

Greenwashing coal in New South Wales

The organisations charged with overseeing regional transition away from coal mining in NSW have a budget of \$5.2 million across four organisations. By contrast, \$27 million of public money was spent in 2022-23 by Coal Innovation NSW conducting and promoting research that greenwashes the coal industry, while a publicly subsidised coal industry research fund worth \$700 million has more money than it can spend.

Discussion paper

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Summary

When it comes to climate action, the New South Wales (NSW) Government is trying to walk both sides of the street: on the one hand emphasising its emissions reductions and renewable energy zones, while on the other expanding the state's coal mines.

This report explores three organisations and related policies that work to support and obscure this contradiction.

The first is the proposed Future Jobs and Investment Authorities, which will replace the existing Royalties for Rejuvenation Fund, which itself purportedly uses coal royalties to fund regional economic development in coal-reliant regions. These appear to be constructive mechanisms that support communities in coal-producing regions transition to other industries, but the authorities have few resources – an initial budget of just \$5.2 million across all four authorities. They are expected to receive \$25 million per year from a fund based on coal royalties, but this fund cannot be accessed until 2028-29. The Future Jobs and Investment Authorities funding from royalties equates to around \$24 per person, per year, for residents of coal-producing regions.

By contrast, Coal Innovation NSW, was established with a \$100 million fund and spent \$27 million in 2022-23, five times what is budgeted for community transition away from coal. This organisation's purpose is to administer grants for research into novel technologies that promote the use of coal, particularly carbon capture and storage (CCS). Coal Innovation NSW also funds social research that aims to “increase public awareness and acceptance of” technologies that prolong coal use.

The third organisation is Low Emission Technology Australia (LETA), formerly called Coal 21, which claims to be a \$700 million fund that commissions or supports research into “low-emissions technologies” for coal in NSW and Queensland. LETA is funded by industry payments that are partially deductible from NSW coal royalties, providing a public subsidy. There are few publicly available reports from LETA's research and there is no evidence of the technologies LETA champions being used commercially. LETA's funding was recently suspended due to large surpluses of cash and an apparent lack of projects to support.

The NSW Government should:

- Abolish Coal Innovation NSW and associated funds.
- End the royalty deduction that subsidises LETA and explore whether LETA funding can be redirected to other purposes.

- Increase resources available to communities for transition away from coal mining, along with appropriate governance arrangements.
- Introduce a moratorium on new coal projects and expansions, and set a timeline for reducing coal volumes mined in the state.

Introduction

There is a contradiction at the heart of climate policy in NSW. On the one hand, the State Government has legislated ambitious emissions reduction targets, designated renewable energy zones, and instructed the NSW public service to “have regard to” NSW climate policies when making planning approval decisions.¹ The NSW Government’s emissions reduction targets are more ambitious than Australia’s nationwide targets — a 50% reduction from 2005 levels by 2030, a 70% reduction by 2035, and net zero emissions by 2050.²

On the other hand, if NSW were a country, it would be the third-largest coal exporter in the world, after only Indonesia and Queensland.³ The state has 39 operating coal mines that produce around 217 million tonnes of raw coal per year across the Hunter, Illawarra, Central West and North West regions of NSW.⁴ Australia Institute research from 2020 found that coal mined in NSW causes nearly four times more emissions than NSW directly emits itself, and more emissions than the UK or France.⁵

NSW is making progress on emissions – the state’s emissions declined 20% between 2017 and 2022.⁶ Yet it has 27 coal mines that are expected to continue operating beyond 2030,⁷ and several already approved to operate well into the 2040s, including:

- MACH Energy's Mount Pleasant mine, extended to 2048.⁸

¹ Sharpe (2024) *Letter to The Hon Paul Scully MP*, <https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=RFI-75053457%2120240822T12408.030%20GMT>

² NSW Government (n.d.) *NSW Government action on climate change*, <https://www.climatechange.environment.nsw.gov.au/about-adaptnsw/nsw-government-action-climate-change>

³ DISER (2024) *Resources and Energy Quarterly – September 2024*, <https://www.industry.gov.au/publications/resources-and-energy-quarterly-september-2024>

⁴ NSW Government (2024) *Future Jobs and Investment Authorities issues paper*, p 6-9

⁵ Swann & Campbell (2020) *Enough Scope: Coal mines, scope 3 emissions and NSW climate policy*, <https://australiainstitute.org.au/report/enough-scope/>

⁶ DCCEEW (2023) *Australia's National Greenhouse Accounts: Emissions by state and territory*, <https://greenhouseaccounts.climatechange.gov.au/>

⁷ NSW Government (2024) *Future Jobs and Investment Authorities issues paper*, p 12, <https://www.nsw.gov.au/regional-nsw/future-jobs-and-investment-authorities>

⁸ The Australia Institute (2024) *Coal Mine Tracker*, <https://australiainstitute.org.au/coal-mine-tracker/mine/narrabri-underground-mine/>

- Malabar Resources' Maxwell Underground mine can mine until 2047.⁹
- Whitehaven's Narrabri venture, extended to 2044.¹⁰
- Glencore and Peabody's United Wambo project has permission to carry out mining operations until 2042.¹¹

Several policies and organisations help the NSW Government and walk both sides of the street on climate and greenwash the state's approach to coal.¹² This paper examines three in particular. First, the Future Jobs and Investment Authorities and associated funding. These give the impression that the state is preparing to phase out the coal industry, but they are under-resourced with just \$5.2 million allocated across four authorities. By contrast, Coal Innovation NSW spent \$27 million in 2022-23 on speculative technologies, such as carbon capture and storage for the coal industry, that at best may reduce some emissions from coal at a large environmental cost, and at worst will never exist.¹³ Similar technologies are funded by Low Emissions Technologies Australia, a publicly-subsidised industry body.

⁹ NSW Government (2020) *Development Consent – Maxwell Underground Coal Mine Project*, <https://www.planningportal.nsw.gov.au/major-projects/projects/maxwell-underground-coal-mine-project>

¹⁰ The Australia Institute (2024) *Coal Mine Tracker*, <https://australiainstitute.org.au/coal-mine-tracker/mine/narrabri-underground-mine/>

¹¹ NSW Government (2024) *Development Consent – United Wambo Open Cut Coal Mine*, <https://www.planningportal.nsw.gov.au/major-projects/projects/united-wambo-open-cut-coal-mine>

¹² The United Nations defines greenwashing as “misleading the public to believe that a company or other entity is doing more to protect the environment than it is” and “promot[ing] false solutions to the climate crisis that distract from and delay concrete and credible action.” United Nations (n.d.) *Greenwashing – the deceptive tactics behind environmental claims*, <https://www.un.org/en/climatechange/science/climate-issues/greenwashing>

¹³ NSW Government (2023) *Coal Innovation NSW Fund annual report 2022-23*, <https://meg.resourcesregulator.nsw.gov.au/sites/default/files/2023-12/CINSWFund-annual-report-2022-23.pdf>

Future Jobs and Investment Authorities

The NSW Government has committed to helping coal-reliant communities “secure their long-term economic future as the global demand for coal declines”.¹⁴ The State Government has committed to achieving this primarily through establishing Future Jobs and Investment Authorities (The Authorities).

The Authorities are to be “made up of local representatives in each coal-reliant region to advise the Government on regional priorities and investment opportunities”.¹⁵ The NSW Government has committed \$5.2 million to establish individual authorities for the four coal-producing regions of NSW — the Hunter, Illawarra, Central West and North West — and has held stakeholder roundtables in each region. The State Government opened consultation on an Issues Paper in May 2024, and received 89 submissions. As of November 2024, it was in the process of reviewing these submissions.¹⁶

The functions of The Authorities would include representing views of local communities and advising the Minister for Natural Resources and the NSW Government on regional priorities and investment opportunities.¹⁷ The Authorities would be accompanied by a Future Jobs and Investment Fund, a Future Jobs and Investment Advocate, an Office of the Future Jobs and Investment Authorities, and a Future Jobs and Investment Board.¹⁸

The Future Jobs and Investment Fund is to replace the existing Royalties for Rejuvenation Fund, which purportedly uses coal royalties to fund regional economic development in coal-reliant regions.¹⁹ The NSW Government “set[s] aside at least \$25 million each year from mining royalties to support coal mining communities in New

¹⁴ NSW Government (2024) *Future Jobs and Investment Authorities*, <https://www.nsw.gov.au/regional-nsw/future-jobs-and-investment-authorities>

¹⁵ NSW Government (2024) *Future Jobs and Investment Authorities*

¹⁶ Beattie (5 September 2024) “Finance, Domestic Manufacturing and Government Procurement, Natural Resources”, Budget Estimates, p 50
<https://www.parliament.nsw.gov.au/lcdocs/transcripts/3328/Transcript%20-%20PC1%20-%205%20September%202024%20-%20Budget>

¹⁷ NSW Government (2024) *Future Jobs and Investment Authorities issues paper*

¹⁸ NSW Government (2024) *Future Jobs and Investment Authorities issues paper*

¹⁹ NSW Government (2024) *Future Jobs and Investment Authorities issues paper*

South Wales through the Royalties for Rejuvenation Fund.”²⁰ The new Future Jobs and Investment Fund would use the existing funding allocated for the Royalties for Rejuvenation Fund.

Both these funds are designed to assist coal-reliant communities to transition into other industries. However, they are not appropriately resourced. Funding of \$25 million per year equates to around \$24 per person, per year, for residents of these coal-producing regions.²¹ The Royalties for Rejuvenation Fund was announced in 2021, however it has not yet invested any money in regional development because its rules state that it cannot be used until 2028-29 or until the fund matures to \$250 million, whichever occurs sooner. It is unclear whether the new Future Jobs and Investment Fund would start distributing money immediately after being established, or whether it would also wait until 2028-29.

According to NSW Resources, the balance of the Royalties for Rejuvenation Fund at the end of the 2023-24 financial year was \$78.4 million.²² From the \$25 million contributed each year to The Fund, \$2.5 million is spent on operational purposes.²³ These numbers suggest The Fund itself increases \$22.5 million a year from government contributions. Assuming the funds are invested to achieve similar returns to the long-term performance of the Future Fund of 8.2% a year, then its projected balance at the start of 2028-29, when the money could be spent, would be around \$170 million. Figure 1 compares this potential expenditure to the current Department of Regional NSW spending, royalty revenue and NSW thermal coal export values.

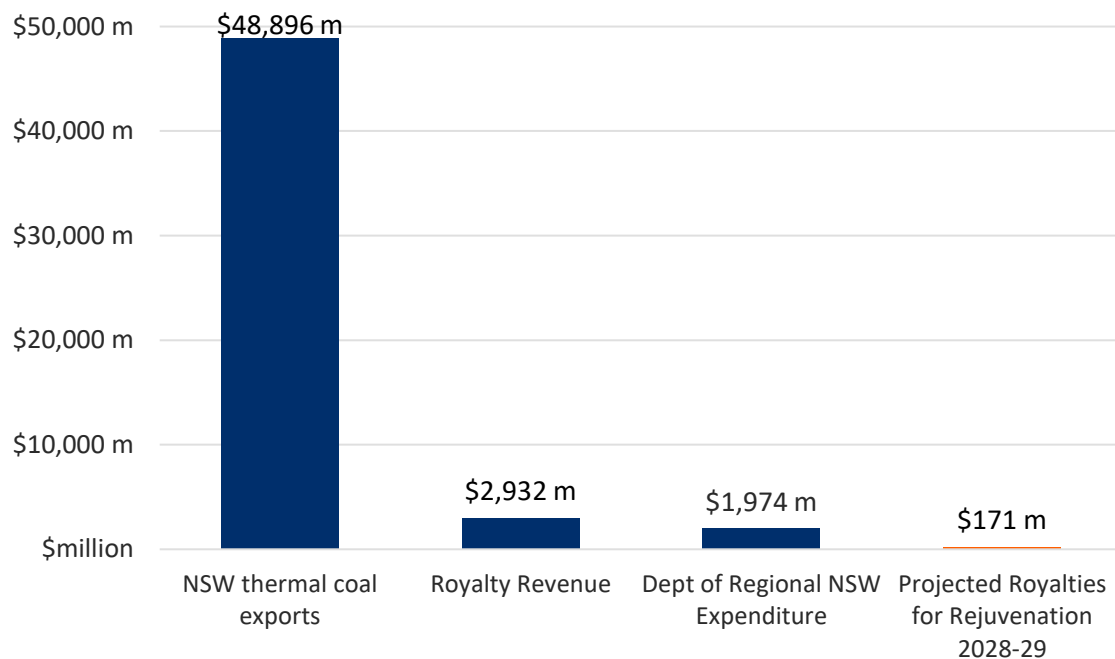
²⁰ NSW Government (n.d.) *Royalties for Rejuvenation Fund*, <https://www.nsw.gov.au/regional-nsw/resources/royalties-for-rejuvenation-fund>

²¹ Calculated from 2021 Census population data at a Local Government Area level of regions identified in *Future Jobs and Investment Authorities issues paper*, Fig 1, Future Jobs and Investment Authorities issues paper (nsw.gov.au).

²² Beattie (5 September 2024) “Finance, Domestic Manufacturing and Government Procurement, Natural Resources”, Budget Estimates, p 50
[https://www.parliament.nsw.gov.au/lcdocs/transcripts/3328/Transcript%20-%20PC1%20-%205%20September%202024%20-%20Budget%20Estimates%20\(Houssos\)%20-%20CORRECTED.pdf](https://www.parliament.nsw.gov.au/lcdocs/transcripts/3328/Transcript%20-%20PC1%20-%205%20September%202024%20-%20Budget%20Estimates%20(Houssos)%20-%20CORRECTED.pdf)

²³ Beattie (5 September 2024) “Finance, Domestic Manufacturing and Government Procurement, Natural Resources”, Budget Estimates, p 49

Figure 1: Royalties for Rejuvenation compared to coal exports and royalties, \$ million



Source: NSW Government (2024); DISR (2024); Queensland Department of Resources (2024)²⁴

It is clear that the Royalties for Rejuvenation Fund is very small in comparison to coal export revenues and government spending. This small allocation of resources, as well as the fact that no money has yet been spent, suggests that the NSW Government is misleading the public about the extent to which they are supporting communities to transition away from coal.

By way of comparison, earlier Australia Institute research estimated that assistance for coal industry workers should be budgeted at \$25-50 million per year,²⁵ while the German Coal Commission budgeted \$3.4 billion per year to transition coal-fired power generating regions.²⁶

²⁴ NSW Government (2024) *NSW Budget 2024-25 – Budget Papers*, <https://www.budget.nsw.gov.au/2024-25/budget-papers>; DISR (2024) *Resources and energy quarterly: June 2024*, <https://www.industry.gov.au/publications/resources-and-energy-quarterly-june-2024>; Queensland Department of Resources (2024) *Coal industry review statistical tables*, <https://www.data.qld.gov.au/dataset/coal-industry-review-statistical-tables>

²⁵ Quiggin (2020) *Getting off coal: Economic and social policies to manage the phase-out of thermal coal in Australia*, <https://australiainstitute.org.au/report/getting-off-coal-economic-and-social-policies-to-manage-the-phase-out-of-thermal-coal-in-australia/>

²⁶ Campbell and Shields (2021) *We can work it out: Could Germany’s multi-stakeholder approach help move Australia out of coal-fired power?*, <https://australiainstitute.org.au/report/we-can-work-it-out-lessons-from-germanys-coal-commission/>

Coal Innovation NSW

Coal Innovation NSW is a State Government body established under the *Coal Innovation Administration Act 2008*. The key role of Coal Innovation NSW is to

Provide funding for research into, and development of, low emissions coal technologies, low emissions coal technology demonstration projects, increasing public awareness and acceptance of the importance of reducing greenhouse gas emissions through the use of low emissions coal technologies, and commercialisation of low emissions coal technologies.²⁷

Coal Innovation NSW oversees the Coal Innovation NSW Fund (The Fund), which provides grants to support research into “novel” technologies that may help reduce greenhouse gas emissions from the mining and combustion of coal. These are also referred to as “low emissions coal technologies”.

The Fund began with a balance of \$100 million and seems likely to continue operating well into the future: it spent \$27.2 million in 2022–23 (the latest available data) and had a closing balance of \$45.4 million.²⁸

Through The Fund, Coal Innovation NSW provides grants to “assist emerging energy technologies, that may provide future solutions to reducing greenhouse gas emissions from coal”, such as carbon capture and storage, ventilated air methane capture, and coal combustion efficiency.²⁹ Few of these technologies have been proven to be successful at scale or are used anywhere in the world. However, they are used by the coal industry to justify the continued extraction and combustion of coal. By funding these technologies through Coal Innovation NSW, the State Government is delaying the energy transition and greenwashing the coal industry.

²⁷ The NSW Government (2023) *Coal Innovation Fund annual report 2022-23*, p 12, [https://www.parliament.nsw.gov.au/tp/files/187376/Coal%20Innovation%20NSW%20Fund%20Annual%20Report%20for%202022-23%20\(1\).PDF](https://www.parliament.nsw.gov.au/tp/files/187376/Coal%20Innovation%20NSW%20Fund%20Annual%20Report%20for%202022-23%20(1).PDF)

²⁸ The NSW Government (2023) *Coal Innovation Fund annual report 2022-23*, p 20,26, <https://meg.resourcesregulator.nsw.gov.au/sites/default/files/2023-12/CINSWFund-annual-report-2022-23.pdf>

²⁹ NSW Government (2024) *Research, development and demonstration projects*, <https://meg.resourcesregulator.nsw.gov.au/invest-nsw/coal-innovation-nsw/research-development-and-demonstration-projects>

RESEARCH AND PUBLICATIONS

Coal Innovation NSW has funded a range of research projects investigating “novel” carbon capture and storage (CCS) options for NSW, greenhouse gas abatement technologies for coal mines, post-combustion carbon capture, and coal combustion efficiency. However, only a few projects have published reports that are available on Coal Innovation NSW’s website or elsewhere on the internet.³⁰

Publicly available reports on “community awareness” projects commissioned or funded by Coal Innovation NSW comprise two studies on community attitudes towards “low emission coal technologies” and the “Australian energy debate”:

- The University of Newcastle’s 2013 paper titled *Managing Low Emissions Coal Technologies project risk: the role of public awareness*.³¹ The aim of this project was to “was to address the organizational dynamics within the Carbon Capture and Storage (CCS) and Coal Seam Gas (CSG) industries and the question of how and why publics form around issues related to them”.³² This report is not published on Coal Innovation NSW’s website. The project received a \$618,930 grant in 2009.
- The University of Melbourne’s and University of Newcastle’s joint 2022 report for the project *Coal in a renewable energy transition: Enabling broader low-emissions advocacy coalitions in the NSW coal-related sectors*. The version of the report on Coal Innovation NSW’s website has 21 redactions, mainly the names of individuals and organisations involved in energy policy debate.³³ These redactions undermine the project’s aim to “identify so-called discourse coalitions that generate a shared way of talking and thinking about energy politics”.³⁴ Despite this vague objective, the report recommends a range of

³⁰ NSW Government (2024) *Research, development and demonstration projects*, <https://meg.resourcesregulator.nsw.gov.au/invest-nsw/coal-innovation-nsw/research-development-and-demonstration-projects>

³¹ Kuch et al (2013) *Managing Low Emissions Coal Technologies project risk: The role of public awareness*, https://www.academia.edu/9045914/Managing_Low_Emissions_Coal_Technology_project_risk_The_role_of_public_awareness

³² Kuch et al (2013), p 5

³³ Arranz et al (2022) *Coal in a renewable energy transition: Enabling broader low-emissions advocacy coalitions in the NSW coal-related sectors*, <https://meg.resourcesregulator.nsw.gov.au/sites/default/files/2023-12/Final-report-Coal-in-a-renewable-energy-transition.pdf>

³⁴ Arranz et al (2022), p i

actions to “better advertise” the virtues of coking coal, CCS, and other coal-related technologies.³⁵ This project received a \$418,828 grant in 2018.

While Coal Innovation NSW has commissioned — and regularly refers to — reports and modelling that support claims of the financial viability and effectiveness of “low emissions coal technologies”, such modelling is not publicly available. This includes a series of reports under a project titled “Cost Benefit Analysis (CBA) for the Darling Basin Drilling Program”, including:

- Package 1: A forecast of NSW CO₂ emissions from electricity generation and industrial processes from 2015 to 2050, by Deloitte Access Economics, completed/reviewed in FY2019-20.
- Package 2: A cost-benefit analysis of the estimated net financial, social and environmental costs and benefits of CCS implementation in NSW, by Deloitte Access Economics, completed/reviewed in FY2019-20.
- The independent peer review of underlying modelling assumptions and study methodology of packages 1 and 2, as mentioned in Coal Innovation NSW’s report to Parliament in October 2020.³⁶

³⁵ Arranz et al (2022), p ii

³⁶ NSW Government (2020) *Coal Innovation NSW: Income, expenditure and project evaluation*, page 30, <https://www.parliament.nsw.gov.au/tp/files/78882/2019-20%20Annual%20Report%20of%20the%20Coal%20Innovation%20NSW%20Fund.pdf>

Low Emission Technology Australia

Formerly called COAL21, Low Emission Technology Australia (LETA) claims to be a \$700m fund established in 2006.³⁷ LETA is paid for by a research levy on coal production in NSW and Queensland.³⁸ The research levy can be partly deducted from coal royalties, providing a public subsidy at direct cost to the NSW public. The levy is a deduction from the value of the marketed coal recovered, not the total payable royalty.

LETA's website states that the organisation has been "investing in low emission technology projects for over 20 years".³⁹ The only information available about existing or past projects on LETA's website is the following:

Our investments, while locally driven, involve technologies from around the world that can be further developed and deployed in multiple industries both here in Australia and internationally. These projects will contribute to global efforts to reduce emissions.⁴⁰

There are no projects listed on the website.

LETA has recently requested a suspension of funding from the coal industry because of a deficit of projects to support. Last year, the organisation reportedly spent \$4.8 million across five 'decarbonisation' projects and declared a surplus of \$40 million.⁴¹ LETA now plans to give \$58 million of its existing funds to eight projects over the next five years, despite previously budgeting \$100 million for projects between 2023 and 2028.⁴² Now that LETA seemingly has more money than it knows what to do with, the NSW Government should end the royalty deduction that subsidises LETA and explore

³⁷ LETA (2024) *Submission to the draft NSW EPA Guide for Large Emitters*, <https://letaaustralia.com.au/wp-content/uploads/LETA-submission-NSW-EPA-GUIDE-FOR-LARGE-EMITTERS-MAY-2024.pdf>

³⁸ The research levy is derived from coal royalties paid, making it a direct cost to the taxpayer. This levy is a deduction from the value of the marketed coal recovered, not the total payable royalty. See <https://www.revenue.nsw.gov.au/taxes-duties-levies-royalties/royalties/coal#heading5>

³⁹ Low Emission Technology Australia (2024) *What are LETs?* <https://letaaustralia.com.au/low-emission-technology-let/what-are-lets/>

⁴⁰ Low Emission Technology Australia (2024) *Projects*, <https://letaaustralia.com.au/projects/>

⁴¹ Ker (2024) *Coal miners half climate fund donations citing lack of projects*, <https://www.afr.com/companies/mining/coal-miners-halt-climate-fund-donations-citing-lack-of-projects-20241115-p5kqw9>

⁴² *Ibid.*

whether LETA's significant funds can be redirected to other purposes – such as assisting that state's coal region communities to transition to more sustainable industries.

As with Coal Innovation NSW, LETA allows the NSW Government and coal industry to greenwash coal by misleading the public about the potential for decarbonising the coal industry by using CCS and other technologies to reduce emissions, thereby justifying the continued production and use of coal.

CARBON CAPTURE AND STORAGE

Carbon capture and storage (CCS) refers to technologies and practices that capture, transport and store greenhouse gas emissions from fossil fuel production and use. However, there appear to be no cases anywhere in the world of coal mines or coal fired power stations using CCS in a commercial capacity. The International Energy Agency lists one demonstration project at a coal power plant in China, and does not include coal mining or coal fired power production as a separate category in its forecasts of global CCS uptake.⁴³

Nevertheless, LETA's primary output appears to be publishing submissions that promote the use of CCS in the coal industry. LETA claims to have achieved “a world-first in proving carbon capture technology on a coal fired power station”,⁴⁴ which presumably refers to the Callide Oxyfuel Project, a demonstration project that was decommissioned in 2015.⁴⁵

LETA has also been a major partner in Glencore's proposed CCS project in the Great Artesian Basin region.⁴⁶ In March 2024, the Federal Senate referred this project for inquiry and subsequently recommended that “states and territories consider a legislated ban on CCS activities across the [Great Artesian Basin] to ensure this

⁴³ International Energy Agency (2024) *Carbon Capture, Utilisation and Storage* (n.d.) <https://www.iea.org/energy-system/carbon-capture-utilisation-and-storage>

⁴⁴ Low Emission Technology Australia (2024) What are LETs? <https://letaustralia.com.au/low-emission-technology-let/what-are-lets/>

⁴⁵ Carbon Capture & Sequestration Technologies Program MIT (n.d.) *Callide-A Oxyfuel Fact Sheet: Carbon Dioxide Capture and Storage Project*, https://sequestration.mit.edu/tools/projects/callide_a_oxyfuel.html

⁴⁶ Glencore (2024) *CTSCo Project*, <https://www.glencore.com.au/operations-and-projects/coal/projects/carbon-transport-and-storage-project>; LETA (2019) *Glencore's CTSCo Project*, <https://letaustralia.com.au/projects/glencores-ctSCO-project/>

important natural asset is uniformly preserved.”⁴⁷ In May 2024, the Queensland Government rejected Glencore’s CCS project and announced a ban on the CCS in the Great Artesian Basin.⁴⁸ Before the project was scrapped, LETA had reportedly committed \$87 million of its \$100 million budget for 2023-2028.

LETA also promotes the use of CCS to reduce emissions from coal-powered hydrogen production to produce “low-emissions” or “clean” hydrogen. Again, this technology is not in use anywhere. In its submission to the National Hydrogen Strategy Review, LETA contended that “introducing CCS technologies to existing production may represent a near-term opportunity to significantly reduce the emissions profile of existing hydrogen production” but failed to point to any existing examples of CCS used in coal-to-hydrogen production.⁴⁹

LETA also commissioned a feasibility study to deploy the Allam-Fetvedt Cycle to produce “clean” hydrogen in Queensland.⁵⁰ At the time, LETA labelled this a “gamechanging” technology that could boost Australia’s “annual export revenue by \$35 billion”.⁵¹ However, there has been no mention of its implementation and no indication that this technology has moved beyond a theoretical stage when used on coal fired power plants.

VENTILATION AIR METHANE TECHNOLOGY

Ventilation air methane (VAM) capture or abatement technology is designed to capture diluted methane from underground mines that would otherwise be vented

⁴⁷ Environment and Communications References Committee (2024) *Glencore’s proposed carbon capture and storage: Report*, project https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Environment_and_Communications/GlencoreCCS/Report

⁴⁸ Brown (2024) “Queensland rejects Glencore carbon capture and storage proposal for Great Artesian Basin”, *The Guardian*, <https://www.theguardian.com/australia-news/article/2024/may/24/queensland-glencore-carbon-capture-storage-proposal-rejected-great-artesian-basin>; Miles et al (2024) *Miles more protections for Great Artesian Basin*, <https://statements.qld.gov.au/statements/100453>

⁴⁹ LETA (2023) *Submission to the Department of Climate Change, Energy, the Environment and Water National Hydrogen Strategy Review Consultation Paper*, <https://letaustralia.com.au/wp-content/uploads/leta-submission-hydrogen-strategy-review-consultation-paper.pdf>

⁵⁰ LETA (2021) *Allam-Fetvedt Cycle Coal Poly-Gen Feasibility Study*, <https://letaustralia.com.au/wp-content/uploads/allam-fetvedt-cycle-coal-poly-gen-feasibility-study.pdf>

⁵¹ LETA (2021) *Media release: “Gamechanging” Allam Cycle technology set to transform Australia into a clean energy exporting powerhouse*, <https://letaustralia.com.au/gamechanging-allam-cycle-technology-set-to-transform-australia-into-a-clean-energy-exporting-powerhouse/>

into the atmosphere as fugitive emissions.⁵² Both Coal Innovation NSW and LETA have pushed VAM technology as an emissions solution for the coal industry.

Coal Innovation NSW has awarded a \$15 million grant to establish a pilot VAM abatement project at South32's Illawarra mine, which is intended to "help to encourage greater investment in, and uptake of, VAM abatement technologies to significantly reduce fugitive methane emissions from coal mining operations in NSW".⁵³ CSIRO has previously successfully trialled smaller-scale VAM technology at the Appin coal mine in southern NSW.⁵⁴

In July 2024, the Australian Government awarded a \$37.2 million grant to "reduce ventilation methane emissions at Kestrel Coal in the Bowen Basin, Qld", which will "[demonstrate] the technology at scale for the first time in Australia".⁵⁵ LETA welcomed the grant and stated that it had invested "nearly \$60 million in VAM abatement projects" to date.⁵⁶

LETA and the coal industry can use VAM to claim that low-emissions production is possible, providing further justification for continued coal expansion. Research funded by the Australian Government and LETA found VAM technology was "an effective and commercially viable way to mitigate low concentration methane emissions found in underground mine ventilation air."⁵⁷ Despite this, coal companies have been resistant to implement the technology, claiming that it is not economically viable. Decision

⁵² CSIRO (n.d.) *Mine ventilation air methane abatement*, <https://www.csiro.au/en/work-with-us/industries/mining-resources/mining/fugitive-emissions-abatement/mine-ventilation-air-methane-abatement>

⁵³ NSW Resources (2024) *Coal Innovation Fund*, <https://www.resourcesregulator.nsw.gov.au/meg.site/invest-nsw/coal-innovation-nsw>

⁵⁴ NSW Resources (n.d.) *Fugitive methane emissions from coal mines*, <https://meg.resourcesregulator.nsw.gov.au/invest-nsw/coal-innovation-nsw/fugitive-methane-emissions-from-coal-mines>

⁵⁵ The Hon Chris Bowen (2024) *Joint media release: \$91 million to drive down emissions in heavy industry*, <https://minister.dccew.gov.au/bowen/media-releases/joint-release-powering-the-regions-20240712>

⁵⁶ LETA (2024) *Media release: Government invests in vital emissions reduction technology*, <https://letaaustralia.com.au/media-releases/government-invests-in-vital-emissions-reduction-technology/>

⁵⁷ LETA (2019) *VAM - ventilation air methane abatement*, <https://www.letaaustralia.com.au/projects/vam-ventilation-air-methane-abatement/>

making bodies such as the NSW Independent Planning Commission have not forced coal mines to use VAM, even when the mines claim significant economic surpluses.⁵⁸

If the technology works and is affordable, mining companies should be required to implement it. If, however, the technology is not viable, then the taxpayer-subsidised research should be abandoned. As long as the NSW Government continues to fund the research without implementing the technology, it is greenwashing coal — by claiming the potential for clean coal and justifying expanded coal production, without using the technology to reduce emissions at scale.

⁵⁸ Campbell (2024) *Tahmoor coal – submission on additional material greenhouse gas*, <https://australiainstitute.org.au/report/tahmoor-coal/>

Conclusion and recommendations

The NSW Government currently spends more money researching novel or speculative “low emissions coal technologies” than it spends helping coal-reliant communities transition into other industries. Instead, the NSW Government should:

- Abolish Coal Innovation NSW and associated funds.
- End the royalty deduction that subsidises LETA and explore whether LETA funding can be redirected to other purposes.
- Increase resources available to communities for transition away from coal mining, along with appropriate governance arrangements.
- Introduce a moratorium on new coal projects and expansions, and set a timeline for reducing coal volumes mined in the state.

Parts of the NSW Government and public service do appear to be committed to climate action, including on coal exports, as shown by the recent withdrawal of the Hunter Valley Operations (HVO) Optimisation Project proposal, the largest coal mine proposed in NSW’s history.⁵⁹ Glencore and Yancoal withdrew their proposal for the mine after the NSW Environment Protection Authority raised concerns about its greenhouse gas emissions, with the backing of the NSW Climate Minister and NSW Planning Minister.⁶⁰

⁵⁹ Cox (2024) “Proposal for largest coal project in NSW withdrawn after emissions concerns raised”, *Guardian Australia*, <https://www.theguardian.com/australia-news/2024/oct/11/glencore-yancoal-mine-project-withdrawn-emissions-hunter-valley-operations>

⁶⁰ The Australia Institute (2024) *Massive Hunter Valley coal project withdrawn*, <https://australiainstitute.org.au/coal-mine-tracker/update/massive-hunter-valley-coal-project-withdrawn/>