Methane is a potent greenhouse gas 28 times more powerful than CO2 over a hundred year life span. Humanity can no longer ignore the future impacts that methane has on our fragile planet.

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45 Green hydrogen, methane digesters, plastic upcycling into fuel and gas can all fill the void when you stop exploiting fossil fuels. There is no point in time than now to pursue these alternative sources of energy. Narrabri gasfield – gas fired power station could easily be converted to run off large scale methane digesters and plastics to gas. And the by-products would be oil, diesel and fertiliser – win-win for everyone and the planet. Furthermore, I'm a local business holder running an agriculture business in the Warrumbungle Shire Council. I also do habitat creation

for wildlife, harvest native seed largely for use in mine rehabilitation, and service our local green energy's tree needs. And I'm very familiar with the pressure on wildlife habitat and flora industrialisation has.

5 Australia has already the worst extinction rate in the world. The Pilliga Forest is a safe haven for flora and fauna and the breeding ground for many species keeping them from extinction. Much is said on the well pads only being a small percentage of the Pilliga, but what is not mentioned is the roads connecting the pads, the pipelines connecting the wells, and the fragmentation of the forest making it easier
10 for invasive species to colonise and barriers between native populations. Noticing Santos felled a 200 year old ironbark tree outside one of their well pads purely to prevent protestors because they knew there was a potential tree sit. I fail to see how this project has any environmental, sustainable, ecologically worthwhile pursuit whatsoever. I believe New South Wales needs to become gasfield free. Thank you
15 for your time.

MR O'CONNOR: Thank you, Sam, for your presentation.

MR BRAGG: Thanks very much.
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MR O'CONNOR: Next speaker.

MR BEASLEY: I think the next speaker is Scott McCalman. Mr McCalman, can you hear me?
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MR McCALMAN: Yes, I can.

MR BEASLEY: Please go ahead.

30 MR McCALMAN: Good afternoon, Commissioners. I'm Scott McCalman. This project and its huge array of potential catastrophic impacts reminds me of the 1962 Cuban missile crisis. Had that crisis played out between the Soviets and the US the irreversible damage to humanity and the planet would have changed the course of mankind's destiny forever. The implications to Australia if this coal seam gas
35 project goes ahead has the same capacity to create irreversible damage and potential life changing destruction. Commissioners, you are at the control panel and the decision you make, with all the scientific evidence in regard to climate change before you, should be a simple one.

40 Fidel Castro, John F Kennedy and Nikita Krushchev, despite the enormous tension, made the right decision and found a way at the impasse and prosperity prevailed. We're at the same impasse now for this region. Will it be gas or a renewable energy future? Global divestment away from fossil fuels is now occurring at an unprecedented rate. Global investment is now seeking renewable, dispatchable
45 energy projects that mitigate climate change emissions. Fugitive emissions, particularly methane, is an extremely potent greenhouse gas. The total emissions

footprint of CSG should include the fugitive emissions plus the emissions generated when the methane is combusted to carbon dioxide for energy.

5 Farm businesses are heavily exposed to climate change risk and new developments
in a regional Australia should have outcomes that buy us clear and broadly accepted
reduction in carbon emissions. This gas extraction project could completely
obliterate well over 30 years of massive bipartisan projects right across Australia and
billions of dollars in area wide rehydration projects such as capping and piping of
precious groundwater and restabilising water pressure in the Great Artesian Basin.
10 That's just one example. These diverse and integrated land management practices
are national strategic solutions to proactively work with Australia's dramatically
changing hotter, dryer climate. It introduces incentives for landscape management to
build and maintain soil carbon, tree cover and ground cover.

15 Most importantly, it recognises the relationship between soil, plant, animal and
human health and our capacity to produce nutrient dense food for our nation and the
world. I've been involved in innovative agriculture production for over 35 years.
Commissioners, I cannot overstate the devastating impacts that climate change is
now having on the Australian continent, particularly in the last 20 years. As I
20 implement more innovative risk management strategies in my business the climate
hurdles only increase; vastly increased temperatures, huge daily transpiration and
evaporation, increase in frequency and duration of drought, diminished and highly
variable rainfall, plant stress, dieback, erosion, wild fires, monetary loss and impacts
to native flora and fauna.

25 We do not have the luxury of high altitudes on this continent. We do not have highly
elevated snow peak mountain ranges and other buffering landscape features to
combat elevating temperatures. Rural Australia does not have the buffering of a sea
breeze. We are seeking some sobering figures – we are seeing some sobering figures
30 from 24 hour weather station data loggers comparing to long historical records. I
farm on the Liverpool Plains and we are now operating at summer temperatures 330
per cent above our long-term average. Long standing – the average daily
temperatures in summer above 35 degrees the long standing is 20 days we are now
operating. In the last decade this has risen to over 65 days.

35 In conclusion, as the smoke from our bushfires circles the earth and other developed
countries express anger at our inaction on climate change, we are deluding ourselves
if action on emissions reductions are not implemented. Australians are now
frightened and anxious. And mines have moved significantly to recognise our dismal
40 future bestowed by government intransigent and denial. The appalling bushfires, the
severe lack of water for basic needs, and the preceding drought parented by degree
rise in temperatures should be a clarion call for the scientific certainty that now
predicts a two to four degree rise. In addition, we are currently getting a lesson in the
vulnerability of exports to China, India and Japan, especially services like education
45 and tourism, through the COVID-19 pandemic.

So Australia is suddenly being confronted with a series of external policy challenges on top of the homegrown ones. I'm nearly finished. It will require the kind of sophisticated national planning and consensus building that has been entirely absent for well over a decade. Is there the vision and the leadership that is required to turn things around? A future vision based on national consensus. There is job security in thriving, vibrant communities. There are so many people looking at renewable industries and organisations doing good things in our communities. Australians, now more than any time in history, want local shires, State and Federal Governments with vision, courage and care to provide leadership that cares for our future generations.

10 MR O'CONNOR: Thank you, Scott. I think we have to wrap up there.

MR McCALMAN: Thank you.

15 PROF BARLOW: Steve, can I ask a question?

MR O'CONNOR: Yes. Scott, before you go, we have a question for you.

20 MR McCALMAN: Yes, sir.

PROF BARLOW: Scott, it's Snow Barlow here. Look, while I don't doubt the temperature has increased a lot all over Australia, but also the Liverpool Plains, can you just give us an idea of, you know, what the base temperatures of 20 days over 35 and your 65 days – what period was that, or was that the last five years, or was that the last year, or when?

MR McCALMAN: No, you can look on the internet. The Gunnedah Pool has some of the longest State historical records, so when comparing this – I think it goes back over a hundred years – so when you compare that long-term historical record with modern data sets – because you've got to remember a lot of us have linked electronic weather stations and they give very accurate readings. They're running 24 hours a day and they're linked, so they're accessible to growers daily. So when comparing that modern data for the last 20 years compared to the historical, right at my farm on the northern Liverpool Plains, the average is 20 days over 35 degrees. That's now running at 65.

And for days over 40 degrees, my farm only used to receive around three to four days per summer over 45 degrees. That's now 800 per cent higher because we're exceeding 20 days over 40 degrees, so it's over a fortnight. And you've got to remember these crops, transpiration just goes through the roof when you're getting that heat. Crops shut down and then you get all the exacerbated problems with such extreme heat. It's desertification happening. Australia is just so prone to climate change. I can't emphasise it enough.

45 MR BEASLEY: Scott, I think there's plenty of information about this on the Bureau of Meteorology website and also, I think in 2014 the IPC had a chapter on Australia and I think the consensus of the bodies within several of our universities is

that a hotter and dryer climate for large parts of Australia, but particularly the area you live in, is a matter of certainty. It's just how bad it will be, not that it's not going to get hotter and dryer.

5 MR McCALMAN: Well, Commissioners, look, just quickly, you've got to remember that there's Blue Mountains to the east and the coast and you've got a tiny very productive zone in Australia going down from – down the east – eastern escarpment of Australia – you've got that productive food belt. And not too far west of here the rainfall drops off very, very quickly and you've got desert all the way to
10 Perth. And so, it's like the coal mine at Leigh Creek; it shut down. They've got a demographic out there of about one person per hundred kilometres. Its impacts are probably less. The climatic its impacts are high. But here where we live, you've got a high demographic, we've got a limited food growing zone, rainfall is diminishing and our capacity as a nation, I'm telling you, is being impacted.

15 I've been in ag all my life, so has my father and grandfather. We came from Scotland in – not far behind Captain Cook – well, it's a long time – 1872. But it is categorically happening and the consequences are absolutely massive. So for us to be at this point today is just beyond comprehension.

20 MR O'CONNOR: Thank you, Scott.

MR McCALMAN: Renewable projects – thank you.

25 MR BEASLEY: I think the next speaker is Sharon Wilkinson. Ms Wilkinson, can you hear me?

MS WILKINSON: Yes, I can.

30 MR BEASLEY: Please go ahead.

MS WILKINSON: Hi. Firstly, I would like to acknowledge we are on Gomeroi land and pay my deepest respects to Elders past, present and emerging. My name is Sharon Wilkinson and I reside in the Blue Mountains. However, I frequent the far
35 west of New South Wales on a regular basis. I love this place. With its abundant underwater ecosystems and beautiful natural flora and fauna and the farming community that coexists here with these natural systems, I have a deep appreciation and understanding of this often dry, arid landscape. I am friends with a lot of locals and support them wholly in their declaration of being gasfield free as outlined in
40 detail by previous presenters this week.

I also have a very good understanding of what's been going on with the proposals of developing gas out in western New South Wales in the Pilliga Forest by Santos and feel competent to outline these issues. I am a mum and I am also a post-graduate
45 environmental scientist who has expert knowledge and experience in working with community on issues of environmental concern and protecting of our natural resources. I object to the Narrabri Gas Project and it is my grave concern for this

large region, both for the community here and the natural environment, that this development will potentially be given the green light to progress.

5 I speak from a place of also having experienced a significant threat from
unconventional gas in the Blue Mountains and Western Sydney. My direct
experience has been one where community were likewise opposing the industry and
we were dealing with two companies, Seamac Proprietary Limited and, more
importantly, AGL. The Planning Commission may recall the opposition by Western
10 Sydney residents against the expansion of AGLs Camden gasfield back in 2012. To
have hundreds of more wells developed within close proximity to schools and
hospitals and residential housing in the Liverpool region which, upon approaching
the IPC process, AGL very quickly withdrew their gas field expansion prospects
observing the staunch community resistance that was building against it in the way of
15 submissions and planned speakers that were due to speak at an IPC just like this.

20 This was due to two other things occurring at the time. One, that AGL were losing
hundreds of millions of dollars due to the lack of popularity of unconventional gas
and, two, shareholders divesting from AGL. And the gas company were also
protecting their existing gas field asset at Camden near Spring Farm which had
hundreds of operating wells already. However, what is impertinent in this working
example of gas in New South Wales is if the IPC process were allowed to proceed at
that time, before AGL withdrew their plans only a day before the IPC process was to
begin, the major health effects and impacts occurring to residents in Spring Farm,
who lived in close proximity, as close as 70 metres to the gas wells, would have
25 become apparent to the IPC.

AGL, seeing the opposition to gas in New South Wales, furthermore cancelled their
plans for developing gas in Gloucester and also then soon after announced their plans
30 to decommission their wells near Spring Farm in Camden by 2023. You might be
aware of this. Additionally, community pressure by the Blue Mountains, along with
our friends in bordering communities and colleagues in Sydney – Western Sydney,
the Illawarra, worked together over many years with non-violent direct action to urge
the government and to industry to cancel PEL 2 which was a very large petroleum
exploration license which covered the North Sydney, to the Hawkesbury, to
35 Springwood and the Blue Mountains.

How is this relevant? I want to focus on the assertion of the planning report and
what is being presented by Santos, that the Narrabri gas project does not pose any
harm nor have any associated risks. The AGL project in Spring Farm demonstrates
40 the inherent risks of gas operating in New South Wales. The Camden gas field is the
only fully operating gas field still in existence in New South Wales apart from the
Santos scattered wells currently in the Pilliga. It is relevant because operation at
Spring Farm was still – and is still a threat to residents held. The many evident
public health effects experienced by residents that live in the gas field are, but not
45 limited to, nose bleeds, headaches that continue for months, nausea, breath issues –
breathing issues, should I say, serious asthma attacks and hair falling out in clumps.

These were experienced by Danielle Hodges and all of her family members, not just her.

5 Basically what has occurred is this demonstrates risk of unconventional gas. Coal seam gas is an absolute risk. It is a stretch of anyone's imagination to propose that mining unconventional gas, as is the case with the proposed 850 operating gas wells at the Pilliga poses no risk, such that David Kitto, of the Department of Planning, and Santos CEO, Kevin Gallagher, have said in their presentations to you on Monday. This is simply not the case. The Narrabri gas field would have the same effects on surrounding residents in the Pilliga and the north-west as it has on AGLs Camden gas project. This is why an entire - - -

MR O'CONNOR: Sharon, if you could please wrap up now.

15 MS WILKINSON: Yes, sure. No worries. But, yes, I just wanted to say I've got a whole lot of information here. I'm going to be presenting that with supporting evidence. And thank you so much for the opportunity to speak today and I hope that you will consider not approving this project.

20 MR O'CONNOR: We will certainly consider your submission. Please lodge it with us. Thank you.

MS WILKINSON: I will do so.

25 MR BEASLEY: I think the next speaker is Dr Helen Stevens. Dr Stevens, can you hear me?

DR STEVENS: I can.

30 MR BEASLEY: Please go ahead.

DR STEVENS: Good morning, Commissioners. My name is Helen Stevens and I'm a scientist with a main interest in birds. I have lived near the town of Coonabarabran for 32 years and in that time I have carried out bird surveys on my 35 124 hectare property and in the nearby Warrumbungle National Park. For nearly the whole of these 32 years I have been doing these surveys both in the Warrumbungle area and also in the Pilliga Forest. I have taken part in the National Parks and Wildlife Service biodiversity surveys covering mammals, birds, reptiles and plants. I am also a keen member of the Pilliga Forest Birdwatchers, a small group who have 40 been surveying the Pilliga Forest for about 12 years.

I wish to address the assessment report that states:

45 *The project would not result in any significant impacts on the environment.*

And again:

Santos has committed to avoiding all impacts on biodiversity values and avoiding the removal of threatened species habitat.

5 So it looks as if all would be well. We just have to suffer the clearing of 1000
hectares and wildlife and plants would not suffer. Now, our region has suffered two
long droughts in the last eight years. The millennium drought and then a very severe
drought in the last three years. During this drought, many creeks in the Pilliga Forest
dried up, nearly all of them, and the only water was deep underground. Many river
oaks along the creeks died and so did many eucalypts, native pines and Mistletoe.
10 All of these are important bird habitat. The Pilliga Forest has been also impacted by
fires, at least 17 bush fires in the past four years.

15 Animals and plants can only survive these extremely difficult environmental
conditions if there is sufficient good habitat somewhere. For a drought, this would
be the wetter areas along creeks. Surface water might disappear but there would still
be water in the creek lines deep underground. In fires, some areas might remain
lightly scorched or even untouched due to variations in topography. Now, large
tracts of natural habitat are needed to give the assurance that some parts will remain
relatively untouched.

20 Now, people are aware that birds are declining in their range – declining in number
and their ranges are shrinking. The main culprit has been lost habitat. We hear of
the Barking Owl, the Hooded Robin, the Diamond – the Turquoise Parrot, the Glossy
Black Cockatoo, the Diamond Firetail, the Brown Treecreeper. These are all
25 threatened species. They all occur in the Pilliga Forest along with a total of about
200 species. We know that the threatened birds are in trouble. But, in addition, my
research has shown that common birds are declining in our area. The Willy Wagtail,
the Australian Magpie and the Laughing Kookaburra and also small Honeyeaters and
the Crimson Rosella. These birds have undergone the stresses of droughts and fires
30 and have persisted due to the presence of – we can only hope that there are some
good seasons, such as the current season, which will help to restore their numbers.

35 So in order to keep our bird species we need large tracts of woodland or forest. By
eating away at the forest with gas wells, roading, fencing, we reduce nature's
resilience simply by reducing the amount of habitat that is available to birds and
other animals. These intrusions also allow feral animals and weeds, easy access to
previously untouched areas while the presence of gas flares is surely an increased fire
risk. The intact forest is vital for the preservation of rare species but is also vital for
the preservation of common species. More bush fires and droughts are likely with
40 climate change. The proposal is proposed to impact upon about 20 per cent or
80,000 hectares of the forest area. If the project expanded, as it very well could, it
could impact up to half of the Pilliga Forest as we know it.

45 To return to the stated Santos position in the assessment report, that they would avoid
all impacts on biodiversity values, as I've just shown, fragmenting the forest with gas
wells, roads, fences and other associated infrastructure would have adverse effects on
the biodiversity values of the forest. Hollow bearing trees needed by Barking Owls,

Cockatoos and Rosellas would have to be cleared. No amount of biodiversity assets could cover these losses. Eucalypt hollows take well over 100 years to form. The proposed Narrabri gas field would fragment our forest and farmland. It would be like a cancer creeping through the largest woodland bird habitat in western New South Wales.

MR O'CONNOR: Doctor, if you could please wrap up now.

DR STEVENS: I will. I urge you to totally reject the Narrabri gas field proposal. We need to keep our Pilliga Forest as it is, untouched by an industrial gas field.

MR O'CONNOR: Thank you for your presentation. Next speaker please.

MR BEASLEY: The next speaker is Libby Laird. Can you hear me, Ms Laird?

MS LAIRD: Yes, I can.

MR BEASLEY: Please go ahead.

MS LAIRD: Can you hear me – thank you. We don't want our children and their children, in fact anyone's children living anywhere near gas exploration, extraction or transportation. The fugitive emissions, the spills, wells leaking and the expert opinion of well failures including that all wells fail over time gives us no joy for the health of our people, our water, our land and our air. These issues are well-documented in other jurisdictions. In Maules Creek we have already had folk hospitalised from toxic coal mining blasts targeting the coal seams. And we see the dirty smudge in the sky each morning full of chemicals.

In our branch, we supported the Gunnedah Basic Health Impact Assessment process, born by the hard work of good people across our region. It was put to government as a way to involve the community in the planning of fossil fuel projects. But in the government's wisdom we got the conflicted gas-funded GISERA instead. This situation increased the lack of certainty around this project. It made the Narrabri Gas Project not in the public interest from the very early stages.

In our branch we have listened to women who have come from gas field. We have sought expert information. We have run forums. We have tried to understand what it might be like to live in a gas field. And there is nothing like listening to the heartbreak and passion of a woman whose children have suffered health effects from this industry. We thank and support the efforts of these women and those who have shared their stories, the researchers and the specialists advocating for safe health environments for families and children. In fact, looking forward, the government is aware of the need to do something with coal seam methane emissions in the atmosphere. The Net Zero New South Wales government plan 2020 to 30 says, and I quote:

Methane released during coal mining is a potential energy source equal to the entire residential gas use in New South Wales each year.

5 For me, this is staggering, and for our branch, the amount of methane already in our atmosphere. It is not in the interest of this plan to proceed with the Narrabri Gas Plan. We and our children have witnessed the implementation of a controversial project in our region. Community needs more certainty than the planning system can offer and this is an important reason why the chief scientist's recommendations must be implemented to the fullest.

10 When this happened at Maules Creek we saw 300 police in black riot gear in the summer of 2013. They occupied our local roads and surrounded the Leard Forest to ensure it was destroyed and a mine established. If you approve this project, will the police force be in black riot gear and masks? Will the farmers and advocates for a safe climate face long jail terms? We are at the pointy end, a tipping point, no matter the issue, climate impacts, water, insurance, culture, heritage. We ask that you, as the independent decision makers, that you carefully consider that this project, on balance, is not in the public interest. And our children should not bear the burden of a poor decision.

20 Our branch is particularly concerned about the health of the Gunnedah-Oxley Basin Aquifer from the expected significant impact to the groundwater resource. During our water consultations last year, according to the Department of Industry Water, the Gunnedah-Oxley Basin is quite close to the surface at Maules Creek. Water issues in our region already suggest that connectivity may exist within and between the adjacent and overlying aquifers. This uncertainty is compounded for us by the New South Wales government's baseline project assessment of information research that uncovered a low level of available knowledge in government, industry and academia institutions of water quality – water quantity, sorry, in the porous Gunnedah Basic water source.

30 In fact, there is uncertainty everywhere. The state of government bore monitoring generally is in crisis according to the National Water Commission 2012 report. This is the context within which the information for this major CSG project sits. We believe that scientific uncertainty around water, especially water that takes 1500 years to recharge, should not be a reason to approve this development. It is not a precautionary approach to simply say "with monitoring". Monitoring is about understanding the impacts after it occurs and for future. It is not preventing water loss to a slow recharge aquifer. In drought and climate stricken times, the precautionary approach must apply. When the chief scientist delivered her coal seam gas review report in 2014, she said:

45 *It is inevitable that the CSG industry will have some unintended consequences including as a result of accidents, human error and natural disaster.*

Just let me finish this one please:

Industry, community and government need to work together to plan adequately to mitigate such risks and prepare to respond to the problems if they occur.

5 With 850 opportunities, what are the chances of unintended consequences including
as a result of accidents, human error and natural disaster. In closing, it is our view
that when the Department of Planning moved away from ensuring the full
implementation of the 16 chief scientists CSG review recommendations, opting to
integrate the recommendations into a yardstick for the water expert panel, this project
lost an important support pillar. Our branch members need to have confidence in the
10 risk management of developments our government is asking us to consider hosting.
The project needs to demonstrate that it will be safe for families and the environment
to live with. Our patience and our confidence in the ability for this project to be safe
are at an end. Thank you.

15 MR O'CONNOR: Thank you, Libby. Our next speaker is Mr Ivan Levant who is
on the phone. Can you hear us, Mr Levant?

MR LEVANT: Yes, I can hear you.

20 MR O'CONNOR: Please go ahead.

MR LEVANT: I am speaking against this project as a local resident, property
owner and a member of Australian public. I am concerned with what is going to
happen with real estate as the project rolls out. The history shows that it goes in
25 boom and bust cycle. And there is panic selling of the land and devaluation of
properties. The quality of life, as reported by residents in Queensland where the
CSG project is rolled out substantially including reports of adverse health risk
and psychological impacts of the uncertainty of the proposal – well, in Queensland it
is the actual development.

30 So this is something that is not taken into account by this project. So it does not
consider psychological impact of environmental change and a poor knowledge of the
processes by which this change occurs. So residents in the proximity of the structure
report extensive psychological stress framed as many report loss of smell, rashes
35 and a whole plethora of adverse effects. And there has not been a study that is
conducted with the best health impact assessment practice to date. The scientific
is absent and it has to take place before a project of this magnitude goes ahead.

40 Like previous speakers, I have big concerns for the future of a great artesian basin
and the risk that this project imposes on it considering the past history of polluting
the artesian basin with uranium. And likewise, the depletion of aquifers is also of
great concern because our property relies on the bore water and if the water is gone,
and with ongoing climate change, what is going to happen then? Furthermore the
45 pollution is another is another consideration for the local observatory. We have
moved here to see the clear sky and beautiful stars and now that is being jeopardised
as well.

Another thing is, in the US, where the project is closing, the wells are not capped and they are left leaking methane in obscene amounts. I have no trust in Santos that it will follow the procedure in closing its operations should this occur locally. And this is dependent on the economic conditions which are very volatile at the moment. And
5 the risks that it presents to our climate and our future, considering the epic bush fires that we have had, the bush fires that we have in Australia, it's absolutely irresponsible to continue with this project where very few people will benefit from it, namely overseas investors. Local people are not going to receive any benefits and likely will come to a losing end.

10 The other considerations are high traffic, high transmission rate with increased temporary workers that is going to further decrease health quality or public health in the area. The itself, it's not a static thing. It's a three dimensional resource and a highly uncertain future. It's a socio-natural hybrid that involves people and
15 environment and it has to be taken as a priority before anything else goes ahead. I am vehemently against this project which should be closed and the scientific – rigorous scientific studies have to be conducted in Queensland before anything else goes ahead, mainly to the International Health Impact Assessment standards which have not been followed. Thank you.

20 MR O'CONNOR: Thank you, Ivan, for your comments. Our final speaker.

MR BEASLEY: Our final speaker is Dominique Jacobs. Ms Jacobs, can you hear me?

25 MS JACOBS: Yes, I can.

MR BEASLEY: Please go ahead.

30 MS JACOBS: Thank you. Hello Commissioners and thank you for the opportunity to address you today. My name is Dominique Jacobs. I live in Gloucester, New South Wales on a small acreage on the Gloucester River. I have enjoyed visiting the Pilliga Forest many times. I speak to you today as a mother, an early childhood
35 educator and a volunteer wildlife rescue rehabilitator who has grave concerns for our future on a warming planet.

In the final assessment report, the executive summary overview states that this project would not result in any significant impacts on people or the environment. Today, everything that contributes to our warming world is significant. We must
40 transition quickly to Net-Zero Emissions. The Narrabri Gas Project will have many dire consequences locally which many experts have and will speak of but it doesn't exist in a bubble. What happens here also has global consequences because of the contributions the emissions from this project will make towards climate change.

45 The approval of this project at a time when we should be reducing emissions is deeply concerning. Climate change gnaws away at me day after day because complex life cannot survive without water, without food, without a stable climate. I

would like to share with you my personal experience of the effects of climate change in my town of Gloucester where we are trying to recover from a drought that was unprecedented and described by ABC News as the most ferocious in living memory.

5 Everyone was affected, from the small children at my pre-school to the weathered
old farmers. We all felt it, some more than others. Sorry. People were taken to the
wall physically, emotionally and financially. Farmers spent the greater part of each
day hand feeding and watering remaining stock to keep them alive. One family I
10 know was spending 3000 a day on feed. The mountains turned brown as great
swathes of bush died and it looked as if a fire had ripped through it. Gloucester
township ran out of water when the Barrington River stopped flowing. Water was
trucked in from an aquifer a three hour return trip away. Twenty-six trips per day
were required to supply the town despite the very strict water restrictions. Our world
was lifeless and brown and we began to realise the significance of life-sustaining
15 water. Sorry.

Some rivers dried up completely, killing aquatic wildlife. Others had small stagnant
pools of water that kept some wildlife alive. The wildlife organisation that I
volunteer with began providing pellets and seed free to people in the community.
20 Food and water was dropped in areas where wildlife could find it in an attempt to
keep them alive until conditions improved. Despite the help of wildlife
organisations, the toll of drought on wildlife is immense and long term. Many
animals are coming to our rescue organisation in an undernourished state. This will
have a lifetime effect on their wellbeing and impact their future breeding success.

25 I just have a couple of photos of our river. The first one – the first two were taken in
December 2019. And then the third one was taken last week. And that's the level
our river normally sits at. Drought is a feature of our landscape. However we
already know that climate change will extend and worsen droughts in Australia. This
30 is a window into my small community. People in communities across the world have
their own unique stories of trying to survive on a warming planet.

The precautionary principle states that if some course of action carries even a remote
chance of irreparable damage to the ecology then you shouldn't do it no matter how
35 great the possible advantage of the action may be. At my workplace, Gloucester Pre-
School, not a day passes that I don't wonder what sort of a world these tiny little
children are going to inhabit and what hardships they will face as a result of the
decisions we are making today. We have enough scientific evidence to know that
what we are doing is destructive and, in many cases, irreversible. We cannot
40 continue to approve fossil fuel projects that add to catastrophic climate change.
Every new permit, every new project is sealing our children's fate. Every decision
that leads to increases in greenhouse gas emissions is criminal as it is knowingly and
wilfully destructive of all life. Shouldn't we be building a better future for all life on
earth? Thank you.

45 MR O'CONNOR: Thank you, Dominique. That concludes the session. We will
have a lunch break now. We will return at 1.45 pm. Thank you.

ADJOURNED

[12.46 pm]

RESUMED

[1.47 pm]

5

MR O'CONNOR: Good afternoon and welcome back to the public hearing. Our next speaker please.

10 MR BEASLEY: Next speaker is Jan O'Leary. Ms O'Leary, can you hear me?

MS O'LEARY: I can. Can you hear me?

MR BEASLEY: Yes. Please go ahead.

15

MS O'LEARY: Thank you. Hello Commissioners and counsel. I'm speaking on behalf of the Blue Mountains Union Council today. This group was formed in the 1980s and its members are from a variety of different union backgrounds. Our aims are to advance unionism, living standards, social justice and employment. We support ACGU campaigns but we of our own in the Blue Mountains. As a union - - -

20

MR BEASLEY: Sorry, Ms O'Leary – Ms O'Leary, I'm terribly sorry, we're getting some – for some reason - - -

25

MS O'LEARY: Getting music.

MR BEASLEY: a song on at the moment.

30 MS O'LEARY: Did you get me before? Not at all.

MR BEASLEY: I think someone else will have to give her instructions other than me. Just hang on, Ms O'Leary. I think you've got to close your livestream. Do you understand what I – you've got to shut down your streaming because we're going – it's on a delay so we're getting – we're hearing what has been said 15 seconds before.

35

MR O'CONNOR: You're on mute now.

40 MR BEASLEY: You've got un-mute yourself now.

MR O'CONNOR: Can we bring her back.

MR BEASLEY: Shall we go to another speaker and come back to Ms O'Leary.

45

MS O'LEARY: Sorry. Why don't you go to the next speaker and I will try and sort it.

MR O'CONNOR: Yes, that's exactly what we will do. Thank you.

MR BEASLEY: Mr Breen, can you hear me? Mr Breen, can you hear me?

5 MR BREEN: Yes, Commissioner.

MR BEASLEY: It's Richard Beasley, I'm the counsel assisting but that's okay. So Peter Breen, please go ahead with your submission please.

10 MR BREEN: Thank you. Thank you, Commissioners. My name is Peter Breen. For the purposes of this inquiry, I'm a former chairman of a publicly listed mining exploration company and I'm also a former member of the Legislative Council of New South Wales. I was born just down the road from here at Coonabarabran and that was more than 70 years ago. In the parlance of the Aboriginal people, this is my
15 country. The most important natural element in my country is water. Without water the Liverpool Plains is no longer one of the most dynamic food bowls in the world but a mere dust bowl.

I thank the inquiry for the opportunity to speak about water. My contacts in
20 government assure me that just a few months ago, before we had rain, many local communities were about to be evacuated after the longest drought in the European history of Australia. My country had insufficient water for those communities to survive. This is the context in which Santos wants to extract water from the coal seams under my country. The amount of water is mind-boggling. I don't know the
25 figures exactly but I think it's nine million litres a day and 37 billion litres over the lifetime of the coal mine.

It is not clean water, Commissioners, but it's poisonous water. Water that has been in the coal seams for more than a million years. It is axiomatic, in my opinion, that
30 the poisonous water will leak into the great artesian basin either during the extraction or as a consequence of the extraction when Santos is long gone, 20, 30, 50 or 1000 years away, when the infrastructure begins to break down. Another possibility, what I would call the nightmare scenario, is that we won't be waiting more than a few
35 years before the empty spaces in the coal seams, caused by the extraction of poisonous water, causes the weight of the Great Artesian Basin to come crashing into the coal and the coal seams, lowering the level of the water in the Great Artesian Basin and intermingling it with the coal seam's poisonous water. That nightmare scenario will mark the end of the Liverpool Plains as we know it as a food bowl as well as the livelihoods and survival of those Australians who occupy about one-fifth
40 of the continent which is the land above the Great Artesian Basin.

May I also say something, with the benefit of my former experience in the mining business, that the coal seam gas mining proposal in the Leard and the Pilliga forests is simply not realistic. Apart from the water problem and the other outstanding
45 environmental issues identified by the chief scientist, only half of which has been addressed apparently, the chances of Santos returning a profit on the project, in my opinion, are Buckley's and none.

Woodside Mining looked at the project before Santos and decided that the cost of extraction did not justify the return on the investment. The best Santos can hope for is a holding cost while they then presumably look around for someone to offload it to, some equity investor perhaps. I am reliably informed that Santos paid six to \$7
5 per kilojoule to make the project worthwhile. But the gas market is well served at \$2 per kilojoule in the US and \$3 in Western Australia. Australia is the largest exporter of natural gas in the world so it's not like there's a shortage of the stuff.

10 The last thing I would like to say, Commissioner, is that my wife and I were involved in the Metgasco gas project at Bentley in Northern New South Wales. Needless to say, we were on the side of the 90 per cent of farmers who opposed the project. We had a sticker on our car that said "Farmland not Gas Land". When the government booked local hotel accommodation for the police who were going to clear the
15 protestors, we took some delight, I must say, in the fact that the police couldn't find any farm to hold a staging post to clear the protestors. So fortunately the government then started to have serious discussions with Metgasco and, rather than go to war with them, it was decided that there should be a settlement.

20 At the same time as the negotiations – when the negotiations with Metgasco became serious, the gas miners and their supporters decided to walk away from the project. It was a good outcome for everyone, Mr Chairman. Nobody benefits from a bruising fight. Bentley is a good precedent to follow and I urge it upon the parties involved in the Santos project. The settlement negotiation involving Santos extracting itself
25 from the project would be the best possible outcome from this inquiry and from the interests of those who are concerned about the environment. Thank you.

MR O'CONNOR: Thank you for your presentation, Peter. Next speaker please.

30 MR BEASLEY: I think we have Colin Hamilton. Mr Hamilton, can you hear me?

MR HAMILTON: I can hear you. Can you hear me?

MR BEASLEY: Yes. Please go ahead.

35 MR HAMILTON: Thank you. Good afternoon and thank you for allowing me to speak at this hearing. My name is Colin Hamilton. I'm a food producer and farmer from Narromine, central New South Wales, just 100 or so kilometres from the proposed Santos coal seam gas field. I speak today firmly against the Santos
40 Narrabri Gas Project. I speak in support of the Gomeroi first nation people with whom I have sat and listened to their stories, their teachings of this special place, the Pilliga, and I have visited some of their sacred places within the Pilliga. I can truly appreciate and respect their connectedness to this country and their desire to protect it from any form of desecration.

45 As a farmer who relies predominantly on groundwater for my operations and livelihood, I speak in support of and can totally understand and empathise with the many farmers and rural communities across the north-west which will be directly

impacted should this project proceed any further. I also speak in support of the many thousands of tourists who visit the artesian bore baths at Pilliga, Moree and Lightning Ridge each year. These bores will no longer be free-flowing and/or may become contaminated should this project be allowed to go ahead. I speak for the
5 natural world and of the many native and endangered creatures who are only found in the Pilliga.

I have been to and seen the numerous spill sites at the Santos coal seam gas pond in the Pilliga a few years ago. I witnessed the total wipe out of all living plants and
10 animals in that part of the forest due to whatever the toxic mix is that this industry uses or causes as part of their operation. This company, after several attempts and many millions of dollars, has failed repeatedly to rehabilitate these dead zones due to the long-lasting toxic nature of this business.

I speak in support of the tens of thousands of people who live across the north-west who will be the ones forced to live in an industrialised gas field similar to those we have seen in Queensland and in America. This same tens of thousands of people who took part in a survey over the past few years, of 100 per cent of the population residing there. This wasn't a select small sample of the population. The surveyors
20 went door to door, including every house on every road so no one was missed. And the results showed that they, the people, 96 per cent overwhelmingly agreed that they did not want to live in a gas field, and they did not want their water and air contaminated and that they wanted to protect the natural beauty of the Pilliga and their way of life. They didn't want their communities torn apart and they wanted to
25 live – so they didn't want to have their property values plummet and be unable to find insurance if they hosted coal seam gas activities on their property.

When I examine the gas extraction industry anywhere in Australia, and indeed the world, it has a very poor track record when it comes to depletion and contamination
30 of water supplies, disruption of communities and a huge contribution to climate change due to the large level of fugitive emissions of methane gas. I contend that it is not possible to do so without these adverse effects otherwise they would already be doing it. Today you, the people of this independent planning body, are in a very unique and powerful position.

I say this because any of the State and Federal governments and their departments cannot, and indeed should not, have any part of the decision-making process regarding this project. They are constrained due to their willingness to accept
40 donation and/or favours from this and other multi-national companies which means they have a direct conflict of interest and should take no part of or enter into discussions regarding it. It is therefore up to you, the IPC, to convey the will of the people.

The will of the tens of thousands of people who agree that they don't want this
45 forced upon them for the many reasons you have already heard at this hearing by the many speakers before and after me. This project has no social license. It will be a wrecking ball for the environment and our communities and the future of many

generations to come. In conclusion, I plead with you not to cast these people and their communities aside. Their lives and future are in your hands. Please uphold their will. Thank you.

5 MR O'CONNOR: Thank you for your presentation, Colin. Next speaker please.

MR BEASLEY: Next speaker is Suellyn Tighe. Can you hear me, Ms Tighe? I think we're good to go again, Ms Tighe, so why don't you start again.

10 MS TIGHE: Thank you. (Not in English) Hello, I speak from Gamileroi land. We always respect the spirits, laws of this land, the dreaming and the ancestors. Now and always I will walk and talk with respect.

I am standing before you today as a woman from the Gamileroi nation to voice my
15 objection to the Santos proposal to drill 850 gas wells throughout the Pilliga Forest. I note that there have been approximately 23,000 objections submitted prior to the commencement of these proceedings. This is a clear and strong message that should be heard. I add my voice to those objections in conjunction with those expressed throughout this process. I am not going to pour out statistics, rather I am going to
20 speak from the heart with the truths I see and know as a member of the Gamileroi nation and communities.

As one of the many Gamileroi people expressing their concern over the prospect of losing our identity and connection to country, it is integral that you understand that
25 historically the Aboriginal voice has been omitted from the decisions which directly affect us. We, to this day, continue to be impacted by decisions which exclude Aboriginal voices. To date there are approximately 30,000 unresolved land claims. This is an extremely strong reminder that our voices, views and culture are systematically ignored. We do not need to add the Santos proposal for the Pilliga to
30 the list of unheard and undervalued Aboriginal voices.

This Commission stands at the crossroads of history. You can reject a dying, environmentally dirty and fiscally redundant industry by heeding the voices of more than 23,000 people. There has been much rhetoric around the financial benefits for
35 communities and Aboriginal people. So why is it that Aboriginal people still live below the poverty line in a first world country. There has been no change to the social determinants of health, education, housing and employment for Aboriginal people that can be attributed to this industry. We should at least be able to see some change on a local level if indeed the claims of benefit are true.
40

Yes, I have heard the bought and paid for testimonials of employees, businesses and those of the financial stream connected to coal seam gas and Santos. They simply do not ring true for our communities. If indeed there are any benefits to be had, they are on an individual basis and not a whole of community gain. The pittance allocated to
45 sponsorship of local sporting teams is often touted along with a photograph as being benefit to community. The fact that this acceptance of these funds does not mean support. It does however reflect the current difficulties faced by rural communities

such as long droughts, bush fires, high unemployment and even the Corona virus pandemic.

5 So, in brief, cash for comment testimonials should not be given credible weight in these proceedings because there are issues of pecuniary and conflict of interest at work in this space. I am a 55 year old Gamileroi woman with ancestral connections across the Gamileroi nation. I realise that speaking out against a multi-national billion dollar company is difficult. In order to preserve our cultural wellbeing as Gamileroi people, I feel it necessary to do so.

10 Should the proposal by Santos be given the proverbial green light, it will undoubtedly add to the Gamileroi peoples historical trauma experience. Aboriginal people have had to endure in excess of 230 years of colonisation and neo-colonialism. I provided an example of this earlier, specifically to 30,000 unresolved land claims. For Gamileroi people to attain and maintain cultural wellbeing, the preservation of the Pilliga Forest is essential. The Gamileroi people have, for thousands of years, maintained a careful and respectful relationship with the Pilliga Forest. This is evidenced by the many cultural sites archived by the very land itself.

20 Sites inclusive for ceremonial and daily life purposes, fresh water middens, resource production, ancient rock art and engraving, scarred and carved trees. The stories of place are still evidenced and catalogued by the Pilliga Forest. Visible representations of the Goorialla, the Rainbow Serpent, can be seen in the many creeks and waterways. The Goorialla is the carver of the landscape and the bringer of water and life. The Goorialla also teaches us about actions and consequence. One such lesson is the upside down rivers and disregard and disrespect for nature's gifts.

30 This is particularly relevant in light of the Santos proposal. Underpinning the cultural wellbeing is identity, connection to place, country and oral histories transfers across and through multiple generations, utilising stories and cultural practices. Water is the cultural thread which binds our Gamileroi identity and connection to country through oral histories. I cannot stress enough the importance and the significance of water. Truth be told, water is the great unifier bringing Aboriginal

35

MR O'CONNOR: Suellyn, could you please wrap up now. Thank you.

40 MS TIGHE: - - - yes, okay, thank you very much – and all non-Aboriginal people alike. There is no doubt that Santos will commercialise, over-extract and pollute our water. The very fact that nature is the best example of symbiotic relationships should cause us all to stop and protect our water. Water is the key to the very survival of the human race. We cannot deny that polluting our life-giving water will have flow-on effects to the land, plants and animals. Yes, even the air and climate will be affected by invisible methane gases.

45

Do not forget that we, as humans, are but one link within and to each and every one of nature's symbiotic relationships. Therefore we are all at risk of the very same

pollution, all for the sake of multi-billion dollar companies quest for financial profit. In closing, I again state my objection to Santos' proposal for 850 gas wells in the Pilliga. Support our Aboriginal voice and say no to Santos. (Not in English) Stand up for the Pilliga. Care for the Pilliga. Stop Santos. Thank you for your time today.

5

MR O'CONNOR: Thank you, Suellyn.

MS TIGHE: Thank you.

10 MR BEASLEY: Now, we have you back again, Ms O'Leary. Can you hear me?

MS O'LEARY: I can.

MR BEASLEY: Good.

15

MS O'LEARY:

MR BEASLEY: We can hear you so go ahead now.

20 MS O'LEARY: Apologise for my technical - - -

MR BEASLEY: That's all right. Not a problem.

MS O'LEARY: Okay. I'm speaking on behalf of the Blue Mountains Unions
25 Council, that was formed in the 1980s and its members are from a variety of different union backgrounds. Our aims are to advance unionism, living standards, social justice and employment. We support ACTU campaigns. We've got quite a lot of our own going in the Blue Mountains. As a union body, we support the creation and maintenance of good, safe, long-term jobs. This is why we're opposing the project.

30

The project will support at best only 200 jobs post-construction. And as the Planning Department admits, and as lots of people have noted, some of those will be at the expense of the agricultural sector which some might judge to be of greater social value. Frankly, 200 jobs are peanuts especially for a project of this scale and
35 environmental consequence. The 1300 jobs to be created during the three year construction phase we believe are more of a hindrance than a help to the local community especially after the workers pack up and leave.

The issue of workplace safety is the big one for us too. The project is largely
40 situated in the fire-prone Pilliga Forest. There is now little dispute that we can expect hotter, drier summers and a greater likelihood of fires and even more intense ones. Yet Santos will be allowed to flare in a forest even on catastrophic fire days. Peter Bookhouse is a local firefighter who has been engaged in bush fire planning and prediction. He argues that debris could be blown through the flare and ignite.
45 Then within two hours fire could race through the gas fields. He said fires in the area can be so fast and furious that there might not be time to evacuate workers.

Yet Santos rates the bush fire risk as moderate. Given what we've seen in the last fire season, this rating is either out of date or never was correct in the first place. Also the fact that firefighters will be putting their lives at risk trying to protect a gas field we find totally unacceptable. And you've the same from the speakers

5 previously. You have also heard a lot about the recent research on methane emissions and you will probably be pleased I won't go through them again. I will just make this point, though, that Australia has obligations, under the 2015 Paris Agreement, and we can't afford any more. We're behind as it is. So, you know, emissions have got to decrease, not increase.

10 Now, you've also heard from other speakers that Narrabri Gas will not help lower gas prices. Production cost is much higher than spot prices in Australia. Consumers will be subsidising Santos and they could be utilising – we could be utilising much cheaper LNG. We are not ready yet to completely rid ourselves of gas but several

15 energy companies are proposing rapid build LNG import terminals on the south-east coast which could allow access to ultra-cheap international gas supplies. Many contracts for gas imports have already been signed.

Now, declining – well, the viability issues, I think, have to be addressed regarding

20 Santos. Declining oil and gas prices have put enormous pressure on Santos and other oil and gas producers. In 2016 Santos recorded a 2.7 billion full year loss. They wrote down the New South Wales CSG business to zero, sacked 825 workers, told the Stock Exchange the Narrabri project was a non-core asset and also told

25 shareholders they were concentrating on other areas. But they pressed ahead with Narrabri anyway. So I think we need to ask what has happened in the meantime. Things have only got worse for the oil and gas industry since then and COVID has added further stresses to the industry, not to mention investment moving away from fossil fuels and moving into renewable projects.

30 Santos' own cost benefit analysis shows that if gas prices fell 30 per cent or lower, the project won't be viable. They have now fallen 50 per cent. Business analysts foresee stranded assets in the oil and gas industry and not some time in the future, but now. It has already happened in the US on a vast scale. It seems there is only one way this project could proceed and that's with huge government subsidies. But

35 we're not told that by Santos or the department. It would seem if large sums of public money would be needed to keep this project afloat, then the public should know about it and possibly have some alternatives presented to them.

So what sort of investment is in the best interests of New South Wales and would

40 make Narrabri redundant? One example to look to might be the Central West Orana Renewable Energy Zone, not far from Narrabri, where private investors are already flocking. McKinsey, a company not known for their eco-socialist credentials I might add, examined European programs designed to restart growth post-COVID as we are trying to do here. They found low carbon stimulus measures with strong socio-

45 economic decarbonised benefits were the best options. An investment of €75 billion will yield 180 billion in gross value added. It will result in a 15 per cent reduction in CO2 by 2030 and would produce one million job years of employment.

MR O'CONNOR: Jan, if you could wrap up now please.

MS O'LEARY: Sorry. I'm almost there. Comparing jobs in renewable technologies to those in fossil fuels, 75 jobs in renewables would be created
5 compared to only 27 in oil, gas and coal combined. Clean, safe, quality jobs are what is needed particularly for regional areas and, from our perspective, are the sort of jobs that we would be supporting. Thank you.

MR O'CONNOR: Thank you for persevering. Thank you, Jan. Next speaker
10 please.

MR BEASLEY: Next speaker should be Denise Murray. Ms Murray, can you hear me?

15 MS MURRAY: Yes. I can.

MR BEASLEY: Please go ahead.

MS MURRAY: Thank you. Good afternoon. I'm Denise Murray and I am a
20 Narrabri resident. I object to the Santos Narrabri Gas Project on the grounds that there are other preferred options to this controversial project without the many negative impacts associated with it. I have made my assessment of the first 19 pages from the executive summary and have concluded it exaggerates the benefits and trivialises the negatives. In my opinion, this assessment report is regurgitated Santos,
25 State and Federal government spin.

Examples, in the 19 pages of the executive summary they use vague words like "impacts of the project can be reduced", "avoiding to the greatest extent practicable",
30 "minimise the economic, social and environmental impacts". These phrases were used on 64 occasions. This is ample proof there will be negative impacts associated with the Narrabri Gas Project, despite the attempts to reduce and minimise them. On pages 10 and 11, the executive summary describes the shortage of gas and the need to put downward pressure on prices. Sadly, it does not acknowledge the central role that Santos played in creating these circumstances that it claims the Narrabri Gas
35 Project will help alleviate, or the fact that Santos' decision to export gas has been responsible for the loss of more jobs than they could ever create with this project.

There are far better options if we need more gas, and one is to import it, as bizarre as this may sound, as Australia is the biggest exporter of gas in the world. This will
40 eliminate the majority of the negative impacts that need to be reduced and minimised. The import terminal at Port Kembla has been approved and has the capacity to supply more gas than the Santos project. It will cost 250 million and will connect into existing pipelines. In comparison, the Santos project will cost 3.6 billion, and that is before they have a pipeline to distribute the gas. With this sort of
45 investment, Santos would prefer to delay the transition to renewable energy for as long as possible, so as to recoup its investment.

Domestic gas prices are now linked to the international export price, so it is highly unlikely Santos can put downward pressure on gas prices unless they are subsidised, or would they want to? The department's assessment report claims the project will provide additional supplies of gas and put downward pressure on prices, but this is at
5 odds with information provided by Santos which makes it clear that:

It was assumed that the project did not add to total gas supply at a national level.

10 Furthermore, Santos clarified it was assumed that the project itself did not drive change to gas market prices. The only way you are going to get downward pressure on prices is by government intervention, that is, a gas reservation policy, and new suppliers. This is a sentiment expressed by the then Incitec Pivot CEO James Fazzino, who chose to invest \$1 billion in a new plant not in Australia but in
15 Louisiana and created a couple of thousand jobs, so the gas import terminal is a logical solution as we transition to renewables. It can supply more gas than the Santos project, competition is more likely to put downward pressure on prices. The many negative impacts associated with the Narrabri Gas Project are avoided. The final sentence of the executive summary states:

20

On balance, the department has concluded that the project is in the public interest and is approval, subject to strict conditions.

On balance, the opposite is true. The public interest would be better served if the
25 project was not approved, because – the benefits provided by the import option and because the overwhelming majority of the public oppose the project. These examples show how weak the assessment is. For these reasons, the IPC has a moral and democratic obligation to reject this project. Thank you.

30 MR O'CONNOR: Thank you, Denise.

MR BEASLEY: Our next speaker is Gwilym Summers. Can you hear me, Mr Summers?

35 MR SUMMERS: Yes, I can.

MR BEASLEY: Please go ahead.

40 MR SUMMERS: And thanks for the – thanks for the opportunity to speak today, and firstly, I want to acknowledge the Kamilaroi – Kamilaroi People of the land which we stand on, and I note that, in their caring for the country, they did not poison the water, the air or the land. A lot of my objection to this proposal stems from peer-reviewed science of which I will summarise for you. I'm very interested in how many people want this project to proceed have read the peer-reviewed science
45 documented by Dr Geralyn McCarron's study and whether or not they understand the implications and the effects it is going to have on all life forms in this area and the biodiversity of the region, so here I outline some health concerns, as documented

in the paper, GERALYN McCARRON, 2018, Air Pollution and Human Health Hazards, a
Compilation of Air Toxins Acknowledged by the gas Industry in Queensland,
Darling Downs, International Journal of Environmental Studies. The link to this
journal article is included in my written submission. Follow excerpts are from this
5 article – Introduction:

*Outdoor air pollution, especially in an industrial context, has demonstrated
multiple negative human health effects. Air pollution increased risks for a wide
range of diseases, including respiratory and cardiac, and is a leading
10 environmental cause of cancer deaths. The unchecked expansion of
unconventional gas companies into what was previously an agrarian area of
the Darling Downs has led to the generation of extra emissions attributable to
a single industry.*

15 Page 173, table 1, Air Toxins and Associated Health Effects:

*A human health risk assessment for developing coal-seam gas water resources
in Queensland was not pursued, purportedly because the industry partner,
Santos, withdrew funding. Despite appeals from health professionals to
20 improve oversight, state and federal regulatory bodies have failed to act. In
2013, the Australian Medical Association, AMA, issued a policy statement
warning: “Despite the rapid expansion of coal-seam gas developments, the
health impacts have not been adequately researched, and effective regulations
that protect public health are not in place.” In 2013, also, the Queensland
25 Government undertook a limited investigation into health complaints of
Darling Down residents.*

*The report, while unable to determine whether reported health effects were
clearly linked to exposure to coal-seam gas pollutants, acknowledged that there
was some evidence that might associate some of the residents’ symptoms to
30 exposure to airborne contaminants arising from coal-seam gas activities. The
critical recommendation from Queensland Health was that the regulator, the
Department of the Environment and Heritage Protection, monitor overall CSG
emissions and the exposure of local communities to those emissions. DEHP
35 acknowledged that they did not have access to data to allow for comparisons to
the air quality objectives set out in the Environmental Protection Policy to
protect environmental values, including health and wellbeing. Despite this,
DEHP determined that they found no cause to expand monitoring, thereby
40 blocking Queensland Health’s recommendations that overall gasfield emissions
and exposure to the community to those emissions be monitored. The rejection
by the regulator of these recommendations is of serious concern.*

And I point to page 177, table 3, Compilation, NPI data, The National Pollutant
Inventory, Self-Reported Emissions in Kilograms, QGC, Origin, Santos, Arrow
45 facilities, DDHHS Western Darling Downs Catchment, 2005 and 2006, between
2005 and 2015/16. From this table, I take formaldehyde as an example. In 2005/6,
emissions were zero kilograms, and in 2015/16 were 307.2 kilograms. There are

more pollutants, which I have – time does not permit to talk about: oxides of nitrogen, PM10, sulfur dioxide, carbon monoxide and VOCs:

5 *Between the years of 2007, 2014, hospitalisations of DDHHS patients for respiratory conditions increased by 142 per cent, and the hospitalisations for circulatory conditions increased by 133 per cent. Hospitalisations from DDHHS areas fluctuated between 2007 and 2010 with significant rates of change apparent in 2010/2011. Circulatory - - -*

10 MR O’CONNOR: Could you please wrap up soon?

MR SUMMERS: Well, I’ve hardly started:

15 *Respiratory condition increases - - -*

MR O’CONNOR: Well, I’m afraid your time is already

MR SUMMERS:

20 *- - - were evident across all DDHHS area, including areas relative – distant from intense gas field industrialisation. Currently, production facilities act with the assumption that emitted pollutants will be dispersed in the surrounding air speed to safe levels. Dilution is assumed to be the solution to the pollution.*

25 And a lot is not given of this – these reports by Santos or spoken to as to how they are going to answer to these concerns – very serious concerns, I might add, and just raised within this health report.

30 MR O’CONNOR: If you can send us a submission and document the remaining points you were going to make, that would be much appreciated.

MR SUMMERS: You will have the whole document.

35 MR O’CONNOR: Thank you very much.

MR BEASLEY: Next speaker is Brownen Evans. Ms Evans, can you hear me?

MS EVANS: Yes, I can.

40 MR BEASLEY: Please go ahead.

45 MS EVANS: My name’s Bronwen Evans, and I’m a practising veterinarian, so my main area of focus in this submission is animal welfare. The Pilliga Forest is the largest continuous remnant of semi-arid woodland in the state. The continuity is important. It is irreplaceable. It is mainly dominated by pine, with a variety of other distinct plant communities such as mallee, healthland and groundwater-dependent ecosystems. The predominant subcanopy is sheoaks and the dominant canopy

throughout the forest is eucalypts. There are many endangered and threatened birds, animals and plants, as indicated by limited surveys by Santos. There are no adequate offsets for this forest.

- 5 The New South Wales Parliamentary Inquiry into Koala Populations and Habitat was handed down on 30 June 2020. It found koalas will be extinct by 2050 without serious government intervention. The findings and recommendations should be a blueprint to stop all species from extinction. Shamefully, Australia has the highest rate of extinction in the world. It is most important to realise that koalas or any individual species is just one element in an incredibly diverse web of life of flora, fauna, microbes, water and earth. All these elements need to be saved together. Habitat destruction and fragmentation is the single greatest cause of extinction, and yet it is just this that will happen if the coal-seam gas project of Santos goes ahead.
- 10
- 15 It is disingenuous and misleading for Santos to inform us that it will be only be clearing 1000 hectares of the 90,000 hectares of the site. The well pads, 4.5 metres by 4.5 metres, will be linked by barriers, some of them impenetrable, roads, pipelines, paths and fences. This will fragment the 95,000 hectares, making it inhospitable to animals, and disrupt the vegetation patterns. By opening the canopy, it allows bright light and heat to ground level, changing the pattern and type of vegetation communities. These altered channels will allow feral species to penetrate further into the forests and oblige our arboreal species to come down to the ground to cross, where they are subject to heat, predation and may become roadkill.
- 20
- 25 Now, surface water gathers in gilgais, which are important water sources for native species. These are formed in cracking clay soils over wet and dry seasons, and many of these will be bulldozed flat. Most of our native species are crepuscular, which is dusk and dawn, or nocturnal, at night. The constant light of 24 hour production will alter this diurnal rhythm adversely. We have all seen images of kangaroos stunned in the glare of bright lights, unable to behave normally. So too the altered light patten will impact on the behaviour of all life in the forest. Flaring will shoot heat and light to higher levels, causing stress for the arboreal animals who use the canopy as safe havens to eat and sleep.
- 30
- 35 Research has shown that the ground around the bases of flares is affected. At the base of a flare, the soil is acidified to 4 pH – 4.2 for pH, and soil moisture decreased by 40 per cent. This is – effect is not normalised until about 20 metres away from that base. That’s a 40 metre diameter of altered soil and its effect on the vegetation and fauna. Flare lights will also alter the ground levels of light. It stands to reason that fugitive methane emissions will adversely affect birds and animals in the same manner as documented in human populations. Many of the fauna on the forest are small. Small animals have a greater ratio of surface area to body weight and so are impacted more by heat stress.
- 40
- 45 Heat stress causes acute kidney disease, congestive heart failure, electrolyte imbalances and infertility, to name a few problems. Extinction, endangered, threatened – these are not passive terms whereby the last animals die quietly in their

sleep. It is a cruel process whereby the individuals suffer due to lack of suitable habitat; increased predation; inability to procreate due to heat stress; lack of essential locations such as mature tree hollows; just the inability to find a mate, blocked by fences and pipelines just not having enough to eat and having to compete with feral animals.

After the devastation of the recent fire season, it means we do not have any native habitats to lose. The areas left that survived need to be protected as the oasis they are. They need to be protected. The future will clearly have increasing frequency of extreme weather events. All major projects from now forward need urgently to be increasing our capability to cope with this and not further decreasing our resilience. As the New South Parliamentary Inquiry into Koala Population and Habitat has laid out, we can reverse this process if we act on their recommendation. This means to not destroy any more of our existing forest. Thank you.

MR O'CONNOR: Thank you for your presentation. Next speaker, please.

MR BEASLEY: Next speaker is Holly Creenaune. I hope you've pronounced your name correctly. Next - - -

MS CREENAUNE: You have, yes.

MR BEASLEY: That's the first time. Thank you. Please go ahead with your submission.

MS CREENAUNE: Well done. Thanks. Good afternoon – joining today from Eora land in Sydney, and my family first moved to Gomeri land in the very early 1900s, attempting to farm at Baradine and then, in about 1905, in Gilgandra, and my grandparents were both raised in Gilgandra. My family still live there today, and our Creenaune Family Farm is there on Creenaunes Lane, on the road of Gilgandra, on the way to the Warrumbungles, where it still carries wheat and sheep, and my grandparents met at a dance at Bidden Hall about 73 years ago. They're still married today, and they wished for me to convey their resolute opposition to the Santos Narrabri Project, so first, you know, I'm deeply concerned about the impacts of this very significant fracking gas project on the land and culture of the Gomeri People.

It will have huge impacts on a very large-scale landscape that is very significant to the Gomeri People, as we've heard from some of the testimony today and in previous days. You know, Santos' own cultural assessment identified 90 known cultural heritage sites, and these are sites that should not be disturbed, destroyed and impacted, and we've certainly seen, over the last few months especially, you know, in New South Wales, on Gomeri land, with the Shenhua Mine, that, across this continent – that the processes and laws around identifying and protecting Aboriginal cultural heritage are – are weak and are not being implemented properly.

I'm also deeply opposed to the project because of its impacts on groundwater, and I'm really worried that Santos' groundwater models are flawed and inaccurate, and

you know, there's going to be vast quantities of water removed, you know, depressurising the aquifers, loss of water in the Pilliga sandstone and, of course, the southern recharge zone of the enormous Great Artesian Basin, and this groundwater modelling is entirely insufficient, and I do not believe that the commission can give
5 the project a green light with such weak and flawed modelling, and we know, with groundwater, once there are – once there are mistakes, you can't fix them. You can't glue them back together, so the impacts are very significant.

10 I'm opposed to the project because of the impacts on the Pilliga Forest ecosystem and biodiversity. It is the largest remaining temperate woodland in eastern Australia. It should not become an industrial gasfield. It's a very significant site, and you know, a gas project of this scale will be a major driver of habitat loss and extinction for threatened plants and species, of which, you know, both at a state and federal level, there are meant to protect these threatened species and to ensure their survival,
15 and of course, the big picture is the impacts on global climate change from this one project, you know, producing 128 million tonnes of carbon pollution.

You know, if the world is going to avoid the worst of climate change, this project and new fossil fuel projects simply cannot go ahead. We are a signatory to the Paris
20 Global Climate Agreement. We are failing to meet our obligations under that agreement, and every single new fossil fuel project we add matters, at this point in time, so look, you know, I wanted to join today to speak on behalf of my family, to state our opposition to this project, and I just want to state, like, it has been many, many years for landholders and traditional owners, you know, sitting with the weight
25 and stress of this project, the uncertainty of it on their lands and their businesses, and if the project goes ahead, it will be decades more of risk and impacts, especially to water, so a huge of people have raised their voices in opposition to this project, and I'm very grateful to add my own, so thank you.

30 MR O'CONNOR: Thank you, Holly. Next speaker, please.

MR BEASLEY: Next speaker is Anna Christie. Please go ahead if you can hear me.

35 MS CHRISTIE: Hello. Yes, I can hear you, and thank you very much. I am very grateful that an opportunity has risen for me just to address you again in my personal capacity, and I wish again to give my – my wholehearted respects to the Gomerai People of this land. Today, I would like to address you on the issue of the EPA. Of course, this is not an inquiry into the EPA, and yet, nevertheless, the EPA is now
40 regarded as the lead health regulator and also is responsible for ensuring the – the substitute for insurance for long-term environmental damage, so it's a very huge onerous burden on this agency, and I'd like to just provide you with some information that will put in a little bit of perspective whether this agency is really capable of actually delivering the outcomes that are expected of it in relation to two
45 matters, one being the protection of health through the monitoring and the enforcement of air pollution regulation, and the other one is in relation to its apparent handling of the new bureaucratic solution to the fact that there's no insurance.

So just on the subject of the insurance, I have been looking at this topic now for quite some time, and repeatedly questions have been placed to the Narrabri Gas Project Community Consultative Committee over the years about how is it going with your – with the fact that there is no insurance as yet, and repeatedly the community was
5 fobbed off with a one-line answer, if that, which was, “We’re working on it,” and I’m sorry, because this is very impromptu, and I don’t have the exact words, but the minutes of the Narrabri CCC will reveal and – and possibly also the minutes of the GISERA Research Priorities working group might also reveal some of this information.

10

Now, this bureaucratic solution that is intended to replace insurance includes continuing the existing security-deposit scheme to cover the costs of rehabilitation. Now, Melissa Tym spoke about that yesterday to you and is compiling a – a clear analysis of that. Basically, that is extremely limited in scope. The second point of
15 the bureaucratic solution is to require gas companies to employ effective risk management strategies. It’s actually a double-barrelled requirement, because it’s asking them to – to or requiring them to have effective risk-management strategies and provide evidence, but we don’t have confidence that the EPA has either the – the power or the will to do that, and when I say the power, I’m drawing upon experience
20 dealing with the EPAs response to pollution matters in the Namoi Valley in the last few years, in which it has shown it is extremely hamstrung.

25

The third point that is part of the bureaucratic solution is assessing the future environmental liabilities, and the fourth is the – managing the abandoned wells program, which we’ve seen, from Melissa Tym’s outline of the – the situation, is really not of a size and scale commensurate with the – with managing hundreds and possibly thousands of wells in the future, so I – on the subject of health, now, which is the subject that I actually am most experienced in, I’m going to read to you a few words that are from the transcript of the – gee, and I’m not even reading here, but I
30 would say that the transcript of the – the Upper House inquiry into the Chief Scientist’s recommendations on CSG where Ms Abigail Boyd MLC asked Mr Andrew Cowan, the lead of the EPAs gas branch, is – asked the question, “Are you aware of any reports being made regarding negative human health impacts to the EPA?”

35

And Ms Dwyer from the EPA said, “Not off my head – off the top of my head, but we could take it on notice.” Now, I think anyone would realise that the EPA should have that answer at the tip of their tongue. For Ms Dwyer to attend the Parliamentary inquiry and say that she does not have that information is a damning
40 indictment. Unfortunately, I – am I out of time now? Yes.

MR O’CONNOR: Yes, if you could wrap up, please.

45

MS CHRISTIE: Well, that was a very, very quick five minutes, yes, and I will be expanding on this in a further written short submission. Thank you.

MR O’CONNOR: Thank you. We look forward to it.

MR BEASLEY: The next speaker is Rachael Scott. Is that you, Ms Scott?

MS SCOTT: Hello. Can you hear me?

5 MR BEASLEY: We can. Please go ahead.

MS SCOTT: Okay. Firstly, I'd like to say thank you for the opportunity to hear views and concerns of the public. I'm phoning in from Awabakal land in Newcastle. You guys have heard a lot of very well-researched arguments and a lot of evidence.
10 My submission comes from more of a personal place. I – whilst I don't have a direct claim to this project, I have an indirect claim, and I'm really particularly concerned about, aside from water, biodiversity impacts – about the effect on climate change. The department, Santos and the New South Wales State Government think that gas is an appropriate fuel for energy transition, but I note that the New South Wales
15 Government has a commitment to reach net zero emissions by 2050, and the development of this project is entirely consistent with this goal, our commitments to the Paris Climate Agreement and all of the recommendations under the IPCC.

On that, the – the IPCC, the Inter-Governmental Panel on Climate Change, released a
20 really damning report in 2018 about the impacts of one and a half degrees of warming, and in that, they actually recommended that, to keep our carbon emissions within the remaining budget, natural gas share of energy use globally has to decline by 20 to 25 per cent by 2030. Another point is the International Renewable Energy Agency also released a modelling report earlier this year and said that any new
25 natural gas developments are inconsistent with the goal of net zero emissions. I really want to reiterate what Holly said earlier is that every fossil fuel project from now on matters, and whilst there are arguments that gas is going to help us transition to - - -

30 MR O'CONNOR: We've lost audio - - -

MR BEASLEY: We can't hear you.

MR O'CONNOR: - - - Rachael.
35

MS SCOTT: Hello?

MR O'CONNOR: Yes.

40 MR BEASLEY: Yes.

MR O'CONNOR: That's good.

MR BEASLEY: We've got you again.
45

MS SCOTT: Okay. Sorry about that. I don't know if that's me.

MR BEASLEY: You were up to the international renewable energy bit.

MS SCOTT: Oh, no. Okay. Essentially, they were just saying, within their modelling, that natural gas – any new projects that are in the pipeline or are going to go ahead are inconsistent with the goal of net zero emissions, which we – the IPCC recommends we need to reach by 2030. You probably know all of this already, and so, I guess, from a place of – personal place, I am a graduate environmental scientist. I have been concerned about climate change since I was 11 years old and have spent the last three years learning about the impacts of development in general, but a lot of fossil fuel projects, on the environment, and it really affects my mental health and my hope for the future.

I have issues where I feel like if I'm not doing enough about climate change, then I'm failing the world, and at the end of the day, I don't think that's fair for me personally to take on, and everyone of my generation and adults and people wanting to have children – that's not fair, because, in reality, it's these large projects that – even though they say it's only going to be one per cent of Australia's emissions, every single project from this point on counts, and my personal contribution is miniscule compared to the size of this project, so I urge you to consider your decision based upon that, knowing that lots of people are trying really hard to do their part, but at the end of the day, we need to transition, and we need to do it properly, and using gas as kind of our transition fuel – there are better solutions out there, and it's not good enough, so that is all I would like to say. Thank you.

MR O'CONNOR: Thank you, Rachael. I think we have Julia Walsh.

MR BEASLEY: Ms Walsh, are you there?

MS WALSH: Yes, I am. Can you hear me?

MR BEASLEY: We can, so please go ahead.

MS WALSH: Thank you so much. Thank you, Commissioner O'Connor, Commissioner Hann and Commissioner Barlow for the opportunity to speak today. My presentation is an opposition to the proposal by Santos to plunge their gas wells through our essential and irreplaceable Great Artesian Basin. I'm going to be sharing with you my screen. Can you see this?

MR O'CONNOR: Not yet.

MS WALSH: Okay. All righty.

MR O'CONNOR: It's now.

MS WALSH: So – so basically, I'd like to take you back in time a little while to a presentation or a meeting in 2016. It was a COAG meeting where an exchange between Anthony Roberts, the New South Wales Energy Minister, and Josh

Frydenberg, Energy and Environment Minister at the time, was overheard. Essentially, this was in relation to the coal seam gas mining in Narrabri and the Pilliga Forest – that Anthony Roberts was heard to say, “We will just back you.” To me, that is ignoring the risks. They’ve just made a decision to move towards a
5 predetermined outcome, and we’re along that trajectory right now, having this meeting right now, and I can imagine there’s probably enormous pressure on the three of you from both a federal and a state level to make a decision in favour of this gas mine.

10 In fact, what I guess disturbed me quite a bit about this exchange is that they think it’s funny. They think that the impact that they’re going to impose on the people of New South Wales, particularly the communities living in the area, and then the generations to come, who will be faced with the toxic legacy of this project – they think it’s funny. They laughed about the fact that, “They are going to hate us,” and
15 of course, then, they acknowledge their duplicitous nature that, “Well, we won’t say that in front of the TV,” but they didn’t know that the camera and the microphones were on. This video is in my presentation, which I will submit to the panel after this – after I’ve gone through this.

20 So my background is I’m a scientist. I’ve worked as a cell biologist at the CSIRO, and my concern is that science is not rigorous when evidence is buried. We saw, globally, issues where people who have been impacted by onshore coal-seam gas mining, the only way that they can access compensation is to sign a non-disclosure agreement or a confidentiality agreement. In fact, in – in Queensland, there were six
25 families that a doctor was reported to have – have understood that they were facing gag orders, and they couldn’t speak publicly about what had happened to them, so having been a previous employee of the CSIRO, GISERA is not the CSIRO, and I frustrates me when I see things are published as if they’re rigorous science from the CSIRO when, in fact, they’re – they’re industry-driven scientific research that
30 doesn’t take into account these very important evidence that’s, you know, experienced by these families.

This government has promised us all kinds of things, and they say that they take due diligence, but they also promised us our rivers would be fine, and we all know that
35 the rivers that should never have dried up have dried up. Fish kills have happened, and are we really going to trust them with our groundwater right now, because you don’t even need to look very far to find evidence that Santos has contaminated aquifers already. In the exploratory states, I believe they contaminated an aquifer with uranium, and they were fined a mere \$1500 by the New South Wales
40 Environmental Protection Agency for this.

This is a massive breach, to be contaminating water with elements like this and then expecting a company that makes \$15 billion in revenue over – income over four-year period – that a \$1500 fine is going to be enough to deter them. That’s why this panel
45 is so essential to stop this from moving ahead, because that – that – that kind of thing is not a deterrent to them at all, and they’ve got, you know, definitely enough money to splash around, despite the fact that they pay a woeful amount of tax, \$3.1 million

over four years. They've got a lot of money to be the biggest donors to Liberal, Labor and National parties, and you know, that – that's another thing that kind of plays into the conversation that I revealed to you at the beginning of this presentation.

5

My interest in this topic stems from the fact that I lived in the United States in a rural area when coal-seam gas mining and onshore gas mining really became a very popular thing and really started to expand. Where I lived in New York was a very different story from people who lived in Pennsylvania. Governor Cuomo banned it in New York, but in Pennsylvania it went ahead, and the residents at Dimock and many other places in Pennsylvania are wearing that legacy. I'm just going to quickly show you here some evidence of a farmer. This is his bore water in Queensland light it on fire. This farmer was battling the gas industry for a really long time to protect his water security, and this is what will be unleashed in New South Wales if this project goes ahead in Narrabri.

10

15

MR O'CONNOR: Julia, you'll have to wrap up now, thank you.

20

25

MS WALSH: Yes, I'm – this is the last thing. So basically, you can look at what they reveal to their investors as to the true risk of these projects. These are not put forward in other things, but they're put forward to investors, so that's the true risk, and I really hope that the commissioners – thank you for the time to speak, but you can speak truth to power and reject this project because we will go down in history as to the outcome of this, and I hope that we can look back and know that this process allowed all of us to work together to protect our greatest natural asset, which is the Great Artesian Basin. Thank you so much for your time.

MR O'CONNOR: Thank you, Julia, for your presentation.

30

MR BEASLEY: We have Derek Finter on the phone now. Mr Finter, can you hear me?

MR FINTER: Yes, I can.

35

MR BEASLEY: Please go ahead.

40

45

MR FINTER: Okay. Thank you. Good afternoon, Commissioners. I'm speaking to you from Mudgee, on the road to Wiradjuri country. You have heard submissions based on the scientific and economic reasons to reject this project. I'm going to speak on something that was not considered in the Planning Department's assessment report and appeal to your humanitarian values and your sense of justice. Hundreds of people have devoted thousands of hours organising opposition to this project, not looking to profit, but hoping to save irreplaceable environmental assets. Prominent among these people are the Sydney Knitting Nannas Against Gas and Friends, who became a feature in Martin Place in Sydney ever Friday in all weather conditions, informing and educating passers by about the dangers of this project.

The most senior and most beloved member of the group was not a nanna but a man, the late Bill Ryan. He was a World War II and Kokoda Track veteran who passed away in December 2019, aged 97, only a matter of days after his last trip to Martin Place. He was legally blind, needed a walking aid to help him get around, yet, with
5 the assistance of his son Colin Ryan, he travelled by train from his home in the Sutherland Shire to attend the Martin Place vigil on hundreds of occasions. He had devoted a huge amount of his last years to the fight against this project and others that he recognised posed as great a risk to this country as those he fought against in World War II. He frequently spoke to groups of young people, inspiring them to
10 take action to help protect their futures.

Bill Ryan never stopped fighting for what he believed was right. He became the most senior Australian arrested for civil disobedience, inspiring many others to take similar action to help save our most valuable natural assets. So, Commissioners,
15 when making your decision, please demonstrate your independence. Reject the calls from those acting only in the selfish short-term interest of the fossil fuel industry and from the politicians there are – that are its agents. Instead, listen to the calls from the youth of today who want a future they can look forward to. Listen to the traditional owners of the land. Listen to the people on the land. Be inspired by and respect the
20 legacy of Bill Ryan. Commit this project to the oblivion it deserves. Thank you.

MR O'CONNOR: Thank you, Derek, for your presentation.

MR BEASLEY: Next speaker is Mr Justin Field MLC. Mr Field, can you hear me?
25

MR FIELD: Commissioners.

MR BEASLEY: Please go ahead.

MR FIELD: Thank you for the – thank you for the opportunity to contribute to these hearings today. My name is Justin Field. I'm an independent member of the New South Wales Legislative Council. I've been deeply involved in issues of coal seam gas since 2010. I do not support the Narrabri Gas Project. My view is that it is
30 not in the interests of the people of New South Wales to develop a new fossil fuel industry in this state. There are clear alternatives with lower risks for the environment, for the climate and for the community health and wellbeing.
35

Today, my submission, however, is focused on the recent Parliamentary inquiry conducted by the Legislative Council Portfolio Committee Number 4 that considered
40 the implementation of the recommendations contained in the New South Wales Chief Scientist's independent review of coal-seam gas activities in New South Wales. I sat on that inquiry. That committee report is clear. The New South Wales Government, despite their public claims to the contrary, have failed to adequately implement the recommendation of the Chief Scientist's report. The committee found eight of 16
45 recommendations had not been implemented at all. Another six had not been implemented in full.

The New South Wales Government's arguments that the recommendations have been implemented seemed to be based on other actions taken or other policies implemented to respond to the Chief Scientist's concerns. I contest that position, and so did the majority of the committee. The government unashamedly tried to mislead the committee and the public in this inquiry. Under questioning, their assertions that recommendations had been implemented fell apart. Critically, the question of insurance for landholders remains entirely unresolved, and a key finding of the inquiry was that these risks appear uninsurable. An expert standing advisory body on coal seam gas has not been established as recommended, despite it being a critical component of the Chief Scientist's proposed regulatory framework.

Instead, the government claimed it had decided to use the Commonwealth Independent Expert Scientific Committee on Large Coalmining and Coal Seam Gas to fulfil this requirement, but this body performs an entirely different function to that recommended by the Chief Scientist, and under questioning, the New South Wales Government was not able to identify how it was engaging with the IESC or if it had even informed them it was being relied on to perform these functions. The committee also found there remains no adequate mechanism to assess cumulative risks from multiple resource projects, despite the government's claims to the contrary.

Without you reading the transcript of the inquiry hearings, it is difficult to express the poor showing of the government during those hearings. Departmental representatives had to be recalled following totally inadequate responses to initial questions. At times, they were not able to explain who was responsible for certain areas of policy implementation. Particularly concerning was the similarity between the submissions from the government, Santos and APIA. There seemed to be a shared understanding between government and industry about what should be said about each of the recommendations. That evidence contrasted sharply with the community submissions that expressed a deep frustration at being unable to get simple answers to questions about the status of implementation of certain recommendations from either the government or the industry.

That is particularly galling given recommendation 2 of the Chief Scientist's report was, and I quote:

...that government ensure clear and open communication on CSG matters is maintained at all times.

A recommendation, I might add, that the government claims it has implemented in full. The New South Wales Government and the department, in recommending this project, rely in part on the ability of the New South Wales regulatory framework for coal seam gas to mitigate the risks presented by this project. I contend that the regulatory framework is inadequate and does not mitigate those risks and cannot be relied on to condition this project, should you determine it be allowed to proceed. The scathing findings of the Parliamentary inquiry were consequential to the support

in the New South Wales Legislative Council last month for my bill to put a moratorium on coal seam gas development in New South Wales.

5 That legislation passed the legislative council with a margin of three votes. It was lost in the legislative assembly by just two votes. This vote reflects the fact that, despite years of public debate, there remains no consensus within the New South Wales Parliament or the community on the suitability of this industry. Commissioners, your obligations to fulfil the objectives of the New South Wales Environment Planning and Assessment Act, especially to promote the social and economic welfare of the community and facilitate ecologically sustainable development, should give regard to this ongoing division. At the core of the principle of ecologically sustainable development is the precautionary principle.

15 The findings of the Parliamentary inquiry and the failure of the government to build consensus suggests to me that the appropriate application of the precautionary principle is to determine that this project should not proceed. Political and social division on the issue of coal seam gas remains strong in New South Wales, opening the door to an entirely new industry to this state, for which clear alternatives exist and that present significantly less risk, requires much greater consensus within the political body of the state, lest it have an even greater consequence for social, economic and environmental welfare in this state. I urge you to reject this project.

25 MR BEASLEY: Can I – can I just ask you a question, Mr Field? It's Richard Beasley speaking.

MR FIELD: Yes, certainly.

30 MR BEASLEY: I've got the – the Parliamentary inquiry report in front of me, which probably places me at an advantage to you, but I was just wondering, in terms of the – the Chief Scientist's recommendations that were found not to have been implemented, is there any one that – that was found not to have been implemented, or only partly implemented, that you think the commissioners should view as being particularly important to this project.

35 MR FIELD: So I highlighted three, Mr Beasley, in my presentation then. The first I pointed - - -

MR BEASLEY: Yes.

40 MR FIELD: - - - to was the failure to provide an adequate insurance regime for landholders. The second that I identified was a failure to establish - - -

MR BEASLEY: So that's 9, yes.

45 MR FIELD: - - - a standing advisory committee, the expert standing - - -

MR BEASLEY: Yes.

MR FIELD: Standing advisory - - -

MR BEASLEY: 12.

5 MR FIELD: - - - committee, and I – and I would just again highlight that that New
South Wales Government really tried to misdirect the committee with how they were
engaging with the Commonwealth IESC to address those issues raised by the Chief
Scientist, and that is an entirely different body with entirely different function, so I –
I deem that as – as entirely inappropriate to address those issues. The third was the –
10 the recommendations around cumulative risk, and I would just highlight those three
across – across other recommendations as well. The standing body was there to
address a range of issues that would be picked up in other recommendations, and that
cumulative assessment was also specifically linked back to the whole-of-government
environmental repository recommendation, so it is difficult to separate them out from
15 all of the other recommendations, and I encourage the commissioners to have a look
at those – those findings.

MR BEASLEY: Yes.

20 MR FIELD: And if you want to understand the – the challenge we had in getting
this information out of the government, reading the transcript of the hearings, I think,
is particularly concerning.

MR BEASLEY: Thank you.

25

MR O'CONNOR: Thank you, Mr - - -

MR FIELD: Thanks very much.

30 MR O'CONNOR: Thank you, Mr Field, for your presentation. We will adjourn
now until 3.25 pm. Thank you.

35 **ADJOURNED** [3.07 pm]

RESUMED [3.30 pm]

40 MR O'CONNOR: Good afternoon and welcome back to the public hearing. We'll
now hear from our next speaker.

MR BEASLEY: Kaye Osborn.

45 MR O'CONNOR: Yes. We can hear you now, Kaye. Go ahead.

MS OSBORN: Go ahead?

MR O'CONNOR: Yes.

MS OSBORN: Great. Good afternoon.

5 MR O'CONNOR: It is you, Ms Osborn; correct?

MS OSBORN: Yes, this is Kaye Osborn.

MR O'CONNOR: Excellent. Go ahead, please.

10

MS OSBORN: Thank you. And thank you for the opportunity to speak with you this afternoon regarding the Narrabri Gas Project. I object to this project. I'm going to speak, firstly, about how this project is not required to meet New South Wales energy needs, and, secondly, about how this project is unwise and irresponsible,
15 given the need to urgently reduce greenhouse gas emissions in the face of escalating climate change.

The Department of Planning states in its assessment report that it conveyed to the IPC that the gas of the Narrabri Gas Project is for domestic consumption as a
20 condition of its petroleum production lease and cites a "gas shortage". However, as we speak, liquid natural gas tankers are floating idly in our oceans due to a global gas supply glut. The global gas market was recently described in the Sydney Morning Herald as still extraordinarily oversupplied, and the pressure of this is intensifying. Domestic gas use is declining; for example, the ACT is phasing out gas use in a
25 move to reduce carbon emissions. I, myself, am just about to have my gas disconnected so the – because it's more cost effective now to use reverse cycle air conditioning for heating.

So this gas shortage that is cited by the Department of Planning is not due to a lack
30 of gas or gas production in Australia, or an actual shortage of gas, per se. I think it's due to a failure of government to plan for even our currently dwindling domestic needs. What we need is a domestic gas reservation from existing production and a plan for transitioning to renewable energy. We do not need new coal seam gasfields like Narrabri, that will only exacerbate the global glut and delay the transition away
35 from fossil fuels.

Today is my birthday, but rather than being outside enjoying myself in the last of the winter sun, I've chosen to be here with – representing to the IPC, because the issue of transition away from fossil fuels is so – such a critical one. This project for a coal
40 seam gasfield does not have a social licence, I believe. We already see impacts of escalating climate change; for example, the recent bushfires, which came very close to my home here in the Illawarra. But it's young people today who will bear the burden of a climate that is increasingly inhospitable.

45 According to the UN sustainable development report, Australia ranks 176th out of the 177 countries that they assessed regarding climate action. That is the second worst in the world; the second worst of all the countries assessed. I'm shocked and ashamed

that a wealthy and developed country like Australia, with so much renewable energy potential, could do so badly.

5 Phasing out gas is critical to a sensible and responsible response to the threat of
climate change. The Department of Planning notes that the Narrabri CSG proposal
will encourage the development of peaking gas-fired power stations in New South
Wales to compensate for scheduled closure of several coal-fired power stations in the
next 20 years. We don't need gas as a transition fuel. We need to transition away
from fossil fuels, full stop. We need to transition away from fossil fuels altogether.
10 The UN Environment Programme's Production Gap Report of 2019 says:

*With average lifetimes of 20 years or longer for pipelines, the time to begin
planning for a winddown of gas production is, as with other fossil fuels,
already upon us.*

15 Individuals and governments, alike, need to do all we can to rapidly reduce burning
of fossil fuels. For these reasons, I urge you to find Santos's Narrabri Gas Project
proposal is un-approvable. Thank you.

20 MR O'CONNOR: Thank you, Kaye. And many happy returns for your birthday.

MS OSBORN: Thank you very much. Next speaker, please.

MR BEASLEY: Next speaker is Kerrie Matchett. Ms Matchett, can you hear me?
25

MS MATCHETT: Yes.

MR BEASLEY: Please go ahead with your submission.

30 MS MATCHETT: Thank you for the opportunity to speak, Commissioners. If
you'd like to check the comfort of your posture and breathe, while I acknowledge the
traditional custodians, the Gomeroi and Gamilaroi People, of the lands on which I
stand and the deep connection that they have to country, and, also, the deep
connection that we all, in this region, share, to land, water and sky.

35 I'm a fifth-generation resident from a grazing property family in the Moree Plains
Shire. I have small business in Moree; a custom picture framing business, operating
for 10 years now. I have customers and clients that stretch from Lismore to
Lightning Ridge, St George and to Orange; family, friends, in between. And I just
40 say this to indicate the connections that people have to each other in this landscape,
because there's been a few things said about people who come in from outside, and I
take objection to that.

I have a number of concerns that I'll explain in a written submission. I'll touch on a
45 few today. They're not necessarily the most important, but I should state that I urge
you to recommend that the project does not proceed, as per the department's
recommendation. From a small business perspective, if this is approved, I would like

to see phase 2 broken into smaller phases, like 50, instead of 850 in one go. I'm surprised that the department did not adjust that, in order to monitor and minimise any adverse, economic, and environmental impacts, especially those on small businesses.

5

Our dark skies; I cannot emphasise how important they are, astrologically, environmentally, economically, culturally, and spiritually, not just for our First Nations people, but for all of us up this way. Now that I've heard that there are options for them to be able to do a function that a flaring does, but without flaring, I'm quite angered that the department didn't make that a condition in order to protect our dark skies and, also, to dramatically minimise the fire risks in the Pilliga.

10

Moree Shire's within 150 kilometres of the project. The department has indicated that we would be able to – we would be one of the places that would be accepting toxic salt waste in our landfill. I find that unacceptable. I also draw your attention to – in the recommended conditions, to B30 and B31. These relate to compensatory water supply in the event that landholders are adversely impacted. It states that supply measures must provide alternative long-term supply. My concern is that this puts more pressure on sub-artesian aquifers and communities like mine, that already help to service communities across this region with water throughout droughts. Drought is something that adversely impacts us already and the Great Artesian Basin, and these aquifers are what we already use as an alternative supply. If you damage that, I don't know where on earth they expect to get this water from, and it's only going to put more pressure on communities like mine. It just indicates a severe lack of forethought.

20

25

Another major concern for people in my shire is that the report states that the project is requiring a pipeline to proceed. There have been two suggestions: one is the Queensland Hunter Gas Pipeline, which runs through my shire or proposed to. It goes past my family farm and through neighbouring properties and a number of my customers and clients' ones. It's perpendicular to the flow of water and flood ways – perpendicular. It goes across grazing, cropping and irrigation fields, within our vertosol soils. The route drawn is not selected by the department. It's selected, basically, by just drawing a line on a map by a pipeline proponent. I'm deeply opposed to this. Many landholders, and including the ones that are along that line – I'm part of the Moree Plains Gas Pipeline group – they started out just wanting to know more information, and they've very quickly become quickly opposed to it, due to the economic, mental, and environmental impacts.

30

35

I don't understand how the department can approve stage 1 of this development, given the necessity of the pipeline and the hurdles that must be overcome in order to be granted a pipeline licence. I ask you to take that into consideration, especially in regard to greenhouse gas emissions that would come with any leakage from that. So back to the Narrabri Gas Project. Just your attention to B19, table 5, regarding air quality criteria. In that you'll see that there's ranges for what's acceptable for ozone and, also, what's acceptable for nitrous dioxide. This is fine. But B22 A.2, it says:

40

45

Minimise the point source of fugitive emissions for methane, carbon dioxide and other pollutants.

5 “Minimise”. At this stage of the game, when it comes to greenhouse gas emissions, they use the word “minimise”. That’s the equivalent of me telling someone to go and buy me a cheap car, and they go into a Porsche dealership and say, “I was told to buy the cheapest one.” That is not an appropriate range. B23, which is about air quality and greenhouse gas management, it says:

10 *Prior to phase 2, point E says it must detail baseline levels of methane, carbon dioxide –*

15 etcetera. I’d like to see that made a condition of phase 1, as well, because if the conditions are that they only have to minimise emissions in phase 1, they can play with the vagaries of that language and create a false baseline for phase 2. And then, you have to also bear in mind that in phase 2, the recommendation is that they just minimise according to the baseline that they’ve essentially had the ability to play with.

20 So there’s a significant amount of room there for us to end up with a lot of fugitive emissions at this stage in the game. The only reason I get quite worked up about that is because we currently have farmers in our region, they’re having to spray retardants on their barley crops because our winters are too warm. They’re having to make decisions about things like that. We have amazing sorghum crops that have been lost because we have an earlier heatwave than usual, and it’s cooked a week and a-half before harvest and turned it into stock feed. It’s like people going, “Oh, well, there goes” – and that’s all money that can go into our state coffers. It’s part of our GDP.

30 It’s really important that we get on top of climate change. The latest UN reports are quite disturbing. We’ve already reached one-degree C. I know you’ve heard a lot about this. I just want there to be better opportunities for people in the future and for my own community and, also, for the Narrabri Shire. Thank you for your time.

35 MR O’CONNOR: Thank you, Kerrie, for your submission. Next speaker.

MR BEASLEY: We have Dr Rod Anderson. Dr Anderson, are you there?

DR ANDERSON: Yes, I am.

40 MR BEASLEY: We can hear you, so go ahead.

45 DR ANDERSON: Thank you. Hello, Commissioners. I acknowledge the Gomeroi People of the Pilliga, the traditional custodians. I’m a medical doctor, living in Sydney, with a long interest in the environmental determinants of human health. I draw your attention to my detailed submission on the plentiful evidence for the severe health impacts of CSG mining overseas and, increasingly, in Australia. My submission also includes commentary on Santos’s well-documented record of

multiple environmental harms, which I, personally, have researched in detail. This is a highly dangerous technology to human health. Santos are simply not fit to be trusted with it. In its report, the department states, quote:

5 *The project would not result in any significant impacts on people –*

but produces not a shred of evidence for this assertion. On the contrary, there is much evidence for likely severe health harms. The major toxicity of the chemicals used should alone be cause for alarm. I have to say that the department's report is
10 biased. It says, quote:

70 per cent of the 22,282 anti-Santos submissions, in relation to the environmental effects statement, were form letters, due to a concerted campaign against the project.

15 But the department makes no comment about the 280 pro-Santos submissions. I have analysed these: 17 per cent were direct cut and paste from Santos; 38 per cent have less than two lines and were very similar; 35 per cent had less than half a page and were also very similar, ie, from the same dot points. So a total of 90 per cent
20 were almost certainly orchestrated. 16 per cent were admitted to being workers with Santos or the industry. 15 per cent admitted a pecuniary interest.

The reassurances in the department's report can mostly be summed up by two
25 paraphrases: "we will have world's best practice regulation," and, "the Narrabri project will be geologically unlike any other CSG projects, so it won't be subject to the same risks". Now, that latter idea is illogical and absurd. In relation to regulation, the 2019 professorial report, which I reference in my submission, found that, across the world, quote:

30 *The regulatory framework has been inadequate and unproven, and it has not prevented significant harms. Some are not preventable by regulation.*

And there's more detail about that in my submission. There is a huge health issue not mentioned in my submission, and that is the clear link between worsening
35 climate change and COVID-19, another cogent reason why new fossil fuel projects should not proceed. Climate change increases the chances of zoonotic disease; these dreadful viruses, which leap from other species to humans. Yellow Fever, Ebola and the corona family come readily to mind. Climate change is reducing the habitats of many species, forcing together species that were previously well separated, including
40 humans. So gas is not a transition fuel. It's at least as dangerous as coal and, in other countries, abundantly has competed with renewables for investment, delaying urgent transition, rather than bridging. The industry has a large and rising greenhouse footprint.

45 Just a few other brief comments. Santos says no fracking will be required. A big leap of faith required there, in my opinion; "Oh, sorry, we didn't anticipate fracking, but to get the last 40 per cent of the gas, we'll just need to frack a winsy little bit."

Water and food securities are, of course, huge issues for human health. The department thinks there will be minimal water drawdown from the aquifers and unlikely chemical contamination. Well, with 850 big long-lasting holes drilled through the aquifers to the coal seams, this departmental assertion also requires
5 further suspension of disbelief. In conclusion, the Santos Narrabri CSG project is to my mind, a very dangerous gamble for people of the region and for humanity generally. There are far safer and better alternatives. Thanks for your time today. I'll submit a copy of my speech. Thank you.

10 MR O'CONNOR: Thank you, Doctor. We look forward to receiving it. The next speaker, please.

MR BEASLEY: I think we have Phil Laird. Mr Laird, can you hear me?

15 MR LAIRD: Yes, I can hear you.

MR BEASLEY: Please go ahead.

MR LAIRD: Thank you. Good afternoon, Commissioners. Thank you for this
20 brief opportunity to object to the proposed Narrabri Gas Project on behalf of the Maules Creek Community Council. The MCCC has been very concerned for many years regarding the reckless track record of the Narrabri Gas Project, this proponent and other operators. And we see the potential precedent of the approval – of a potential approval determination could have a big impact on farms and environment
25 in Maules Creek, because it is included in field 1, which is decided only by the same company and is adjacent to this project.

As is typical of the establishment of the CSG industry in Queensland, the Narrabri Gas Field aims to set up its infrastructure and gain a foothold on public land and
30 expand from there, meaning that we are kind of out of the loop, physically. If the experience that we, at Maules Creek, have had with the coal industry serves as a guide, this proposal, if it's approved, will be followed by many modifications and expansions and unending management plan changes when the proponent can't meet its positions. All this, with no merit, fuel rights, though it's hard to see how this
35 project can be approved on merit.

Despite the reams of the EIS paper and the years of delay by the proponent to put forward the project, due to economic circumstances, we're none the wiser as to where the wells will be drilled, what the chemicals to be used are, how the salt will
40 be treated, and how the ground bore will be protected. We don't know the names of the contracting companies, the subsidiaries that will be used, or the work practices that will be undertaken. And this is normal for the oil and gas industry, as noted by the New South Wales chief scientist when she said that traditionally oil and gas companies have a higher risk appetite than other large industries, and they generally
45 take on their own risk; that is, they self-insure or under insure.

In my former role as the national coordinator for the Lock the Gate Alliance, I took a particular interest in insurance for coal seam gas. I've met with state and federal ministers, the head of the New South Wales EPA, the bureaucrat in the New South Wales EPA charged with implementing the chief scientist's recommendation

5 insurance underwriters, actuaries, lawyers, AgForce in Queensland, local farmers and insurance brokers and agents. I've written briefs, submissions, proposals, provided to the farmers on insurance, and have spoken about it in four states. I have done all this with the experience of my insurance for my own farm at Maules Creek.

10 When I wrote to my broker about whether I was covered by my Elders Farm Pack Insurance which is underwritten by QBE, they said, "CSG is not mentioned specifically in the policy, so read the Product Disclosure Statement." When I looked at page 76 of the PDS, there's an exclusion for general – sorry – there's an exclusion for damage caused intentionally or incurred by a person acting with your express or
15 inquired consent. For me, this seems to cover the CSG company such as Santos, who has a land access agreement with the policy holder. Basically, we'll be reliant on their indemnity, which is at their to have any kind of coverage for contamination from them.

20 What I can tell you from all my meetings and travels, is that the only ones who don't want to the chief scientist's recommendation line that requires environmental insurance security deposits and enhanced and – an environmental rehabilitation fund to be implemented, is the proponent and the government, and one suspects that this is due to the poor financial prospects of the project. Prefer to transfer the risk from the
25 project to the landholder and the environment, rather than have to internalise the cost.

The actuary that I spoke to told me that he would happy to design and market a policy. The underwriter told me that he was writing policies in Asia. The insurance company executives and broker said they'd be happy to sell the policies to the gas
30 companies, and the farmers said they'd be happy to be covered by the policies. In fact, one young libertarian federal MP from Victoria said to me, when I was in Canberra, "I love it when you come to me with a solution. It makes total sense." And even the lawyers agree.

35 The Maules Creek Community Council would like to point out to the IPC that we have legal advice provided by the EDA of New South Wales to indicate that insurance conditions can be attached to approval provided under the three Acts that pertain to this: the Environmental Planning and Assessment Act 1979, the Petroleum (Onshore) Act 1991, and the Protection of the Environment Operations Act 1997.
40 Indeed, the EPBC Act has provisions for insurance at a federal level.

The advice states – and we recommend the advice to the Commission and will supply the advice to the Commission – that the insurance conditions under all the Acts should be required in order to ensure consistency. Note, the chief scientist did
45 not recommend preparation of a health impact assessment prior to any report – any work being undertaken. And the MCCC believes that this is a key element of managing the risk to the community. We do not believe that a health impact

assessment should be ignored, and we ask, should this project have merit, the IPC include a health impact assessment as a key component of any project planned must be prepared for its owners to look. I thank you for having me speak today. I hope that you reject the proposal.

5

MR O'CONNOR: Thank you, Phil. I didn't understand correctly, you will send us a copy of that EDO advice about the insurance?

MR LAIRD: Absolutely.

10

MR O'CONNOR: Good.

MR LAIRD: I'll package up the federal advice, as well.

15

MR O'CONNOR: Thank you very much. The next speaker, please.

MR BEASLEY: The next speaker is Rodney Pryor. Mr Pryor, can you hear me?

MR PRYOR: I can.

20

MR BEASLEY: Please go ahead.

MR PRYOR: Hi. My name's Rod Pryor. I'm a resident of Mudjee. I strongly oppose this project. I want to be able to look my young children, when they grow up, in the eye, and say that I wasn't silent. I acknowledge the traditional owners of the land and I offer them my respect.

25

I live in an area that's affected by a lot of extraction industry, and I've had quite a bit of experience with them and their methods. The fossil mining companies know how to remove influences, bribe and con the community for a social licence. They often overstate the benefits and understate and downplay the risks. Santos has taken this to a whole new level, and the Department of Planning appears to be reading from the same page. So much so that you could be given – forgiven or be given the impression the department is working for Santos, rather than the greater good in the community.

30

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The department has misrepresented the facts, cherry-picked their findings and made some serious omission. The department's assessment claims the project is critical for the state's gas supply and that it will lower pricing. We have a project that has been approved at Port Kembla by Twiggy Forrest and some partners that will be online, I believe, by 2022, two years earlier than this proposal would be up and running. It's forecast to supply 75 per cent of the state's gas, not 50; so more. And at a lower price. If we can believe John Barilaro – I can quote him – he states:

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It is more cost effective to import gas than to source it locally.

And that's from the Financial Review, that quote. The department claims a huge economic benefit to the state. You've heard from a guy called Rod Campbell from The Australian Institute. He's done a cost-benefit analysis and he's presenting that to you, and he'll do a lot better job than I will at convincing you that there is no cost benefit in this project.

The promise of substantial jobs is a bit of a furphy. I've seen it from past experience that they always overstate that there will be lots of jobs, especially for locals. This project proposes 1300 jobs in the setup and 200 ongoing during the 20 years of production, yet Santos's own consultation Acil Allen says there will be a net loss of jobs, both locally and across the state in manufacturing. When continuing to read the department's assessment, alarm bells start ringing. I think it was David Quince that you had hear yesterday, that after doing a computer word check, so many subjective words and phrases come up with regularity; the "coulds", the "shoulds", "it's likely", "unlikely", and the phrase "that that be measured". There is little in the assessment that offers surety or positivity. A concluding statement in the assessment only reinforces doubt: "the project can", not "will" –

...can be designed to avoid and minimise impact.

This is not planning; this is a disaster in the making. The department makes constant reference to the Water Expert Panel, the WEP, and make the – who make the gobsmacking statement that they did not identify any land or water issues that was likely to resolve any significant impact on people or environment. This has been refuted by numerous submissions to you that go into detail about the environmental effects, the inadequacy of offsets, the effect on farmland, the effect on water, the drawdown on the aquifer, the possible contamination in aquifer. I'm not going to go into that.

What I'd like to go into is the department seems comfortable with a contribution of up to one per cent of the nation's greenhouse gas emissions that this project will contribute to, that we have no carbon credit left – sorry – we have leading climate scientists warning us that we have no carbon credits left to burn and all fossil fuels should stay in the ground if we want to avoid catastrophic climate change, an existential threat to the very existence of human beings and life on earth. I can think of no greater impact to the people and the environment than climate change.

Santos and the department claim the Pilliga is not a recharge zone; it is. They claim no connectivity between the aquifer, but if you read some of the GISERA report, the hydrology and the ecology connectivity report, it states that it is connected. So many inaccuracies, inconclusive proposals and admissions, lead me to have no confidence in the path of assessment. And before I run out of time, I want to highlight a glaring omission in the assessment. GISERA's analysis used by the department, concentrated on impacts to groundwater, with a range of 30 kilometres to the north of the project. They ignored impacts to the southwest of the project.

Commissioners, you may recall a presentation by Simon Pockley on the Monday, who has a property on the southwest edge of the Warrumbungles, who spoke of depressurisation of the aquifer that feeds the spring he is dependant on. Simon was – Santos cynically offered Simon a water tank. Between the project and Simon’s
5 property, why is – the heritage listed Warrumbungle National Park, that has numerous springs, which are drought refuges sustaining birds, insects and animals, some of which are endangered, is a unique groundwater dependant ecosystem; will Santos also provide them with rainwater tanks that in a dry climate will hardly sustain them anyway?

10 MR O’CONNOR: Rod, could you please wrap up.

MR PRYOR: Yes. I’m on the last paragraph, basically.

15 MR O’CONNOR: Okay.

MR PRYOR: There are more issues that I don’t have time to detail; the risks to the environment, etcetera, and community effects. Nearly every issue raised so far in my mind would stand alone to be reason enough to cancel this project. If the
20 Commission has not yet made up its mind to not approve this project, I can only hope those yet to speak will make you come to that decision. This project needs to be put back in its box and buried and stay buried as the CSG that lies in the ground beneath. Thank you.

25 MR O’CONNOR: Thank you, Rod. Next speaker.

MR BEASLEY: The next speaker is Ken Flower. Mr Flower, can you hear me? I think you might need to turn your microphone on.

30 MR FLOWER: There we go.

MR BEASLEY: Yes. You’re good to go now.

MR FLOWER: Okay. Well, thank you – am I ready to go?
35

MR O’CONNOR: You are.

MR BEASLEY: Yes.

40 MR FLOWER: Well, thank you, Commissioners, for hearing me this afternoon. So my name’s Ken Flower. I live in Narrabri. I’m a long-term resident of Narrabri. I have children here, and I have grandchildren here as well. By trade, I’m a civil engineer and a water engineer, and I’ve spent many years designing infrastructure to lower the impacts of humans on the environment and to lower the impacts of the
45 environment on humans. I’ve managed several organisations and businesses in Narrabri and globally, in both agriculture, local government and state government.

Over my career and my life, I'm absolutely passionate and active about environmental and social sustainability, with special emphasis on water. I am strongly in favour of the Narrabri Gas Project, and I came to that view because I think that this process has undergone a very rigorous political and scientific process.

5 As proven, there are triple bottom line benefits from this project. I think that there are significant environmental benefits using gas in combination with our coal and oil, which we now mainly use. I also think it's an important project, because we have a responsibility to extract some of the energy that we use from our area and not just import it from overseas. And I think that over the last 60 years, from what I can see
10 and read – I think Santos is an Australian company of 60 years, and more, experience in gas and oil, should be listened to, and they're – they're a – they're a good company. I also, having lived in Narrabri since the early-90s, I think there is majority community support for this project, and they see the benefits.

15 So going through a few points, the political process; I think the process is good. The government received an EIS from Santos. They put it through their government departments. They asked for submissions. All of the considerations and submissions were put back to Santos, who gave a reply. I think that's a robust process, and I think that it's been good. At the end of it, the Department of Planning has
20 recommended that there are positive benefits to the state, and I agree with their summation, having read most of the documents in the background.

The scientific process has been particularly good. I'm particularly pleased that, now with this, we have got the extra benefit of GISERA, who have really pulled out the
25 key points of concern of the community, both social and environmental, and they have researched those on an independent basis. And I know, listening to some of the other people submitting to this, that people say – some people who are really informed say that they are corrupted, and they are speaking with forked tongue. The fact of the matter is, knowing the people from GISERA and the way it's set up so
30 that it's independent, they are – it is actually a great benefit to the community that we've got this independent research on the key major issues in the science of this project. GISERA, I think, will form an ongoing role as this project folds forward, because if it is approved, there are ongoing problems that haven't been thought of, and to give the community comfort that there's independent science that's very well
35 worthwhile.

Environmental benefits: as a major agriculture production area, Narrabri Shire is a massive user of energy. If you cut off the coal and the electricity and the oil flow into Narrabri Shire, it wouldn't produce the agriculture that it does. It would be
40 subsistence farming again. So we are very big users of energy. So it's good now with – the benefit of gas is that carbon dioxide emissions are reduced. Gas is an energy source and modern generators produce 50 to 60 per cent less carbon dioxide per kilowatt produced than does coal. Diesel engine emissions of carbon dioxide are 30 per cent higher per kilowatt energy an hour. So there is a considerable benefit of
45 using gas over petrol, when you want to reduce your carbon dioxide footprint on the planet.

Nitrous oxides are another big problem with hot burning energy fuels, and nitrous oxides are toxic emissions from burning fuels and they cause considerable respiratory problems for humans and other. Gas vehicles produce less – 80 percent less nitrous oxide emissions than does petrol and 99 per cent less than does diesel.

5 Ever wondered why forklifts in buildings are run on gas and not petrol or diesel? Because it is such a clean fuel. So we've got less carbon dioxides produced per kilowatt hour and we've got less nitrous oxides than other fuels, so this has got to be good.

10 The Pilliga scrub is an incredibly important part of the northwest of North South Wales and, particularly, of Narrabri and the shires around it. One of the big benefits of having this project in part of the scrub is, when you've got people in there, you can get some land management benefits. And whilst the Narrabri Gas Project is said to have a one per cent footprint on that part of the scrub, one per cent in small areas
15 is quite a lot less than having one per cent taken out in a large single area for biodiversity. So all of these access tracks and people going regularly into the scrub in that project area can bring some major benefits.

I, particularly, have done some work on feral cats in the area; they are a major
20 problem. And it's not effective trap them at this stage, because you've got to visit a trap every day so that cats aren't trapped and inhumanely left for more than 24 hours. So I believe that this Narrabri Gas Project gives this community a real once in a lifetime chance to leverage Santos's access to the Pilliga on a regular basis so that we can trap cats and we can have a meaningful feral cat program, which can change
25 things for environmental - - -

MR O'CONNOR: Ken, could you please wrap up now.

MR FLOWER: Okay. So, in summary, I strongly support the project because of the
30 quality of the political and scientific process, we have independent research, the benefits of gas as an energy, and the significant majority of people in Narrabri who support the project. Thank you.

MR O'CONNOR: Thank you, Ken. Next speaker, please.
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MR BEASLEY: Next speaker is Colin Sagar. Mr Sagar.

MR SAGAR: Good afternoon, Commissioners. this as an objection to the
Narrabri I'm Colin Sagar. I'm a resident of Bermagui, far south coast of New
40 South Wales. Normally, I concern myself with local issues, however, on this occasion, the Narrabri proposal is so significant for New South Wales and beyond, that I have requested to speak. I've been privileged to visit the area, including Narrabri, the Pilliga, Warrumbungle, Siding Springs Observatory areas, and I have appreciated that opportunity.

45 There are many reasons I object to the proposal. Most have been covered by others or will get covered. These include aboriginal sites and landscape disturbance, soil,

water, flora, fauna, flora destruction and major fragmentation of habitat areas, and fragmentation of ecological system. They don't like to get chopped up, by little tracks that are 50 metres wide. Displacement of groundwater, disposal of heavy metal contaminated salt, fire potential from gas flare loss, the lack of any mandated domestic gas reserve, increased contributions to Australia's CO2 emissions. In this area, climate change means longer bushfire seasons and more intense seasons, and we've just had one heck of a beauty.

Also, I'm concerned at the government's failure to implement the recommendations regarding the project by the chief scientist. You can't expect us to embrace new proposals if they haven't even come up to the standard of the ones that have already been recommended.

I will focus on the light pollution generated by the proposed gasfield. The dark sky region of New South Wales is centred on its most important visual light observatory at Siding Spring. You've heard this before, part of anyway. The Siding Springs Observatory is extremely rare in that it can observe the entire southern hemisphere. It is critical to the scientific endeavours of Australian and international astronomers in the understanding – in our understanding of how the universe work. The observatory has 20 telescopes; over \$100 million invested in research equipment, public money. It attracts over 24,000 visitors each year and injects more than \$5 million directly into the local economy annually.

Light associated with gas development in the dark sky region has the potential to reduce the ability of the optical telescopes to do their work. Mount Stromlo, predecessor to Siding Springs, became redundant, precisely because of increasing light pollution as Canberra developed in the 1950s. The New South Wales department of Planning and Environment's own Dark Sky Planning Guidelines 2016 include gas flares, dust, lighting, and truck movements on gasfields as potential major emitters of light pollution. The proposed Narrabri gasfield project would develop 850 gas wells, all within the dark sky protection zone, all emitting light.

Importantly, the Narrabri proposal is only one of 11 exploration areas with the potential of perhaps thousands of wells and gas flares. The cumulative effects will also apply to other environmental impacts. These additional areas are likely to come online if the Narrabri field is permitted and thus creates a precedent. Ecologically sustainable development and sound land use planning must not be permitted to be overridden by progress, vested-interest groups, and their efforts to influence Australian political institutions and policies.

Presenters opposing the Narrabri project that you've heard have shown themselves to be exemplary citizens; sincere, well-informed, with a view to the long term picture. Clearly, their outrage at the adverse implication of the proposal is palpable. Their active engagement and wisdom, if ignored in favour of short-term vested interest, will be highly detrimental to Australian's confidence in governmental integrity and, ultimately, detrimental to Australia's democracy.

MR O'CONNOR: Colin, can you wrap up now, please.

MR SAGAR: Yes. In conclusion, it is clear that the DPIE has failed in its obligation to apply ecologically sustainable development and precautionary principles to the report on this gas proposal. The IPC is charged with an important task. It is faced with two undeniable truths: (1) that the Narrabri proposal is incompatible with established long-term planning principles and good practice, and it should be rejected on its merits as a standalone case; (2) the cumulative adverse environmental impacts of likely additional flow on gas fields in the district also make it imperative that the Narrabri Project is rejected. The IPC must reject this proposal. Thank you.

MR O'CONNOR: Thank you, Colin. Next speaker, please.

MR BEASLEY: Our next speaker is Jamie Condon. Mr Condon.

MR CONDON: Thank you, sir.

MR BEASLEY: Go ahead.

MR CONDON: Firstly, I'd like to thank the IPC commissioners and representatives for the diligent work you guys do. I'm confident that you'll make the right decision for the environment, the communities, the businesses, our country and its future; not an enviable task. Anyway, my name's Jamie Condon and I'm a proud fourth-generation Narrabri local, and I've heard a lot of great arguments for and against the Narrabri Gas Project, and this truly demonstrates the gravity of this decision and importance to everybody involved. I've watched the developments of the Narrabri Gas Project with extreme interest over many years and felt the – you know, as a Narrabri resident, a family man, you know, a business owner in the area, and a proud Aussie, that I needed to voice my support for the Narrabri Gas Project. I'm not saying that we rip in and drill at all costs, nor am I saying that we do nothing and bury our heads in the sand and not take advantage of what this project really means for a regional community.

You know, I agree, in principle, that we need to move towards renewable energy sources, and there's been lots of talk about that, and it's all very valid. But, you know, there's a long way for us to get to that point. And renewables is, you know, still a works away. So do we stall and hold, you know, all projects that don't fit in that renewable mould while we navigate this path. You know, that may not be the answer either. So there's still a lot to be learned and developed for this sector to seriously take over from, you know, our existing energy sources.

So what does it mean when I say that, you know, I support the project? I guess, I support Australian companies having a go and investing in long-term projects that will benefit our local economies and communities, rather than all the arguments that have been given for importing and all – you know, some good arguments were given too, but it's about creating jobs and opportunities for Aussies as well. And if there's

ever been a time to, you know, to look at that, you know, after the COVID is a good time to reflect on some of those things.

Now, I support the methodical approach. Santos has applied for this development.
5 And the patience and commitment shown today – I mean, this is a measure of a professional and diligent company that demonstrated their expertise and experience in what they do. I also support the opinions, reports and findings from the independent third parties that have assessed the mineral and environmental land and water impacts for the gas project. And I support the ability of Santos and modern
10 industry practices and our regulators and authorities and our technical engineering abilities to monitor and deal with any issues that may arise during the development and operations of the gas project, as we would with any other project of this magnitude.

15 Whilst I respect the opinions of locals, for and against, I do question the motives and the weight of all the negative opinions of people, you know, way outside of our region. You know, why do we have a – you know, why have an extensive and intensive EIS process and ignore the reports and findings from so many industry experts and independent professionals.

20 I also support the diversification of this project; you know, what this will bring to the region that's suffered so much through, you know, regional isolation, drought, and now pandemic. The Narrabri Gas Project will bring diverse income streams that would be – you know, would help ride through the droughts and the floods and the
25 variable commodity prices that massively impact, you know, our ag businesses and the communities within.

I support the ability of the Narrabri Gas Project to attract so much more opportunity – development potential to regional New South Wales. The industries and the
30 sectors that will benefit from this major infrastructure project, you know, they will vitally support Australian manufacturing, processing, food, logistics, energy, just to name a few. You know, these projects are long overdue for us out here in the bush, and, you know, it's our turn for a, you know, for a crack at some of this opportunity. You know, from a local perspective, it's not just about what this project delivers in
35 terms of jobs and opportunities, it's about setting the foundation and core resources for far more than what would be possible than if this didn't exist.

I support the prospect that we can continue to grow our local businesses and our families that rely on these regional businesses to, you know, to be sustainable. Now,
40 do I have an interest in Santos getting an approval for this project? I guess I do. Yes. And so does every other member of the community surrounding this nation building project. You know, the successful implementation of, you know, of this project going ahead will provide so much opportunity for direct and indirect growth for the region, and regional growth will see, you know, improved educational and
45 health facilities, diverse employment sectors, prosperity, confidence in our region, and once started, you know, this will continue to support itself. You know, coupled

with the Inland Rail, you know, these projects will attract an untold amount of investment and associated business opportunities to the area.

5 The Narrabri region needs this project to go ahead. Our country needs this project to go ahead, and I recall the same negative discussions and debates that echoed through the communities surrounding the, you know, development of the Queensland gasfields. And I could imagine the reaction now, you know, if Santos were to go back up there and shut down those operations in those communities. You know, towns have thrived on the back of these developments and shown great resilience and strength through some of the toughest times in our nation's history. You know, 10 where other towns outside the region, including ours, you know, have shrunk and suffered, you know.

15 So, again, I pledge my support for the Santos Narrabri Gas Project, the diversity it brings and the opportunities it will attract. The path forward is to set, you know, clear development and operational guidelines and enforce these, you know, not just react or reject opportunities because it's too hard or uncertain. You know, our country's future, Narrabri's future relies on this. Like every other major infrastructure project or development, there's always a level of risk - - -

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MR O'CONNOR: Could you wrap up now, please, Jamie.

MR CONDON: No worries, sir. And it's how this is managed and how it's monitored will define its success. And I believe this is the formula for measured and sustainable growth. So for this project not to go forward, you know, I feel that it's a bigger tragedy than, you know – than the “maybes” and the “what ifs” that have been 25 tabled in this discovery process. And I thank you for your time and the opportunity to voice my opinion on this very important project in Narrabri. Thank you.

30 MR O'CONNOR: Thank you for your comments, Jamie.

MR BEASLEY: We have Robyn Juteram on the phone. Can you hear me Robyn?

35 MS JUTERAM: Yes, I can. Thank you.

MR BEASLEY: Please, go ahead.

MS JUTERAM: All right. I live on the Bucketts Way in the Manning Valley. Thank you for the time to express my concerns and objections to this project. During 40 the last 10 years, we have had the experience of potential coal seam gas mining here on the mid-north coast with a trial well at Waukivory near Gloucester. During that time, with media reports and excellent research from local community groups, such as Groundswell Gloucester and Manning Clean Water Action Group, it led to a large number of the community growing concerned and wanting to know what would 45 happen to the toxic wastewater, the salts waste and the potential of leaking gas into our waterways. Eventually, that project was called off without any reassuring answers in regard to solutions for those risks.

These worrying risks are ongoing without property solutions for concerned people in the Narrabri region and the wider New South Wales. I have visited the area and had a guided tour through part of our national treasure of the beautiful Pilliga Forest. I was shown a site where the vegetation was destroyed by toxic water. I have been
5 involved in bush regen for over 10 years, and it certainly didn't look like that site was going to be regenerating anytime soon.

I listened to the concerns of our First Nations people when some Gomeroi women explained that the forest contains cultural and sacred sites, plus their connections to
10 the waterways of the Great Artesian Basin, which is important, as well, to our farmers, who I know are also expressing their concerns to the hearing. I also visited Siding Springs where it was explained that 850 gas wells will cause so much light pollution that it will adversely affect the telescopes used by companies and organisations, not only from here in Australia, but all around the world.

15 Information about ongoing coal seam gas mishaps are still being reported. Only last week, our former premier Bob Carr had an article in the Sydney Morning Herald on the 16th of July where he informs us that Reuters reported that EU sentinel satellites detected plumes of methane gushing from the Yamal Pipeline running from Siberia
20 to Europe. Also, a Harvard University study showed another leak in the Permian Basin. Bob Carr added, in fact, all along the steps of the supply chain, the latest research shows that gas leaks it is in its nature, but far more than assumed.

Evidently, the evidence is mounting that the gas industry has not been reported the
25 extent of methane it dumps into the atmosphere. Bob Carr's article caused me to think dangers of leaking pipelines, horrific fires, what would be the outcome. Are there any safeguards? I shuddered at the thought of those two events colliding.

With climate change having a more obvious effect on our environment these days,
30 the world is moving away from fossil fuels. In the same newspaper last week, Nick Toscano reported that Origin Energy wrote down the value of its business, flagging 1.2 billion due to plummeting oil and gas prices, plus the world's progressive transition from fossil, following similar moves by Europe's BP and Shell, also, Australia's Woodside Petroleum. It looks as though this is becoming a dying
35 industry, and while this project predicts 1300 jobs, the renewable energy industry, just recently, is predicting tens of thousands of jobs. To approve this project, putting at risk our Great Artesian Basin, Pilliga Forest, our First Nations people's sacred sites, our farmlands, Siding Springs Observatory, is not worth the risk to our people, our environment, or our economy. Thank you.

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MR O'CONNOR: Thank you, Robyn.

MS JUTERAM: Thank you.

45 MR BEASLEY: We now have Graeme Jessup. Mr Jessup, can you hear me?

MR JESSUP: Yes, I can hear you. Thank you.

MR BEASLEY: Please, go ahead.

MR JESSUP: Can you hear me okay?

5 MR BEASLEY: Yes. All good.

MR JESSUP: Okay. Thank you very much. Well, first of all, thanks very much for the opportunity to express my views on the project. I think it's wonderful to have the IPC open to so many people. And I apologise, I'm probably going to say things
10 you've heard before, but I want to say them again. My submission today is focused on the very important I see the IPC process has on changing the way we plan for a sustainable future in New South Wales. My name is Graeme Jessup, and I'm a member of the Climate Action Pittwater group in northern Sydney.

15 The world is changing in a way we planned for sustainable future in New South Wales. The world is changing fast, and we need to adapt our planning process so that it embraces the need to plan, not for unbridled growth but for a well-planned transition for a sustainable economy. There have been many detailed submissions which I've seen on this IPC hearing with the issues surrounding this project. And
20 I'm not going to rehash all of these today. But rather, I want to suggest that this IPC assessment is of vital importance for the ongoing capacity of New South Wales to plan for our collective future. I see it as an opportunity to break free from the shackles of an antiquated planning system and, instead, grasp beyond this opportunity that centres on a path to a sustainable future.

25 A rational look at what is proposed will quickly reveal that it is an impending environmental disaster. Riddled with uncertain risks, the operator Santos, by its previous history, in my opinion, is not fit to take it on. So in the five minutes I've got to comment on the project, I want to list the six most serious issues that I see.

30 First of all, the assessment has so far not adequately considered the need to address climate change issues. The whole world is being asked to leave fossil fuels in the ground and reach net zero emissions by 2050. So why on earth are we proposing to develop yet another gasfield at Narrabri.

35 Secondly, the risk of contamination to the bore water aquifer, although I appreciate that it is small, in my view, is simply not acceptable. On a visit to Coonabarabran in 2018 during the drought, I saw every dam's mature trees and vegetation dead or dying and some farmers existing on handouts. Without the bore water, this whole
40 place would just desiccate and die, so it's a very important issue.

Thirdly, Santos has shown itself not capable of managing the many risks involved. They have a poor history of complying with regulations, and have not even seen fit to undertake all of the 11 requirements set out in the Chief Scientist's report. Even
45 the New South Wales Government has shown themselves to be unwilling or unable to regulate similar projects. For example, at Redbank Creek in the Nepean Catchment, longwall mining is causing creek bed fracture, resulting in the loss of

stream water. Not surprisingly, the operator has been unable to rectify this problem, and the New South Wales Government has not seen fit to stop the operation. In many ways, this underground operation shines a light on potential problems at Narrabri.

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(5) it is not necessary to obtain the gas from Narrabri anyway. Recent progress in renewable energy generation coupled with storage is demonstrating that the transition to net zero by 2050 is possible without the need to develop new gas fields. The New South Wales Energy Minister Matt Kean recently called for submissions to provide renewable energy in the AEMO Renewable Energy Zone in western New South Wales. There was an extraordinary level of interest, some nine times the required capacity. The renewable energy industry is champing at the bit to provide a carbon-free network. And anyway, we can get the gas from elsewhere if we really need to.

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And lastly, the community quite clearly does not want this project to proceed. It has already had a huge impact on the wider Narrabri community, who have spent a lot of time fighting for their land, their water and their wellbeing. With these six objections, and many others that have been raised over the past few years, in my view the Department of Planning should have refused to entertain the proposal years ago. In my opinion, the fact that we're all here today making a valiant effort to prevent an environmental disaster represents a serious failure of our ability to plan for a sustainable future. It seems to me the Department is just thumbing its nose at the widely accepted call for urgent action on climate change and saying that it is someone else's problem. Nothing else could be further from the truth. Their role should be to plan for a better future.

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And finally, it is to the credit of the New South Wales Government that it has set up the IPC to cast an independent eye on what is being proposed. I see this assessment as a critical test of whether our democratic system of government can depart from an institutional and antiquated planning process and deliver a sensible outcome that will stand as a beacon for future sustainable development. I see this hearing as a real test of the IPC. I hope it can fulfil its vital role of ensuring our planning is in accord with community expectation. So in my view, the Narrabri Gas Project should not be approved. Thank you, commissioners, very much for listening.

MR O'CONNOR: Thank you, Graeme, for your presentation. Next, please.

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MR BEASLEY: Angela Burrows is the next speaker. Ms Burrows, can you hear me?

MS BURROWS: Yes, I can. My internet has been very unstable, so I hope you can hear me.

45

MR BEASLEY: Yes, we can.

MS BURROWS: Okay. Well, good afternoon, then, and thank you for this opportunity to speak against the Narrabri Gas Project, which has no social licence. I speak today from Kamilaroi land and acknowledge the Gomeroi people whose traditional lands severely impacted by the Narrabri Gas Project, to all elders, past, present and emerging. With deep respect and gratitude, I recognise the First Nation's spiritual connection with and care for this land over many millennia. I'm a retired honours science graduate, and I came to live in Sydney over 50 years ago. I am a wife, a mother, and a proud grandmother who cares deeply about the living Earth, biodiversity, all peoples, and generations to come.

10 You may be wondering why an older woman who grew up overseas would care so much about this Narrabri Project. I grew up in England, with its industrial smog and acid rain, so I'm acutely aware of the excesses of industry and the damage done by pollution and contamination of land and water by waste products. I've visited the beautiful, peaceful Pilliga Forest area on many occasions and know this precious area must be protected from a similar fate. The Narrabri gas proposal to develop an industrial gas field in a rich agricultural forest area is heartbreaking and completely unacceptable on so many levels, as you have already heard from many presenters.

20 Unfortunately, the report overlooks respect for the Earth. The Earth is sacred. Everything is interconnected. Humans are only on Earth for a short time, and it's our responsibility to care for it, not destroy it. We're completely dependent on the Earth and its water for our wellbeing, food and survival. We hold it in trust for future generations. We must learn from the Gomeroi people and respect the sacred nature of the Earth. They know this land intimately and understand the central importance and interconnectivity of the water, the lifeblood of the land, its rivers and streams above and underground, the ponds and soaks, springs and swamps. Water is life. They know how to live in this, the driest continent. We must listen to their wisdom.

30 Regardless of what the Department and Santos say, digging 850 gas wells in the Pilliga area would damage the integrity of the land and water systems and their biodiversity. Gomeroi culture, sacred sites, trees, wildlife and burial places must be protected. The sacredness of land and life itself is central to more recent faith traditions too. Pope Francis, in his letter entitled *Laudato Si, On Care for Our Common Home*, called peoples of the world to wake up and act before it's too late. And that was from five years ago. We must listen. Modern extractive industries have lost this understanding of sacredness and connection to the land.

40 The whole planet is in peril. Despite international recognition of the climate emergency and the imperative to cut carbon emissions from fossil fuels, the gas industry and politicians have been consistently and strongly misrepresenting the science, culminating in the National COVID Commission calling for a gas and pipeline-led recovery Gas is not a transition fuel. Methane emissions are 80 times more polluting than carbon dioxide during the first 10 years.

These are the most critical years to avoid reaching a tipping point and unstoppable climate damage. Gas use is falling. Prices are plummeting. Fossil fuel companies are writing down their assets. And we even hear stories of gas tankers cruising around the oceans trying to find somewhere to unload their cargo. The jobs
5 predicted are only short-term at best, and unlikely ever to materialise. Energy security will be provided by abundant clean, renewable resources which don't damage air, land or water. I draw attention to the One Million Jobs Plan presented by Beyond Zero Emissions - - -

10 MR O'CONNOR: Angela, could you please - - -

MS BURROWS: - - - and also to - - -

MR O'CONNOR: - - - wrap up now, thank you.

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MS BURROWS: - - - information I received today from the Climate Council about 76,000 Clean Jobs Plan. At this moment in history, then, a profound moral question faces us all. How do we live on this Earth so that it is preserved and its peoples cared for in an equitable way so that future generations are not sacrificed by our
20 present greed? This decision calls for courage and integrity. It is both an existential and a spiritual I must do everything I can now, or how could I face my grandchildren? I call on the Commission to reject the Narrabri Gas Project. And I have been deeply moved, almost to tears sometimes, by the powerful, articulate and poignant presentations from so many local people

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MR O'CONNOR: Angela, could you please wrap up now. We're running out of time.

MS BURROWS: Okay. One more sentence.

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MR O'CONNOR: Sure.

MS BURROWS: I appreciate their 10-year marathon of dedication, countless hours of painstaking voluntary research, meetings, surveys, and their distress at the threats
35 to water, the risk of contamination, their experiences with Santos, their worries and anxieties. I feel privileged and humbled to have heard all these stories. Thank you for listening.

MR O'CONNOR: Thank you, Angela, for your comments. The panel will take a
40 short break. We will be back at 4.50 pm. Thank you.

ADJOURNED

[4.40 pm]

45

RESUMED

[4.50 pm]

MR O'CONNOR: Good afternoon, and welcome back to this final session on day 3 of the public hearing. We will move to our next speaker.

5 MR BEASLEY: We have Sharon McCalman on the phone. Are you there, Ms McCalman?

MS McCALMAN: Yes, I am.

10 MR BEASLEY: Please go ahead.

MS McCALMAN: Thank you. Good afternoon, Commissioners. My name is Sharon McCalman, and I'm speaking to you today on behalf of the three generations of my family that live and work on our Warren property. We object to the Narrabri Coal Seam Gas Project. We were thrust into this issue in 2017 when the Western Slopes Pipeline was proposed, suddenly having to deal with the possibility of a high-pressure gas pipeline running through our property. The disruption, stress, lack of control over future family and business plans, the lack of public liability insurance, and what this means to financial institutions, and how do you run a large productive agricultural business without public liability insurance.

20 This coincided with the onset of three years of intense drought and an extreme lack of rainfall. With no surface run-off, our dams and tanks ran dry. For two years, we were totally dependent on our artesian bore for all our stock and domestic water. This drought highlighted the deeper implications of the Narrabri Coal Seam Gas Project, and the possible effects to our Great Artesian Basin water became paramount. After reading the recent New South Wales DPI assessment, these were our grievances: potential project expansion, depressurisation, jobs, energy security, and the decommissioning gamble. In the DPI assessment, the first five reasons for project support are based on the project size and immediate location. It states that:

30 *The Narrabri Coal Seam Gas Project is relatively small compared to other CSG developments in other jurisdictions such as Queensland, where there are over 6800 wells.*

35 But please remember the Queensland CSG industry began with one small gas field. Our concern of future New South Wales coal seam gas fields stems from the positioning of the Western Slopes Pipeline. We are above the Surat Basin, which is the major source of coal seam gas in Queensland. How can we not expect them to continue putting wells along the entirety of this pipeline? My next issue is depressurisation. Our bore is down 300 metres and relies on artesian pressure to bring water close to the surface. When discussing the Great Artesian Basin pressure and water extracted by the Narrabri project, the Water Expert Panel referred to the GAB Sustainability Initiative, which included the Cap and Pipe the Bore program, and operated from 1999 to 2018.

45 This program was funded jointly by the Australian Government, the New South Wales State Government and landholders, at a cost of \$102 million. Basically, the

Water Expert Panel implies that the water and pressure saved across the basin will offset that used in the Narrabri project, while also stating that water and pressure loss from gas extraction is localised. I would like to refer the IPC to the DPI 2018 evaluation of the Great Artesian Basin Sustainability Initiative, and the
5 contradictions made in the Narrabri Coal Seam Gas Project assessment. The DPI stated that:

*The sustainability initiative project would benefit landholders who would have an increasingly unreliable water supply, as water pressure within basin
10 aquifers decreases, particularly in times of drought, and with predicted climate change. Existing farms may be abandoned as economical supplies of water become unavailable. Local communities may experience job loss, social and economic disadvantage and declining populations, as water supplies become increasingly unsecure.*

15 In regard to jobs, the Great Artesian Basin lies below 25 per cent of New South Wales, supporting a population of 120,000 people. Can we risk the current jobs sustained by this water in agriculture, town businesses and tourism, all for the creation of a possible 200 Santos jobs? Please remember that New South Wales
20 agriculture is an 11.7 billion dollar industry. Finally, I just want to mention energy security. Australia is the largest exporter of natural gas in the world. 87 per cent of the gas produced in Queensland is exported. Santos is Australia's largest exporter of natural gas. Is Santos not the reason but it is not responsible for the shortage of an affordable supply of gas to Australians. This project is outdated, unnecessary and
25 extremely risky. Renewables are our energy security now and in the future. Thank you very much.

MR O'CONNOR: Thank you, Sharon, for your comments.

30 MS McCALMAN: Thank you.

MR O'CONNOR: Next speaker, please.

MR BEASLEY: Our next speaker is Nic Clyde. Mr Clyde, can you hear me?

35 MR CLYDE: Good afternoon, Commissioners. I can. Can you hear me?

MR BEASLEY: Yes. Please go ahead.

40 MR CLYDE: Excellent. Commissioners, here in Sydney, next door to a laneway called Gas Lane back in 1837, the company AGL began, with the aim of supplying light to the streets of Sydney. Four years later in 1841, the first lights in the country were powered by gas. Today, Commissioners, if you visit Gas Lane, you will find the street lights there are powered not by gas, but by electricity generated 100 per
45 cent by renewable energy. Commissioners, the age of fossil fuel gas is ending, which is why I want to talk to the three of you about the strategic need for this project.

In the final assessment report, the department wrote that the Narrabri Gas Project would put downward pressure on gas prices, but the downward pressure claim, as you know, did not survive the first morning of these hearings, with the New South Wales Planning Department conceding:

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...that we're certainly not saying in our assessment that the Narrabri Gas Project will reduce prices.

10 So that claim evaporated. Can we trust the other claims in the government's assessment report? For example, the department says Narrabri Gas is critical for energy security, but in January of this year, Premier Berejiklian bluntly said it's not. She said it was one of two or three options, including an already approved gas import terminal at Port Kembla, and a second possible terminal at Newcastle. She said one of those three things will satisfy our arrangements. I also want to challenge the
15 notion that more gas from absolutely anywhere is critical for energy security.

New South Wales currently uses gas in industrial facilities, businesses, gas fired power stations and households, but there are alternatives. For example, 1.4 million households in New South Wales use gas for cooking and heating. That might be true
20 now, but it won't be true in 2025 or 2030. Gas use will decline, and it will decline due to price, carbon policy and the increasing availability of cheaper alternatives. A report by energy consultants Northmore Gordon this year assessed how gas use in the Victorian economy could be replaced. Their study found that switching homes from gas to electric could lead to a 73 per cent reduction in annual residential gas demand,
25 and reduce the state's gas consumption by between 98 and 113 petajoules a year.

That's a bigger reduction than the entire proposed annual production at Narrabri of about 70 petajoules of gas. So we're told again and again that Narrabri could supply half of New South Wales current gas needs, but where, Commissioners, in the
30 department's assessment report, is any information at all about energy efficiency, demand side management versus new gas supply? Here in New South Wales, there's meant to be a planned transition to net zero carbon. Where's the department's assessment of what that means for the strategic need for Narrabri gas? Could we halve the amount of gas we use in New South Wales, Commissioners? Has
35 Mr Kitto's team even considered that?

Well, according to Northmore Gordon's analysis, Victoria could more than halve its gas consumption by 2030 through a handful of measures considered achievable in the next five to 10 years, with current technology and targeted economic support. So
40 those measures are things like replacing aging ducted gas heating systems, using electric heat pumped space heating in commercial buildings, adopting renewable energy powered process heating in industry. You get the idea. So it is possible and it's urgent. In fact, the New South Wales Climate Council has written to Premier Berejiklian to say that keeping warming to 1.5 degrees C would require net zero
45 emissions by at least 2050, with far less risk if that was 2040.

So the pressure to transition away from fossil fuels, including gas, is real. The ACT Government recognise this. As the second highest per capita user of gas in Australia, they have a policy to rapidly reduce emissions and, in particular, to reduce emissions from transport and gas. In fact, in a January 2020 press release, the ACT's Minister for Climate Change and Sustainability said:

The fact is natural gas is a polluting fossil fuel, and we must eventually phase it out in favour of clean energy.

10 And they are taking action. They're already beginning work on a plan to progressively disconnect households from gas, starting with 60,000 homes by 2025. That's their goal. Commissioners, we can phase out gas use, and we must, which begs the question, why is the New South Wales Department of Planning recommending a new fossil fuel gas project at a time when, in the words of Preston J,
15 what is now urgently needed in order to meet generally agreed climate targets is a rapid and deep decrease in greenhouse gas emissions?

Commissioners, someone has to do something. That someone is you. The reason you are determining this application is precisely because the ICAC and the New
20 South Wales Government have recognised that politicians and their departments cannot be trusted to make decisions about new fossil fuel projects, which is why they've delegated the decision to you. We are in your hands. You have an historically important opportunity. According to the ABC's Australia Talks social research, a massive 81 per cent of the Australian community do not think "more gas
25 should be in the mix". Commissioners, should you reject this proposal, I and the rest of the Australian people will be with you. The only people who will be complaining will be a handful of people in the gas industry, and The Daily Telegraph. So please do the right thing, say no to this proposal. The age of gas is finished. Please do the right thing. Thank you.

30 MR O'CONNOR: Thank you, Nic, for your comments.

MR BEASLEY: Can I ask you a question, Mr Clyde?

35 MR CLYDE: Certainly.

MR BEASLEY: The quote you just gave from Preston J was in relation to a proposed new coal mine. Do you say that even though this is a coal seam gas mine, that the same principle applies? I mean, the department is saying because – they're
40 asserting there will be half the CO2 emissions from gas that there are in relation to coal, that this will reduce CO2 emissions. Is that something you disagree with?

MR CLYDE: Well, Mr Beasley, I mean, look, the gas is used in industrial purposes, for home heating, manufacturing. There's a lot of uses for gas other than just
45 electricity generation, which is actually, I think Australia wide, it's only about a third of the Australian domestic gas use; I'm not sure what the figure is in New South Wales. So there might be a minor gain in terms of electricity generation, but you've

got to look at the overall mix. We have a target of net zero. We have the government's own Climate Change Council advising us that we should be really trying to hit that by 2040 to reduce our risk to climate.

5 And what Preston J said, it did relate to a coal project – Rocky Hill – so you're quite correct there, but he was presenting that evidence and, in fact, he accepted the expert evidence of Professor Will Steffen, which related to the global carbon budget. So what Professor Steffen said – and that evidence was accepted by Preston J, and he is described as Australia's most senior environmental judicial officer – the evidence
10 that he accepted was based on the carbon budget, and that was that no new fossil fuel project, no matter how small, no matter whether it's coal or gas, can be approved at this point in history. We really need to pare that back. So thank you for your question. It's an excellent judgment, and I would commend the commissioners to that document, and I believe you're going to hear from Professor Steffen and, indeed,
15 from the former chief scientist of Australia, Penny Sackett, who I believe people like that will basically reinforce what I have told you in my own, you know – you know, with my own personal style. I hope I've managed to communicate my

MR BEASLEY: No. You've been clear. Thank you.
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MR O'CONNOR: Nic, we may have a second question for you. Snow, have you got a question?

PROF BARLOW: Yes, Steve, thank you. Nic, I've just got a question, a
25 clarification. Is reference to that Victorian study of the potential benefits for the transition for gas to heating within domestic use – I'm not – basically gas to electricity for domestic use – will that be referenced in your submission?

MR CLYDE: Yes. Thank you for the question. I will include that in my written
30 submission. In fact, I think what I might do is amend the entire report. In reading that this morning, it really struck me that when Mr Kitto was speaking on Monday, and he was saying the department had devoted thousands of hours, I think he said, to examining the impacts of the Narrabri Gas Project on farmland and water in the north-west of New South Wales, it struck me, well, gee, it's a shame that his –
35 someone in his department didn't spend a week or two looking at what other jurisdictions are doing in looking to phase out gas, and substitute with energy efficiency, demand side management and renewable alternatives. Then we wouldn't be having this conversation about risking farmland in the Great Artesian Basin with Narrabri Gas.

40 MR O'CONNOR: Thank you.

PROF BARLOW: Thank you.

45 MR CLYDE: Thanks for your time, Commissioners.

MR O'CONNOR: Our next speaker, please. Bye.

MR BEASLEY: The next speaker is Mr John Simpson. Are you there, Mr Simpson? You might have to turn your microphone on, sir.

MR SIMPSON: Hello. Can you hear me now?

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MR BEASLEY: Yes. Yes. All good now. Go ahead.

MR SIMPSON: Okay. Good on you. You must be running ahead of schedule, are you? All right. Well, look, thank you very much for the chance - - -

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MR BEASLEY: It's hard to know at this stage.

MR SIMPSON: Beg yours?

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MR BEASLEY: It doesn't matter. Please go ahead. I'm sorry.

MR SIMPSON: No worries, sir. Look, thank you very much for the chance to speak, and thank you for your – the work, the time that you're putting in, and all the great work by your staff. I would like to start with the acknowledgement of the original - - -

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MR BEASLEY: Did we just lose him?

MR O'CONNOR: We might just take a short break until we can reconnect. Thank you.

25

MR BEASLEY: Can you hear me, Mr Simpson?

MR SIMPSON: Yes, I certainly can

30

MR BEASLEY: Okay. We had a bit of a hiccup there. Why don't you start again.

MR SIMPSON: All right. Well, I'll just thank you again for this chance to speak, and I just want to acknowledge the original custodians and pay tribute to their elders past, present and emerging. Look, we've had some great speakers for the first couple of days, so I'm not going to go into detail why this project doesn't stack up environmentally or economically. It's – I note that the words "ecology" and "economics" come from the same root in Greek, which is "oikos", which means household, so that's interesting. Look, I'm going to leave it to the others for the detail. Just a bit of background on myself, I've got a little five-acre property that I look after as a custodian, and I'm an organic farmer – organic gardener, sorry, in my part-time job. In a full time I'm in property maintenance. I've been trying to regenerate that land for 25 years, and I'm trying to put the carbon back in the soil where it belongs and not in the atmosphere. Just a bit of background, I spent about eight years in the Pilbara, and - - -

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MR BEASLEY: You may have muted yourself, Mr Simpson. Just see if your mic is on.

MR SIMPSON: Back again?

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MR BEASLEY: Yes. Got you now.

MR O'CONNOR: Yes. You just mentioned living in the Pilbara for eight years.

10 MR SIMPSON: Yes. Yes. I was in the mining industry up there. I was an AWU shop steward, and I listened to the AWU presentation the other day on my little speaker, and I can understand that, you know, that jobs are a great priority, but I'll speak to that later. I first got involved with this whole project when I saw – when I was listening to the ABC back in 2011, and Josh Fox was talking about the film
15 Gasland, and he was out here promoting it. I went over to the Gunnedah Town Hall and it was packed; there was about 400 people in there. I listened to that, and then in 2012, I went out to the Pilliga on a coal seam gas tour that actually Pat Schultz run, which I think you heard from her yesterday, and since – so nine years down the track, we've come to the crunch time, and you, the commissioners, now have it in
20 your hands as to whether to approve this project or not.

We've heard, as I said before, a lot of people speak. I've met some fantastic people over the last nine years. I visited Bentley when that campaign was on, went over to Gloucester, and I've been out to the Leard and Pilliga Forests – I've lost count of
25 how many times. And a lot of the people that have been speaking this week I've met, and, look, I don't live in the Pilliga, but as I said before, I've visited many times, and I've attended ceremonies that the Gomerai People have put on out there, and I sympathise with their concerns about what's going to happen to their country out there. I've also – one of the things that I listened to about the gas project was a
30 spill site which was purported to be about 10,000 litres from the Bibblewindi osmosis facility.

So on the gas tour, we actually went and had a look at that spill site, and being a gardener, I know what happens when you pour water on sandy soil, and for that to be
35 purported as 10,000 litres, the spill zone was enormous, and from that period on, I have great distrust for Santos. I believe that they're very – they're not to be trusted, if that's what they're saying happened there. I've visited many of the other spill sites, and they have not been rehabilitated in many, many years, and the last time we actually went out there, I wasn't able to get to the original spill site at Bibblewindi
40 because they had it roped off.

Look, there's a few other things that, as I said before, I wasn't going to go into the details. I'll leave that to others. There's going to be some excellent speakers tomorrow on the economics of this project. The 840,000 tonnes of salt which has to
45 be disposed of apparently within 150 kilometres of Narrabri, which Santos has not actually – they haven't come up with an answer for that one. That will be very interesting to see what they're going to do with that. The 37 billion litres of brine

water – 10,000 litres is what they said did that at that spill at Bibblewindi. I can only imagine what 37 billion litres of produced water and how they're going to dispose of that.

5 I've heard a lot of speakers this week talk about different things. One of the things that really concerns me is about well integrity, and we know that those wells will fail. I don't know how long before they will fail, but they're certainly not going to last 100 years, if they last 50, and that's going to be way, way beyond the life of this project, and Santos is going to be long gone, and there's going to be a lot of issues
10 out there with the well integrity. I don't think that - - -

MR BEASLEY: Could you wrap up now, please, John.

MR SIMPSON: Yes. Okay. Look, all I can say is I've been on the Sustainable
15 North West Reference Panel for 10 years, and I believe that we've got answers. We don't need this gas project. This book here, Drawdown, it's billed as "the most comprehensive plan ever proposed to reverse global warming", edited by Paul Hawken. It's peer reviewed. There's 80-odd solutions in there that we already have, and 20 are technologies that are on the cusp. All the jobs are in this – in here. It's
20 been costed out, and a friend of mine did some numbers on it. Believe it or not, if you got the 20 richest people on the world, they would only have to give 27 per cent of their assets and they would pay for everything in this book. There's more jobs in this book, and there's more hope in this book than I've ever seen before.

25 Look, just to wrap up, I read a book – I gave up television 10 years ago, since Big Brother came along – that was enough for me – and I started reading environmental books. One book I did read was written by David Yencken and Debra Wilkinson. It was called Resetting the Compass. It was produced, I think, in the nineties, and what
30 they said was that every technological development in the 21st century should have as a subsidiary but essential aim, if not primary aim, the reduction of energy and materials used for the protection of the diversity of life on the planet.

MR O'CONNOR: John, we'll have to draw it to a close there, I'm sorry. We've
35 just run out of time. We have other people we need to hear from.

MR SIMPSON: The elimination of – elimination harmful waste. You can't eat coal and you can't drink gas, and there's no jobs on a dead planet. Thank you very much.

MR O'CONNOR: Thank you, John. Next speaker.
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MR BEASLEY: The next speaker is Meredith Stanton. Can you hear me, Ms Stanton? I think you've got yourself on mute, Ms Stanton. Can you put your microphone on?

45 MS M. STANTON: Okay. That should work now.

MR O'CONNOR: Yes. That's

MR BEASLEY: It does, yes. We can hear you. Go ahead.

MS STANTON: Okay. Hi, yes. I'm objecting to the Narrabri Gas Project, and I'm sure most people have already said everything I might be likely to say, so I'm going
5 to make it a bit more personal. I'm currently on the committee of the Australian
Forests & Climate Alliance, and I think the project will have unacceptable impacts
on the Pilliga Forest by fragmentation of the landscape, with tracks and gas wells.
There's a number of threatened species that will also be impacted, and the impacts to
the climate from fugitive emissions and our use of gas in our energy economy is
10 really unacceptable in 2020, when we need to keep our carbon emissions and
greenhouse gas emissions at much lower levels than we have at the moment.

There's also unacceptable impacts on groundwater, dewatering of the coal seams,
15 toxic chemicals brought to the surface, which will also impact on biodiversity in the
forest, as we've seen in some of the previous coal seam gas water spills throughout
the Pilliga Forest, where the vegetation hasn't returned. These long-term impacts are
going to have economic costs for the future, and I've been out in the Pilliga. I've
been objecting to coal seam gas mining for – since 2012, when Metgasco attempted
20 to bring the mining of coal seam gas into the Northern Rivers. When I heard that it
was going to be expanded in the Pilliga, I just can't accept that our government
would allow that to happen, when most of the people in the north west rely on
artesian water, and this project will put that at risk.

The other personal side of that is that we've just been through a major drought, and I
25 live in a very high rainfall area in the Northern Rivers, and this year the impact of the
extreme drought really brought home to me how the north west will be impacted if
dewatering of the – or pollution of the Great Artesian Basin is threatened by this
project. The Pilliga Forest is one of the largest intact woodlands still existing in New
South Wales, and it's imperative that we protect these areas as intact biodiversity
30 hotspots, especially with the impacts of climate change going forward. Existing
businesses in the Pilliga and around Narrabri rely on their water, continued
protection of biodiversity and, of course, their dark skies. So I'm going to make this
fairly short and sweet. I don't think this project should go ahead. I'm aware that
98 per cent of New South Wales people object to the project, and I hope the IPC
35 panel also objects to the project, and thank you for the opportunity to speak. I really
hope the north west comes out on top in this one. Okay. Thank you.

MR O'CONNOR: Thank you, Meredith. Thanks for your comments. Next
40 speaker.

MR BEASLEY: Our next speaker is Gemma Viney. Can you hear me, Ms Viney?

MS VINEY: Yes.

45 MR BEASLEY: Go ahead. We can hear you.

MS VINEY: Great. Good evening, Commissioners. I'm a PhD student at the University of Sydney, and my research is centred around understanding the social impacts of resource extraction in rural Australian communities. In undertaking this research, I've conducted interviews with individuals from Narrabri and surrounding regions, as well as those impacted by subsidiary developments related to the project. These conversations have been framed around what impacts these community members anticipate, should the project should go ahead, as well as the existing and cumulative impacts which are already being experienced, both as a result of this project and the eight existing or approved projects across the region.

In this short presentation, I would like to highlight some of the key findings regarding both existing and prospective social impacts. However, I'll also be submitting to the commission a report detailing this study, containing direct quotes from participants, which I think are essential to fully appreciating what and why these communities have been fighting for nearly a decade. This research is ongoing. However, one of the most significant findings thus far has been that all participants indicated that they were already experiencing social impacts as a result of this project in some form, and one participant had even moved from the region as a result of the existing pressures.

There were two key manifestations of these existing impacts, which were raised by every participant, these being impacts to community bonds, and the degree to which respondents had already experienced loss as a result of the Narrabri Gas Project. The first and most consistently raised issue by respondents was the shift in the social dynamic of the community, and the damage caused to personal relationships due to the contentious nature of this project. Respondents described feeling the loss of relationships with neighbours and friends, within social circles and community groups, and the overwhelming feeling of being unable to speak about this project for fear of the breadth of the divide between those in favour and those opposed. Importantly, there was also a consistent fear that this social divide would only become more prominent, should the project be approved.

Another key impact raised by participants was the sense of loss – lost time, lost livelihood and the cumulative effect that has on both mental and physical health. All participants indicated that they had had to invest significant time and research in order to properly understand a project which for several of whom had essentially become their neighbour over the last decade. A consistent finding was that participants felt misled, at times intentionally, by both the department and by Santos regarding the full scope of the project and its impacts. This meant individuals had had to take time away from family, friends and even work in order to investigate questions which the proponent failed or refused to answer.

Social impact guidelines dictate that communities should have access to decision-making systems, and this necessitates transparency in order for communities to be in a position to provide informed consent. Participants instead described mental and physical stresses resulting from time and energy spent investigating the validity of the proponents' claims. Finally, I would like to address some of the issues raised by

participants regarding their concerns for what might happen, should the project be approved. Participants described fearing for their capacity to remain on their land and in their region, land on which many of whom intended to retire and hope to one day pass on to the next generation. This was due to both the threat to regional
5 environmental security and, thus, livelihoods for those in the agricultural sector, and the increase in social tensions that already permeate the region.

Social impact scholarship has documented the extent to which resource extraction has fractured Australian communities, and can ultimately lead to the death of small
10 rural towns. This is what is at risk both in Narrabri and in particular for the many smaller communities in the surrounding region. I ask that in your determination, you consider the threat this project poses to the social and environmental security of the region, as well as the damage that has already been done. Thank you.

15 MR BEASLEY: Gemma, can I just ask you was your – the research you’re talking about, was that – sorry, the study you’re talking about, is that part of your PhD?

MS VINEY: Yes. Yes. So it’s – my PhD is looking at social impacts as a form of
20 environmental justice, but this research has been coincided to work with the – towards this IPC hearing as well.

MR BEASLEY: And what was the size of your study group for Narrabri?

MS VINEY: A small - - -
25

MR BEASLEY: Sorry?

MS VINEY: Yes. Quite a small study group. It’s a qualitative study, so it’s
30 around 10, 10 people.

MR BEASLEY: Right. Okay. Thank you.

MS VINEY: Thank you.

35 MR O’CONNOR: Thanks for updating us on your research, Gemma. Next, please.

MR BEASLEY: Yes. We’ve got Nick McClure is the next presenter. Mr McClure,
are you there?

40 MR McCLURE: Yes, mate, I’m here.

MR BEASLEY: Yes. We can hear you. Go right ahead.

MR McCLURE: All right. Thank you very much for the opportunity to express my
45 support for the Narrabri Gas Project. Our company, Specialised Civil Services, is a local family-owned and operated civil construction company. We perform civil works for the local agriculture industry, local government and coal mine and coal

seam gas industries. We were first introduced to Santos in 2012, when they were acquired by Eastern Star Gas, and since then we've been involved in numerous tendered projects for them. In the initial stage of working with Santos, we were required to overhaul all of our environmental and safety management systems, and we had always performed our contracts with this in the forefront, but working for Santos meant that we had to raise our standards to comply with their corporate company policies.

This, at the time, was definitely challenging. However, it has resulted in this high standard now becoming our baseline, and is incorporated into our core business. Further to this – sorry, further to this, Santos' standard in construction and engineering is second to none. Working for Santos can be challenging, but ultimately rewarding when it comes to completing their construction works. I can stand here today and state from firsthand experience that their overall operational standards are to the highest we have ever seen. My support for this project is based on more than being a local contractor to Santos. We employ 30 full-time staff in our operations, and this number needs to definitely be extended when we consider how many people benefit from this employment.

Of the 30 people we employ, there are approximately 50 children and grandchildren in these families, and these children attend all our local schools and, in turn, it could be considered that one full-time teacher is then employed, based off just this number that we employ. Overall, there are 110 non-direct people that all benefit from the employment of our 30 men and women and that we did not care

MR BEASLEY: Nick – Nick, we're just – sorry, Nick, we're not able to hear you properly at the moment.

MR McCLURE: And we are only

MR BEASLEY: We'll come back to you. Hello. Our next speaker is Amanda Jones. Can you hear me, Ms Jones?

MS JONES: Yes.

MR BEASLEY: I can hear you, happily, so please go ahead.

MS JONES: My name is Amanda Jones. I grew up, live and work in Coonabarabran. I have five children and run a small local business. Our workshop maintains farming equipment. We have already been affected by bushfires and a severe drought, that has brought a financial crisis to us and our farming community, that, like the rest of Australia is now being affected by a virus. It seems that if there is a crisis, we have not been immune from it. My partner and I own Gideon Park, 600 Indian Lane, Baradine. We purchased this land in 2017 as 2000 acres of already established forest that sustains and protects our native wildlife. We intend to use our land for carbon credit farming because we see this as a long-term sustainable project that encourages independence on our healthy forest ecosystem.

We run alongside other neighbouring projects who rely on the groundwater for tourism and commercial trade in livestock and crops. Groundwater is essential to keep our forest for the majority of the year, as we are in a highly variable rainfall area, with severe drought spanning years. My view is that carbon credit farming, tourism and commercial trade are not projects that can coexist with the coal seam gas project. Coal seam gas brings risks to my land and to me as a community member. The position of my land is between national park forest and state forest. This puts us at risk. The contaminated water from the CSG project will affect our rivers and groundwater and cause all the surrounding forest to die.

Our area is prone to bushfires due to hot and dry weather conditions. The fire risk from the gas field combined with such a large area and quantity of dead forest would make my land a dangerous place to live on and visit. The most recent drought we experienced and are still experiencing, has caused the surrounding communities to rely solely on groundwater because there was no more above-ground stored water that was usable. It would be an absolutely dire situation for our town and our farming community to have that underground water source contaminated. These issues alone would see the end of my forest, and would end my small business, so what can I do to protect my land from the likely water contamination and fire? Underground water is shared. There is no such thing as my water and your water. Contamination is shared. You cannot tame the fire as we have seen, and there's no such thing as a fireproof fence.

Fly-in and fly-out workers will also create a false local economy. Why would a coal seam gas project care about a false local economy? To them, it wouldn't even be a risk, but to me, as a small business owner, it's absolutely important to be an active and long-term community member. The coal seam gas is a non-sustainable energy, and selling for it a low price is designed so that international customers will not try to migrate to sustainable options. This is the same pattern we've seen from other powerful countries for more than 40 years, and we know it devastates international economies and our own. This CSG project destroys the forest, not only that cleans the air locally, but joins forests all over the world to collectively offset the issues of our world's cities and industrial pollution.

To accept coal seam gas mining would just leave me waiting to be a victim. I don't agree with the mining of coal seam gas to go ahead. I'm saying no, but not only am I saying no, I'm asking that the decision-makers consider that the common person, that is, the landowner, the community member, the family, remain the stable authority when making impacting decisions. Every day we make a present, conscious decision to care, maintain and live alongside nature. I do not see that a coal seam gas mining project has any such values, and fining Santos does not fix the issues caused by them. The coal seam gas project simply cannot coincide with our future, our town, our way of life. We hand this land on to the next generation, who believe that sustainable energy is our future. Keep Australia clean and beautiful. Thank you.

MR O'CONNOR: Thank you, Amanda. Next speaker, please.

MR BEASLEY: Mr McClure, are you on the phone now?

MR O'CONNOR: We will just take a short break while we try and reconnect with Nick. Hello, Nick, are you there?

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MR McCLURE: Yes, mate. I'm here now. I do apologise about the muck-up, mate.

MR O'CONNOR: Not a problem. You go right ahead.

10

MR McCLURE: All right. I'll pick up where I left off. So of the 30 people we employ, there are approximately 50 children and grandchildren in these families. These children attend all our local schools and, in turn, I believe it can be considered that one full-time teacher is then employed based off this number. And overall, there

15 are 110 non-direct people that all benefit from employment of SCS of our 30 men and women. Now, if we are just one representation of just one contractor for Santos, multiply this number to get a further idea of the flow-on effects that this industry will bring to the economy of our shire. I reject the common statement that we do not care for the local environment, and we're only supporters for financial reasons.

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How could I possibly support a development that damaged the future of our shire, and ultimately the future of my family? Narrabri is fortunate to have diverse industries that can all coexist. Maintaining diversification means a stable and consistent economy and a strong future for our town. I'm a proud Narrabri local, and

25 I would not put my name to anything that I did not fully believe in, as reputation in a small regional community is absolutely everything. Santos has allowed our business to grow and develop into a financially stable business which, in turn, means that my brother and I and our family can stay in Narrabri and one day raise our children here. I've witnessed so many of my mates that have left our town to further their careers

30 and business opportunities elsewhere. However, having a reputable company like Santos in our shire means that we have a future here in Narrabri. Thank you very much for your time, and letting me speak, and I support the Narrabri Gas Project.

MR O'CONNOR: Thank you, Nick, for your comments about your business. It's good to know.

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MR McCLURE: Thank you very much.

MR O'CONNOR: Bye. We have one more call we're just waiting to get online now.

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MR BEASLEY: Mr McLaughlin, can you hear us? Can we hear you, Mr McLaughlin? Can you hear me?

MR McLAUGHLIN: Yes, I can. Yes.

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MR BEASLEY: Yes. Go ahead.

MR McLAUGHLIN: Yes. So my comments are with Australia already being one of the world's biggest exporters of LNPG, it doesn't seem in ours or the world's best interests to be continually doubling down on energy sources that have clear empirical negative consequences. We should be putting our country in a position where we
5 have a coherent energy policy that is putting lifespans on existing carbon infrastructure and energy sources, transitioning to alternative fuel services that enable us to leave a carbon economy in an orderly manner. We should not be giving planning permission to new hydrocarbon projects like this. Thank you very much.

10 MR O'CONNOR: Thank you very much, Noel.

MR McLAUGHLIN: Cheers. Bye, bye.

MR O'CONNOR: Okay. That brings us to the end of day 3 and the various
15 submissions that we've heard. I'd like to thank all the speakers for their engagement in this consultation process, and remind everyone that a transcript of today's proceedings will be made available on the commission's website. Our studio at Crossing Theatre in Narrabri, which was set up to ensure residents across the region, with limited or no home internet access, could present to us via the video link. That
20 studio has now closed. Thank you to our team on the ground in Narrabri, to Kym, Helen, Callum and Fran for all their hard work over the past couple of days. Just a reminder that the commission will accept written comments from the public up until 5 pm on Monday, 10 August 2020. These comments can be sent to the commission via post, email or through the Have Your Say portal on the commission's website.
25 We'll be back for day 4 of this public hearing as scheduled at 9.30 am tomorrow morning. Until then, thank you and good evening.

MATTER ADJOURNED at 5.37 pm UNTIL THURSDAY, 23 JULY 2020