

# **Wrong way, go back**

**Why the Gas-fired Recovery plan will fail to reduce energy prices or create jobs but will increase emissions**

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Submission

**Mark Ogge**

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Level 1, Endeavour House, 1 Franklin St

Canberra, ACT 2601

Tel: (02) 61300530

Email: [mail@tai.org.au](mailto:mail@tai.org.au)

Website: [www.tai.org.au](http://www.tai.org.au)

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# Summary

What is the Federal Government's Gas-Fired Recovery Plan? At its most base level it appears to be a series of taxpayer subsidies to export-focused gas companies.

The process for allocating these subsidies is secretive, with no publicly available criteria, or even policy documents answering many of the basic questions of what the plan is aiming to achieve and how.

The gas-fired recovery is plagued by a lack of transparency or accountability. The original National COVID-19 Coordination Commission (NCCC) first proposed a gas led recovery program in early 2020. Following widespread concerns about conflicts of interest due to Commissioners connections to gas companies, the Government changed the body into an advisory board making it part of cabinet. This raised further concerns that its advice would be subject to cabinet confidentiality making it off-limits to public scrutiny, a concern reinforced by the Government's refusal to release conflict of interest declarations by the Commissioners citing again cabinet confidentiality.

What the Government has told us is that the gas-fired recovery will increase jobs and lower gas prices, the latter of which will then increase jobs in industries like manufacturing. However, none of these claims stack up.

The gas-fired recovery will create few jobs, particularly in the near term when jobs are most needed. The gas industry is a tiny employer, employing only 0.2 percent of the Australian workforce, and it is one of the least labour-intensive industries in Australia. It employs around 0.4 people per million dollars of output, compared to more than 10 jobs for the equivalent output in health or education. If creating jobs is the objective, supporting virtually any other industry would be more effective.

Nor will this plan lower gas prices. The production costs of gas from the "strategic gas basins" the Government has announced as part of the plan are \$7-10 per gigajoule (GJ) with transport costs of at least \$2 GJ to deliver the gas to the east coast gas market. This means the delivered costs are upwards of \$9 GJ. This is well above the cost of gas from fields currently supplying Australian customers, well above current gas prices, and at least as high as pre-Covid contract prices of \$8-11 GJ.

Because these subsidies will not reduce gas prices, they will not create additional jobs in flow-on industries like manufacturing. In fact only around 1 percent of Australia's manufacturing workforce works in gas intensive manufacturing industries where gas makes up over 3 percent of input costs, and more than half of those workers are in Western Australia which does not have high gas prices (thanks to a gas reservation policy).

Furthermore if the Government was prepared to subsidise the production and transport of gas from these basins to compete or beat costs at existing gas fields, there is no policy preventing gas companies from pocketing the production and transport subsidies and continuing to charge Australians the same or higher prices than they currently do.

If the Government was really serious about reducing energy costs for Australians, it would assist households and businesses to switch from gas to electricity and speed up the roll-out of renewable energy.

Electricity is cheaper than gas for heating, cooking and hot water, often even when the cost of replacing gas appliances is taken into account. Electricity is also cheaper than gas for many industrial processes, and if the government could assist companies with the costs of electrification, many companies would lock in permanent ongoing energy cost savings. Renewable energy is cheaper than gas for electricity generation even when the cost of firming and additional transmission is included.

The one sure effect of these gas-fired subsidies, if they succeed in opening up new gas basins, will be to increase emissions fuelling further climate change. The new “strategic gas basins” are very large potential sources of greenhouse gas. The Beetaloo Basin alone could result in an additional 100 million tonnes (Mt) of greenhouse gases being pumped into the atmosphere, 40 million tonnes of which would occur in Australia, increasing Australia’s emissions by 7.8 percent annually based on 2020 levels. Recent analysis has found the total emissions potential from the five gas basins identified as part of the Gas-Fired Recovery plan is 1602Mt of carbon dioxide equivalent (Mt CO<sub>2</sub>-e). This is over three times Australia’s current annual emissions of 513Mt CO<sub>2</sub>-e.

Although the Gas-Fired Recovery Consultation Note only requests submissions on the NGIP and Wallumbilla Gas Hub, the Australia Institute’s submission and recommendations cover the Gas-Fired Recovery as a whole, including the strategic gas basins.

This is because scrutiny of these issues is important for the public interest, and there has been no opportunity for input on other aspects of the Plan despite hundreds of millions of dollars of subsidies to gas having already been allocated for development in the Beetaloo Basin.

The Australia Institute’s **recommendations** go to the heart of the problem – poor process.

The government should set undertake a credible and thorough policy development process that begins with explaining and clarifying what the Gas-Fired Recovery plan aims to achieve. This should include: whether it will reduce energy prices, including gas prices, and if so, how and by how much; how this plan compares to other ways energy prices could be lowered such as by expanding renewable energy, energy efficiency and electrification; and how jobs will be created, how many, when and at what cost compared to alternative job creation programs.

The government should release all commissioned and internal work for the gas-fired recovery including the National Gas Infrastructure Plan (NGIP) and the Wallumbilla Hub. This includes the NCCC Manufacturing Taskforce plan commissioned from Boston Consulting Group. This should also include tender documents and contracts for modelling and other work being commissioned from consultants.

The government should direct the Climate Change Authority to model and publish the greenhouse gas implications of the Gas-Fired Recovery, in particular, of opening up five new “strategic gas basins.”

The government should publish the criteria for assessing government subsidies to pipelines and other gas infrastructure under the NGIP. Finally it should also explore and implement policies to ensure taxpayer subsidies that reduce gas production costs (such as exploration, road and pipeline subsidies) will be passed on to Australian customers through lower gas prices, and not simply passed on to shareholders. That is if the gas-fired recovery is meant to be more than a series of taxpayer subsidies to export-focused gas companies.

# Introduction

The Australia Institute welcomes the opportunity to submit its views on the Government's Gas-Fired Recovery Plan.

The consultation note on the National Gas infrastructure Plan (NGIP) and the Wallumbilla Hub invites "stakeholders" to provide their views on gas projects that should be "considered" in the NGIP and how "barriers and risks" to submitters' preferred projects, "or gas infrastructure developments more broadly...could be overcome". This reads like an invitation for only gas company "stakeholders" to submit projects they would like to have subsidised.

This approach to public policy and funding is flawed. It is not just gas companies that are stakeholders in this plan. All taxpayers are stakeholders because the Government has already announced hundreds of millions of dollars in taxpayer subsidies for the gas industry, ostensibly as part of the Gas-Fired Recovery Plan, and appears intent on providing even more subsidies through the NGIP.

Ordinary Australians, whether taxpayers or not, are stakeholders because opening up these vast new gas basins will drive more climate change which will continue to have devastating impacts on all Australians.

The Government first began discussing plans for a "gas fired recovery" from the pandemic in April of 2020, with Minister Taylor quoted as saying;

Gas already plays an essential role in energy reliability, but it could be even more important through a gas-fired recovery. We want to have demand for affordable gas matched with priority upstream investment opportunities to bring gas where it is needed and provide economic stimulus.<sup>1</sup>

In March 2020 the Government appointed a National COVID-19 Coordination Committee to advise the Government on measures to assist with the recovery from the pandemic.<sup>2</sup> Several members including the chair had close ties to the gas industry while the Committee

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<sup>1</sup> Foley (April 2020) *Gas to fire economic recovery and capitalise on cheap oil prices*, <https://www.smh.com.au/politics/federal/gas-to-fire-economic-recovery-and-capitalise-on-cheap-oil-prices-20200421-p54lw8.html>

<sup>2</sup> Prime Minister of Australia (25 March 2020), National COVID-19 Coordination Commission, <https://www.pm.gov.au/media/national-covid-19-coordination-commission>



advocated for gas to play a central role in the Covid recovery, giving rise to concerns of conflicts of interest.<sup>3</sup>

A report by the Commission's manufacturing taskforce headed by Andrew Liveris, a former Dow Chemical executive and current board member at oil giant Saudi Aramco remains secret, but a leaked draft report was widely ridiculed for suggesting subsidies of gas infrastructure could reduce gas prices to \$4 GJ. One of Australia's leading analysts told clients Mr. Liveris' remarks deserved a gold medal for the most stupid comment ever made publicly.<sup>4</sup>

Paul Bastian, the then national secretary of the Australian Manufacturing Workers Union (AMWU) and a member of the Commission's manufacturing taskforce claimed gas "completely dominated" discussions about the Covid-19 recovery, and that there had "been an overemphasis in public discussion about gas and not enough discussion about [other] opportunities that are presented and the need to focus on renewables". He also warned that such an approach risked Australia ending up with stranded fossil fuel infrastructure.<sup>5</sup>

In September 2020, a Prime Ministerial media release outlined a number of measures for the "gas fired recovery" including unlocking "five key gas basins". The Government has said that work will start with the Beetaloo Basin in the Northern Territory, followed by the North Bowen and Galilee basins in Queensland. These are the only three basins that have been named by the Government, but the plan has also been reported in the media to include the Gunnedah Basin in New South Wales and the Perth Basin in Western Australia.<sup>6</sup>

Then in the 2020-21 Federal Budget released in early October 2020, the Government allocated \$52.8 million over four years for the "JobMaker Plan- gas fired recovery." This included \$28.3 million to "establish five Strategic Basin Plans to accelerate gas development in priority geological basins". There was a further \$13.7 million to the gas industry dominated <sup>7</sup> Gas Industry Social and Economic Research Alliance (GISERA) and \$10.9 million

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<sup>3</sup> Morgan and long (May 2020) *Coronavirus economic recovery committee looks set to push Australia towards gas-fired future*, <https://www.abc.net.au/news/2020-05-13/coronavirus-recovery-to-push-australia-towards-gas-future/12239978>

<sup>4</sup> Williams (September 2020) *'I'll buy your house': Andrew Liveris ridiculed over gas price claims*, <https://www.theaustralian.com.au/business/mining-energy/ill-buy-your-house-andrew-liveris-ridiculed-over-gas-price-claims/news-story/2d683b9765fe9314a76ca617c2c7f928>

<sup>5</sup> Morton (June 2020) *Gas 'completely dominated' discussion about Covid-19 recovery, commission adviser says*, <https://www.theguardian.com/australia-news/2020/jun/13/gas-completely-dominated-discussion-about-covid-19-recovery-commission-adviser-says>

<sup>6</sup> Crowe (September 2020) *Morrison to back construction of new gas-fired power station*, <https://www.smh.com.au/politics/federal/morrison-to-back-construction-of-new-gas-fired-power-station-20200914-p55vks.html>

<sup>7</sup> Ogge (2018) GISERA and conflict of interest, <https://australiainstitute.org.au/report/gisera-and-conflict-of-interest/#:~:text=A%20fundamental%20conflict%20of%20interest,impacts%20of%20unconventional%20gas%20development.>

to “implement a sequenced plan to reset the East Coast gas market, including developing a National Gas Infrastructure Plan, work to establish Wallumbilla as the Australian Gas Hub.”<sup>8</sup>

Since then the Government has released a “Beetaloo Strategic Basin Plan” for the Beetaloo Basin, the first of its five strategic gas basins. This includes the announcement of \$50 million of taxpayer’s money to pay 25 percent of the exploration costs for fracking companies in Northern Territory’s Beetaloo Basin, and a further \$174 million to upgrade roads used by their fracking trucks.<sup>9</sup>

The latest stage of the gas-fired recovery is the “stakeholder consultation” calling for submissions on the NGIP and establishing a gas hub at Wallumbilla which is the subject of this Australia Institute submission.

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<sup>8</sup> Australian Government (2020) Budget 2020-21, *Budget Measures, Budget Paper No. 2, 2020–21*, [https://budget.gov.au/2020-21/content/bp2/download/bp2\\_complete.pdf](https://budget.gov.au/2020-21/content/bp2/download/bp2_complete.pdf)

<sup>9</sup> Australian Government, Department of Industry, Science, Energy and Resource (2021) *Action 3: Enabling infrastructure*, <https://www.industry.gov.au/data-and-publications/unlocking-the-beetaloo-the-beetaloo-strategic-basin-plan/action-3-enabling-infrastructure>

# All about subsidies to the gas industry

Much of the rhetoric about the gas-fired recovery is about helping manufacturers and creating jobs as part of the recovery from the Covid-19 pandemic.

In fact, it has little to do with either. When we look beyond the name to the substantive measures being taken by the Government as part of the gas fired recovery plan, we are largely left with a raft of subsidies to export-focused gas companies.

So far, as noted above, the Government has announced \$50 million of taxpayer's money to pay 25 percent of the exploration costs for fracking companies in Northern Territory's Beetaloo Basin, and a further \$174 million to upgrade roads for their fracking trucks.<sup>10</sup>

This appears to be just the tip of the iceberg. In its "Beetaloo Strategic Basin Plan" the Government has flagged its intention to make more subsidies available to gas companies operating in the Beetaloo Basins under the Northern Australia Infrastructure Fund (NAIF).<sup>11</sup> The Beetaloo Basin is just the first of five "strategic gas basins."

The other main elements of the plan appear to be the National Gas Infrastructure Plan (NGIP) and the development of a gas hub at Wallumbilla. The current consultation on the NGIP seems to take the form of an invitation for fracking companies to propose gas infrastructure they would like subsidised. Minister Taylor has suggested NGIP subsidies could take the form of new pipelines and other gas infrastructure through 'underwriting projects or establishing a 'special purpose vehicle' with a capped government contribution.'<sup>12</sup>

NGIP could learn from the poor process used by Minister Taylor for his failed Underwriting New Generation Investment (UNGI) program.<sup>13</sup> It sought registrations of interest including potential proposals from industry before the UNGI program was even designed and, without

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<sup>10</sup> Australian Government, Department of Industry, Science, Energy and Resource (2021) *Action 3: Enabling infrastructure*, <https://www.industry.gov.au/data-and-publications/unlocking-the-beetaloo-the-beetaloo-strategic-basin-plan/action-3-enabling-infrastructure>

<sup>11</sup> Australian Government, Department of Industry, Science, Energy and Resource (2021) *Action 3: Enabling infrastructure*, <https://www.industry.gov.au/data-and-publications/unlocking-the-beetaloo-the-beetaloo-strategic-basin-plan/action-3-enabling-infrastructure>

<sup>12</sup> Parliament of Australia, Hansard (October 29, 2020) *Angus Taylor MP Ministerial Statement- Energy*, [https://www.aph.gov.au/Parliamentary\\_Business/Hansard/Hansard\\_Display?bid=chamber/hansardr/401a8e85-65d0-4704-8cfc-ef351b7cb8b6/&sid=0012](https://www.aph.gov.au/Parliamentary_Business/Hansard/Hansard_Display?bid=chamber/hansardr/401a8e85-65d0-4704-8cfc-ef351b7cb8b6/&sid=0012)

<sup>13</sup> Swann and Merzian (April 2020) Problems with UNGI, <https://australiainstitute.org.au/report/problems-with-ungi/>

formal guidelines or a formal Request for Proposals (RfP), launched the program with a shortlist of industry projects including five gas power stations. It has now been three years since UNGI was announced and its only achievement to date is a current investigation by the Auditor General.<sup>14</sup>

Rushing into a program to support the gas industry could act as a poor investment for taxpayer funding. Recovery money spent subsidising large gas companies operating in Australia is likely to go largely to these companies' profits with little return to Australians.

As shown in Table 1 below, few oil and gas companies operating in Australia pay any tax at all in Australia, despite many having multi-billion incomes from the sale of Australian gas.

**Table 1: Income and company tax paid by selected oil and gas companies in Australia 2018-19**

Company	Total income \$	Taxable income \$	Tax payable \$
ARROW ENERGY	338,460,793		0
CHEVRON	11,986,037,153	900,117,295	0
CNOOC	1,768,560,195		0
CONOCOPHILLIPS	1,592,059,105	29,214,658	0
EXXONMOBIL	13,293,222,200		0
INPEX	514,779,678	18,928,641	5,645,305
KOGAS	667,825,073		0
ORIGIN	15,894,540,753	634,652,763	179,955,804
PETRONAS	1,107,168,028		0
QGC	3,985,352,867		0
SANTOS	4,360,612,850	8,328,076	0
SINOPEC	370,722,823		0
WOODSIDE	8199321733	1991703841	0

Source: ATO (2019) *Corporate Tax Transparency*, <https://www.ato.gov.au/business/large-business/corporate-tax-transparency/>

<sup>14</sup> Mazengarb (July 2020) Taylor's stalled UNGI and Snowy 2.0 included on watchdog's audit hit list, <https://reneweconomy.com.au/taylors-stalled-ungi-and-snowy-2-0-included-on-watchdogs-audit-hit-list-51308/>

# Secretive

It is difficult to understand what the Gas-fired Recovery Plan actually is. There is no report or policy document outlining basic questions that should be asked before hundreds of millions, perhaps billions, of taxpayers' money is spent. These questions should include:

- What the plan aims to achieve and how it will achieve these aims?
- Whether it will reduce energy or gas prices and if so, how and by how much?
- How this plan compares to other ways energy prices could be lowered such as by expanding renewable energy, energy efficiency and electrification?
- How the Gas-Fired Recovery Plan will create jobs, how many and when?
- Whether there are more effective ways of creating jobs, such as funding more labour-intensive industries including health, education and manufacturing?
- What the greenhouse gas emissions impacts are?

Accountability and transparency are always essential, but particularly so when large amounts of taxpayers' money are being handed to private companies. Even more so when concerns have been raised about potential conflicts of interest arising out of the connection between those advising the Government to subsidise the gas industry with the gas industry itself.<sup>15</sup>

The largest single element in the federal budget allocation for the gas-fired recovery is developing five "Strategic Basin Plans." However, the five basins do not appear to have been listed anywhere. The Prime Minister's media release mentions the Beetaloo, Galilee and North Bowen basins, and two others (Perth and Narrabri) have been reported in the media<sup>16</sup> but do not appear on any official government publications as far as The Australia Institute been able to establish.

Decisions on subsidies to the gas industry appear to be coming from the National COVID-19 Commission Advisory Board (NCC). This board was originally the National COVID-19

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<sup>15</sup> As discussed below, the National COVID-19 Commission Advisory Board has been made part of the Department of Prime Minister and Cabinet, and as such is part of the Government. Conflicts of interest have been raised on a number of occasions: Butler and Morton (May 2020) *Covid commission boss Nev Power steps back at gas company amid conflict of interest concerns*, <https://www.theguardian.com/australia-news/2020/may/23/covid-commission-boss-nev-power-steps-back-at-gas-company-amid-conflict-of-interest-concerns>

<sup>16</sup> Foley (April 2020) *Gas to fire economic recovery and capitalise on cheap oil prices*, <https://www.smh.com.au/politics/federal/gas-to-fire-economic-recovery-and-capitalise-on-cheap-oil-prices-20200421-p54lw8.html>

Coordination Committee (NCCC) which attracted controversy for the potential conflicts of interest of members due to connections to the gas industry.<sup>17</sup>

Following these controversies, the membership of the body was broadened and it was renamed the National COVID-19 Commission (Advisory Board) and made part of the cabinet process. As the Prime Minister explained:

It won't be an external agency, it will work within government and can form part of the cabinet deliberative processes – which is an important innovation.”<sup>18</sup>

This allows officials to argue that because the advice is part of cabinet deliberations, it is subject to cabinet confidentiality and off-limits to the public, as they did in refusing to release the conflict of interest declarations of members of the commission.<sup>19</sup> As such the advice the Government is relying on to give hundreds of millions, perhaps billions, of dollars in subsidies to the gas industry is likely to remain secret and more likely to be shielded from Freedom of Information (FOI) requests.

On top of subsidies to the exploration and production activities of fracking companies, the Government is also planning to subsidise pipelines and other gas infrastructure through the NGIP.

Again, the process is secretive, with only one and a half pages of public information on the consultation process.<sup>20</sup> It appears the Boston Consulting Group (BCG) has engaged to undertake modelling for the NGIP. A contract has been signed between the Department of Industry, Science, Energy and Resources and Boston Consulting Group<sup>21</sup> for “Model Delivery, Consultancy Services and Reports,” however the tender and the contract are secret and there is no publically available information on exactly what the BCG is being engaged to undertake. Questions in the March 2021 Senate Estimates hearings revealed that the BCG contract for east coast gas modelling was the largest consultancy contract awarded by the

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<sup>17</sup> Knaus (June 2020) *Just one of six Covid commission members volunteers to release conflict-of-interest declaration*, <https://www.theguardian.com/australia-news/2020/jun/12/just-one-of-six-covid-commission-members-volunteers-to-release-conflict-of-interest-declaration>

<sup>18</sup> Murphy (July 2020) *Morrison broadens membership of Covid-19 commission but says advice to remain off-limits to public*, <https://www.theguardian.com/australia-news/2020/jul/27/morrison-broadens-membership-of-covid-19-commission-but-says-advice-to-remain-off-limits-to-public>

<sup>19</sup> Murphy (July 2020) *Morrison broadens membership of Covid-19 commission but says advice to remain off-limits to public*, <https://www.theguardian.com/australia-news/2020/jul/27/morrison-broadens-membership-of-covid-19-commission-but-says-advice-to-remain-off-limits-to-public>

<sup>20</sup> Australian Government, Department of Industry, Science, Energy and Resources (2020) *Gas Fired Recovery Plan, National Gas Infrastructure Plan, Consultation note*, [https://consult.industry.gov.au/energy/gas-fired-recovery-plan/supporting\\_documents/GasFiredRecoveryPlanConsultationNote.pdf](https://consult.industry.gov.au/energy/gas-fired-recovery-plan/supporting_documents/GasFiredRecoveryPlanConsultationNote.pdf)

<sup>21</sup> Austender (2020) *Contract Notice View - CN3736786*, <https://www.tenders.gov.au/Cn/Show/755633a2-c347-4655-a2e9-ab55f51c54aa>

Department of Industry, Science, Energy and Resources (DISER) in the last financial year, and that overall the BCG was awarded \$9.3 million of consultancy contracts.<sup>22</sup>

That the BCG was responsible for NCCC's manufacturing taskforce report<sup>23</sup> remains secret. As noted above, a leaked draft report recommended massive subsidies to the gas industry and was widely ridiculed.<sup>24</sup>

It is not apparent why the Australian Energy Market operator (AEMO) doesn't undertake this modelling given its exemplary work on the Integrated System Plan (ISP) modelling that provides an actionable whole-of system plan for Australia's power system the electricity network and that it also operates the east coast gas network.

AEMO's ISP process is highly transparent and accountable, providing thorough stakeholder engagement, multiple iterations, public draft reports and opportunities for public comment. In contrast, the NGIP process has no Terms of Reference, no criteria and no standards provided in relation to either emissions, affordability or markets.

It is important to understand for instance whether any modelling includes alternatives to increasing the gas supply including electrification, renewable energy and energy efficiency, as it is likely that in many circumstances these would be more effective ways of reducing energy costs for Australian households, businesses and industry. If the assumptions or the modelling itself remain secret, Australians will never know whether hundreds of millions of dollars in subsidies have reduce or increased energy costs and emissions.

AEMO has now abandoned its plan to model a "gas led recovery" scenario as part of the ISP because less than half the participants at the consultation workshops felt it would be useful, and even the fracking company Origin didn't believe it was plausible.<sup>25</sup>

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<sup>22</sup> Hansard (25 March 2020) Senate Economics Legislation Committee, Thursday March 25 2021, pp 37-38, [https://parlinfo.aph.gov.au/parlInfo/download/committees/estimate/85f0495a-3de2-4d5a-9a6d-c8f30fdd1075/toc\\_pdf/Economics%20Legislation%20Committee\\_2021\\_03\\_25\\_8631\\_Part.pdf;fileType=application%2Fpdf#search=%22committees/estimate/85f0495a-3de2-4d5a-9a6d-c8f30fdd1075/0000%22](https://parlinfo.aph.gov.au/parlInfo/download/committees/estimate/85f0495a-3de2-4d5a-9a6d-c8f30fdd1075/toc_pdf/Economics%20Legislation%20Committee_2021_03_25_8631_Part.pdf;fileType=application%2Fpdf#search=%22committees/estimate/85f0495a-3de2-4d5a-9a6d-c8f30fdd1075/0000%22)

<sup>23</sup> Commonwealth of Australia (2020) *Official Committee Hansard Senate Select Committee on COVID-19, Australian government's response to the COVID-19 pandemic, Thursday June 4, 2020*, [https://parlinfo.aph.gov.au/parlInfo/download/committees/commsen/bae35510-5f64-42b5-9217-1fcb8e6b7de6/toc\\_pdf/Senate%20Select%20Committee%20on%20COVID-19\\_2020\\_06\\_04\\_7752\\_Official.pdf;fileType=application%2Fpdf#search=%22committees/commsen/bae35510-5f64-42b5-9217-1fcb8e6b7de6/0000%22](https://parlinfo.aph.gov.au/parlInfo/download/committees/commsen/bae35510-5f64-42b5-9217-1fcb8e6b7de6/toc_pdf/Senate%20Select%20Committee%20on%20COVID-19_2020_06_04_7752_Official.pdf;fileType=application%2Fpdf#search=%22committees/commsen/bae35510-5f64-42b5-9217-1fcb8e6b7de6/0000%22)

<sup>24</sup> Morton (May 2020) *Leaked Covid-19 commission report calls for Australian taxpayers to underwrite gas industry expansion*, <https://www.theguardian.com/environment/2020/may/21/leaked-covid-19-commission-report-calls-for-australian-taxpayers-to-underwrite-gas-industry-expansion>

<sup>25</sup> Mazengarb (March 2020) *AEMO reconsiders plan to model 'gas led recovery', after idea panned by energy market*, <https://reneweconomy.com.au/aemo-abandons-plan-to-model-gas-led-recovery-after-idea-panned-by-energy-market/>

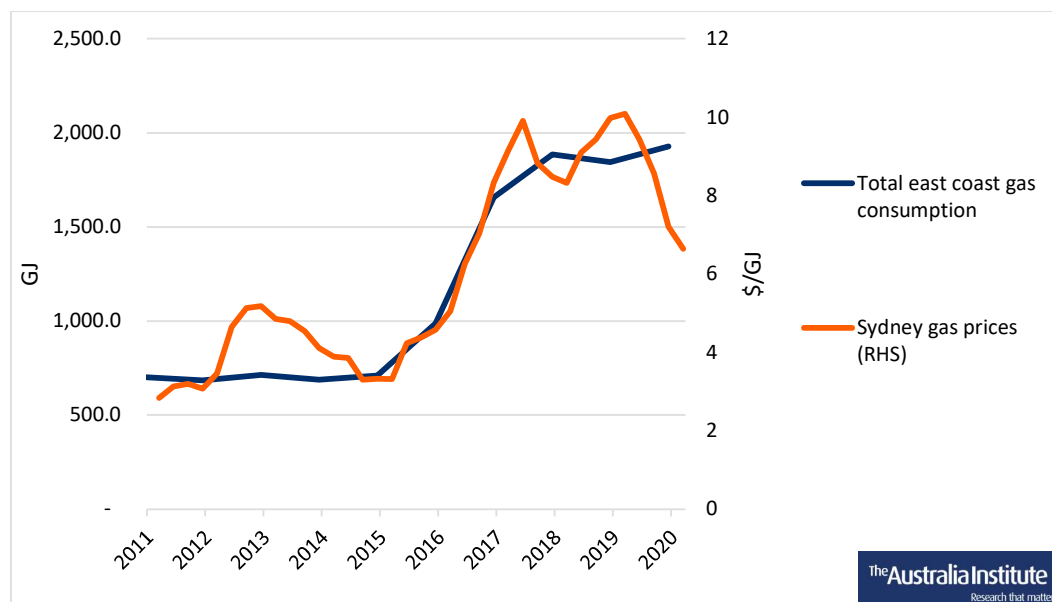
# Won't reduce gas prices

In the Prime Minister's media release announcing the Gas-Fired Recovery, he says that "gas will help re-establish a strong economy as part of the Government's JobMaker plan, making energy affordable for families and businesses and supporting jobs as part of Australia's recovery from the COVID-19 recession." He also says it will "reset the east coast gas market and create a more competitive and transparent," and even that it 'will deliver more Australian gas where it is needed at an internationally competitive price.'<sup>26</sup>

However, it is notable that Prime Minister doesn't actually say it will reduce gas prices.

This is perhaps because such a claim is difficult to justify when, as shown in Figure 1 below, gas prices in eastern Australia have tripled over the last five years (orange line) despite gas production tripling (blue line).

**Figure 1: East coast gas production vs gas price**



Source: AEMO (2020) GSOO 2020, Figure 1 - Gas consumption actual and forecast, 2010-39, all sectors, Central scenario (PJ) <https://aemo.com.au/en/energy-systems/gas/gas-forecasting-and-planning/gas-statement-of-opportunities-gsoo>, AER (2020) STTM- Quarterly Prices, rolling three quarter average, <https://www.aer.gov.au/wholesale-markets/wholesale-statistics/sttm-quarterly-prices>

<sup>26</sup> Prime Minister of Australia (15 September 2020) *Media Release, Gas-Fired Recovery, Prime Minister, Minister for Energy and Emissions Reduction, Minister for Resources, Water and Northern Australia*, <https://www.pm.gov.au/media/gas-fired-recovery>



The ACCC has attributed the recent fall in domestic gas prices to record low global oil and gas prices, and the pandemic, not government policy.

Record low oil and gas prices observed over 2020, due to existing market trends and exacerbated by the pandemic, have brought some welcome price relief for commercial and industrial (C&I) users in the domestic east coast gas market. Doubts about how long these improved conditions can last, however, are weighing heavily on the minds of C&I users.<sup>27</sup>

However, even if we opted for hope over experience, the truth is that no matter how many new “strategic gas basins” the government opened up, gas prices are unlikely to fall. One reason is that the cost of producing gas from these basins is too high. Gas companies prioritise lower cost gas fields, and because governments have allowed, and continue to allow them to export vast quantities of our lower cost gas, now only increasingly expensive gas remains.

AEMO publishes production cost estimates of gas from various gas basins in Eastern Australia and the Northern Territory as part of its annual Gas Statement of Opportunities report (GSOO). As shown in Table 2 below, AEMO’s 2020 GSOO estimates of the production costs of undeveloped gas resources in the three “strategic gas basins” identified so far by the Government (in light blue) are all around \$7-10 GJ. The Gunnedah Basin that has been reported in the media as another “strategic gas basin” is also shaded in blue, and also falls within the same range of production costs.

All of these basins are remote and none are connected by pipeline to the east coast gas market. Gas from the new basins will require new pipelines to connect them to the existing pipeline network. The gas will require transport over both these new pipelines and existing pipelines to deliver it to demand centres. The costs of the new pipeline are unknown, and the routes the gas will take on existing pipelines vary depending on the location of the basin. However examining AEMO pipeline tariff cost assumptions for existing pipelines, and allowing for realistic tariffs for new pipelines make it reasonable to assume the transport costs from any of these basins to Australian customers will almost certainly be at least \$2 GJ, and in most cases considerably more.<sup>28</sup>

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<sup>27</sup> ACCC (January 2021) *Gas Inquiry 2017-2025, Interim report*, <https://www.accc.gov.au/publications/serial-publications/gas-inquiry-2017-2025/gas-inquiry-january-2021-interim-report>

<sup>28</sup> AEMO (2020) GSOO 2020, Supply Input Data Files, Cost assumptions workbook, Pipeline Transmission Tariffs, <https://aemo.com.au/energy-systems/gas/gas-forecasting-and-planning/gas-statement-of-opportunities-gsoo/2020-gas-statement-of-opportunities>

This means the delivered cost will be well over \$9 GJ, well above the cost of gas currently supplying Australian customers and above recent contract gas prices given by the ACCC of around \$6-9 GJ.<sup>29</sup>

**Table 2: Production cost estimates of contingent and prospective resources (“strategic gas basins” highlighted in blue)**

Project / Supply Region	Production cost AUD/GJ
Bass Basin	6.84
Cooper Eromanga Basin	7.63
GBJV & Turrum & Kipper	7.43
Longtom & Sole	6.51
Moranbah	6.91
QLD CSG - Arrow Energy (excl. Moranbah)	7.55*
QLD CSG - BG / QCLNG	7.39*
QLD CSG - GLNG	9.44*
QLD CSG - ORG / APLNG	7.93
QLD CSG - Other	9.38
Gippsland Basin - Other	7.28-9.87
Clarence-Moreton Basin - Other	
Gunnedah Basin - Other	
Galilee Basin - Other	
Adavale Basin - Other	
Otway Basin - Other	
Central Petroleum Amadeus	
Falcon Oil & Gas (Georgina Basin)	
Cash Maple	
Beetaloo Basin	
Gloucester Basin	
Coxco Dolomite	

The Australia Institute  
Research that matters.

\*Not including appraisal, acquisition & exploration costs

Source: AEMO/Core Energy and Resources (November 2019) *Gas Reserves and Resources and Cost Estimates Eastern Australia, NT*, [https://aemo.com.au/-/media/files/gas/national\\_planning\\_and\\_forecasting/gsoo/2020/final\\_reserves\\_contracts\\_cost\\_report.pdf?la=en](https://aemo.com.au/-/media/files/gas/national_planning_and_forecasting/gsoo/2020/final_reserves_contracts_cost_report.pdf?la=en)

<sup>29</sup> ACCC (August 2020) *Domestic gas users paying too much*, <https://www.accc.gov.au/media-release/domestic-gas-users-paying-too-much>

Santos assumes the transport cost of Gunnedah Basin gas from its Narrabri project to Sydney is \$1.50 GJ,<sup>30</sup> meaning the delivered cost will be \$8.78-\$11.37 GJ.

AEMO estimates the North Bowen Basin centred on Moranbah has a production cost of \$6.91 GJ. As shown in Figure 2 below, the proposed Moranbah-Wallumbilla Pipeline that would deliver gas from the North Bowen Basin goes directly to the Gladstone export terminals, meaning the gas is unlikely to reach the east coast markets.

**Figure 2: Proposed Moranbah-Wallumbilla/Gladstone Pipeline**



Source Extract from: ACCC (January 2020) Gas Inquiry 2017-25, Interim report January 2021, Figure 1, P.13, [https://www.accc.gov.au/system/files/Gas%20Inquiry%20-%20January%202021%20interim%20report\\_1.pdf](https://www.accc.gov.au/system/files/Gas%20Inquiry%20-%20January%202021%20interim%20report_1.pdf)

However, even if it did, for it to reach the southern states it will still face very high transport costs as it needs to be transported first to Wallumbilla, then to Moomba by the South West Queensland Pipeline (SWQP), to Sydney via Moomba Sydney Pipeline (MSP), or Adelaide via the Moomba to Adelaide Pipeline (MAPS) or to Victoria through the Eastern Gas Pipeline

<sup>30</sup> Acil Allen Consulting (6 August 2020) *Report to Santos (Eastern) Pty Ltd, Narrabri Gas Project ; Update on Economics*, p.23, [https://www.ipcn.nsw.gov.au/resources/pac/media/files/pac/projects/2020/03/narrabri-gas-project/correspondence/santos-submission/200810-ngp-economics-report\\_acil-allen.pdf](https://www.ipcn.nsw.gov.au/resources/pac/media/files/pac/projects/2020/03/narrabri-gas-project/correspondence/santos-submission/200810-ngp-economics-report_acil-allen.pdf)

(EGP) via Sydney. Delivery to any of these markets of these options will add over \$2 GJ in transport costs.<sup>31</sup>

As shown in Table 3, the production cost for gas from the Gunnedah Basin that includes Santos' Narrabri Gas Project is far higher than the cost of gas from the Cooper Basin that is currently supplying most of NSW's gas. As such more expensive Narrabri gas is likely to displace lower cost Cooper Basin gas, locking NSW consumers into more expensive gas and freeing up the lower cost gas from the Cooper Basin for Santos to export.

**Table 3: Comparison of Cooper & Gunnedah Basin delivered cost to Sydney**

	Production cost (Core Energy/ AEMO)			Transport cost	total
	2p developed	2p undeveloped	2c		
<b>Cooper Eromanga</b>	\$2.44	\$6.36	\$7.07-\$7.12	\$1.12	\$3.56-\$8.24
<b>Gunnedah</b>			\$7.28-9.87	\$1.50	\$8.78-\$11.37



Source: Core Energy (2019) *Gas Reserves and Resources and Cost Estimates Eastern Australia, NT*, p.11 [https://aemo.com.au/-/media/files/gas/national\\_planning\\_and\\_forecasting/gsoo/2020/final\\_reserves\\_contracts\\_cost\\_report.pdf?la=en](https://aemo.com.au/-/media/files/gas/national_planning_and_forecasting/gsoo/2020/final_reserves_contracts_cost_report.pdf?la=en), Acil Allen Consulting (6 August 2020) Report to Santos (Eastern) Pty Ltd, Narrabri Gas Project ; Update on Economics, p.23, [https://www.ipcn.nsw.gov.au/resources/pac/media/files/pac/projects/2020/03/narrabri-gas-project/correspondence/santos-submission/200810-ngp-economics-report\\_acil-allen.pdf](https://www.ipcn.nsw.gov.au/resources/pac/media/files/pac/projects/2020/03/narrabri-gas-project/correspondence/santos-submission/200810-ngp-economics-report_acil-allen.pdf), AEMO (2020) GSOO 2020, Reserve Cost Assumptions, Supply Input Data Files, <https://aemo.com.au/en/energy-systems/gas/gas-forecasting-and-planning/gas-statement-of-opportunities-gsoo>

Even if the Government was prepared to massively subsidise the production and transport of gas from these new gas basins to reduce the cost of producing and delivering gas to the east coast gas market, there is no reason to believe that the gas companies would lower the price. Gas companies can simply continue charging Australian customers high prices and pocket the subsidies.

There is no requirement for gas companies to pass on savings from subsidised exploration, production and pipelines to customers at lower prices. Under the new Heads of Agreement between the Government and LNG exporters in January this year, LNG exporters have

<sup>31</sup> AEMO (2020) GSOO 2020, *Reserve Cost Assumptions, Supply Input Data Files*, <https://aemo.com.au/en/energy-systems/gas/gas-forecasting-and-planning/gas-statement-of-opportunities-gsoo>

agreed to offer uncontracted gas to the domestic market first on “competitive market terms.”<sup>32</sup>

The competitiveness of market terms may well be in the eye of the beholder, and there are no price controls. Gas producers can also simply increase the amount of gas they contract for export, keeping supply tight and prices high.

Large quantities of low cost gas from fields originally developed for the domestic market, particularly the Cooper Basin have been exported despite the QLD LNG projects being approved on the basis that they only export CSG developed for export. As such it would be entirely reasonable the Australia to reserve gas from existing low cost fields for Australian customers. Despite this, the Government has ruled out reserving any gas from lower cost existing gas fields for Australian customers,<sup>33</sup> so only expensive gas from new fields, presumably in the five “strategic gas basins” would be included in any reservation policy, if indeed the Government chooses to institute a domestic reservation policy at all.

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<sup>32</sup> The Hon Keith Pitt (21 January 2021) *JobMaker plan secures Australia's domestic gas supply*, <https://www.minister.industry.gov.au/ministers/pitt/media-releases/jobmaker-plan-secures-australias-domestic-gas-supply>

<sup>33</sup> Australian Government, Department of Industry, Science, Energy and Resources (October 2020) *Gas reservation issues paper Issues Paper*, [https://consult.industry.gov.au/onshore-minerals/gas-options/supporting\\_documents/optionsforaprospectivenationalgasreservationschemeissuespaper.pdf](https://consult.industry.gov.au/onshore-minerals/gas-options/supporting_documents/optionsforaprospectivenationalgasreservationschemeissuespaper.pdf)

# Will create few jobs

Providing jobs is presumably a central priority of Covid-19 recovery spending.

However, the gas industry is one of the least labour intensive industries in the entire economy, and so will create few jobs even if subsidies succeed in increasing the amount of gas being produced.

Australia is currently the world's largest exporter of liquefied natural gas (LNG).<sup>34</sup> Yet the oil and gas extraction industry employs less than 0.14% of all Australian workers.<sup>35</sup> In a room of 700 Australian workers, one on average would work in gas mining.

Figure 3 below shows the job intensity of various industries measured by the number of jobs per unit of output.

As the Figure shows, mining in general is the least job intensive form of economic activity. Oil and gas mining specifically is *even less* job intensive than other forms of mining.

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<sup>34</sup> Australian Government, Office of the Chief Economist (March 2020) Resources and Energy Quarterly March 2020, Figure 7.9 p.66,

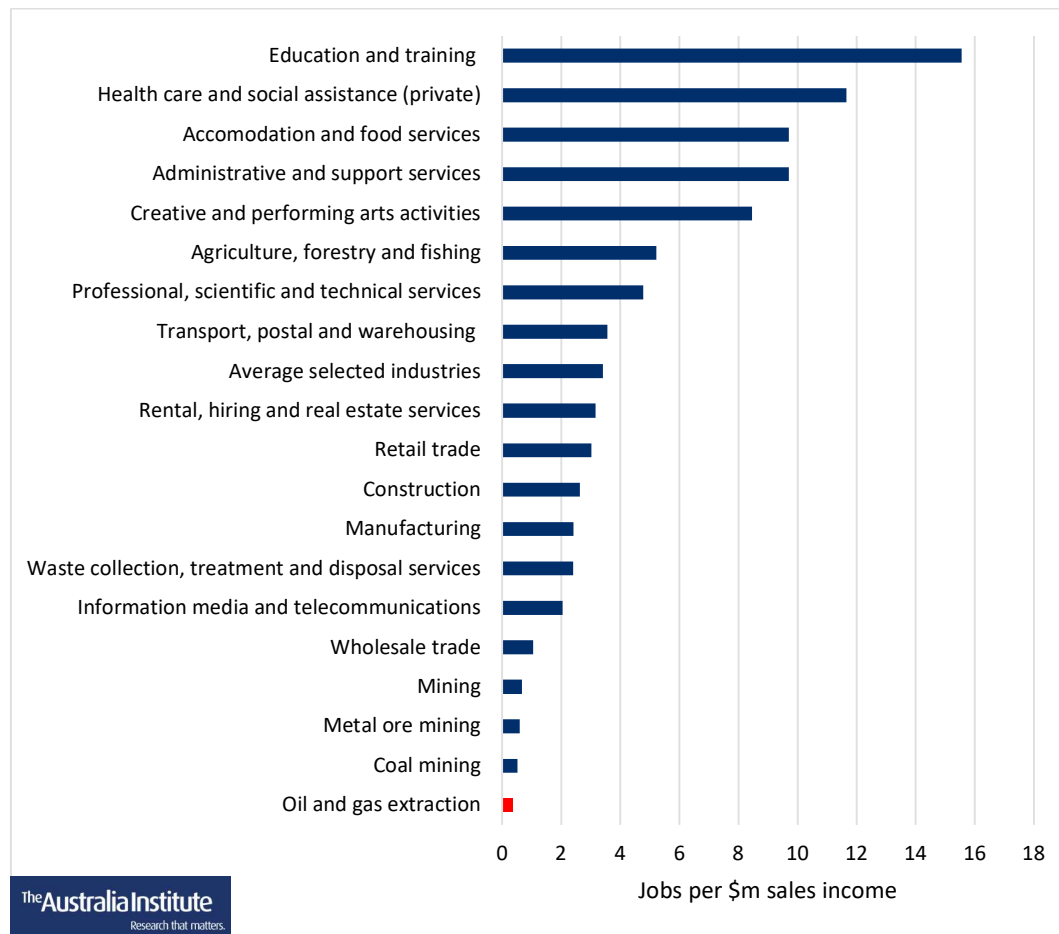
<https://publications.industry.gov.au/publications/resourcesandenergyquarterlymarch2020/documents/Resources-and-Energy-Quarterly-March-2020.pdf>

<sup>35</sup> Employment in oil and gas extraction 2018-19 was 18,000, ABS ( May 2020) 81550DO002\_201718 81550DO002\_201819 Australian Industry, 2018-19,

<https://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/8155.02017-18?OpenDocument>

Total Australian workforce was 12,746,000 in 2018/19 ABS (2021) 6291.0.55.003 Labour Force, Australia, Detailed, Quarterly, Table 04. Employed persons by Industry division of main job (ANZSIC) - Trend, Seasonally adjusted, and Original , <https://www.abs.gov.au/statistics/labour/employment-and-unemployment/labour-force-australia-detailed-quarterly/latest-release>

**Figure 3: Job intensity of selected Australian industries (jobs per \$m sales income)**



Source: ABS (2020) 81550DO002\_201718 Australian Industry, 2017-18,  
<https://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/8155.02017-18?OpenDocument>

For every million dollars of sales income, only around 0.4 jobs are created in mining gas. The average for all Australian industries is 3.4 jobs.

The story is the same when approached via other metrics for labour intensity. For example, industries can be assessed in terms of jobs per gross value added. On this metric, oil and gas mining is again the single job poor industry subcategory, behind the rest of the mining sector and even gas supply.

Between November 2019 and December 2020, the oil and gas industry in Australia cut around 3000 jobs, around 10% of its workforce.<sup>36</sup>

Figure 4 below shows job cuts reported in the media by the oil and gas industry over that period.

<sup>36</sup> Ogge and Campbell (2020), *When the going gets tough...the gas industry sacks workers: Recent job cuts in the Australian oil and gas industry*, <https://australiainstitute.org.au/post/gas-industry-cuts-10-of-its-workforce/>

**Figure 4: Reported job cuts by oil and gas companies November 2019-December 2020**

Company	Reported job cuts	Details	Reported
<b>INPEX</b>	465	400 job cuts in December 2019, 65 job cuts in September 2020.	December 2019 and September 2020
<b>Woodside</b>	1200	900 jobs cut in March followed by a further 300 jobs cut in October.	March and October 2020
<b>Santos</b>	150	150 jobs cut on top of an unspecified reduction in its “contingent workforce.”	April 2020
<b>Oil Search</b>	50	25 percent reduction in its Australian workforce.	July 2020
<b>Chevron</b>	510	180 voluntary redundancies and 230 forced redundancies equivalent to one quarter of Chevron’s Australian workforce.	September 2020
<b>Shell</b>	Unknown	9000 jobs slashed from shells global operations. Shell has not commented on how many of these jobs are from its Australian workforce.	September 2020
<b>Origin</b>	90	90 jobs, 10 percent of Origin’s integrated gas business.	September 2020
<b>ExxonMobil</b>	150	Redundancy packages offered to 1500 workers in September 2020. 150 job cuts reported in early October with more waiting to hear if their applications were successful.	October 2020

Source: Ogge and Campbell (2020), *When the going gets tough...the gas industry sacks workers: Recent job cuts in the Australian oil and gas industry*, <https://australiainstitute.org.au/post/gas-industry-cuts-10-of-its-workforce/>

If all Australian industries had behaved in the same way, Australia would have 1.3 million more unemployed workers and 15 percent unemployment.



Subsidising gas is squandering our recovery spending. Gas is among the very worst options for stimulus, which should focus on jobs-rich industries. Support for almost any other industry will provide more jobs than in the gas industry.

# Nothing to do with manufacturing

The Government is very vague about how it would create jobs in manufacturing. Its media release on the gas-fired recovery mentions manufacturing once:

Gas supports the manufacturing sector, which employs over 850,000 Australians and is an essential input in the production of plastics for PPE and fertiliser for food production. In 2019, Australia was the largest exporter of LNG, with an export value of \$49 billion.

All of these statements are true, but the lack of context gives a misleading impression. For instance:

- While it is true that manufacturing employs over 850,000 workers, only around 4,500 of those are employed in gas intensive manufacturing industries where gas makes up over 5 percent of input costs. The vast majority of manufacturing workers in Australia work in industries that use little if any gas.<sup>37</sup>
- While it is true that gas is an essential input for PPE, only 1 percent of gas produced in Australia is used as a chemical feedstock,<sup>38</sup> and only a tiny fraction would be used for PPE.
- While it is true that Australia is the largest exporter of LNG in the world, unlike other large LNG exporters, Australia gets little return from the multinational export companies we allow to operate here. The Petroleum Resource Rent Tax PRRT is paid by LNG companies extracting offshore gas. In 2018-19 these companies paid around \$1 billion in PRRT payments.<sup>39</sup> Queensland LNG exporters pay royalties to the Queensland Government which amounted to \$454 million that year, reaching a total of around \$1.6 billion.<sup>40</sup> For comparison, it has been reported that Qatar, which exports virtually the same amount of gas as Australia received over \$20 billion in royalties in 2018.<sup>41</sup>

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<sup>37</sup> Wood and Dundas (2020) *Flame out: The future of natural gas*, Table 3.1 p.28 and Table B.1 Appendix B p.57 <https://grattan.edu.au/wp-content/uploads/2020/11/Flame-out-Grattan-report.pdf>

<sup>38</sup> Domestic consumption is here total supply less exports. Non energy gas consumption was 1.34 Mtoe, around 56 PJ. International Energy Agency (2018) *IEA Sankey Diagram*, <https://www.iea.org/sankey/>

<sup>39</sup> ATO (2020) *2018-19 Report of Entity Tax Information*, <https://data.gov.au/data/dataset/corporate-transparency/resource/827f68ea-83c0-440e-bb6d-4118644b7efd>

<sup>40</sup> Queensland Government (2020) *Queensland Budget 2020-21, Budget Paper 2*, Table 4.5, p.89, [https://budget.qld.gov.au/files/BP2\\_4\\_Revenue.pdf](https://budget.qld.gov.au/files/BP2_4_Revenue.pdf)

<sup>41</sup> Kraal (2020) *In the midst of an LNG export boom, why are we getting so little for our gas?* <https://theconversation.com/in-the-midst-of-an-lng-export-boom-why-are-we-getting-so-little-for-our-gas-131461>

In theory, the gas fired recovery could create jobs in manufacturing if it reduced energy costs for manufacturing companies enough to enable more manufacturing activity requiring more workers.

However, as discussed above, the plan will not reduce gas prices because the new gas basins are more expensive to produce gas from than exiting gas basins, and even if it could, there is no reason the gas companies would not just pocket the subsidies and continue charging Australian customers high prices.

If the Government forces additional gas powered generation into the National Electricity Market (NEM), it will increase electricity prices because it will displace lower cost renewable energy. The price of electricity from gas is far higher than from renewable energy for any share of renewable energy in the network even when the additional cost of storage for firming and new transmission is added to the cost of renewables.<sup>42</sup> Much of the energy used by the manufacturing industry is electricity, and if subsidising gas power stations displaces lower cost renewable energy and raises electricity prices, the policy will actually increase energy costs for manufacturers.

The vast majority of manufacturing workers work in industries that use little if any gas. There are only 15 large manufacturing facilities in Australia where gas is over 5 percent of input costs. Together they employ around 10,560 workers. Of those, 5980 are in Western Australia which does not have the issue of high gas prices, leaving 4,570 working at facilities in the eastern states where high gas prices are an issue.<sup>43</sup>

The other 835,000 manufacturing workers work in industries where gas makes up less than 5% of input costs, many that use no gas at all. All of these industries face serious challenges that could be assisted with government funding. The myopic focus on gas prices distracts from these issues and opportunities to meaningfully assist the manufacturing industry.

If the Government was serious about helping Australian manifesting businesses and creating manufacturing jobs, it would be funding the manufacturing industry, not subsidising export focused gas companies.

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<sup>42</sup> Graham et al (December 2020) *GenCost 2020-21 Consultation draft*, <https://publications.csiro.au/rpr/pub?list=BRO&pid=csiro:EP208181&expert=false&sb=RECENT&n=10&rpp=25&page=1&tr=2408&dr=all&dc4.browseYear=2020>

<sup>43</sup> Wood and Dundas (2020) *Flame out: The future of natural gas*, Table 3.1 p.28 and Table B.1 Appendix B p.57 <https://grattan.edu.au/wp-content/uploads/2020/11/Flame-out-Grattan-report.pdf>

# Hubbub

The consultation invites comment specifically on “establishing Wallumbilla as Australia’s Gas Hub.”

The suggestion for a Henry Hub style gas hub at Wallumbilla seems to have come from the Covid Commission’s colourful manufacturing taskforce adviser Andrew Liveris.<sup>44</sup>

Establishing a gas hub at Wallumbilla will make little difference to gas prices in Australia. The US Henry Hub sets US gas prices, and US gas prices are lower than Australia. It does not follow that attempting to imitate the US Henry Hub would lower Australian gas prices. The US situation is not comparable because 90 percent of gas produced in the US is for the domestic market, meaning that the domestic market sets the price and the impact of global prices is limited. Virtually the opposite is true in Australia where governments allow over two thirds of eastern Australian gas to be exported, meaning that the Asian market sets the gas price, with a floor provided by Australia’s high production costs.

Experts have dismissed the idea of a US style gas hub in Australia.

EnergyQuest chief executive Graeme Bethune has pointed out the vast difference in volume between Australia and the US.

Major gas supply hubs in the US and Europe work because they are part of large gas markets with 89 trillion cubic feet a year, in the case of the US, compared with 0.6 trillion cubic feet a year for eastern Australian domestic gas.<sup>45</sup>

MST Marquis analyst Mark Samter added:

The Australian domestic market is a fraction the size of the US market and Henry Hub is only where it is because of the liquids — gas is a by-product really...”<sup>46</sup>

Credit Suisse analyst Kavonic was also dismissive saying:

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<sup>44</sup> Williams (September 2020) Lukewarm response to Morrison’s gas hub proposal, <https://www.theaustralian.com.au/business/mining-energy/lukewarm-response-to-morrison-gas-hub-proposal/news-story/13e2f30dc38e14af966e977374f3327f>

<sup>45</sup> Williams (September 2020) Lukewarm response to Morrison’s gas hub proposal, <https://www.theaustralian.com.au/business/mining-energy/lukewarm-response-to-morrison-gas-hub-proposal/news-story/13e2f30dc38e14af966e977374f3327f>

<sup>46</sup> Williams (September 2020) Lukewarm response to Morrison’s gas hub proposal, <https://www.theaustralian.com.au/business/mining-energy/lukewarm-response-to-morrison-gas-hub-proposal/news-story/13e2f30dc38e14af966e977374f3327f>

We doubt a Henry Hub-like hub can be achieved in Australia absent a government mandate, given market depth and structural constraints

We also doubt a hub would achieve any material benefit for market participants beyond price transparency — which isn't really the core issue for manufacturing.

A more liquid hub could be mandated by government via various means, but the unintended risks this could pose for long-term supply security could easily outweigh the modest benefits a hub may present in a market the size of eastern Australia.”<sup>47</sup>

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<sup>47</sup> Williams (September 2020) Lukewarm response to Morrison's gas hub proposal, <https://www.theaustralian.com.au/business/mining-energy/lukewarm-response-to-morrison-gas-hub-proposal/news-story/13e2f30dc38e14af966e977374f3327f>

# Fuelling climate change

If the Government succeeds in its plans to open up some or all of the five new gas “strategic gas basins,” it will result in very large increases in emissions.

Gas fields require large scale production to justify the investment in pipelines and infrastructure. Once gas fields are established, the more gas is produced, the higher the profits. Gas companies will be driven by this economic imperative to produce as much gas as they can export and sell.

If the new gas basins are connected to the existing gas network, they will also be connected to export terminals at Gladstone, and in the case of the Beetaloo Basin, Darwin. Australian Governments have so far been prepared to approve gas export capacity limited only by what the gas companies have requested approval for. It seems likely that if large new resources were available, the capacity of the export terminals would be increased.

The Beetaloo Basin is the first of five “strategic gas basins” the Government is subsidising. This basin alone is a massive potential source of greenhouse gas. The Northern Territory Government has estimated that the Beetaloo Basin contains 500 trillion cubic feet (Tcf) of 540,000 PJ of gas.<sup>48</sup> If this was burned it would result in almost 30 billion tonnes of greenhouse gas emissions from the combustion alone, excluding emissions from producing and transporting the gas as well as direct methane emissions.

As discussed above, the Beetaloo Basin gas is remote and expensive. It would be unlikely to proceed without subsidies. An ACIL Allen Report<sup>49</sup> commissioned by the Fracking Inquiry found that a “Shale Gale” scenario of 365 PJ per year would have a low likelihood of occurring. However, the Government’s determination to spend hundreds of millions of dollars of taxpayer’s money subsidising fracking in the Beetaloo Basin makes large scale development plausible.

The NT Fracking Inquiry examined the emissions implications of a scenario where production from the Beetaloo Basin reached 1240 PJ/year.<sup>50</sup>

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<sup>48</sup> Northern Territory government (March 2019) *Northern Territory Gas Strategy: Five Point Plan*, [https://cmc.nt.gov.au/\\_\\_data/assets/pdf\\_file/0019/712450/nt-gas-strategy.pdf](https://cmc.nt.gov.au/__data/assets/pdf_file/0019/712450/nt-gas-strategy.pdf)

<sup>49</sup> ACIL Allen (2017) *Final Report To Scientific Inquiry Into Hydraulic Fracturing In The Northern Territory; The Economic Impacts Of A Potential Shale Gas Development In The Northern Territory*, P.136 <https://frackinginquiry.nt.gov.au/inquiry-reports?a=456790>

<sup>50</sup> Northern Territory Government, *Scientific Inquiry into Hydraulic Fracturing in the northern territory* (2016) Final report, Table 9.4 p.228, <https://frackinginquiry.nt.gov.au/inquiry-reports?a=494295>

The Inquiry found that this scenario would add 40 million tonnes of emissions in Australia annually, equivalent to 6.6 percent of Australia's total 2015 greenhouse gas emissions,<sup>51</sup> which would increase Australia's emissions by 7.3 percent on 2020 levels.<sup>52</sup> It would add a further 60 million tonnes of greenhouse gas to the atmosphere from emissions when the gas is burned overseas.<sup>53</sup>

The inquiry concluded that this was a "high risk" to the climate and "unacceptable", and that fracking should only go ahead if the "GHG emissions are fully offset and that there is no net increase in the life cycle GHG emissions."

Documents released under Freedom of Information show Commonwealth government officials warned the Minister for Emissions Reduction that the Beetaloo Basin gas production would be so large it would threaten Australia's ability to meet its obligations under the Paris Agreement.<sup>54</sup>

The Beetaloo is just the first of five basins, all of which are large potential sources of greenhouse gas.

Recent analysis found the total emissions potential from the five gas basins is 1602Mt of carbon dioxide equivalent (Mt CO<sub>2</sub>-e). This is over three times Australia's annual emissions or 513Mt CO<sub>2</sub>-e.<sup>55</sup>

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<sup>51</sup> Northern Territory Government, Scientific Inquiry into Hydraulic Fracturing in the northern territory (2016) Final report, Table 9.4 p.228, <https://frackinginquiry.nt.gov.au/inquiry-reports?a=494295>

<sup>52</sup> Australian Government DISER (2020) Australia's greenhouse gas emissions: March 2020 quarterly update, <https://www.industry.gov.au/news/australias-greenhouse-gas-emissions-march-2020-quarterly-update#:~:text=Australia's%20overall%20emissions%20fell%201.4,the%20year%20to%20March%202020.>

<sup>53</sup> Northern Territory Government, Scientific Inquiry into Hydraulic Fracturing in the northern territory (2016) Final report, Table 9.4 p.228, <https://frackinginquiry.nt.gov.au/inquiry-reports?a=494295>

<sup>54</sup> Swann (2020) *All It's Fracked Up to Be*, <https://apo.org.au/sites/default/files/resource-files/2020-02/apo-nid276971.pdf>

<sup>55</sup> 350 Australia (February 2021) GAS-TASTROPHE: the climate impact of the Government's strategic gas basins, <https://350.org.au/gas-tastrophe-the-climate-impact-of-the-governments-strategic-gas-basins/>

# Reducing gas dependence

Australians don't need lower gas prices, they need lower energy prices. If the government was serious about lowering energy costs and creating jobs, they would focus on reducing our dependence on this expensive and polluting fuel.

The "gas-fired recovery" is focused entirely on the supply of gas. It ignores other ways of supplying energy, particularly through renewable energy, using electricity instead of gas, and simply reducing gas use through energy efficiency.

Gas prices will inevitably increase as LNG companies continue to export vast quantities of Australia's more accessible lower cost gas, leaving only more remote and difficult to extract gas for Australian customers.

The only way for Australian households and businesses to get off this upward energy cost spiral is to reduce their dependence on gas.

Renewable energy is already far cheaper than gas for providing electricity, and electricity is cheaper than gas for household uses including heating, cooking and hot water.

Most manufacturing processes don't require gas per se, but energy, predominantly for heat. Fortunately, this can often be provided by electricity, often at a far lower cost than gas.

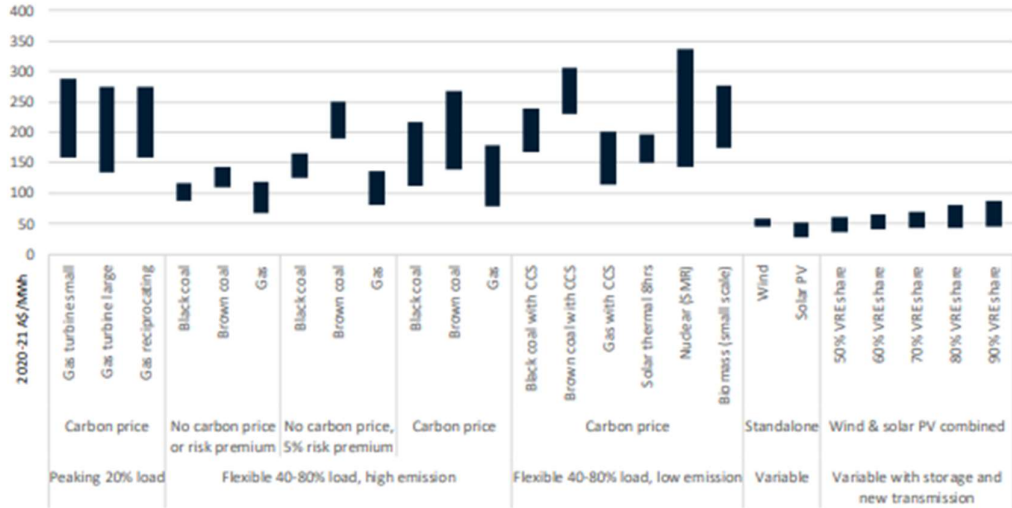
## ELECTRICITY GENERATION

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As shown in Figure 5 below, CSIRO analysis of the relative cost of producing electricity from various technologies shows renewable energy is far cheaper than gas even when the cost of new transmission and energy storage is added, no matter how high the share of renewable energy in the grid.



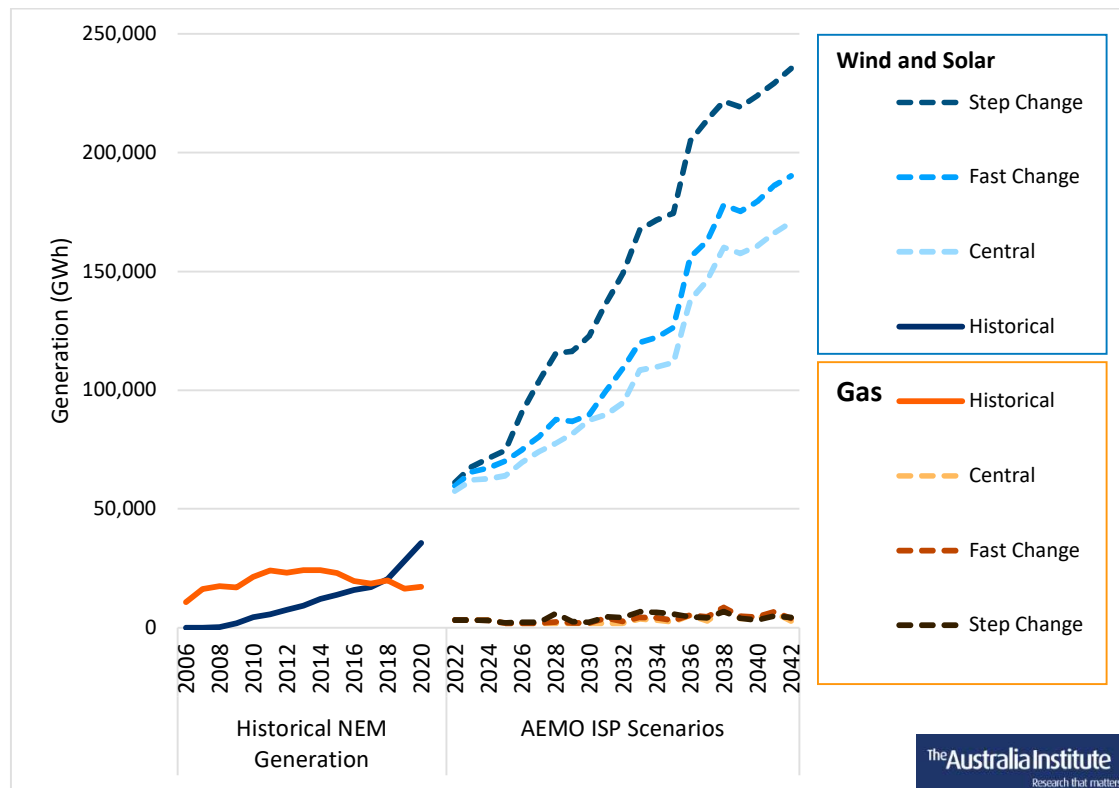
Figure 5: Calculated LCOE by technology and category for 2020



Source: Graham et al (December 2020) *GenCost 2020-21 Consultation draft*,  
<https://publications.csiro.au/rpr/download?pid=csiro:EP208181&dsid=DS1>

The Australian Energy Market Operator’s Integrated System Plan (AEMO ISP) examines lowest cost development of the NEM over coming decades. In the key scenarios, shown in Figure 6 below, gas-fired electricity collapses and remains low over coming decades, while renewable energy generation grows very strongly.

**Figure 6: Gas vs renewables in the NEM – historical & AEMO ISP optimal scenarios**



Source: OpenNEM (2020) OpenNEM: An Open Platform for National Electricity Market Data, AEMO (2020) 2020 Integrated System Plan (ISP), 2020 ISP Generation Outlooks, Scenario 2 for “optimal path” in each case, optimal development pathway for each scenario, as per Table 10 in ISP report.

The AEMO scenarios are “derived by minimising total system cost”. AEMO notes that “in practice” gas use may be higher for a range of reasons, like emergency events and “contract positions and strategic bidding by generators”, but ads where these factors increase gas generation they also “increase costs to consumers”.<sup>56</sup> The immediate reduction of gas use in the ISP modelling indicates gas consumption is associated with higher system costs.

## HEAT

Most gas is used to create heat. It is used in our homes for space heating, hot water and cooking, and in industry to create heat for industrial processes.

Fortunately, there are now there are many efficient electrical alternatives for creating heat in our homes, businesses and industry that also cost less than gas.

<sup>56</sup> AEMO (2020) 2020 Integrated System Plan (ISP), p.56, <https://aemo.com.au/en/energy-systems/major-publications/integrated-system-plan-isp/2020-integrated-system-plan-isp>

## Residential

Victoria is the largest consumer of gas in the residential sector, consuming almost half the amount of gas in 2019 (168 PJ) as used in manufacturing across Australia (372 PJ).<sup>57</sup> Almost all of this is used for heating houses and hot water, with a small proportion used for cooking.

Because heating is seasonal, Victorian residential gas use creates large peaks in winter demand for gas. Reducing those peaks alleviates potential shortfalls that result largely from gas pipeline constraints.

Ducted gas heating makes up around 70% of Victorian residential gas use and is extremely inefficient. Efficient electrical heat pumps with a Coefficient of Performance (COP) of between 4 and 6 can deliver the same amount of heat as ducted gas heating using around one tenth of the energy. Heat pumps can also be used to heat hot water, requiring at least 50% less energy than gas hot water systems. Electrical induction cooktops use around 50% of the energy of gas cooktops.<sup>58</sup>

All of these efficient electrical appliances cost far less to run than gas, and modelling has shown switching from gas to electricity can save many households hundreds of dollars each year.<sup>59</sup> The cost of buying new appliances is a barrier to switching from gas, however, many gas appliances are old, and customers are increasingly replacing them with electrical systems. These processes can be accelerated by appropriate policies including replacing gas heating with efficient reverse cycle air-conditioners in public housing, as well as providing incentives to other households to switch.

Northmore Gordon estimates that gas demand in Victoria can be reduced by up to 113 PJ/year through measures with a zero to moderate cost.<sup>60</sup> Coincidentally, this is the same amount of gas used by the entire Australian chemical, polymer and rubber manufacturing sector in 2019.

University of Melbourne research recommends switching 50% of the Victorian gas heating load to heat pumps.

They estimate this would free up 180 TJ/day (70 PJ/year), the equivalent amount of gas that would be provided by the controversial Narrabri Gas Project if it goes ahead.<sup>61</sup> If LNG

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<sup>57</sup> AES (2020) *Australian Energy Update 2020*, Table F, <https://www.energy.gov.au/publications/australian-energy-update-2020>

<sup>58</sup> Northmore Gordon (2020) *Victorian Gas Market – Demand Side Measures to Avoid Forecast Supply Shortfall*, pp 20-22, <http://environmentvictoria.org.au/wp-content/uploads/2020/06/Vic-Gas-Market-Demand-Side-Study-Final-Report-1.pdf>

<sup>59</sup> Moyse et al (2014) *Are we still Cooking with Gas? Report for the Consumer Advocacy Panel*, [https://renew.org.au/wp-content/projects/CAP\\_Gas\\_Research\\_Final\\_Report\\_251114\\_v2.0.pdf](https://renew.org.au/wp-content/projects/CAP_Gas_Research_Final_Report_251114_v2.0.pdf)

<sup>60</sup> Northmore Gordon (2020) Op. Cit. p.4

<sup>61</sup> Sandiford and McConnell (2020), Op. Cit p.1

exports were capped, preventing gas savings from being exported, this gas would add to the domestic gas supply available to manufacturing.

This research also estimates switching 50 percent of the Victorian gas heating load to heat pumps will add around 2 GW to Victorian peak winter electricity demand with the total annual demand requirement equivalent to the output of about 1.5 GW of installed wind power.<sup>62</sup>

Australian Energy Regulator (AER) data on state peak electricity demand in Victoria shows over the last 3 years summer peak demand has been between 1.6-2 GW higher than winter peak demand in winter, suggesting there is significant winter redundancy to absorb much of the additional electricity load.<sup>63</sup>

The University of Melbourne research also recommends reserving a minimum of 550 TJ/day of Queensland CSG to restore the allocation of Queensland CSG to the domestic prior to the opening up of LNG exports in 2015.

## Manufacturing

There are also significant opportunities to reduce gas dependency in the manufacturing industry itself. Almost all the gas used in manufacturing is used to create heat. Just as domestic heat pumps can create heat for homes, industrial scale heat pumps can replace gas to create heat for temperatures up to 150 degrees.<sup>64</sup> While electrification delivers ongoing energy cost savings for manufacturers, the initial capital outlay is still a barrier.

In its 2020-21 budget submission, the manufacturing industry body Ai Group recommended the Commonwealth Government establish a \$500 million industry energy transformation fund.

The fund would allocate \$500 million over two years for capital grants to rapidly scale up the penetration of existing technologies that are widely used overseas but uncommon in the Australian market. These include electrification of industrial processes with industrial scale heat pumps and electric induction furnaces, as well as energy management systems to enable demand response.

Ai Group estimate this funding with a matching rate of 1:1 “would deliver \$1 billion of manufacturing investment, equivalent to between 150 and 1,000 electrification projects”

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<sup>62</sup> Sandiford and McConnell (2020) *The gas-fired recovery - new supply v. fuel switching with reservation*, [https://melbourne.figshare.com/articles/online\\_resource/The\\_gas-fired\\_recovery\\_-\\_new\\_supply\\_v\\_fuel\\_switching\\_with\\_reservation/13133477](https://melbourne.figshare.com/articles/online_resource/The_gas-fired_recovery_-_new_supply_v_fuel_switching_with_reservation/13133477)

<sup>63</sup> AER (2020) *Seasonal peak demand – regions*, <https://www.aer.gov.au/wholesale-markets/wholesale-statistics/seasonal-peak-demand-regions>

<sup>64</sup> 2XEP (2017) *High Temperature heat pumps for the Australian food industry*, [https://022fdef7-26ea-4db0-a396-ec438d3c7851.filesusr.com/ugd/c1ceb4\\_9b0221a90abf44d18fdc8f393afd9b31.pdf?index=true](https://022fdef7-26ea-4db0-a396-ec438d3c7851.filesusr.com/ugd/c1ceb4_9b0221a90abf44d18fdc8f393afd9b31.pdf?index=true)

enabling facilities to reduce their energy bills by between 5-50% and create “7,000 job-years of employment.”<sup>65</sup>

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<sup>65</sup> AI Group (2020) *AI Group 2020-21 Budget Submission*, p.23,  
[https://cdn.aigroup.com.au/Submissions/Budget/2020/Ai\\_Group\\_BUDGET\\_SUBMISSION\\_24\\_August\\_2020.pdf](https://cdn.aigroup.com.au/Submissions/Budget/2020/Ai_Group_BUDGET_SUBMISSION_24_August_2020.pdf)

# Conclusion

The taxpayer subsidies to the export focused gas companies making up Government's gas fired recovery plan will not reduce gas prices or provide a significant amount of jobs.

Investing in almost any other industry would be a more effective way of creating jobs as part of the Covid-19 recovery.

However it will drive up emissions substantially which contradicts the Government's stated intention of reducing emissions.

The best way to reduce energy costs for Australia's households, businesses and manufacturers is to reduce dependence on this expensive and polluting fuel.

# Recommendations

Although the Gas-Fired Recovery Consultation Note only requests submissions on the NGIP and Wallumbilla Gas Hub, the Australia Institute's submission and recommendations, cover the Gas-Fired Recovery as a whole, including the strategic gas basins.

This is because scrutiny of these issues is important for the public interest, and there has been no opportunity for input despite hundreds of millions of dollars of subsidies to gas having already been allocated for development in the Beetaloo Basin.

The Australia Institute's recommendations are as follows:

1. Providing a clear policy document that explains and clarifies:
  - What the Gas-Fired Recovery plan aims to achieve and how it will achieve these aims.
  - Whether it will reduce energy prices, including gas prices, and if so, how and by how much.
  - How this plan compares to other ways energy prices could be lowered such as by expanding renewable energy, energy efficiency and electrification.
  - How the Gas-Fired Recovery Plan creates jobs, detailing how many and when.
  - Whether there are more effective ways of creating jobs, such as funding more labour-intensive industries including health, education and manufacturing?
2. Publish documents that have been commissioned from private consultants or undertaken by DISR or other government bodies to date relating to the Gas-Fired Recovery including the Manufacturing Taskforce plan commissioned from Boston Consulting Group.
3. Publish tender documents and contracts for modelling and other work being commissioned from private consultants related to the Gas-Fired Recovery.
4. Identify the two remaining unnamed "strategic gas basins."
5. Separate the National COVID-19 Commission (Advisory board) from cabinet to allow greater transparency and scrutiny of its activities and advice.
6. Release all conflict of interest declarations of former and current members of the NCCC and NCC Advisory Board.
7. Direct the Climate Change Authority to model and publish the greenhouse gas implications of the Gas-Fired Recovery, in particular, of opening up five new "strategic gas basins."

8. Publish modelling, or if it hasn't been done, commission modelling of the effect of measures already undertaken and planned as part of the Gas-Fired Recovery on:

- Gas prices
- Electricity prices
- Include analysis of whether there are more cost effective ways than subsidies to the gas industry of reducing energy prices for households, businesses and industry including:
  - Assisting households and businesses to shift from gas to electrical appliances for heating, hot water and cooking
  - Assisting manufacturing companies to electrify their industrial heat processes
  - Producing electricity with renewable energy and storage rather than gas
- Include analysis of there are more effective ways of creating jobs, such as funding more labour-intensive industries including health, education and manufacturing?

9. Explain how Government policies will ensure that subsidies to the gas industry that reduce their production costs (such as exploration, road and pipeline subsidies) will be passed on to Australian customers through lower gas prices, and not simply passed on to shareholders.

10. Publish modelling or analysis showing how establishing a gas hub at Wallumbilla will reduce east coast gas prices and by how much.

11. Publish an explanation of what the National Gas Infrastructure plan (NGIP) is.

12. Publish the criteria for assessing government subsidies to pipelines and other gas infrastructure under the NGIP.

13. Support the AI Group proposal to create a \$500 million Industry Energy Transformation Fund to reduce gas dependence in manufacturing and reduce energy costs.